Exhibit No.:	
Issue:	*Rate of Return*
Witness:	*Shana Atkinson*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Rebuttal Testimony*
Case No.:	*ER-2012-0345*
Date Testimony Prepared:	*January 16, 2013*

MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

UTILITY SERVICES DEPARTMENT

REBUTTAL TESTIMONY

OF

SHANA ATKINSON

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2012-0345

Jefferson City, Missouri
January 2013

TABLE OF CONTENTS

REBUTTAL TESTIMONY

OF

SHANA ATKINSON

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2012-0345

REBUTTAL TESTIMONY

OF

SHANA ATKINSON

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2012-0345

Q. Please state your name.

A. My name is Shana Atkinson.

Q. Are you the same Shana Atkinson whose direct testimony in this case appears in Section V, Rate of Return, of the Staff's Cost of Service Report ("COS Report") filed in this proceeding on November 30, 2012?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to the direct testimonies of Dr. James H. Vander Weide and Michael P. Gorman on rate-of-return ("ROR"). Dr. Vander Weide is testifying in this proceeding on behalf of The Empire District Electric Company ("Empire"). Mr. Gorman is testifying on behalf of the Midwest Energy Users' Association (MEUA).

EXECUTIVE SUMMARY OF REBUTTAL TESTIMONY

Q. Please summarize your rebuttal testimony.

A. I critique Dr. Vander Weide's lack of recognition that the cost of common equity ("COE") has decreased since Empire's last rate case, his comparable groups, his exclusive use of projected earnings per share (EPS) growth rates for purposes of calculating his constant-growth discounted cash flow (DCF) analysis, and his use

of forecasted yields for his risk premium and capital asset pricing model (CAPM) COE estimates. I also critique Mr. Gorman's capital structure adjustment in terms of why Staff believes the adjustments Mr. Gorman makes are problematic from a capital allocation perspective and also from a consistency perspective.

DR. VANDER WEIDE'S COST OF COMMON EQUITY FOR EMPIRE

Q. What COE did Dr. Vander Weide estimate for Empire in this case?

A. 10.6 percent.

Q. How did he arrive at that estimate?

A. Dr. Vander Weide's estimated COE of 10.6 percent is based on five types of COE estimation methods: (1) DCF; (2) ex ante risk premium; (3) ex post risk premium; (4) historical CAPM; and (5) DCF-Based CAPM. Dr. Vander Weide estimated Empire's COE to be 10.2 percent using his DCF method, 10.9 percent using his ex ante risk premium method, a range of 10.3 to 10.8 percent with a midpoint of 10.6 percent using his ex post risk premium method, 9.5 percent using his historical CAPM method and 10.6 percent using his DCF-Based CAPM method. Dr. Vander Weide arrived at his final estimated COE for Empire of 10.6 percent by taking a simple average of his DCF method (10.2 percent), his ex ante risk premium method (10.9 percent) and the midpoint of his ex post risk premium method (10.6 percent). Dr. Vander Weide's COE estimate of 10.6 percent is also the return on common equity ("ROE") he recommends the Commission adopt for Empire in this case. He did not give any weight to his CAPM estimates in his final recommendation. Dr. Vander Weide also performed a multi-stage DCF COE, but also did not give it any weight in his final recommendation. His multi-stage DCF COE is in the range of 9.5 percent to 10.6 percent.

Q. What was Dr. Vander Weide's estimate of Empire's COE in Empire's last rate case, Case No. ER-2011-0004?

A. The same as in this case, 10.6 percent.

Q. Have capital costs decreased since Empire's last rate case?

A. Yes. In Staff's COS Report, Staff provides a substantial amount of evidence that all capital costs have decreased for utilities, which includes the COE for utility companies, in the last couple of years. In a November 19, 2012 Citi Electric Utilities Equity Research Report, "Why Aren't Utility Stocks Behaving? Examining the 3 Ds: Dividends, Demand And Declining ROEs," the authors provide evidence that commissions are in fact recognizing the decline in the COE through lower allowed ROEs:

> In our view, Dividend concerns appear mostly priced in, demand weakness appears temporary, and declining ROEs are a **legitimate** long term trend. (emphasis added)
>
> For the last three years, our interviews with state commissioners noted many regulators were wary of approving allowed rates of return below 10%, lest their state be characterized as unattractive to investors. This concern established a floor for average allowed rates of return, despite falling bond yields. (Falling bond yields often drive a fall in allowed rates of return from a regulatory perspective.)
>
> The drop seems to suggest that the 10% firewall has been broken. Moreover, the drop provides political cover for other regulators to do the same. The drop in allowed ROEs in 2Q12 and 3Q12 consist of 21 different rate cases, and there are no individual cases in that list that can explain such a meaningful skew to the downside.
>
> In our view, the drop in allowed ROEs is likely a **drop long overdue**. And unless bond yields dramatically rise (which would be a valuation headwind for utility shares), we suspect electric utilities will need to adapt to a reduced earnings outlook for some time to come. We believe this drop has contributed to a more conservative revision to their long-term growth outlooks, and we are likely to face reduced revisions in early 2013 when new long-term growth targets are established.[1] (emphasis added)

[1] Brian Chin, John Apgar, and Scott Steimer, Citi Electric Utilities Equity Research Report: *Why Aren't Utility Stocks Behaving? Examining the 3 Ds: Dividends, Demand And Declining ROEs*. November 2012.

Other ROR witnesses who testify for utilities, witnesses such as Robert B. Hevert for Ameren Missouri and Samual H. Hadaway for Kansas City Power and Light Company ("KCPL") and KCP&L Greater Missouri Operations ("GMO"), have even recognized the decrease in the COE. In the most recent Ameren Missouri case, Mr. Hevert recommended a ROE of 10.5 percent, whereas in the prior Ameren Missouri case, Case No. ER-2011-0028, Mr. Hevert recommended an ROE of 10.9 percent. In the 2010 KCPL and GMO cases, Case Nos. ER-2010-0355 and ER-2010-0356, respectively, Dr. Hadaway recommended an ROE of 10.75 percent. He decreased his recommendation to 10.3 percent in the most recent KCPL and GMO cases, Case Nos. ER-2012-0174 and ER-2012-0175, respectively.

Q. Do any of Dr. Vander Weide's methods for estimating the COE produce decreased results from his analysis in the last Empire rate case?

A. Yes. In the instant case, Dr. Vander Weide calculated a simple average of his constant-growth DCF COE estimates for his proxy group to arrive at an aggregate COE estimate of 10.2 percent. However, in Empire's last case he did not use the simple average of his constant growth DCF results of 11.4 percent for his recommended ROE. Instead he used a market-weighted average of 10.5 percent for his recommended ROE. If he had continued to use a market-weighted average of his constant-growth DCF results in this case as he did in the last rate case, his COE estimate would be 9.62 percent.

Although Dr. Vander Weide maintains that he does not believe multi-stage DCF methodology is necessary to estimate the COE, in Empire's last rate case his multi-stage DCF COE result was 10.6 percent when he used 4.82 percent as his perpetual growth rate. Whereas in this case it was 9.5 percent to 10.6 percent when he used 4.52 percent, 5.19 percent and 6.26 percent as his perpetual growth rates to determine a COE range.

Considering the 4.82 percent perpetual growth rate in this case is an approximate mid-point perpetual growth rate between the 4.52 percent and 5.19 percent Dr. Vander Weide used in the last rate case, an approximation of the COE Dr. Vander Weide would have achieved in this case is approximately 9.7 percent, which is almost a full 1 percent lower than the 10.6 percent he estimated in the last rate case.

His ex ante and ex post risk premium methods for estimating the COE did not change much from those he used in Empire's last rate case, but this is because of several flaws in his analysis using these methodologies that Staff will explain in this testimony. Consequently, comparing Dr. Vander Weide's results from these ex ante and ex post risk premium methods in this case and Empire's last case does not provide meaningful insight on the decline in the COE.

Q. Do you have any concerns about Dr. Vander Weide's ex ante risk premium approach?

A. Yes. Dr. Vander Weide's estimated risk premium is based on his application of the DCF to an index of "electric" utility companies. Therefore, his risk premium is only as reliable as his DCF COE estimates are and the comparability of this index to Empire. The index Dr. Vander Weide used includes companies that are not comparable to Empire. According to the December 2012 AUS Monthly Report, ten of Dr. Vander Weide's companies in his comparable group for his ex ante risk premium approach have less than 70 percent of revenues from electric utility operations. According to this same AUS monthly report, 92 percent of Empire's revenues are from its electric utility operations.

Q. The companies Dr. Vander Weide used in his ex ante risk premium DCF analysis, are the same companies identified in the 2003 *Mergent Public Utility and*

Transportation Manual that Staff used to research an actual long-term electric utility industry growth rate (*See* Schedule 16 in Staff's Cost of Service Report). What did Staff's analysis show regarding the actual rolling average of historical 10-year compound growth rates for EPS, DPS and BVPS provided by Mergent?

A. The rolling average of 10-year compound growth rates for these per share financial indicators for the period 1947 through 1999 was far below the perpetual growth rates assumed in Dr. Vander Weide's ex ante DCF risk premium analysis. A simple average of all the growth rates Dr. Vander Weide assumed in his analysis was 5.86 percent.

Q. Do you have any concerns about Dr. Vander Weide's ex post risk premium approach?

A. Yes. Dr. Vander Weide uses the average of both the S&P 500 and the S&P Utilities' historically based risk premiums as his estimate of the required risk premium in his ex post risk premium method. A broad index should not be used to make a specific COE estimate. The S&P Utilities include companies such as AES Corp. and NRG Energy that have Betas of 1.20 and 1.10 respectively, which is much higher compared to Empire's Beta of 0.65.

Q. Is it logical for Dr. Vander Weide to continue to assume that the risk premium for regulated electric utilities is somewhere in between historical risk premiums for S&P Utilities and that of the S&P 500?

A. No. This is completely illogical considering the recent behavior of capital markets. Dr. Vander Weide continues to make this assumption, as he has in every case since he started sponsoring testimony for Empire in Case No. ER-2004-0570, even though the capital markets completely refute this assumption. Regulated electric utilities are trading at a

premium to the S&P 500, not because their risk is converging to the S&P 500, but because investors have bid up utility stock prices in search of yield. Any slightly informed investor would explain that electric utility stock prices have been much more influenced by the decline in bond yields rather than the returns received on the S&P 500. The fact that Dr. Vander Weide has not taken such fundamental issues into consideration when estimating Empire's COE should be weighed when considering the credibility of his overall ROE recommendation.

Q. Dr. Vander Weide used forecasted bond yields in his risk premium and CAPM methods in this case. Is that appropriate?

A. No. In this case, using projected yields overstates the current COE. Basing risk premium COE estimates on projected bond yields is similar to basing a DCF estimated COE on projected stock prices. Dr. Vander Weide did not use projected stock prices in his DCF analysis because current stock prices reflect investors' expectations regarding changes in interest rates as well as company-specific risks. Current bond prices, and therefore current bond yields, reflect investors' expectations concerning future interest rates. Therefore, the current bond yield does not need to be adjusted.

Q. What would Dr. Vander Weide's risk premium COE estimates have been if he had used the average yield to maturity on A-rated utility bonds in February 2012, the month that Dr. Vander Weide used for his forecasted yields, rather than those forecasted bond yields?

A. According to BondsOnline data, the average yield to maturity on A-rated utility bonds with a 30-year maturity in February 2012 was 4.90 percent. If Dr. Vander Weide had used this yield, his estimated risk premium would be 5.35 percent for his ex ante

risk premium method. However, this estimate is inflated due to the fact that Dr. Vander Weide's ex ante risk premium methodology is based on estimating the risk premium using his DCF COE estimates for his proxy group and these estimates are based on the assumption that the constant growth of his utility proxy group can be equivalent to the 5-year EPS growth rates.

In a 2011 Bernstein Research report, Hugh Wynne, a utility equity analyst for Bernstein Research, provided information for the period 1974 to 2010 showing that 68% of the total return for S&P Electric Utilities came from dividends, while only 32% was from capital gains[2]. However Dr. Vander Weide's DCF estimates assume that regulated electric utility stocks will generate more returns in capital gains (approximately 57%)[3] than in dividend yield. Assuming regulated electric utilities continue to maintain their long-held characteristics of being yield investments, investors would not expect much more than 2.2 percent of their return to come from growth in the stock price. Any electric utility COE analysis that assumes that investors expect a growth rate of 6.17 percent defies the basic characteristics of electric utility stocks and should not be relied upon.

However, for sake of illustration, Staff will quantify the impact of only making an adjustment to reflect the use of the actual bond yields rather than projected bond yields. If you add the 4.90 percent to the risk premium of 5.35 percent, the COE estimate using this ex ante method would be 10.25 percent, not the 10.9 percent estimate using projected yields. If you add the 4.90 percent to Dr. Vander Weide's ex post risk premium method estimated risk premium of 3.8 to 4.3 percent, the COE estimate for this method would change

[2] Bernstein Research: "U.S. Utilities: Our Dividend Growth Model Identifies Utilities Poised to Pay More", May 20, 2011.
[3] Approximately 4.70% average dividend yield of proxy group divided by 10.87% average expected return on equity estimate of his proxy group equals 43% of return due to dividend yield.

to 8.7 to 9.2 percent, with a midpoint of 8.95 percent, not the midpoint of 10.6 percent Dr. Vander Weide got using projected yields.

Q. What would Dr. Vander Weide's CAPM estimates have been if he had used the average yield to maturity on 20-year Treasury bonds for February 2012 to estimate the risk free rate for his CAPM methods?

A. According to the St. Louis Federal Reserve's website, the average yield to maturity on 20-year Treasury bonds for February 2012 was 2.75 percent. Using 2.75 percent as the risk-free rate in Dr. Vander Weide's Historical CAPM method indicates a COE of 7.37 percent. If Dr. Vander Weide had used 2.75 percent for the risk-free rate in his DCF-Based CAPM method, the indicated COE would have been 10.00 percent.

Q. What is Dr. Vander Weide's estimated risk premium for his DCF-Based CAPM analysis?

A. It is 8.19 percent.

Q. Is that risk premium estimate reasonable?

A. No. This equity risk premium estimate is far beyond what investment advisors use for purposes of asset and stock valuation analyses. For instance, Duff & Phelps[4] published the 2012 Duff & Phelps Risk Premium Report. This Risk Premium report is in its 17th year of publication. According to the Duff & Phelps website:

> The Duff & Phelps Risk Premium Report is designed to assist financial professionals in estimating the cost of equity capital ('cost of equity', or 'COE') for a subject company. The risk premia and size premia published in the Risk Premium Report can be used to develop levered and unlevered COE estimates using both the build-up method and the Capital Asset Pricing Model (CAPM).

[4] Duff&Phelps is a leading global financial advisory investment banking firm.

An excerpt of the 2012 Duff &Phelps Risk Premium Report states that on January 15, 2012, Duff & Phelps decreased its U.S. equity risk premium estimate to 5.5 percent from 6.0 percent. It also states that "we have concluded that a reasonable long-term estimate of the normal or unconditional ERP for the U.S. is in the range of 3.5% to 6.0%."[5]

Q. What would Dr. Vander Weide's DCF-Based CAPM results be if he had used a risk premium of 5.5 percent?

A. His DCF-Based CAPM results would be 6.60 percent.

Q. Does Dr. Vander Weide incorporate his CAPM results in his recommendation for Empire's COE?

A. No, but he has done so before in cases before this Commission, most recently in Case No. ER-2010-0130.

Q. What would Dr. Vander Weide's indicated COE be if he had incorporated his CAPM results into his overall ROE recommendation in this case?

A. Approximately 9.50 percent, after adjusting his CAPM and risk premium COE estimates by using actual bond yields rather than projected bond yields. (Average of the following: constant growth DCF method – 10.2%, average of risk premium methods – 9.60% and average of CAPM methods – 8.70%).

Q. Do you have concerns about the companies Dr. Vander Weide selected for his electric utility proxy group for his DCF estimation?

A. Yes. The objective of selecting a comparable group is to find companies that are as "pure play" as possible. "Pure play" means that the comparable company is confined, as much as possible, to the operation that is the subject of the cost-of-capital study. To meet

[5] Duff&Phelps Risk Premium Report 2012 Selected Pages and Examples (Data Exhibits not included), p. 11-12.

this objective, Staff only includes in its comparable group, companies that have at least 70 percent electric utility operating revenues and that are classified as "Regulated"[6] by the Edison Electric Institute (EEI). Dr. Vander Weide does not use a revenue criterion in selecting his comparable companies. According to the December 2012 AUS Monthly Report, ten of Dr. Vander Weide's comparable companies do not receive at least 70 percent of their revenues from regulated electric utility operations. These companies are CenterPoint Energy, CMS Energy Corp., Dominion Resources, DTE Energy, First Energy Corp., NextEra Energy, OGE Energy, SCANA Corp., Sempra Energy, and TECO Energy, which have electric operating revenues of 33%, 64%, 53%, 60%, 52%, 69%, 57%, 58%, 33%, and 63%, respectively. Also, according to EEI's "Q3 2012 Financial Update", seven of Dr. Vander Weide's comparable companies are not classified as "Regulated." Based on this criteria, Staff would eliminate ten of Dr. Vander Weide's twenty comparable companies

Q. What growth rate does Dr. Vander Weide use in his DCF analyses?

A. He relies exclusively on equity analysts' projected five-year earnings per share (EPS) compound annual growth rate forecasts.

Q. Is that problematic?

A. Yes. Exclusive reliance on analysts' projected five-year EPS compound annual growth rates currently produce upwardly biased results.

Q. Why?

A. The DCF model requires constant and sustainable growth rates. Equity analysts' EPS forecasts are based on nearer-term expectations (five years or less). Such growth rates are not likely to be sustainable if not consistent with long-term industry growth

[6] EEI's "Regulated" classification means 80%+ of the company's total assets are regulated.

rates, which Staff provided in its COS Report. Dr. Vander Weide's average growth of projected EPS growth rates used in his DCF model is 5.64 percent. Staff does not believe investors would consider an average projected growth of 5.64 percent to be sustainable in the long term. This 5.64 percent is not sustainable due to the fact that it is higher than long-term projected economic growth rates provided by the Congressional Budget Office (CBO), which was 4.8 percent compounded annually for the period 2012 through 2022. Additionally, as I discussed earlier in my testimony when critiquing Dr. Vander Weide's ex ante risk premium methodology, investors do not expect to receive a majority of their returns from capital gains for electric utility stock investments. Dr. Vander Weide's assumption the electric utility stock prices can grow at 5.64 percent means investors would expect to receive 55 percent of their returns from capital gains. This defies the basic characteristics of electric utility stocks as yield investments.

Q. On page 32 of Dr. Vander Weide's direct testimony regarding his regression study comparing the historical growth rates with the average I/B/E/S analysts forecasts, he states, "These results are consistent with those found by Cragg and Malkiel, the early major research in this area (John G. Cragg and Burton G. Malkiel, *Expectations and the Structure of Share Prices*, University of Chicago Press, 1982). These results are also consistent with the hypothesis that investors use analysts' forecasts, rather than historically oriented growth calculations, in making stock buy and sell decisions." Is this a legitimate reason to exclusively use analysts' projections of future EPS growth in estimating a constant growth rate for the single-stage DCF method?

A. No. Staff discussed Cragg and Malkiel's study extensively in its COS report. The conclusion of Cragg and Malkiel's study was that equity analysts' expectations had a

greater influence on stock prices compared to simple extrapolations of historical financial data. However, this neither establishes nor shows that investors exclusively use 5-year EPS forecasts as a constant growth rate when using the single-stage DCF model, especially since Cragg and Malkiel did not even use the DCF valuation model when testing their hypothesis regarding the influence of analysts' projections on stock prices.

Q. Do you know of any authority to the contrary?

A. Yes. Burton Malkiel, who did the study with Cragg, recently authored two articles in the *WSJ* that provide evidence that investors do not rely exclusively on 5-year EPS forecasts to project long-term returns on stocks.

Q. When were they published?

A. One was published on January 5, 2012. It is titled, "Where to Put Your Money in 2012."[7] The other was published on March 23, 2012 *WSJ*. It is titled, "What Does the Prudent Investor Do Now?"[8] In both articles Malkiel indicates a simplified approach to calculating the long-run expectations for U.S equities. This approach indicates that earnings and dividends in the market have grown at approximately a 5 percent rate over the long run. He adds this 5 percent long-run growth rate to the current approximate 2 percent dividend yield on the U.S market to arrive at a long-run return estimate of 7 percent for the U.S. stock market.

Q. What long-term growth rate did Dr. Vander Weide use to estimate the market risk premium for his and DCF-based CAPM method?

A. Over twice what Malkiel used. This is how Dr. Vander Weide was able to produce expected returns of close to 13% for the S&P 500.

[7] Burton G. Malkiel, "Where to Put Your Money in 2012," *Wall Street Journal*, January 5, 2012, p. A13.
[8] Burton G. Malkiel, "What Does the Prudent Investor Do Now?," *Wall Street Journal*, March 23, 2012, p. A15.

Q. On page 36, lines 11 through 14 of his direct testimony, Dr. Vander Weide states the following about using a multi-stage DCF method: "I believe they should be used only when there is incontrovertible evidence that the results of the single stage model are less reliable. I am unaware of such evidence for my proxy companies." Is there evidence which shows that the single-stage DCF model is less reliable than the multi-stage DCF method for Dr. Vander Weide's proxy group?

A. The growth rates Dr. Vander Weide uses in his single-stage DCF model have a wide variance. For example, in his proxy group Consolidated Edison has the lowest projected EPS growth rate of 3.22% and PNM Resources has the highest of 9.55%. A steady-state industry should have fairly similar expected growth rates. This wide range of projected 5-year EPS growth rates does not produce a reasonable perpetual growth rate in Dr. Vander Weide's constant-growth DCF estimation of the COE. Although the average growth rate of his proxy group is 5.64 percent, this wide variance illustrates that many of his companies are not in a "steady-state" growth pattern.

Q. Is there "incontrovertible evidence" investors do in fact use multi-stage DCF methods for purposes of analyzing electric utility stock investments?

A. Yes. Greg Gordon, CFA, Senior Managing Director and Partner with International Strategy and Investment, uses the multi-stage DCF methodology for purposes of advising investors on a fair price to pay for electric utility stocks. Apparently the utility industry and regulators respect Mr. Gordon's investor perspective enough to request him to speak at various regulatory conferences. Mr. Gordon provided the investor perspective at the 2012 Mid-America Regulatory Conference (MARC) and also at the 2012 Society of Utility and Regulatory Analysts ("SURFA") conference.

Q. Is Mr. Gordon influential on Wall Street?

A. He is influential enough to be interviewed by the *Wall Street Journal*. His opinion was sought for purposes of an article discussing the potential impact a dividend tax increase would have on utility stocks[9].

Q. What multi-stage DCF methodology does Mr. Gordon and his firm use?

A. They use a three-stage dividend discount model in their valuation of electric utility stocks. This model discounts a hypothetical stream of residual cash flows to the equity holder based on certain parameters regarding the current equity discount rate, estimates of near and longer term earned ROEs, and equity ratios and rate base growth from the valuation date. Their model assumes incremental rate base growth is financed with equity issuances above the level of debt allowed by regulators. The first stage includes the first 5 years of their valuation period. In this stage they assume a company-specific rate base growth trajectory, and assume the earned ROE's remain constant over that time period. The second stage has adjustments to both the rate base growth and earned ROE projections reflecting what they believe to be a reasonable longer-term estimate over the next 15 years. In the third and final stage of their multi-stage DCF method they assume a modest perpetual growth rate of 2% for the final year of cash flows (from year 20).[10]

Q. What perpetual growth rate did Dr. Vander Weide use in his multi-stage DCF analysis?

[9] Liam Denning, "Utility Investors Are on the Wire over Taxes," *Wall Street Journal*, November 23, 2012, p. C8.
[10] International Strategy & Investment Group, Inc., Power & Utilities Research: Regulated Utilities "Valuations Supported By Low Interest Rates; There are Relative Values", January 9, 2012, p. 17-18.

A. He used three estimates of long-term growth. One estimate was the long-term GDP growth forecast of 4.52 percent used by the Energy Information Administration (EIA) for the years 2015 to 2030 based on EIA's Reference Case study of their *Annual Energy Outlook 2012*. Another long-term growth estimate he used was derived by adding the 3.24% long run historical growth in real GDP based on data from the Bureau of Economic Analysis ("BEA") to the EIA's 1.96% estimate of future inflation as measured by the GDP deflator. The third estimate he used was the historical growth in nominal GDP over the period 1929 through 2011 from BEA of 6.26%.

Q. Did Dr. Vander Weide rely on historical growth rates when estimating a perpetual growth rate for his constant-growth quarterly DCF model?

A. No. He stated on page 31, lines 17 through 22 of his direct testimony:

> I rely on analysts' projections of future EPS growth rather than historical or retention growth rates because there is considerable empirical evidence that analysts' forecasts are the best estimate of investors' expectations of future long-term growth. The evidence that analysts' forecasts are the best estimate of investors' expectation of future long-term growth is important because the DCF model requires the growth expectations of investors."

He contradicts himself by using historical growth in GDP in order to estimate a perpetual growth rate for his multi-stage DCF model.

Q. What did Staff's independent analysis of the Value Line Central Region companies indicate about the actual long-term average industry growth?

A. Staff's analysis indicated that the long-term average industry growth rate ranged from 3.18 percent to 3.99 percent.

Q. Did Staff also analyze experienced growth of the companies that have owned a majority of the regulated electric utility properties in Missouri?

A. Yes.

Q. What did Staff discover?

A. That the growth rates ranged from 1.33% to 2.12%, which are even lower than the Value Line Central Region utilities.

Q. Did Staff evaluate this information through the most recent annual period available?

A. Yes.

Q. What would Dr. Vander Weide's updated multi-stage DCF analysis COE result be if he had used a 3.5 percent perpetual growth rate?

A. It would be 8.84 percent.

MR. GORMAN'S CAPITAL STRUCTURE

Q. What capital structure does Mr. Gorman propose the Commission use for Empire?

A. He proposes a capital structure of 51.2 percent long term debt and 48.8 percent common equity.

Q. How did he develop his proposed capital structure?

A. He started with Empire's March 31, 2012 consolidated capital structure. He then decreased the common equity balance by the amount of the goodwill asset and the amount of equity that supports the non-utility investments.

Q. Did Mr. Gorman exclude goodwill from his capital structure recommendations in the recent KCPL and GMO cases, Case Nos. ER-2012-0174 and ER-2012-0175, respectively?

A. No. Great Plains Energy booked $169 million of goodwill when it acquired the GMO assets. Mr. Gorman did not eliminate this goodwill in his proposed capital structure for these recent cases.

Q. Is it appropriate to eliminate goodwill and non-utility investments from the capital structure without eliminating the $55 million of debt Empire incurred for its gas acquisition?

A. No. It is Staff's understanding that Mr. Gorman is attempting to reconcile capital invested in Empire's electric utility operations to Empire's electric utility rate base. In Staff's opinion, this is an impractical endeavor because of the fluidity of capital flows. However, for sake of discussion, let's assume it is appropriate to exclude the goodwill associated with Empire's purchase of its gas distribution operations, then it is also appropriate to exclude the debt issued to purchase the gas distribution operations. Because Empire purchased the gas operations for approximately $85 million, the purchase was actually made with more debt capital (approximately 65%) than equity capital. Consequently, pulling out this capital would result in a less leveraged capital structure for Empire's electric utility operations. Consequently, if adjustments are made to the capital structure for assets that are not associated with the electric operations, then there needs to be an adjustment to take out everything that is not associated directly with Empire's electric operations.

Q. Has Staff changed its capital structure recommendation in this case at this time?

A. No.

SUMMARY AND CONCLUSIONS

Q. What points in your rebuttal testimony should the Commission focus on?

A. The Commission should recognize that Dr. Vander Weide is ignoring some of the most fundamental changes that have occurred to the capital markets since Empire's previous rate case, Case No. ER-2011-0004. Although utility capital costs have continued to decline considerably since Dr. Vander Weide filed his direct testimony in December 2010 in that rate case, amazingly his COE estimate in this case is exactly the same, 10.6%. When weighing the credibility of Dr. Vander Weide's testimony it should consider his refusal to recognize even a slight reduction to his recommended ROE despite the significant changes in the utility capital markets since Empire's last rate case before this Commission. Although Staff's COE estimates have declined considerably since the last rate case, Staff is tempering this reduction by recommending the high-end of its ROE range. This is not because Staff believes the capital markets are requiring this high of a ROE, it is because Staff respects the Commission's caution on not wanting to lower the allowed ROE too quickly until capital costs remain low for a longer period.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company of Joplin, Missouri Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	)))))	Case No. ER-2012-0345

AFFIDAVIT OF SHANA ATKINSON

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

Shana Atkinson, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of 19 pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

Shana Atkinson

Subscribed and sworn to before me this 16th day of January, 2013.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: December 12, 2016
Commission Number: 12412070

Notary Public