EXHIBIT

Exhibit No.	
Issue(s)	Rate of Return
Witness	Charles W. King
Type of Exhibit	Surrebuttal Testimony
Sponsoring Party	Public Counsel

SURREBUTTAL TESTIMONY

OF

CHARLES W. KING

FILED

SEP 2 9 2006

Missouri Public Service Commission

Submitted on Behalf of
The Office of Public Counsel

THE EMPIRE DISTRICT ELECTRIC COMPANY

Case No. ER-2006- 0315

August 18, 2006

Public Counsel Exhibit No. 74
Case No(s). ER-2006-0315
Date 9-05-06 Rptr PF

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In The Matter of the Empire District Electric Company of Joplin, Missouri for Authority To File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	)))))	**Case No. ER-2006-0315**

AFFIDAVIT OF CHARLES W. KING

COUNTY OF HANCOCK)
) ss
STATE OF MAINE)

Charles W. King, of lawful age and being first duly sworn, deposes and states:

1. My name is Charles W. King. I am a Public Utility Consultant for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony consisting of 12 pages including the cover page.

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

Charles W. King
Public Utility Consultant

Subscribed and sworn to me this 17th day of August 2006

Donna L Sawyer
Notary Public
Donna L Sawyer

My commission expires 11-21-2007

SURREBUTTAL TESTIMONY OF
CHARLES W. KING

INTRODUCTION

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

A. My name is Charles W. King. I am President of the economic consulting firm of Snavely King Majoros O'Connor & Lee, Inc. My business address is 1111 14th Street, N.W., Suite 300, Washington, DC 20005.

Q. ARE YOU THE SAME CHARLES W. KING WHO PREVIOUSLY SUBMITTED TESTIMONY IN THIS CASE ON BEHALF OF PUBLIC COUNSEL?

A. Yes. I am.

Q. IS THIS TESTIMONY ALSO SUBMITTED ON BEHALF OF PUBLIC COUNSEL?

A. Yes. It is.

Q. WHAT IS THE OBJECTIVE OF THIS SURREBUTTAL TESTIMONY?

A. The objective of this surrebuttal testimony is to respond to the criticisms of my initial direct testimony contained in Dr. VanderWeide's rebuttal testimony. Dr. VanderWeide criticizes my DCF application, my selection of proxy companies, and my application of the CAPM. He also attempts to respond to my objections to his risk premium calculations. I will also comment upon the rebuttal testimony of Steven M. Fetter.

DCF MODEL

Q. WHAT ARE DR. VANDERWIEDE'S CRITICISMS OF YOUR DCF APPLICATION?

A. Dr. VanderWeide objects to what he termed my use of an "annual" DCF model, rather than his quarterly model. He argues that my selection of the next period dividend on the basis of Value Line's forecast is incorrect, and he claims that the two additional sources I use for forecast earnings growth are inferior to the single source, I/B/E/S, that he uses.

Q. HAVE YOU ALREADY RESPONDED TO ANY OF THESE CRITICISMS?

A. Yes. On page 18 of my initial direct testimony, I noted that Dr. VanderWeide's quarterly compounding procedure is unnecessary because the compounding of earnings occurs outside of the dividend-issuing company.

On pages 17 and 18 of that testimony, I pointed out that the selection of next year's dividend should take into account the current cash flow situation of the company, so that the analysis does not assume that a cash-strapped company, such as Empire, would increase its dividend. Value Line would make the requisite analysis in forecasting next year's dividend. Dr. VanderWeide's mechanical application of the "g" factor does not.

Finally, on page 18 of my direct testimony I argued that it is appropriate to use a greater range of analysts in estimating the proxy group's earnings growth rates.

Q. HAS DR. VANDERWIEDE PRODUCED ANY FURTHER REBUTTAL TO THESE POSITIONS?

A. Yes. Dr. VanderWeide alleges that I/B/E/S' forecasts are generally considered superior to Zacks' growth forecasts because they include a greater number of analysts' forecasts on average. Dr. VanderWeide asserts that they are considered superior to Value Line's forecasts because they are based on "normalized current earnings" while Value Line uses a three-year average as a base.

Q HOW DO YOU RESPOND TO THESE CRITICISMS?

A. Dr. VanderWeide has provided no evidence to support his assertion that I/B/E/S surveys more analysts' forecasts than Zacks, and I have been unable from the materials at my disposal to verify this assertion one way or another. It seems somewhat obvious, however, that it is better to use more forecasts than less. As regards Value Line, I do not see why I/B/E/S' normalized current earnings base is necessarily superior to Value Line's three year average earnings base, assuming that this distinction exists at all – which I question. It is my understanding that I/B/E/S is a survey of analysts' forecasts, and those analysts may use a variety of bases.

I should note that Dr. VanderWeide appears to cherry-pick his sources. He does not like Value Line for its earnings forecasts, but he greatly prefers it for its estimation of beta. I/B/E/S is his preferred source of earnings forecasts, but Dr. VanderWeide believes that its betas are worthless. In contrast, I use three sources – I/B/E/S, Zacks and Value Line for both earnings forecasts and betas.

PROXY COMPANIES.

Q. WHAT DOES DR. VANDERWEIDE HAVE TO SAY WITH RESPECT TO YOUR SELECTION OF PROXY COMPANIES?

A. As regards my broad group, Dr. VanderWeide objects to my elimination of companies primarily in the gas distribution business and to my exclusion of MDU Resources because it is only marginally in the electric utility business. He opposes my discarding TXU on the basis of its very small book equity percentage.

Dr. VanderWeide sees no point in my limiting my "narrow group" to companies that derive 75 percent or more of their revenue from regulated utility service. He claims that his proxy group has the same business risk as Empire by reason of their bond rating and their Value Line safety ratings. He asserts that the larger the proxy group the better.

Q. HOW DO YOU RESPOND TO DR. VANDERWEIDE'S CRITICISMS OF YOUR EXCLUSIONS FROM THE BROAD GROUP?

A. I do not agree with Dr. VanderWeide. The objective of the proxy group is to find financially healthy companies that are as similar to Empire as possible. Gas distribution companies are not similar to Empire because they are in a different business and thus have different business risks. Dr. VanderWeide's own analyses show that the gas distribution business is perceived by investors as less risky than the electric utility business. Had I included the four companies that are primarily in gas distribution, my DCF rate of return would be lower, a result that would be detrimental to Empire.

MDU Resources is primarily involved in unregulated activities, such as gas and oil exploration, that are intrinsically more risky than the electric utility business. It is therefore not comparable to Empire.

Dr. VanderWeide is correct that TXU's market equity is not nearly as low as its book equity. However, to the extent that TXU is subject to rate-base/rate-of-return regulation, its very low book equity ratio will pose problems. As I explained in my initial direct testimony, regulators must use book values for equity and debt because otherwise regulation becomes circular. If the Texas commission uses TXU's book equity in setting that company's retail utility rates, the overall cost of capital would be quite low, and the likelihood that the company would regain a healthier capital structure would be compromised. I therefore consider TXU to be riskier than Empire.

Q. HOW DO YOU RESPOND TO DR. VANDERWEIDE'S CRITICISM OF YOUR NARROW GROUP SELECTION?

A. First of all, I should note that regulated utilities are intrinsically less risky than non-regulated enterprises. That is because regulated utilities enjoy a monopoly position in their markets, which is why they are regulated, and they have a constitutional right to have rates set based on prudent costs, including return on investment, thus providing them an opportunity to earn a reasonable rate of return. These observations were confirmed in a recent Moody's Credit Opinion on Baltimore Gas & Electric, which contained the following statement:

> Under Moody's Rating Methodology for Global Regulated Electric Utilities, we have tended to view regulated businesses as having lower business risk profiles compared to unregulated or competitive businesses.

But the most important distinction between regulated and unregulated companies has to do with how their rates are set. Unregulated companies set their rates and prices based on the market. These market-driven prices have no relation whatever to the capital structure of the company or the book value of its equity. By contrast, the prices for regulated activities are set through the regulatory process which applies an authorized rate of return to the book value of the companies' regulated assets. For unregulated companies, the book value of equity has no particular meaning to an investor or investment analyst. To regulated companies, book equity value is one of the two determinants of profitability, the other being the rate of return.

By limiting my narrow group to regulated companies, I render irrelevant Dr. VanderWeide's final subjective adjustment for the allegedly higher financial risk of Empire vis-à-vis the proxy group of companies. Dr. VanderWeide contends that because Empire's allowed return is based on the book value of its equity, and investors examine only market value, it is necessary to adjust Empire's return for the greater leverage of its book equity capital structure relative to the market value capital structure of the proxy group.

Whatever the validity of Dr. VanderWeide's rationale when comparing Empire to unregulated companies, it becomes totally irrelevant when Empire is compared to a group of companies that are regulated in the same manner as Empire. The earnings of all of these companies are based on book equity value, and investors know it. They may be willing to buy the stocks at prices higher than book value, but that is just their recognition of the potential for future growth – the "g" factor in the DCF formula. Investors know that for all the companies in my narrow group, book equity is the basis for allowed return. Dr. VanderWeide's adjustment becomes not only moot but also inappropriate for a regulated entity.

CAPM

Q. AT PAGE 40 OF HIS REBUTTAL TESTIMONY, DR. VANDERWEIDE ASSERTS THAT YOU USED THE WRONG LONG-TERM TREASURY BOND RATE IN PERFORMING YOUR CAPM TEST. IS HE CORRECT?

A. No. Dr. VanderWeide claims that long-term nominal Treasury bond rates have increased from the 5.17 percent I use in my initial direct testimony to 5.3 percent and that they are forecast to increase further to 5.5 percent. I do not know where

Dr. VanderWeide obtained his July interest rates, but the Federal Reserve series H-11 shows that the yield on 30-year Treasury bonds was 5.04 percent during the week of August 11, and the yield on 20-year Treasuries was 5.13 percent. The failure of these interest rates to increase during the summer of 2006 casts considerable doubt on Dr. VanderWeide's forecast yield of 5.5 percent.

Q. AT PAGE 41 OF HIS REBUTTAL TESTIMONY, DR. VANDERWEIDE OBJECTS TO YOUR USE OF I/B/E/S AND ZACKS BETAS. WHAT IS THE BASIS FOR THIS OBJECTION?

A. In my application of the CAPM methodology, I use an average of the proxy companies' betas from three sources, Value Line, I/B/E/S, and Zacks. Dr VanderWeide objects to my inclusion of I/B/E/S and Zacks' betas in this average on the grounds that these betas are not "adjusted."

The adjustment to which Dr. VanderWeide refers is the addition of .25 to the "raw" beta, which is the degree of co-variance in the price fluctuations of the stock at issue relative to the total market. I know that Value Line applies this adjustment, and I suspect that I/B/E/S does also, because none of its betas are below .25. Zacks does not apply this adjustment. If this is the case, then my average beta is two-thirds weighted in favor of adjusted betas.

Q. IS THIS ADJUSTMENT APPROPRIATE?

A. This question underscores my misgivings with the whole concept of CAPM, as described in my initial direct testimony. I seriously question whether the adjustment is appropriate. I understand that this adjustment is based on a paper titled "On Assessment of Risk" by Marshall Blume that was published in the *Journal of Finance* in March 1971. In that paper, Dr. Blume examined the tendency of the betas of portfolios of stocks over time, and he found that the betas of these portfolios tended toward 1.0. The average adjustment for this tendency is .25 in the portfolio's beta.

It is not clear that this tendency of portfolios of stocks to move in the direction of 1.0 applies either conceptually or mathematically to individual stocks. For this reason, I am not persuaded that the adjustment to the betas is altogether appropriate. I must agree, however, that the adjustment avoids the counter-intuitive observation of negative betas (see, for example, the –.05 Zacks' beta for the Southern Company). The problem of negative betas is a conceptual and mathematical difficulty with the concept of beta itself, not necessarily with its computation. It partially explains my misgivings with the whole concept of CAPM, as described in my initial direct testimony.

Q. AT PAGE 42 OF HIS REBUTTAL TESTIMONY, DR. VANDERWEIDE ASSERTS THAT THE FCC WIRELINE COMPETITION BUREAU HAS RELIED ON THE CAPM TO ESTIMATE ITS COST OF EQUITY. HAVE YOU ANY COMMENT?

A. Yes. In its Virginia Arbitration Order of 2003, the FCC's Wireline Competition Bureau did indeed favor CAPM over the DCF models. However, the detailed discussion in the Order reveals that the rejection of DCF had less to do with its conceptual problems than with the selection of comparison groups and the specific growth rate projections provided by the contesting parties, Verizon and AT&T/Worldcom. In that specific case, the Bureau found that the CAPM involved less controversy than did the DCF given the evidence presented in the case.[1] However a review of prior Bureau cases does not indicate that CAPM was the favored method.

[1] *Memorandum Opinion and Order*, CC Docket Nos. 00-218, 00-251, DA 03-2738 (Aug. 29, 2003) (*Virginia Arbitration Order)* ¶¶ 71-76.

RISK PREMIUM ANALYSES

Q. WHAT HAS DR. VANDERWEIDE TO SAY IN SUPPORT OF HIS "EX ANTE" RISK PREMIUM ANALYSIS?

A. Dr. VanderWeide repeats his purported justification for this approach as stated in his initial testimony. First, he claims that the DCF results for the electric companies have displayed considerable volatility over the last several years. Second, he claims that the DCF results for electric companies deviate significantly from the cost of equity results obtained from other widely used equity methodologies. He contends that the Ex Ante risk premium approach smoothes out the unreasonable fluctuations in DCF results by examining both DCF results over a longer period of time and the relationship between DCF results and interest rates.

Q. HAVE THERE BEEN UNREASONABLE FLUCTUATIONS IN THE DCF RESULTS DURING THE PAST FEW YEARS?

A. No. Dr. VanderWeide's own work papers show that over the three years from November 2002 through November 2005, his DCF results for the electric industry have varied by only 1.13 percent, from a low of 9.93 percent in August 2005 to a high of 11.06 percent at the very beginning of the period, November 2002. Moreover, these results declined steadily during the period covered by his calculations, which ended in November 2005. During the 13 months November 2002 through November 2003, the average DCF indication was 10.75 percent. Between November 2003 and November 2004, the average was 10.41 percent, and between November 2004 and November 2005, it was 9.92 percent.

None of these indications support the 11.1 percent Dr. VanderWeide purports to conclude from his Ex Ante analysis. Indeed, all of the indications since October

2002 lie below that value. Yet, these very indicators are one of the two principal inputs to this analysis. The result is a flat-out contradiction between inputs and output.

Q. DOES DR. VANDERWEIDE RESPOND TO YOUR CRITICISM OF HIS EX POST RISK PREMIUM ANALYSIS?

A. Dr. VanderWeide responds only to the conceptual argument that realized risk premiums do not necessarily translate to expected returns. He does not address the statistical weakness that the variations of these experienced returns far exceed the average.

As for the conceptual argument, Dr. VanderWeide's batter analogy is instructive. If a batter has an average of .300, or if all batters collectively have had an average of .250 during the past 69 years, these numbers cannot be used to predict the batting average of any one batter or of all batters collectively in the next year. Yet, that is the explicit assumption of Dr. VanderWeide's Ex Post analysis.

Q. WHAT IS THE SUBJECT OF STEVEN FETTER'S REBUTTAL TESTIMONY?

A. Empire witness Steven Fetter discusses the Commission's regulatory plan and its relationship to the recovery of fuel and purchases power costs.

Q. WHAT HAS MR. FETTER TO SAY ABOUT THIS ISSUE?

A. Mr. Fetter argues that the regulatory plan does not substitute for a fuel adjustment clause that would allow Empire to recover its prudently incurred fuel and purchased power costs. He argues that failure to recover these costs could still result in a negative reassessment of Empire's operational risk by credit rating agencies, with the result that stronger ratios would be needed to maintain Empire's investment-grade status. At worst, argues Mr. Fetter, qualitative rating factors could become so negative that the Company's adequate financial ratios might not be sufficient to keep it from falling into non-investment-grade status.

Q. IS THERE ANY REASON TO BELIEVE THAT MR. FETTER IS OVERSTATING THE IMPORTANCE OF A FUEL AND PURCHASED POWER COST RECOVERY MECHANISM?

A. Yes. The rebuttal testimony of Staff witness Mark Oligschlaeger indicates that the Company may have an inappropriately restrictive view of the relief available from the regulatory plan. Mr. Oligschlaeger cites the testimony of Empire witness William Gipson in which Mr. Gipson appears to reject the idea of using the mechanism of regulatory plan amortizations to offset unforeseen fuel and purchase power expenses.

Mr. Oligschlaeger states that this view is incorrect. The regulatory plan is intended to provide Empire with sufficient cash flows to prevent a downgrading. This objective applies regardless of the source of the cash flow deterioration.

It appears that Mr. Fetter has adopted Mr. Gipson's erroneous view of the scope of the regulatory plan amortizations. Specifically, he fails to recognize that the purpose of the plan is to provide Empire with the opportunity to maintain its debt rating by providing adequate cash flows. The determination of necessary cash flows is made after all prudent regulatory costs, including fuel and purchase power have been determined. That is the purpose of the regulatory plan.

Q. DOES THIS COMPLETE YOUR SURREBUTTAL TESTIMONY?

A. Yes. It does.