

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the matter of the Tariff Filing of the Empire)
District Electric Company of Joplin, Missouri)
To Implement a General Rate Increase for)
Retail Electric Service Provided to Customers)
In the Missouri Service Area of the Company)

Case No. ER-2006-0315

**PREHEARING BRIEF OF THE EMPIRE DISTRICT
ELECTRIC COMPANY**

Submitted by:

BRYDON SWEARENGEN & ENGLAND, P.C.

James C. Swearengen MBE#21510

Dean L. Cooper MBE#36592

L. Russell Mitten MBE#27881

312 East Capitol Avenue

P.O. Box 456

Jefferson City, MO 65102

(573) 635-7166

(573) 635-7431 (facsimile)

lrackers@brydonlaw.com

**ATTORNEYS FOR THE EMPIRE DISTRICT
ELECTRIC COMPANY**

INDEX

Statement of the Case.....	1
Return on Common Equity	3
Capital Structure	15
Off-System Sales	15
Regulatory Plan Amortization	17
Fuel and Purchased Power Expense	19
Fuel and Purchased Power Expense Recovery Method	23
Gain from Unwinding Forward Natural Gas Contract	29
Incentive Compensation.....	31
Low-Income Assistance	33
Unspent Funding of Current Energy Efficiency and Affordability Programs	34
Rate Design/Cost of Service	35
Conclusion	35

The Empire District Electric Company ("Empire" or "Company"), by and through the undersigned counsel, hereby submits this prehearing brief to the Missouri Public Service Commission ("Commission") for its consideration in Case No. ER-2006-0315.

STATEMENT OF THE CASE

Empire initiated the current case when, on February 1, 2006, it filed revised tariff sheets, bearing an effective date of March 3, 2006, that were designed to increase rates for retail electric service provided to customers in the Company's Missouri service area by approximately \$29.5 million, exclusive of gross receipts, sales, franchise, and occupational taxes.¹ That represents an increase of 9.63 percent over current rates. As required by the Commission's rules, the Company also filed the written testimony and schedules of eight witnesses in support of its rate increase request.

Empire has explained that its proposed rate increase request was driven primarily by higher costs for fuel used in generating electricity and purchased power, although other costs associated with providing safe and reliable electric service to customers also have increased since the Company's last rate adjustment. Another factor that influenced Empire's decision to file this case was the Company's desire to eliminate its current Interim Energy Charge ("IEC"), which, when combined with base rates, has failed to allow Empire to recover the significant increases in energy costs it has experienced. Empire sought to replace the IEC with an energy cost recovery mechanism that in combination with base rates would have allowed timely recovery from customers of actual, prudently incurred fuel and purchased power costs.² Senate Bill 179, which was signed into law by Governor Blunt in

¹ The rate schedules were designed to generate \$38,179,048 in additional revenues from base rates and to eliminate the Interim Energy Charge, which provided \$8,665,335 in annual revenue. This represents a net increase of \$29.5 million.

² The Commission has ordered that Empire may not make any request for an energy cost recovery rider while the existing IEC is effective.

July 2005,³ authorizes the Commission to approve such mechanisms, but only in a general rate case.

On February 7, 2006, the Commission issued an order suspending the revised tariff sheets ("Suspension Order") for a period of 120 days plus six months, to January 1, 2007. The Suspension Order directed Empire to file by February 21, 2006, its recommendations regarding the appropriate test year and true-up period to use for the case and directed the Commission's staff ("Staff"), the Office of the Public Counsel ("OPC"), and any intervenors to file by March 7, 2006, their concurrence with the Company's recommendations or alternate recommendations of their own. Empire timely filed its recommendation that the test year be the twelve-month period ending December 31, 2005, adjusted and updated for known and measurable changes through March 31, 2006. All other parties to the case concurred with the Company's recommendation. The Commission also ordered a true-up of certain specified items through June 20, 2006.

Empire, Staff, the OPC, and intervenors Praxair, Inc., and Explorer Pipeline, Inc. (jointly "Industrial Intervenors") have each filed testimony and schedules in this case, all in accordance with the procedural schedule adopted by order dated April 11, 2006. Local public hearings were held in Joplin and Reed Springs, Missouri, in June 2006. Also in accordance with the order adopting the procedural schedule, the parties have submitted a list of remaining issues and the names of the witnesses who will testify regarding those issues. Evidentiary hearings in the case are scheduled to commence on September 5, 2006.

This prehearing brief addresses each of the remaining issues that have been identified by the parties to this case. With respect to each such issue, this brief will summarize Empire's position and will describe the areas of disagreement that remain based on the positions expressed by the other parties in their respective pre-filed testimonies and schedules.

³ Senate Bill 179 was codified as Section 386.266, RSMo.

RATE OF RETURN

1. Rate of Return on Common Equity

Issue Description: What return on common equity should be used for determining Empire's rate of return?

Empire's Position: Empire should be authorized to earn a rate of return of at least 11.7 percent on its common equity.

The Commission's decision as to the appropriate rate of return that should be authorized on the value of Empire's investment that is devoted to serving its Missouri electric customers will significantly affect the Company's revenue requirement in this case. And setting the appropriate rate of return on the equity portion of Empire's capital structure – or determining the cost of common equity as it is sometimes referred to – is a key element of the Commission's overall rate of return determination. Empire submits that it should be authorized to earn a rate of return of 11.7 percent on its common equity. The much lower common equity returns recommended by Staff and the OPC are in stark contrast to the Company's position. The OPC recommends that Empire be allowed a rate of return on its common equity of 9.65 percent, and Staff's recommendation is lower still – a range of 9.5 to 9.6 percent. The evidence will show that, of the three recommendations being presented in this case, only the Company's recommendation accurately captures and reflects the market-based rate of return expectations of investors in companies whose business and financial risks are comparable to Empire's.

The Company's approach to estimating an appropriate cost of equity in this case is virtually identical to the one it employed in its last general rate case, Case No. ER-2004-0570. In that case, a majority of the Commission agreed that Empire's return on equity must be commensurate with the returns being earned by companies of comparable risk, and the Commission endorsed the process that the Company's expert used to determine the returns of such companies. Then, as now, Empire's rate of return witness based his cost of equity recommendation on a Discounted Cash Flow ("DCF") analysis, which he applied to a broad group of proxy companies whose risk profiles are comparable to Empire's. Empire's expert

witness also evaluated his DCF result using other analytical methods and his own reasoned judgment. In Case No. ER-2004-0570 the Commission concluded that such a methodology produces a return on equity that is fair to the Company and its customers alike and allows Empire to attract the capital necessary to meet its future obligations. The Commission should reach the same conclusion in this case.

Empire's witness on this issue is Dr. James H. Vander Weide, the Research Professor of Finance and Economics at the Fuqua School of Business at Duke University and the President of Financial Strategy Associates, a strategic and financial consulting firm. Dr. Vander Weide used a two-step process to estimate Empire's cost of equity in this case. First, he applied several standard cost of equity methods – the Discounted Cash Flow ("DCF") method, the Capital Asset Pricing Model ("CAPM"), and two variations of the Risk Premium Method ("RPM") – to available market data for a broad group of proxy companies whose risk profiles are similar to Empire's. Using these standard estimation methodologies, Dr. Vander Weide calculated an average equity return for the proxy group of 11.3 percent. (Vander Weide Direct, pp. 5-6) Next, he refined the results derived from the first step of his process by adjusting the average cost of equity for the proxy group to account for the differences between the market's perceived risk of the proxy group companies and the financial risk that is implied for Empire by its capital structure. (Vander Weide Direct, p. 4) Because of Empire's relatively greater financial risk, this adjustment yielded a cost of equity recommendation of 11.7 percent, which is 40 basis points greater than the proxy group average.

Although both David Murray, the witness for Staff on this issue, and the OPC's witness Charles W. King use the same standard methods as Dr. Vander Weide to produce their cost of equity recommendations, neither of their recommendations is credible because both witnesses have manipulated the data inputs to produce results that are artificially low and, therefore, do not accurately reflect the return expectations of investors. Because the groups of proxy companies used by each of these witnesses to derive the data they input into their financial

models is much smaller than Dr. Vander Weide's proxy group, the data used by both Staff and the OPC suffer from the kinds of statistical distortions that are inherent to small survey samples. Distorted data inputs lead inevitably to distorted and unreliable results, which accounts for the unreasonably low equity return recommendations of both the Staff and the OPC.

a. Economic and Legal Principles Governing the Determination of a Fair Rate of Return

Economists define the cost of equity as the return that investors expect to receive on alternative equity investments of comparable risk. Unlike debt, the rate of return on equity is not contractual, so the cost of equity for a given company is more difficult to measure than the cost of debt. There is consensus among economists that, because equity is more risky than debt, the cost of a company's equity will always be greater than its cost of debt. There is also consensus that any reliable estimate of a company's cost of equity must be both market based and forward looking and must take into account the company's unique business and financial risk characteristics. Financial risk is measured by the ratio of debt and equity in a company's capital structure. A company's business risk is measured based upon the businesses it is in and the markets that it serves. For companies like Empire, the regulatory environment in which it operates also has a significant impact on the market's evaluation of the Company's business risk.

These financial and economic principles relating to the supply and demand for capital have been recognized in two key decisions of the United States Supreme Court that established the legal standards that govern the Commission's determination of a fair rate of return. In

Bluefield Waterworks v. Public Service Commission, 262 US 679 (1923), the Court stated:

A public utility is entitled to such rates as will permit it to earn a return upon the value of the property which it employs for the convenience of the public equal to that generally being made at the same time in the same general part of the country on investments in other business undertakings which are attended by corresponding risk and uncertainties. . . The return should be reasonable sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain

and support its credit, and enable it to raise the money necessary for the proper discharge or its public duties.

Id. at 692.

Twenty-one years later, in *FPC v. Hope Natural Gas Company*, 320 US 591 (1944), the Court reiterated that maintaining a utility's financial soundness and its ability to attract capital remained the standard for determining whether the rate of return authorized by a regulatory commission meets the requirements of law:

From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock . . . By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Id. at 603.

To satisfy applicable economic, financial, and legal standards, the rate of return on Empire's common equity that the Commission authorizes in this case must accomplish several objectives: it must allow the Company to maintain its financial integrity and attract capital at reasonable rates; it must accurately reflect Empire's unique business and financial risks; it must be forward looking; and it must provide investors with a rate of return on their invested capital that is comparable to that being earned on investments in other companies whose risk profiles are similar to Empire's.

b. Dr. Vander Weide's Testimony

i. Determination of an Appropriate Proxy Group

As noted previously, the first step of the two step process that Dr. Vander Weide uses to determine Empire's cost of equity involves developing a proxy group of companies whose risk profiles are similar to Empire's, then applying market based data for this proxy group to three standard methodologies used to estimate the cost of capital: the DCF model, the CAPM, and two variations of the RPM. This produces a range of rates of return for investments in

companies “that are attended by corresponding risks and uncertainties” to those of Empire – a critical step in complying with the legal standards announced in *Bluefield* and *Hope*.

Dr. Vander Weide used as his proxy group all of the companies in Value Line’s group of electric companies that: 1) paid dividends each quarter of the last two years; 2) did not increase dividends during any quarter of the last two years; 3) had at least three 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) have not, as of the time of their selection, announced a merger. (Vander Weide Direct, p. 28; Vander Weide Rebuttal, p. 15) Forty-seven companies satisfied all of these selection criteria and were included in Dr. Vander Weide’s proxy group. These included not only electric energy companies but also gas energy companies and combination electric and gas companies. (See Vander Weide Direct, Schedules JVW-1 and JVW-2)

There were three reasons why Dr. Vander Weide did not limit his proxy group to electric energy companies alone. First, financial theory does not require that companies be in exactly the same industry to be comparable in risk. (Vander Weide Direct, pp. 31-32) Second, widely used measures of comparability – such as Value Line’s Safety Rank and bond ratings by Standard & Poor’s and other rating agencies – demonstrate that gas and combination energy companies are perceived as having risks comparable to electric companies. (Vander Weide Direct, pp. 32-33; Vander Weide Rebuttal, pp. 14-15) And third, it is desirable to choose a relatively large group of comparable risk companies for the proxy group because the uncertainties inherent in the standard methodologies used to estimate the cost of equity are reduced significantly if a large group of companies is used instead of a smaller group. (Vander Weide Rebuttal, pp. 12-13) Although available data show that, on average, the risk characteristics of the companies in Dr. Vander Weide’s group are lower than Empire’s, these data confirm that the group of electric, gas, and combination energy companies is a legitimate proxy for the risk of investing in Empire, albeit a conservative one. (Vander Weide Direct, pp. 29, 31; Vander Weide Rebuttal, p. 15)

ii. The DCF Analysis

Two fundamental assumptions underlie the DCF Model: 1) that investors value an asset based on the future cash flows they expect to receive from owning the asset, and 2) that investors value a dollar received in the future less than one received today. Applying these principles to an investment in a company's common stock results in the following cost of equity equation: $k = D_1/P_s + g$, where k is the cost of equity, D_1 is the expected next period dividend, P_s is the current price of the stock, and g is the constant annual growth rate in earnings, dividends, and book value per share.

To reflect the fact that each of the companies in his proxy group pays dividends quarterly instead of annually, Dr. Vander Weide uses a modified version of the DCF equation that expresses a company's current stock price as the present value of a quarterly stream of dividends payments. This more accurately reflects the time value of money aspect of the DCF Model.⁴ (Vander Weide Direct, pp. 21-22; Appendix 1) Consequently, instead of a single dividend value (D_1), his DCF equation uses the estimated values of four future quarterly dividends (d_1, d_2, d_3 , and d_4) that are calculated by multiplying the previous four quarterly dividends by the factor $1 + g$.

The stock price for each of the companies in Dr. Vander Weide's proxy group was calculated based on a simple average of each firm's monthly high and low stock prices for the three-month period beginning November 2005. He used a three-month average to adjust for the daily volatility in stock prices and to make the stock price component of the DCF equation more consistent with the growth component, which, because it is based on analysts' estimates, changes less frequently than does the price of a company's stock. (Vander Weide Direct, p. 27)

Dr. Vander Weide used as his growth component financial analysts' estimates of future earnings per share growth as reported by I/B/E/S Thomson Financial. (Vander Weide Direct, p.

⁴ Dr. Vander Weide rejects the annual DCF Model because it assumes that dividends are paid annually and is accurate in its estimates of the cost of capital only if that is the case. (Vander Weide Direct, pp. 21-22) All of the companies in Dr. Vander Weide's proxy group pay dividends quarterly.

24) He considers these estimates to be appropriate because they are widely circulated in the financial community, include projections of reputable financial analysts, are timely reported to investors, and are widely used by both institutional and private investors. (Vander Weide Direct, p. 25) In addition, Dr. Vander Weide personally conducted a study, which was published in the *Journal of Portfolio Management*, which confirmed that analysts' forecasts of future growth are the best tool available for predicting a firm's stock price. (Vander Weide Direct, p. 26)

As shown on Schedule JWV-1 of his direct testimony, Dr. Vander Weide's DCF analysis yielded an estimated cost of equity of 9.9 percent for the electric energy companies in his proxy group. Because investors' perceptions regarding the relative risks of investing in electric utilities has increased in recent years and also because of considerable volatility that has been observed over the past several years in DCF results for electric utilities, Dr. Vander Weide believes that the 9.9 percent estimate understates Empire's true cost of equity. (Vander Weide Direct, p. 30) The DCF Model's estimate of the cost of equity for the gas companies in Dr. Vander Weide's proxy group was 9.6 percent. He believes this, too, underestimates Empire's cost of equity because, on average, gas companies are viewed as less risky than both electric companies, in general, and Empire, in particular. (Vander Weide Direct, p. 33)

iii. The RPM Analysis

The RPM is based on the principle that investors expect to earn a return on an equity investment in Empire that reflects a premium over and above the return they would expect to earn on an investment in a portfolio of bonds. The expected premium compensates the investor for the additional risk he bears making an investment in equity securities instead of bonds. Although this method of estimating the cost of equity does not require the use of any particular debt instrument, it does require that the debt instrument that is used to estimate the risk premium be the same as the debt instrument used to calculate the interest rate component. For example, if the risk premium on equity is calculated by comparing the returns on stocks and A-rated utility bonds, then the interest rate component used for the RPM must be the interest rate

on A-rated utility bonds. This does not mean, however, that the same *companies* be used to estimate both the stock and bond returns. (Vander Weide Direct, p. 34)

Dr. Vander Weide used two methods to estimate the required risk premium on an equity investment in Empire: the *ex ante* RPM and the *ex post* RPM.

The *ex ante* RPM uses DCF-based estimates of expected returns on a proxy group of electric and gas companies and compares those estimates to the interest rate on Moody's A-rated utility bonds. A regression analysis is performed to see if there is a correlation between the calculated risk premium and interest rates and the results of that analysis are used to estimate investors' required risk premium. To estimate the cost of equity, Dr. Vander Weide next added the required risk premium to a forecasted interest rate on A-rated utility bonds. (Vander Weide Direct, pp. 35-36; Appendix 2; Schedule JVW-3) This methodology produced a cost of equity estimate of 10.9 percent for Dr. Vander Weide's proxy group of electric companies and 11.3 for his proxy group of gas companies for an average of 11.1 percent for both groups. (Vander Weide Direct, pp. 36-37)

The *ex post* RPM is based on a 67-year study that Dr. Vander Weide performed on the comparable returns received by bond and stock investors. He estimated the returns on the stock and bond investments in his study using stock price and dividend yield data on the Standard & Poor's 500 and the bond yield on Moody's A-rated utility bonds. The study consisted of making investments of one dollar each in hypothetical portfolios of stocks and bonds beginning in 1937 and reinvesting the principal plus returns each year thereafter to 2004. As shown on Schedule JVW-5, the average annual return on the stock investment was 11.67 percent and 6.4 percent on the bond investment, which results in a risk premium on the stock portfolio of 5.27 percent. (Vander Weide Direct, p. 38) Dr. Vander Weide also conducted a second study using the same methodology but using stock data on Standard & Poor's utilities instead of the Standard & Poor's 500. In that study the average annual return on the stock investment was 10.57 percent, yielding a risk premium of 4.16 percent. Applying the results of

both of his *ex post* studies to the forecasted interest rate of Moody's A-rated utility bonds for 2007 of 6.9 percent yields an expected return on equity within a range of 11.0 - 12.2 percent. (Vander Weide Direct, p. 44)

iv. The CAPM Analysis

The CAPM is a model in which investors' expected or required return on a given company's security is equal to the risk-free rate of interest plus the product of the company's equity "*beta*" multiplied by the market risk premium. For purposes of this equation: the risk-free rate is the expected rate of return on a risk-free federal government security; the equity beta is a published measure of the company's risk relative to the market as a whole; and the market risk premium is the return premium that investors require to invest in the market basket of all equity securities compared to the risk-free rate. To estimate the risk-free rate, Dr. Vander Weide used the forecasted yield to maturity of 5.50 percent on long-term Treasury bonds that was published in *Global Insight* for 2007. His company-specific risk measurements – or betas – came from Value Line. The average of the betas for the proxy group of companies was 0.84.

Dr. Vander Weide used two different methods to calculate the risk premium. First, he calculated the difference between the arithmetic mean return on the Standard & Poor's 500 and the income return on 20-year Treasury bonds, as reported in Ibbotson Associates' *2000 Yearbook*, which yielded a risk premium of 7.2 percent. Second, he calculated the difference between the DCF-based cost of equity for the Standard & Poor's 500 and the yield to maturity of 20-year Treasury bonds, which yielded a risk premium of 8.0 percent. (Vander Weide Direct, pp. 44-45)

Using the risk premium of 7.2 percent derived from the first calculation produces a CAPM estimate of the cost of equity of 11.5 percent for the proxy group, which Dr. Vander Weide terms the "historical CAPM." (Vander Weide Direct, pp. 45-46; Schedule JWV-8) Using the risk premium of 8.0 percent derived from the second calculation yields an estimated cost of equity of 12.2 percent for the proxy group, which Dr. Vander Weide terms the "DCF CAPM."

(Vander Weide Direct, p. 47; Schedule JWV-9) He believes that both of these estimates may understate Empire's true cost of equity, however, because the CAPM tends to underestimate the cost of equity for companies whose beta is less than 1.0. (Vander Weide Direct, pp.47-49) In addition, the CAPM fails to account for the fact that investors generally require a higher rate of return for smaller companies. (Vander Weide Direct, p. 48) These weaknesses in the CAPM are especially significant in this case because Empire is a smaller company and its beta is less than 1.0.

v. The Fair Rate of Return on Equity for Empire

Based on the results of the cost of equity estimates he derived from his DCF, RPM, and CAPM methodologies, Dr. Vander Weide calculated the average rate of return for his proxy group of companies to be 11.3 percent. (Vander Weide Direct, p. 49) Dr. Vander Weide believes, however, that the cost of equity for the proxy group does not accurately reflect investors' expected or required returns on an equity investment in Empire. This is true because Empire's capital structure is more highly leveraged than the average of the companies in Dr. Vander Weide's proxy group. The average debt/equity ratio in the capital structures of the electric companies in the proxy group was 38.54/61.56 and 27.09/72.91 for the gas companies. Empire's debt/equity ratio as of September 30, 2005, was 48.55/51.45.⁵ To adjust for this difference and the increased financial risk that is implied by Empire's more highly leveraged capital structure, Dr. Vander Weide estimates that Empire's true cost of equity is 11.7 percent. (Vander Weide Direct, p. 53) The Commission should note, however, that this estimate assumes that Empire is authorized by the final order in this case to implement a fuel and purchased power cost recovery mechanism, which the majority of the companies in the proxy group already have in place. If no such cost recovery mechanism is authorized, Dr. Vander

⁵ For purposes of the debt/equity ratios calculated for both the proxy group companies and Empire, preferred stock was included as part of the debt component.

Weide's estimate of Empire's cost of equity would be higher than 11.7 percent. (Vander Weide Direct, p. 54)

c. Staff and the OPC's Cost of Equity Recommendations

Staff's witness Murray estimates Empire's cost of equity to be within a range of 9.5 – 9.6 percent. Dr. Vander Weide demonstrates that Mr. Murray's recommendation is both unreliable and unreasonably low because it is: 1) based on flawed assumptions, 2) incorrectly applies both the DCF and CAPM methodologies, and 3) relies on a group of proxy companies that is too small to produce reliable results. The following are among the problems that Dr. Vander Weide identified:

- In discussing current financial conditions, Mr. Murray states that he does not believe that recent increases in long-term interest rates constitute a trend. Dr. Vander Weide shows that long-term interest rates have trended upward for more than a year and that economists predict that this trend will continue for several more years. (Vander Weide Rebuttal, pp. 3-4)
- Mr. Murray "spins" the reasons stated by Standard & Poor's when it reduced Empire's credit rating, which shows his refusal to acknowledge the adverse effect that increasing fuel and purchased power costs and the lack of a mechanism to recover those costs outside a general rate case have had on Empire's risk profile. Because he has not acknowledged the increased risk, Mr. Murray did not adjust for it in his cost of equity recommendation. (Vander Weide Rebuttal, pp. 4-5)
- The group of proxy companies that Mr. Murray used in estimating Empire's cost of equity consists of only 5 companies. Small samples are much less reliable than large ones and are much more prone to reflect statistical anomalies. Small samples are especially problematic when applying the DCF method to determine the cost of equity. The uncertainties inherent in that method are most pronounced when it is applied to a single company or a small group of companies. (Vander Weide Rebuttal, pp.12-13)
- Staff's witness uses the annual DCF model, which assumes dividends are paid annually, even though all of the companies in his proxy group pay quarterly dividends. (Vander Weide Rebuttal, pp. 6-7)
- Mr. Murray's "mix and match" approach to the CAPM renders his analysis almost worthless. For example, although he uses data from Ibbotson Associates (which is based on 20-year Treasury bonds) to calculate his risk premium, he applies that premium to a risk-free rate based on 30-year Treasury bonds. This violates that fundamental principle that if a risk premium is calculated based on 20-year bonds that premium must then be added to a risk-free rate that is based on 20-

year bonds. He further corrupts his CAPM result by: 1) using an average beta for a small proxy group, which tends to distort the result; 2) failing to acknowledge and adjust for recent increases in risk for electric companies, including adjusting the betas of some of the companies in his proxy group; and 3) using an extremely brief, recent time period (1996-2005) to calculate the risk premium in one of his CAPM applications. Had Mr. Murray used appropriate data for his CAPM analysis, he would have estimated a cost of equity for his proxy group of 12.2 percent. (Vander Weide Rebuttal, pp. 19-24)

- Mr. Murray does not adjust the cost of equity estimates he derives from his applications of the DCF and CAPM methodologies for risk factors that are specific to Empire, such as its relatively small size and its more leveraged capital structure. (Vander Weide Rebuttal, pp. 25-26)

The OPC's witness, Charles W. King, estimates Empire's cost of equity at 9.65 percent.

Like Mr. Murray, Mr. King makes numerous errors in his applications of the DCF and CAPM methodologies, which result in estimates of the cost of equity for both his proxy group and Empire that are well below what the models would have estimated had they been properly utilized. Specifically, Mr. King's errors include the following:

- He uses the annual DCF model despite the fact that the companies he uses as proxies pay dividends quarterly. (Vander Weide Rebuttal, p. 32)
- The growth estimates he uses in his DCF analysis – an average of growth estimates prepared by Value Line and Zachs – were apparently selected for the express purpose of reducing the cost of equity estimate that the DCF model would produce. Neither Zachs' nor Value Line's growth estimates are well regarded by professionals in the economic and financial communities because the estimates from both sources are thought to be too low. (Vander Weide Rebuttal, p. 33)
- Neither of the two proxy groups that Mr. King uses for his analyses is large enough to eliminate concerns regarding the shortcomings inherent in the DCF method. Moreover, he seems to have eliminated companies from his groups for reasons that have no impact on the ability of the DCF model to accurately estimate the cost of equity. His reasons for eliminating these companies amount to distinctions without a difference and evidence a lack of understanding of the model. In addition, he fails to adjust the cost of equity for his proxy group to reflect Empire's greater business and financial risk profile. (Vander Weide Rebuttal, pp. 34-39)
- For his CAPM analysis, Mr. King used a risk-free rate for long-term Treasury bills of 5.17 percent. This rate is much lower than the current rate for those securities, 5.3 percent, and also fails to reflect analysts' forecasts that the rate likely will increase to 5.5 percent in the near-term future. (Vander Weide Rebuttal, p. 40)

- As in his DCF model, Mr. King used inferior sources for the betas used in his application of the CAPM. The betas reported by Zachs and Thompson Financial are not as well respected as Value Line and appear to have been selected with one purpose in mind: to produce the lowest possible cost of equity estimate. Had he used appropriate data in the CAPM, he would have estimated a cost of equity for his proxy group of 12.2 percent. (Vander Weide Rebuttal, p. 41)
- In criticizing Dr. Vander Weide's methodology, Mr. King states that the FCC believes the DCF to be the most reliable method for estimating the cost of equity. What Mr. King fails to tell the Commission, however, is that the FCC decision he cites is from 1986 and that recent decisions by that agency have used the CAPM to determine the cost of equity. (Vander Weide Rebuttal, pp. 41-42)

2. Capital Structure

Issue Description: What capital structure should be used for determining Empire's rate of return?

(1) Should the unamortized expenses and discounts be reduced from the total principal amount of long-term debt and trust preferred stock outstanding for determining Empire's capital structure for ratemaking purposes?

Empire's Position: Empire, as well as Staff, reduced the long-term debt and trust preferred stock outstanding by the unamortized expenses. This is the same methodology that has been used by Empire and Staff in previous cases.

REVENUE ISSUES

3. Off-system Sales

Issue Description: What amount should be included in Empire's revenue requirement for off-system sales?

Empire's Position: Off-system sales gross profit of \$1,276,061 should be included in Empire's revenue requirement for ratemaking purposes. The amount is based on a five-year average of actual off-system sales activity after adjustment to remove the effects of a single, non-recurring transaction between Empire and AEP.

Due to variables such as weather, plant outages, and other factors beyond Empire's control, off-system sales fluctuate substantially from year to year. In addition to the fluctuations in overall sales levels, the makeup of the supply resources used to generate off-system sales also fluctuates from year to year, often dramatically. For example, during 2001, a large majority of Empire's off-system sales involved the purchase and resale of hydroelectric power. By contrast, in 2006 hydroelectric power accounted for less than 20 percent of the Company's off-system sales. (Keith Surrebuttal, p. 3) To smooth out the effects of these fluctuations, Empire

recommends that the revenue attributable to off-system sales that is included in the test period to determine the Company's revenue requirement be based on an average of off-system sales activity for the last five years. This is the same methodology that was used in the last Empire rate cases. This average, however, should be calculated after removing the impact of off-system sales sourced to a non-recurring purchased power transaction between Empire and AEP. (*Id.*)

The wide fluctuations in Empire's total off-system sales for the years 2001–2006 are graphically depicted on Surrebuttal Schedule WSK-4. Sales during that period ranged from a low of approximately **_____** Mwh in 2001 to more than **_____** in 2002. Similar fluctuations also are graphically depicted for off-system sales by resource (Surrebuttal Schedule WSK-1), off-system revenues by resource (Surrebuttal Schedule WSK-2), off-system sales gross profit (Surrebuttal Schedule WSK-3), and average gross profit per unit of off-system sales by power source (Surrebuttal Schedule WSK-5). These schedules clearly show that if one had tried to use the various characteristics of the Company's off-system sales for any one year to predict the characteristics for the next year that prediction would have been wrong every time.

Just as it would be unreasonable to try to predict off-season sales for one year based on sales during the preceding year, it would be equally unreasonable to do so based on a five-year average that does not exclude the effects of abnormal, non-recurring transactions from the data used to calculate the average. That is why Empire proposes to eliminate the effects of a short-term energy purchase from AEP that took place during the period from June 2002 through June 2003. Of the more than 1.2 million Mwh of power that the Company purchased from AEP during that period, almost 700,000 Mwh, or approximately 57 percent, was sold off-system. (Keith Rebuttal, p. 12) The AEP transaction also had a very significant effect on Empire's off-system sales profit margin. For 2002, the transaction accounted for **__** percent of the Company's gross profit and in 2003 **__** percent. (Keith Surrebuttal, p. 14) After the AEP contract expired, Empire's gross profit contribution from the resale of power purchased on the open market declined sharply. (*Id.*)

The AEP contract expired in 2003 and no similar arrangement took its place or is contemplated in the future. (Keith Rebuttal, p. 15) Sales related to the AEP contract should also be excluded from this case because if the effects of AEP transaction – which will not recur in the future – are not removed a five-year average of off-system sales will likely overstate the margins that Empire will receive from those types of sales in the future.

The methodologies proposed by Staff and the OPC to calculate off-system sales margins are fundamentally flawed and should be rejected. Staff proposes to use a single year to estimate off-system sales and sales margins. The fluctuations in all aspects of off-system sales that have been graphically depicted in the Company's testimony and exhibits show how unlikely it is that Empire's off-system sales results for one year will be duplicated the next year. Although OPC recognizes the value of a five-year average in calculating off-system sales and sales margins, the OPC did not exclude the effects of the AEP contract from the data used to calculate the average. And though the OPC included sales and margins associated with the AEP contract, it failed to offset those with the fixed costs associated with that contract. (Keith Surrebuttal, p. 8) The average this method produces overstates off-system sales and margins and serves to artificially reduce the Company's revenue requirement.

4. Regulatory Plan Amortization

Issue Description: Should Empire's revenue requirement include regulatory plan amortizations? If so, (i) how should Empire's off-balance sheet obligations be valued for purposes of the amortizations and (ii) should the amortized amount be subject to an income tax gross-up?

Empire's Position: The amortization was not designed as a replacement for the timely recovery of prudently incurred fuel and purchased power expense or as a substitute for an adjustment to the Company's authorized return on equity in the absence of timely recovery of those costs. However, if the calculations called for by the Stipulation and Agreement in Case No. EO-2005-0263 require an amortization to maintain the target ratios, then an amortization should be granted. The amortization, if any, should also include a gross-up for income taxes. Failure to include a gross-up for income taxes will defeat the purpose of the amortization as the amounts received will be taxable.

The regulatory plan that was part of the Stipulation and Agreement that the Commission approved in August 2005 in Case No. EO-2005-0263 included provisions that were designed to

help Empire maintain its investment-grade credit rating. The plan requires the consideration of special rate measures, in the form of amortization adjustments that will increase the Company's revenue requirement, if, in any general rate case filed prior to and including the rate case that reflects the investment in the Iatan 2 generating unit, Empire fails to meet any one of three financial standards used by rating agencies to determine a company's credit rating.⁶ The Company's credit rating is significant under any circumstances, but it is of special concern now because of Empire's need to obtain funds to finance its share of construction costs for Iatan 2.

The amortization mechanism included in the Stipulation and Agreement in Case No. EO-2005-0263 was designed to provide additional cash from rates that would assist the Company to maintain its credit rating during the period when it will be required to make significant capital expenditures related to the construction of Iatan 2. But that is not the situation that confronts the Commission in this case. Past and future increases in fuel and purchased power costs and Empire's inability to recover those costs from its customers, not Iatan 2, are the primary factors driving the Company's current need for increased rates. The amortization mechanism that was included as part of the Company's regulatory plan was not designed as – and should not be considered to be – a substitute for directly addressing and appropriately dealing with the impact from unrecovered fuel and purchased power costs. Appropriately dealing with fuel and purchased power costs will allow Empire to continue to meet the financial measurements necessary to attempt to achieve an investment grade credit rating.

This being said, Empire agrees that if as a result of this case, the calculations agreed to in Case No. EO-2005-0263 would call for an amortization, the Commission should include such an amortization in its calculation of rates in this case. Empire generally agrees with the calculation used by Staff witness Oligschlaeger to derive the projected amortization found in his

⁶ Only two of the three financial ratios – adjusted funds from operations to interest coverage and adjusted funds from operations as a percentage of average total debt – were to be reviewed in rate cases. The third ratio – adjusted total debt to total capitalization – would be reviewed in financing cases.

Supplemental Direct Testimony. The Commission's ultimate decisions in this case should be utilized in these calculations to determine whether an amortization is appropriate.

If an amortization is deemed to be appropriate, the amount authorized must include a gross-up for income taxes. This is because "regulatory plan" amortization is essentially additional book depreciation. Due to the fact that tax depreciation, which is the only depreciation allowed to be used in computing taxable income, does not change as the result of the regulatory amortization, the additional revenue associated with regulatory amortization will increase current taxable income and current income tax expense. In order to achieve the level of FFO that the regulatory plan intends, the amortization (additional cash needed to be generated) must be increased to reflect the additional income taxes due so that the revenues, less additional current tax liability, will provide the required cash flow. (Williams, Surrebuttal)

EXPENSE ISSUES

5. Fuel and Purchased Power Expense

Issue Description: What is the appropriate level of on-system fuel and purchased power expense Empire should be allowed to recover in rates?

Empire's Position: The amount of fuel and purchased power expense allowed in the test period cost of service for recovery through rates should be at least \$166,012,277 Total Company on-system including demand or \$30.87 \$/Mwh, which is based on reasonable and reliable projections of what the cost of fuel and purchased power will be during the period rates set in this case will be in effect.

Perhaps the most contentious issues remaining in this case relate to fuel and purchased power costs and include questions regarding the amount of those costs that should be included in the test period and how those costs should be recovered.

For Empire, fuel and purchased power is the largest expense category in the Company's overall cost of service, accounting for almost fifty percent of total expenses during the test year. (Tarter Direct, p. 2) In its initial filing, Empire sought recovery through rates of fuel and purchased power costs, including related demand charges, in the amount of \$162,888,204 on a total company basis. (Tarter Direct, p. 17) Based upon a new run of the Company's PROSYM

computer model using more recent data, including natural gas data for 2007 deliveries, that amount has grown to \$166,012,277. (Tarter Rebuttal, p. 2)

Many factors are responsible for these increases. Fuel and purchased power costs have risen steadily and significantly in recent years. The two-year period December 2003 through December 2005 saw Empire's largest percentage increase in these costs on a \$/MWh basis in at least 15 years. (Tarter Direct, p. 8) During the same period, natural gas prices also rose significantly. (Tarter Direct, p. 10)

Substantial increases in fuel and purchased power costs in recent years have had a significant impact on Empire's cost of service. Measured on the basis of cost per MMBtu, natural gas prices also increased significantly during the 2002-2006 time period. (Tarter Direct, p. 10; Tarter Supp. Direct, p. 4) If Empire's proposed ECR, or some similar cost adjustment mechanism, is not approved in this case, the Commission must, when it determines test period fuel and purchased power costs, reject the notion that historic costs will accurately predict the costs the Company will incur in the future. Otherwise, Empire could be back in the same position it now finds itself under the IEC: charging rates that do not come close to covering the actual costs of the fuel and purchased power that the Company must acquire to provide electric service.

Empire has done its part and has implemented several measures that are designed to alleviate the volatility of fuel and purchased power costs. (Tarter Direct, pp. 13-16) Examples of the measures the Company has taken include:

- A hedging program for natural gas purchases has been in place since 2001;
- Increasing staffing at Empire's fuel trading desk and the hours those employees work during periods of short supply, especially volatile prices, and severe weather, thereby allowing the Company to promptly address the problems and opportunities those types of situations present regarding fuel and purchased power costs;
- Burning fuel oil in some of the Company's generating facilities during 2005 instead of more costly natural gas;

- Entering into a contract for wind-generated power from the Elk River Wind Farm, which Empire began receiving in October 2005;
- Initiating a process to acquire an ownership interest in the Iatan 2 coal-fired generating facility and entering into a collaborative for demand-side management; and
- Since the time when the direct testimony was filed, Empire has also committed to the Plum Point coal fired generating facility at a 100 MW level.

But these measures, alone, will not be sufficient to successfully deal with the issue of fuel and purchased power costs. There must also be some innovation in the Commission's approach to determining the costs of fuel and purchased power that are included in rates.

Empire has a sophisticated computer modeling system, known as PROSYM, that is used by more than 100 energy companies worldwide to estimate their production costs. This model recommends the optimal dispatch of resources on an hourly basis based on a wide variety of data, including fuel costs, unit start-up costs, and variable operating and maintenance costs. It also has a chronological production costing model that Empire has used for many years to estimate fuel and purchased power costs.

Using PROSYM, Empire estimates that, on an adjusted basis which includes applicable demand charges, the cost of fuel and purchased power for the test period in this case is \$166,012,277 on a total company basis. This amount was determined using both actual cost data and cost estimates based on the best data available at the time of the Company's filing plus updated information at the time rebuttal testimony was filed. (Tarter Direct, p. 17) This amount exceeds the test year expense amount used by the Company in its direct filing by approximately 20 percent, and that difference is attributable to the following factors: 1) actual test year amounts include a non-recurring benefit attributable to the unwinding of a fuel contract; 2) the actual test year amount includes fuel and purchased power costs from 2004, which do not reflect either current or future prices; 3) the actual test year amount does not reflect the expected effects of future customer growth; 4) the actual test period amount included good availability for the Company's generating units; and 5) test actual year data do not reflect

increased prices for fuel and purchased power costs in the future. In addition, although Empire's estimate of test period fuel and purchased power costs is significantly larger than actual test year costs, the Company's most recent cost projections suggest that even the test period estimate likely understates actual fuel and purchased power costs through 2009.⁷ (Tarter Supp. Direct, pp. 89)

Staff recommends a backward-looking approach for spot natural gas prices based on a weighted average of historical data for the 12 month period ending March 31, 2005 (Tarter Rebuttal, p. 5) which included a very mild January when Empire did not purchase spot gas. January is typically a month of high gas prices and usage. This fundamental defect, however, is compounded by the fact that Staff also assumed, for purposes of its estimate, that Empire could hedge 80 percent of its natural gas needs at the same price that Empire had hedged gas for the period April 2006 through December 2007 even though Empire hedged less than 80 percent of its needs during that period. This assumption artificially lowered Staff's weighted average natural gas price.

Although the OPC suggested using the future market for spot natural gas prices it did not use PROSYM or an equally sophisticated and robust modeling tool. In fact, it does not appear that the OPC developed an estimate.

The Industrial Intervenors also did not use any model to estimate test period fuel and purchased power expenses. The Industrial Intervenors attempted to predict future costs of spot natural gas using a mixture often of historical prices and future prices.

If the Commission fails to determine Empire's test period fuel and purchased power expense based on future natural gas prices, then the rates set in this case will not fully compensate the Company for the largest category of expense in its cost of service. Empire's

⁷ Later runs of the PROSYM model using more current information, including actual cost data for natural gas to be delivered in 2007, increased the Company's estimate of fuel and purchased power costs to [\$166,012,277].

evidence shows that even the amount of fuel and purchased power costs the Company has included in the test period will likely not fully cover actual costs during the period rates set in this case will be in effect. The full amount of fuel and purchased power expense that the Company has requested must, therefore, be recognized for ratemaking purposes in this case. Otherwise, Empire will have no chance to earn its authorized rate of return. Moreover, its shareholders will have to make up the difference between allowed and actual fuel and purchased power costs – as they have done since the last rate case.

6. Fuel and Purchased Power Expense Recovery Method

Issue Description: What method should be used for recovery by Empire of its fuel and purchased power expense?

Alternatively: **IEC Continuation**

Should the Commission continue to enforce the 3-year term of the Interim Energy Clause that was approved by the Commission in Case No. ER-2004-0570?

- (1) Is the Commission barred from terminating the Interim Energy Clause by Section 386.266.8?
- (2) Relying upon the four corners of the Stipulation and Agreement, are the terms of the IEC ambiguous?
- (3) In the event that the Stipulation and Agreement is found to be ambiguous, do Empire's actions demonstrate its belief that it was bound to a 3-year term?
 - (i) What is the practical construction that Empire has given to the agreement?
 - (ii) What is the burden of proof of ambiguity and on whom does it rest?
 - (iii) What is the significance of the burden of proof?
- (4) Has Empire properly applied to terminate the Interim Energy Clause approved by the Commission in Case No. ER-2004-0570?
- (5) What standard should the Commission apply in deciding whether to prematurely terminate the IEC?
- (6) What would be the extent of Empire's financial harm if it were bound to the remaining term of the IEC?
 - (i) What is the comparative financial harm that would be experienced by ratepayers if the Stipulation and Agreement were prematurely terminated?

- (7) In the event that Empire is permitted to prematurely terminate the Interim Energy Clause, what amount of revenues collected by Empire under the IEC should be refunded to customers?

Empire's Position: Empire currently recovers its fuel and purchased power costs through a combination of base rates and an Interim Energy Charge ("IEC"). This method has failed to allow the Company to recover its ever increasing fuel and purchased power costs. The alternatives that have been proposed by Empire in this case are: 1) to allow the Company to collect its energy costs entirely through base rates, or 2) to approve an ECR, which would allow recovery of fuel and purchased power costs through a combination of base rates and an automatic rate adjustment mechanism.

In Missouri, fuel and purchased power costs traditionally have been recovered exclusively through base rates. In recent years, however, the Commission has authorized Empire and other Missouri electric companies to implement limited, interim non-traditional cost recovery mechanisms designed to ameliorate the negative effects of volatile energy costs. The Company's Interim Energy Charge ("IEC") is an example of such a mechanism. Empire collects a portion of its energy costs through base rates and a portion through the IEC, which is an additional charge that is subject to true-up and refund, in whole or in part, if actual energy costs are less than the amount collected through the IEC. But the IEC has neither solved nor significantly lessened the problems that the Company faces. Since the IEC was put into place in March 2005, Empire's average fuel and purchased power costs have exceeded the IEC ceiling, and the shortfalls the Company has already experienced will only increase unless something is done in this case to correct the problem.

Empire wants to terminate the IEC because the IEC does not and will not allow the Company to recover its reasonable and prudently incurred fuel and purchased power costs. From the inception of the IEC through June 30, 2006, the Company's cost for fuel and purchased power was approximately \$18.9 million higher than the total of the costs in Empire's base rates and the IEC recorded during the period. While the IEC has been in effect, the under recovery of energy costs, alone, eliminates 58 percent of the annual return on common equity that the Commission authorized for Empire in Case No. ER-2004-0570. (Keith Direct, p. 8)

But there are other problems with the IEC, as well. For one thing, not all costs related to fuel and purchased power are even recoverable through the IEC. Only the variable costs of fuel and purchased power themselves can be recovered. Other related costs, such as demand charges and gas reservation charges, are not included in the IEC calculations. (Tarter Direct, p. 3) In addition, only cost fluctuations within a defined range can be recovered. Costs outside that range are not recoverable from customers and must be borne by the Company's shareholders. (Tarter Direct, p. 4) Since the IEC was put into place in March 2005, Empire's *average* fuel and purchased power costs have exceeded the IEC ceiling and, therefore, have not been recoverable. (Tarter Direct, p. 5)

The IEC has not and cannot fulfill its intended purpose. If the IEC is retained, the Company will continue to under recover its energy costs and thereby will be denied an opportunity to earn a fair rate of return. For all these reasons, the IEC should be terminated.

As a result of authority conferred by the enactment of Section 386.266, RSMo, the Commission has the opportunity in this case to decisively deal with the issue of fuel and purchased power cost recovery for Empire. The Company proposed adoption of an ECR that, through a combination of base rates and an automatic rate adjustment mechanism, would have allowed full and timely recovery of all reasonable and prudently incurred fuel and purchased power costs both above and below the embedded amount of energy costs that will be included in base rates.

If Empire is not authorized to implement an ECR, the alternative is to allow the Company to recover its energy costs solely through base rates.

a. Elimination of Empire's IEC

The Industrial Intervenors and the OPC object to the Company's proposal to eliminate the IEC on grounds that the Stipulation and Agreement that Empire entered into in Case No. ER-2004-0570 contains language that prohibits termination of the IEC within the three-year period after it became effective. By its order dated May 2, 2006, the Commission rejected this

argument and determined that the Stipulation and Agreement gives Empire the right to seek termination of the IEC within the three-year period referenced above. But the questions raised by those opposed to elimination of the IEC continue. Empire's response to those questions is as follows:

1. Elimination of the IEC is not barred by Section 386.266(8).⁸
2. Relying on the four corners of the Stipulation and Agreement, the terms of the IEC are not ambiguous.
3. Because the Stipulation and Agreement is not ambiguous, there is no need to review Empire's actions with respect to the IEC.
4. Empire has properly applied to terminate the IEC.
5. In determining whether to terminate the IEC, the Commission should apply the standard of reasonableness: Is it reasonable to continue the IEC when it clearly has failed to allow Empire to collect its reasonable and prudently incurred fuel and purchased power costs? In other words, the Commission should consider whether rates will be "just and reasonable" with the IEC in place and whether Empire will be able to recover its prudently incurred costs with the IEC in place.
6. If the IEC is continued, the measure of Empire's financial harm will be: 1) the difference between energy costs that can be collected under base rates and the IEC and the actual costs of fuel and purchased power that Empire will incur providing service to its customers; 2) any reduction in the Company's credit rating that is attributable to the under recovery of energy costs that results in increased financing costs; and 3) the loss of any realistic opportunity for the Company to achieve its authorized rate of return. Customers, on the other hand, will suffer no loss.
7. If Empire is allowed to terminate the IEC, no refunds to customers are required because during the period the IEC was in effect the Company consistently under recovered its actual fuel and purchased power costs.

⁸ It is doubtful that Section 386.266(8) applies to the IEC because: 1) the statute took effect months after the IEC was approved by the Commission, and 2) it is far from clear that the IEC qualifies as "an incentive-or performance-based plan" to which subsection 8 pertains. But assuming arguendo that the statute applies, the term of the IEC tariff that is called for in the Stipulation and Agreement is for a period "that will expire no later than 12:01 a.m. on the date that is three years after the original effective date . . . unless earlier terminated by order of the Commission" not a fixed, three-year period.

b. The Proposed ECR

The best available substitute for the IEC is the ECR that Empire had proposed which is a fuel and purchased power cost recovery mechanism authorized by Section 386.266, RSMo. Relying on that authority, the Company included tariff sheets describing the proposed ECR (Schedule WSK-3) as part of its initial filing.

Of the fuel and purchased power cost recovery options available to the Commission, the ECR is the only one that will: 1) allow the Company to fully and timely recover the largest component of its overall cost of service, and 2) allow customers to both know and pay the true cost of the electric energy they are consuming. In addition, the ECR will relieve the Commission of the burdens of estimating the future costs of fuel and purchased power and then hoping that rates based on those estimates will be adequate to cover actual costs or that the rates set are not too high. It also will relieve the Company and its shareholders of the burdens of making up the difference when actual costs exceed the estimated amounts included in rates, as has been the case in the recent past, and of the need to frequently file rate cases to keep pace with ever-increasing fuel and power costs. Adoption of an ECR will thus benefit all of Empire's stakeholders: regulators, shareholders, and customers.

Approval of an ECR is also the only cost recovery option that will reduce Empire's business risk. Because fuel and purchased power are such a large portion of Empire's cost of service, analysts and investors perceive the lack of a systematic cost recovery mechanism to significantly increase the Company's risk profile. This is especially true when Empire is compared to its peers in the electric industry whose operations are outside Missouri. As noted by Dr. Vander Weide, most of the companies in Empire's peer group already have in place fuel and purchased power recovery mechanisms similar to the proposed ECR. And because investors believe these types of cost recovery mechanisms make a company less risky, the rate of return requirements for these peer companies is lower than it is for Empire. That is why Dr. Vander Weide conditions his cost of equity recommendation for the Company on the

assumption that the Commission will approve the ECR. If the Commission fails to do so and, instead, requires Empire to continue to collect its fuel and purchased power costs in base rates or through an IEC, then the 11.7 percent that Dr. Vander Weide recommends must be increased to compensate investors for Empire's relatively greater risk.

The major features of the proposed ECR, which are described in the direct testimony of Empire's witness W. Scott Keith, include the following:

- Costs to be recovered through the ECR will be the allocated, Missouri jurisdictional costs for fuel consumed in the Company's generating units, purchased power charges, and emission allowance costs, but not including purchased power demand costs associated with contracts with a term in excess of one year;
- Changes in the ECR factor will be based on the historical difference between the cost of fuel and energy that is built into base rates and the actual cost of energy. Costs included in the calculation will be based on actual expenses recorded in FERC Accounts 501, 547, and 555, as well as emission allowances recorded in FERC Account 509;
- Two changes in the ECR factor will be made annually: one in June and one in January. Information supporting the June change will be filed with the Commission for its review on April 1st and information supporting the January change will be filed on October 1st of each year the ECR is in effect;
- The base cost of energy under the ECR will be established by the Commission in the rate case in which the ECR is approved and in each subsequent rate case thereafter;
- Over and under recoveries of energy costs will be refunded or collected automatically through operation of the ECR tariff;
- Over and under recoveries of energy costs will be recorded on the Company's books in the appropriate FERC accounts using asset and liability accounts on the balance sheet and income statement. This will assure that net operating income is not distorted and will leave an audit trail for internal and external accountants.

The Stipulation and Agreement entered into in Empire's last general rate case, Case No. ER-2004-0570, provides in part as follows:

In consideration of the implementation of the IEC in this case and the agreement of the Parties to waive their respective rights to judicial review or to otherwise challenge a Commission order in this case authorizing and approving the subject IEC for the duration of the IEC approved in this case Empire agrees to forego any right it may have to request the use of, or to use, any other procedure or remedy, available under current Missouri statute or subsequently enacted Missouri statute, in the form of a fuel adjustment clause, a natural gas cost

recovery mechanism, or other energy related adjustment mechanism to which the Company would otherwise be entitled.

The Company has argued – and continues to believe – that this language only prohibits Empire from requesting to use a fuel adjustment clause or similar cost recovery mechanism *simultaneously with* the IEC. Empire, therefore, is not prohibited from requesting to use an alternative fuel and purchased power cost recovery mechanism, such as the ECR, *in lieu of* the IEC. An effort should be made to not allow prudent fuel and power supply costs to diverge significantly from recovery of such costs, whether in the ultimate recovery amount or the timing between expenditure and recovery. The Commission should seek to stabilize and potentially improve Empire's financial standing by approving and implementing an energy cost recovery mechanism as soon as is legally permissible and, in the meantime, to reflect the Company's higher risk in the return on equity that the Commission authorizes in this case.

7. Gain from Unwinding Forward Natural Gas Contract

Issue Description: Should Empire's gain from unwinding a forward natural gas contract during the test year offset test year fuel and purchased power expense? If so, should the entire gain be an offset in the test year, or should it be amortized and only a portion of the gain be applied as an offset in the test year?

Empire's Position: Because it was the result of a single, non-recurring event, no part of the gain that Empire received on the unwinding of a forward natural gas contract should be used to offset test year fuel and purchased power costs. To do so would artificially understate the amount of energy costs the Company will incur in the future and provide rates that are inadequate to cover those costs.

During the third quarter of 2005, Empire elected to "unwind" a portion of a long-term, forward natural gas contract with British Petroleum ("BP"). Part of that agreement had locked in the price of natural gas deliveries scheduled to take place in 2009, 2010, and 2011. Empire sold back its positions on the 2009-2011 deliveries and recorded a gain of slightly more than \$5 million during 2005. It did so in an effort to offset dramatic price increases in the cost of natural gas that the Company needed for the summer, fall, and winter of 2005. In addition to the aforementioned gain, the transaction also enabled Empire: 1) to reduce its credit exposure with BP, which at the time was nearing **, and 2) to use this decrease in its credit

exposure to increase its near-term natural gas hedge positions. (Keith Rebuttal, pp. 2-3) The unwinding transaction was a single, non-recurring event that offset shortfalls between the fuel and purchased power cost ceiling prescribed by the IEC and actual energy costs that Empire was incurring during 2005.

Staff proposes to amortize the \$5 million gain over five years by reducing the Company's test period cost of fuel and purchased power by \$1 million and continuing that reduction until the gain is fully amortized. The proposal of the Industrial Intervenors is even more onerous: they propose to reduce test period energy costs by the full amount of the gain, which has the effect of continuing to pass through to customers the entire gain each year rates set in this case remain in effect. Both of these proposals should be rejected.

Ratemaking is a forward-looking process that matches reasonable estimates of future revenues and expenses to produce rates that are fair and reasonable to customers and also provide the utility with a reasonable opportunity to earn a fair rate of return. The treatments of the gain that Empire realized from the unwinding of the BP contract that have been proposed by Staff and the Industrial Intervenors are contrary to this principle for at least two reasons. First, because there is no argument among the parties that the gain realized from the BP transaction is a non-recurring event, using that gain to calculate future energy costs will not result in a reasonable estimate of the level of those costs during the period rates set in this case will be in effect. If they are accepted by the Commission, each of the proposals would act to artificially reduce future fuel and purchased power costs below the reasonably estimated level of those costs, and they would do so based on an event that has no relation whatsoever to either the future or future energy costs.

For the reasons stated above, the Commission should not reduce test period estimates of fuel and purchased power costs to reflect any amortization of the revenues Empire received in 2005 due to its unwinding of a portion of its gas supply contract with BP.

8. Incentive Compensation

Issue Description: Are all the costs of Empire's incentive compensation plan an expense Empire should recover from Empire's ratepayers? If not, what costs should be recovered?

Empire's Position: All payments made under Empire's incentive compensation plan are legitimate business expenses that should be fully recovered from ratepayers through rates.

In addition to the base salaries it paid during the test year, Empire made awards of incentive compensation to certain of its management employees who were eligible to receive such compensation and whose performance merited an award. The Company's senior executives were eligible for and received two types of incentive compensation: a cash bonus, which was based on the achievement of specific goals and objectives, and long-term compensation consisting of stock options and stock dividend equivalents. Various non-executive managers also were eligible for and received cash bonuses based on their achievement of specified goals and objectives. Finally, the Company made numerous lump-sum "Lightning Bolt" awards to non-executive management employees on an ad hoc basis for exceptional performance on individual activities or projects. These were all parts of an overall compensation plan that had been approved by the Compensation Committee of Empire's board of directors and that the members of the committee believed, after consultation with outside compensation experts from the Hay Group, would allow the Company to attract, retain, and motivate the high quality managerial talent necessary to efficiently and effectively run the business and to fairly compensate employees for their efforts.

In today's corporate world, compensation plans consisting of base compensation, cash bonuses, and long-term incentive compensation are commonplace. (Bauer Rebuttal, pp. 4-5) In fact, plans like Empire's, which put "at risk" a significant portion of the compensation paid to executives and non-executive managerial personnel and then base the award of that compensation on the achievement of specified goals and objectives that are closely aligned with the company's overall vision and business strategy, are considered to be a "best practice."

(Bauer Rebuttal, p. 8) Through its variable compensation structure, Empire has been able to create a performance-based culture where managers are incentivized to meet key targets that are designed to improve operational and financial results and move the Company forward.

(Bauer Rebuttal, p. 11)

Empire has been careful to design its compensation plan so that neither the individual components of the plan nor total compensation paid under the plan is excessive. As noted previously, the plan was designed by the Company in consultation with compensation experts from the Hay Group. Based on compensation data developed by the Hay Group for both comparable companies and Empire's employment market, the Company has designed its compensation plan to achieve the following targets:

- Base salary is targeted at the 25th percentile;
- Total cash compensation (base salary plus annual cash incentive) is targeted at the 25th percentile; and
- Total direct compensation (total cash compensation plus long-term incentives) is targeted at the mid-point between the 25th and 50th percentiles. (Bauer Rebuttal, pp. 6-7)

Because total compensation paid to its executives and non-executive managers is designed to be at levels that are average or below, the reasonableness of the amount of compensation paid by the Company during the test year is beyond dispute.

Staff proposes to eliminate from Empire's cost of service calculation most of the incentive compensation paid by the Company during the test year. The only portions that Staff proposes to allow are those that, in the subjective opinion of Staff's witness, Amanda McMellen, were: 1) earned by the recipient, and 2) provide direct benefit to Empire's customers. Ms. McMellen is an accountant who has no experience designing, implementing, administering, or reviewing corporate compensation plans. Therefore, her opinions as to what is appropriate and what is not, therefore, should be viewed skeptically.

Empire's management has the responsibility to operate the Company's business in a manner that allows it to provide safe and adequate service to customers at reasonable rates while still providing stockholders with a reasonable return on their investment. The ability to design, implement, and administer a compensation plan that allows the Company to attract, incentivize, and fairly compensate its employees is key to the achievement of those objectives, and management's prerogatives regarding compensation should not be usurped or unduly influenced unless there is clear evidence of an abuse of discretion. No such evidence exists in this case. No reason exists, therefore, to disallow any of the incentive compensation that the Company paid to its executive and non-executive managers during the test year.

9. Low Income Assistance Program

Issue Description: Should Empire's Experimental Low Income Program (ELIP) be continued with changes? If so, what should those changes be, should the Customer Collaborative (CPC) determine those changes and have oversight responsibility respecting the program, and should the cost of the program be included in Empire's cost of service for collection from ratepayers? What should be done with unspent ELIP funds?

Empire's Position: Empire agrees with the recommendation of the Staff that the ELIP program be discontinued and that any remaining funds be transferred to the CPC for use in assisting low income customers with their electric bills. If the Commission decides to continue the program, Empire believes it should be transferred to the CPC for further study and recommendations as to possible revision.

The Company's Experimental Low Income Program ("ELIP") was part of a stipulated settlement of Case No. ER-2002-0424. The program provides eligible customers with a fixed credit to their monthly bills for up to 12 months to reduce energy costs. Customers may re-apply at the end of that period for an extension of the credits for an additional 12 months. (McCormack Direct, p. 2)

Because the results of the program were still under review, the Company originally proposed to transfer the ELIP to the Customer Programs Collaborative ("CPC") for further study and possible revision. Empire believed such a transfer would be consistent with the regulatory plan that the Commission approved in Case No. EO-2005-0263, which addresses incorporating

a number of existing demand side management ("DSM") programs under the CPC.

(McCormack Rebuttal, p. 2) In addition, all costs associated with the ELIP, including an annual shareholder matching payment of \$150,000, were eliminated from test period expense with a recommendation that, upon transfer of the program to the CPC, the accumulated costs be treated as a regulatory asset subject to the same amortization schedule that the 2005 regulatory plan established for DSM programs. If the Commission adopts these proposed changes, Empire's revenue requirement will be reduced by \$200,001. (Id. at p. 4)

Empire now agrees with the proposal of Staff's witness Lena M. Mantle that the ELIP should be eliminated and that all unused funds associated with the program should be made available for the CPC to use in a program to assist low income customers with their electric bills. These unused funds should be recorded as a negative asset to the CPC's regulatory asset. (McCormack Surrebuttal, p. 2) If the Commission decides to retain the ELIP, Empire proposes that the Commission adopt the Company's original proposal relating to the program.

10. Unspent Funding of Current Energy Efficiency and Affordability Programs

Issue Description: What should be done with unspent funds from the current energy efficiency and low-income weatherization programs? What should be the amortization amount respecting the demand side management (DSM) regulatory asset account?

Empire's Position: Empire agrees with Staff that the unspent funds should be a negative entry to the demand-side programs' regulatory asset account upon the date rates become effective in this case. Empire is requesting that no amount be included in rate base or amortization expense at this point in time.

The Company believes that combining the accounting for the current energy efficiency and affordability programs with the programs created by the CPC follows the intent of the regulatory plan Stipulation and Agreement by coordinating the CPC activities with Empire's existing customer programs.

CLASS COST OF SERVICE/RATE DESIGN

11. Rate Design/Cost of Service

Issue Description: How should any revenue increase for Empire that results from this case be implemented in rates?

Empire's Position: Empire proposes an equal percentage increase to all classes.

Due to the very short life of the rates coming out of Empire's last rate case, Case No. ER-2004-0570, the Company proposes to spread the rate increase resulting from this case to all of the charges in its tariffs in the form of an across-the-board increase, with an equal percentage increase to each rate class.

CONCLUSION

For the reasons stated previously, the Commission should adopt Empire's position on all remaining contested issues.

Respectfully submitted,

BRYDON, SWEARENGEN & ENGLAND, P.C.

James C. Swearengen MBE#21510

Dean L. Cooper MBE#36592

L. Russell Mitten MBE#27881

312 East Capitol Avenue

P.O. Box 456

Jefferson City, MO 65102

(573) 635-7166

(573) 635-7431 (facsimile)

lrackers@brydonlaw.com

ATTORNEYS FOR THE EMPIRE DISTRICT
ELECTRIC COMPANY