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Issues:	*Rate of Return/Capital Structure*
Witness:	*David Murray*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Surrebuttal Testimony*
Case No.:	*ER-2004-0570*
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

DAVID MURRAY

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2004-0570

Jefferson City, Missouri
November 2004

****Denotes Highly Confidential Information****

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BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In The Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase for Retail Electric Service Provided to Customers in its Missouri Service Area.	)))))	Case No. ER-2004-0570

AFFIDAVIT OF DAVID MURRAY

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

David Murray, being of lawful age, on his oath states: that he has participated in the preparation of the following surrebuttal testimony in question and answer form, consisting of 41 pages to be presented in the above case; that the answers in the following surrebuttal testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

David Murray

Subscribed and sworn to before me this 23rd day of November 2004.

Notary

TONI M. CHARLTON
NOTARY PUBLIC STATE OF MISSOURI
COUNTY OF COLE
My Commission Expires December 28, 2004

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SURREBUTTAL TESTIMONY

OF

DAVID MURRAY

THE EMPIRE DISTRICT ELECTRIC COMPANY

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Q. Please state your name.

A. My name is David Murray.

Q. Are you the same David Murray who filed direct and rebuttal testimony in this proceeding for the Staff of the Missouri Public Service Commission (Staff)?

A. Yes, I am.

Q. In your direct testimony, did you recommend a fair and reasonable rate of return for The Empire District Electric Company's (Empire) Missouri jurisdictional electric utility rate base?

A. Yes, I did.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Dr. Donald A. Murry and Dr. James H. Vander Weide. Dr. Murry and Dr. Vander Weide sponsored rate-of-return direct and rebuttal testimony on behalf of Empire.

Response to Dr. Murry's Rebuttal Testimony

Q. On page 2, lines 15 through 20 of his rebuttal testimony, Dr. Murry indicates that your testimony is similar to testimony that you have presented over the last several years

in other cases and that this includes the presentation of "stale" economic data. How do you respond?

A. Just about every rate-of-return witness has standardized portions of testimony, including Dr. Murry and Dr. Vander Weide (Murry deposition at p. 31, ll. 1-12 and Vander Weide deposition at p. 21, ll. 13-16). The theory underlying cost-of-capital analysis does not change frequently. Consequently, the testimony explaining the theory does not change frequently nor does the way in which the witness approaches the analysis. The written explanation of the theory does not change, but the analysis of the financial data does. This is why my recommended costs of common equity have changed over time, where Dr. Murry's recommendations have remained constant at anywhere from 11.5 to 12 percent in Empire's last three rate cases, even though there have been changes in the capital and economic environment during this time.

On page 2, lines 17 through 18 of his rebuttal testimony, Dr. Murry indicates that the presentation of "stale" economic data is irrelevant because this ignores the fact that the cost of capital is a function of expectations. However, it is the presentation of historical data that gives insight as to how the cost of capital presently compares to the cost of capital of the past. Dr. Murry acknowledged during his deposition that it is important to understand the context of current interest rates as they compare to historical interest rates (Murry deposition at p. 27, ll. 2-14). It is interesting that Dr. Murry's recommended costs of capital have not come down during a period of declining interest rates. It appears that Dr. Murry believes there should be a floor for the recommended cost of common equity. If a witness sets his own floor on what he thinks is an appropriate return on common equity to recommend in a rate case proceeding, then he is no longer analyzing what investors are requiring on their

investments. He is simply substituting his judgment on what is reasonable as compared to what investors are telling us is reasonable.

Q. On page 1, lines 16 through 18 of his rebuttal testimony, Dr. Murry indicates that your recommendation, "at a minimum, contributed to Empire being placed on Standard & Poor's ("S&P") CreditWatch with negative implications." Are you aware of anything in S&P's September 28, 2004 report that indicates that S&P believes that your recommendation doesn't reflect the current cost of capital?

A. No. I have read through the S&P report and, while it does refer to the return-on-common-equity recommendations for both the Staff and the Company in this proceeding, it does not indicate that Staff's recommendation fails to reflect the cost of capital. In fact, I have read through other research reports published by S&P, and in one such report published on June 19, 2003, "Regulated Operations Back in Fashion for U.S. Electric Utilities," S&P discussed the fact that the low-interest rate environment will allow commissions to justify lower allowed returns.

Q. On pages 4 and 5 of his rebuttal testimony, Dr. Murry provides the results of calculations of what he estimates Empire's funds from operations (FFO) to total debt and FFO interest coverage would be if Staff's recommendation is accepted by the Commission. Are you concerned about Dr. Murry's estimations?

A. Yes. Dr. Murry made his calculations based on the high end of Staff's recommended cost of common equity (9.29 percent). Based on Dr. Murry's methodology, he estimates that adoption of Staff's recommendation would result in FFO interest coverage of 2.54 times and FFO to total debt of 18.83 percent. To determine if Dr. Murry's methodology was reliable in estimating these ratios, I looked at actual results for Empire in 2002 and 2003.

According to Value Line, Empire's return on common equity in 2002 and 2003 was 7.8 percent for both years. According to an April 26, 2004, S&P research report, Empire's FFO interest coverage ratio was 3.6 in 2003 and 3.5 in 2002. Empire's FFO to total debt was 20.5 in 2003 and 13.4 in 2002. Obviously, some of these ratios have actually been better for lower returns on common equity than what I am recommending in this case. I believe one needs to use caution in relying on these estimated ratios to test the reasonableness of the cost of common equity because the ratios may not be based on the same data that S&P ultimately uses.

Q. Did Dr. Murry contact S&P to determine if it had evaluated any of Empire's financial ratios based on Staff's recommendation?

A. No. During Dr. Murry's deposition on November 10, 2004, he indicated that he had not contacted S&P to determine if and how it analyzed the financial ratios before it put Empire on CreditWatch with negative implications.

Q. Is S&P's report clear about the analysis that the S&P analysts did to determine that the Commission's adoption of Staff's position in this case would result in an "erosion of Empire's pressured financial condition?"

A. No. The report doesn't indicate if S&P analyzed any expected coverage or capitalization ratios based on Staff's position in this case.

Q. On page 7, lines 5 through 7 of his rebuttal testimony, Dr. Murry indicates that you have a "dangerous lack of understanding of the relationship between dividends, the cost of capital, and regulatory allowed returns." How do you respond?

A. Dr. Murry cites the "bird-in-the-hand" theory to support his position that a dividend reduction will result in an increase in the cost of common equity. Ironically,

Dr. Murry also cites Modigilani and Miller's (MM) "dividend irrelevance theory" to refute my position that Empire's dividend policy is causing an increased cost of capital for Empire. The MM theory indicates that the value of the firm is based on its earnings power and its business risk. Consequently, how the income is split between retained earnings and dividends is irrelevant to the cost of common equity, according to MM "dividend irrelevance theory." This theory not only refutes my position, but refutes Dr. Murry's position. The "bird-in-the-hand" theory indicates that investors prefer higher dividend payout ratios. Therefore, if the payout ratio is decreased, then the cost of capital would increase according to this theory. However, as we all recognize, sometimes theories don't hold true in all circumstances. I believe that an analysis of the situation and circumstances is important before one can determine what theory is more pertinent to a given situation. It is my belief that common sense should prevail in a situation such as this, and that Empire should react to its financial situation and then pursue strategies that allow it to grow earnings per share, and then, consequently, grow dividends per share if growth in earnings per share should allow for it.

Q. Did Dr. Murry indicate during his deposition on November 10, 2004, that he believed that it would be appropriate for a company to react to its financial situation and then pursue strategies to improve its financial health?

A. Yes, Dr. Murry indicated the following during his deposition:

> Q. Do you believe that it's important for a company to react to its current financial situation and then pursue strategies to improve its financial health?
>
> A. If I understand that question correctly, of course.

Q. What would Empire's return on common equity need to be in order for it to have a dividend payout ratio of 100 percent?

A. With 24,975,604 shares outstanding as of September 30, 2004, and a $1.28 dividend per share, Empire would have to earn $31,968,773 in order to have a 100 percent payout ratio. Based on Empire's book value common equity balance of $386,569,155 on September 30, 2004, this would translate into a required return on common equity of 8.27 percent in order to achieve a 100 percent payout ratio.

Q. What would Empire's return on common equity need to be in order for it to have a dividend payout ratio of 80 percent, which is Empire's targeted dividend payout ratio according to Mr. William L. Gipson, Empire's CEO (Gipson deposition p. 51, ll. 3-5)?

A. Based on the same information above, Empire would have to earn $39,960,966, which would translate into a required return on common equity of 10.34 percent.

Q. How many times has Empire been able to earn a return on common equity of 10.34 percent in the last ten years?

A. Two of the last ten years.

Q. Has Empire's management estimated what return on equity (ROE) it would need to earn in order to attain a 100 percent payout ratio?

A. No. Greg Knapp, Empire CFO, indicated the following during his deposition on November 17, 2004:

> Q. But have you done any kind of a study or analysis to determine what return on common equity Empire would have to have now in order to achieve a 100 percent dividend payout ratio?
>
> A. I don't think so. You know, you work on budgets and that sort of thing that, you know, for the coming year that you get down to the bottom with net income and dividends and you can obviously calculate it, but I -- I don't -- there's not -- as far as I'm aware of, I don't think that we've done that kind of a study.

Consequently, determining the ROE that Empire would need to earn in order to achieve certain dividend payout ratios does not appear to be part of Empire's financial planning process. It would appear to be somewhat difficult for Empire's management to determine if Empire were ever going to be able to attain a more reasonable dividend payout ratio if it is not going through the process of targeting certain earnings levels in the future to determine at what point it will be able to reduce its dividend payout ratio. This lack of financial planning is of serious concern to Staff.

Q. Has Empire ever expressed a targeted dividend payout ratio?

A. Yes. In response to Staff Data Request No. 0343, Mr. Gipson, Empire's CEO, indicated the following:

> A. What was Empire District's targeted dividend payout ratio for 1999 through 2003?
>
> Q. Historically and for the longer-term, management and the Board of Directors has sought to improve the quality (i.e. grow) and stability of earnings that yields a payout ratio more in line with capital market expectations.

Staff sought clarification to this data request response by issuing another data request asking for Mr. Gipson to clarify Mr. Gipson's understanding of what the capital market expects for a dividend payout ratio. Gregg Knapp, Empire CFO, provided the following response:

> Less than 100%, probably more in the 80% range give or take 10%.

Q. ** _____

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A. ** _____

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Q. Are you aware of any other time that Empire has expressed its targeted dividend payout ratio?

A. Yes. In an April 1999 Utility Credit Report, S&P made the following statement:

> In 1998, EDE's common dividend payout ratio was 83.7 percent, a **more reasonable level** than the 99.4 percent and above-payout ratios experienced in previous years. Over time, management intends to achieve and maintain a 70% to 75% dividend payout level based on projected increases in earnings and levelized dividends. [emphasis added]

Q. Has S&P ever expressed concerns about Empire's high dividend payout ratios in any of its past research reports on Empire?

A. It has been a while since S&P listed Empire's high dividend payout ratio as a "major risk," but in a May 1996 research report on Empire, Barbara Eiseman and Robert Francher, S&P analysts, listed this as a "major risk" to Empire's credit quality. I am not sure why S&P no longer considers this as a "major risk" factor other than an email that I received from Barbara Eiseman that indicated that this is mainly a concern if a company does not have adequate liquidity. It appears that S&P is no longer judgmental about Empire's dividend policy.

Q. Was Mr. Gipson aware that Empire District Electric Company (EDE) had indicated a targeted payout ratio in 1999?

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A. No. During Mr. Gipson's deposition on November 8, 2004, the following question and answer occurred:

> Q. Do you know what Empire's targeted dividend payout ratio was back in 1999?
>
> A. No, I don't. I doubt if we had one.

Q. What return on common equity would Empire need to achieve in order to have a dividend payout ratio of 70 percent?

A. Using the same September 30, 2004, financial data that I used before, Empire would have to earn a return on common equity of 11.81 percent in order to achieve a 70 percent payout ratio.

Q. What is the basis for your claim that Empire's cost of common equity is higher than it would be if it had a more reasonable dividend payout ratio?

A. Because Empire is consistently paying out 100 percent or more of its earnings in dividends, it is causing deterioration in its level of retained earnings, which is a component of the total common equity balance. For every dollar by which dividends exceed earnings, there is a one dollar decrease in the common equity balance on Empire's balance sheet, which results in a deterioration in Empire's common equity ratio. As a result, in order for Empire to improve its capital structure, it has to resort to selling new common equity shares in a public offering, which is more costly than internal equity. Not only do you have the opportunity cost associated with internal equity, when issuing external equity, but you also have the issuance expenses that accompany a public offering of external equity. Also, to the extent that this newly issued external equity doesn't generate additional earnings, the existing shareholders will experience dilution of their existing earnings per share, which will put downward pressure on the price of the stock, resulting in a higher cost of common equity.

This is why many companies will not issue additional common equity in a public offering unless they have an attractive investment opportunity that will result in an increase in earnings, which will offset the dilution to the existing shares. It should be apparent that when a company pays out more than it earns and the newly issued common stock is at least partially used to repair the balance sheet, that this common stock is not for investment opportunities.

Q. Do you have an example of the effect a high dividend payout ratio can have on a company's earnings per share (EPS)?

A. Yes. I attached an example of this to my direct testimony as Schedule 7-1 through 7-4. Basically, what this example shows is that if a company doesn't retain its earnings, then the company will not be able to grow its EPS because it is not retaining any earnings for future investment. This is the premise behind the sustainable growth method of determining a growth rate for the discounted cash flow (DCF) model. Empire can issue new common equity to finance this growth, but if part of the equity is issued to repair the balance sheet rather than for investing in new projects to finance growth, then this may dilute EPS. However, if this common equity issuance is recognized in the rate of return in Empire's next rate case, then the dilutive effect should be minimized. However, if the new common equity is issued and it is not used to pay down debt that has been used to finance construction nor is it used to finance construction directly, then this will cause dilution.

Q. Are there any other issues that Dr. Murry failed to mention that would enable the Commission to have a better understanding of this issue?

A. Yes. Dr. Murry failed to mention the "tax preference theory," which indicates that investors may prefer a low dividend payout ratio for three tax-related reasons. One of

these reasons relates to the taxation of dividends being higher than the taxation of capital gains taxes. Because the tax on dividends and capital gains are equivalent now, this reason no longer supports the tax preference theory. However, the other two reasons still hold merit. The first is that the taxes on capital gains are not paid until the stock is sold. This is advantageous because of the time value of money principle, where a dollar of taxes paid in the future is less costly than a dollar of taxes paid today. The second is that if a stock is held by someone until he or she dies, no capital gains tax would be due at all. [1]

Q. Are there any other issues that Dr. Murry should consider in this debate on how dividend policy affects Empire's cost of capital?

A. Yes. First, Dr. Murry indicates that cutting Empire's dividend would result in an increase in Empire's cost of common equity, because those investors that have come to rely on Empire's steady $1.28 dividend per share (DPS) would sell the stock. While this may be true for those investors that are only focused on the DPS, other investors who believe in retaining earnings to make investments in projects that reduce Empire's exposure to natural gas prices (whether directly through fuel for generation or indirectly through purchased power) would invest in Empire's stock. If investors realized that these retained earnings would be used to invest in these types of projects, these investors may put more value on the stock. Investors would expect the volatility in earnings to decrease because Empire would be reducing its exposure to one of the major factors that is affecting Empire's earnings, which is its reliance on natural gas to meet its load requirements. Investors would realize that Empire's management is now focusing on the long-term health of the Company, rather than

[1] Brigham, Eugene F. and Joel F. Houston, Fundamentals of Financial Management 8th edition, 1998, The Dryden Press, Orlando, Fl.

having the short-term goal of maintaining the dividend at its current level, regardless of the cost to the investors and ratepayers.

Q. Are there any other issues that should be considered when evaluating the dividend policy of a company?

A. Yes. According to Brigham and Houston's textbook, Fundamentals of Financial Management, a company should look at various financial scenarios when determining an appropriate dividend level. In fact, most well-run companies would have a set of forecasted financial statements for at least five years, which anticipate various earnings levels, investment needs, and financing needs. One of the key components in determining how future investments will be financed is the amount of retained earnings that are available for these investments. It is preferable to use retained earnings rather than external equity for future investment because internal equity (i.e. retained earnings) is cheaper than external equity (i.e. newly issued public shares). External equity is more expensive than internal equity, because when a firm raises external equity, it has to pay issuance costs and also, it may dilute EPS.

Q. Wouldn't a company want to use a conservative forecast of its financial statements to determine the appropriate dividend policy?

A. Yes. Usually a company will look at multiple scenarios when determining an appropriate dividend. At the very least, one would think that a company would look at *good*, *bad* and *normal* scenarios, which could contemplate anything from different states of the economy to various types of ratemaking treatments in a rate case. Based on my determination of the returns on common equity that would need to be earned in order to achieve a more reasonable dividend payout ratio, Empire is not being conservative enough in

its expectations of its earnings level in order to achieve a more reasonable dividend payout ratio.

Q. If sources of financing have to be considered for future investments, and a company has a targeted capital structure, then wouldn't it appear to be good financial planning for that company to consider all of the factors that will affect its capital needs in the future?

A. Yes.

Q. What things should be considered when determining how much cash to distribute to shareholders?

A. According to Eugene F. Brigham and Joel F. Houston's textbook, Fundamentals of Financial Management, two points should be kept in mind: (1) The overriding objective is to maximize shareholder value; and (2) the cash flows produced by the firm belong to its shareholders. Further, the optimal payout ratio is a function of four factors: (1) investors' preferences for dividends versus capital gains; (2) the firm's investment opportunities; (3) its target capital structure; and (4) the availability and cost of external capital. The last three elements are combined in what is called the "residual dividend model," in which the dividend is set equal to the actual earnings minus the amount of retained earnings necessary to finance the firm's optimal capital budget. Under this model a firm follows four steps when establishing a targeted dividend payout ratio: (1) It determines the optimal capital budget; (2) it determines the amount of equity needed to finance that budget, given its targeted capital structure; (3) it uses retained earnings to meet equity requirements to the extent possible; and (4) it pays dividends only if more earnings are available than are needed to support the optimal capital budget.

Q. Does it appear that Empire has a targeted capital structure?

A. Yes. In Empire's 2003 Annual Report, Mr. Bill Gipson indicated the following:

> Today our equity to total capitalization ratio stands at about 47%, well in line with what we consider a healthy ratio for our business.

Consequently, it appears that Empire is targeting a certain capital structure, given Mr. Gipson's characterization of a 47% equity ratio as being healthy. Dividend policy has to be considered if a company is targeting a certain capital structure. Otherwise, a company may consistently put itself in a situation where it has to issue more costly new external equity than is necessary. This is why careful financial planning is necessary.

Q. Would it be proper to set dividends based on yearly fluctuations, or should dividends be set based on expectations for some longer period?

A. Dividends should be set based on expectations for some longer period. There is no doubt that investors like certainty. Consequently, if a dividend were to fluctuate from year-to-year, then some investors may shy away from that stock. This is why it is important for a company to develop some type of financial plan in order to determine the sustainability of a dividend based on the expected earnings over a period of at least five years.

Q. Has Empire set a goal for targeted EPS growth over the next five years?

A. No. When asked this question during his deposition on November 8, 2004, Mr. Gipson indicated the following:

> We have – we have concentrated our efforts toward recovery of costs. Until we – until we get in a position where we can get the costs recovered, it's difficult to establish any kind of earnings growth rate. The answer to your question is no.

It would appear to be difficult to determine an appropriate level of dividends if Empire is not going through the process of projecting future earnings. Even with regulatory uncertainty, one would believe that Empire would go through the process of estimating future earnings so it can plan its investments and financings accordingly.

Q. Should other things be considered besides earnings when evaluating the dividend level over a long period?

A. Yes. Not only should earnings be considered when determining the proper amount of dividends to pay out, but the growth opportunities for the company should be considered as well. This will help a company determine what its optimum dividend payout ratio would be. According to Eugene F. Brigham and Joel F. Houston's textbook, Fundamentals of Financial Management, the three specific steps that should be taken to set a dividend are as follows:

> 1. Estimate what their MCC [marginal cost of capital] and IOS [investment opportunity schedules] schedules are likely to look like, on average, over the next five or so years.
>
> 2. Use the forecasted MCC and IOS information to find the residual model payout ratio and dollars of dividends during the planning period.
>
> 3. Then set a *target payout ratio* based on the projected data.

These steps will help a corporation set a long-run target payout ratio that will take into consideration yearly fluctuations.

Q. It appears that the dividend policy of a firm requires quite a bit of thought and foresight. What tools do most larger corporations use to set their long-run dividend payout ratio target?

A. According to Eugene F. Brigham and Joel F. Houston's textbook, Fundamentals of Financial Management, most larger corporations use computerized financial forecasting models to forecast their financial statements over the next five to ten years. Brigham and Houston's text also provides the following explanation on dividend policy:

> Information on projected capital expenditures and working capital requirements is entered into the model, along with sales forecasts, profit margins, depreciation, and the other elements required to forecast cash flows. The target capital structure is also specified, and the model shows the amount of debt and equity that will be required to meet the capital budgeting requirements while maintaining the capital structure.
>
> Then, dividend payments are introduced. Naturally, the higher the payout ratio the greater the required external equity. Most companies then use the model to find a dividend pattern over the forecast period (generally five years) that will provide sufficient equity to support the capital budget without having to sell new common stock or move the capital structure ratios outside the optimal range. The end result might include a statement, in a memo from the financial vice-president to the chairman of the board, such as the following:

I haven't included the sample memo, but the memo explains why the vice-president believes a certain dividend growth rate can be sustained under reasonable scenarios. However, if these reasonable scenarios are not met and the earnings don't cover the dividend, then the corporation is exposed to the danger of having to cut the dividend.

Q. Does it appear that Empire has put a lot of thought into its dividend policy?

A. No. It appears that Empire's dividend policy is to maintain its dividend at its current level regardless of the impact this dividend policy has on its shareholders, creditors, and ratepayers. In fact, Dr. Vander Weide, one of Empire's rate-of-return witnesses in this case, stated during his deposition that Empire should give its shareholders priority over Empire's creditors (Vander Weide deposition p. 131, ll. 7-10). This mind set is particularly enlightening when one considers that Empire has consistently used credit rating agencies'

research reports to attempt to bolster its argument for rate increases. If Empire management were sincerely concerned about the creditworthiness of their Company, then one would believe that they would at least reevaluate their short-sighted dividend policy of maintaining the dividend at its current level, even if it doesn't appear that the Company will be able to sustain this dividend and retain earnings for future investment under fairly conservative scenarios.

Q. Do you have any other reason to believe that Empire is not putting a lot of thought into its dividend policy?

A. Yes. During Mr. Gipson's deposition on November 8, 2004, several questions were asked about Empire's financial planning on how its dividend policy is a part of that financial planning. In response to a question about whether Empire had done any studies to determine if Empire's cost of common equity would go up if it cut its dividend, Mr. Gipson indicated that, although they had not done any studies, it was his opinion that this would occur. Also, when asked if there might be any benefit to Empire if it were to cut its dividend, Mr. Gipson's answer was a simple "no" without any further discussion.

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According to Mr. Gipson, Empire doesn't have a written dividend policy and there aren't any internal documents regarding Empire's policy of declaring dividends.

Q. What appears to be Empire's current targeted dividend payout ratio?

A. Based on the answer given by Mr. Gipson during his deposition on November 8, 2004, it appears that Empire's targeted dividend payout ratio is now 80 percent, plus or minus 10 percent.

Q. Based on your analysis of Empire's dividend payout ratio since it expressed its targeted dividend payout ratio of 70 to 75 percent in the 1999 S&P research report, has Empire been able to achieve this targeted payout ratio?

A. No. Empire's lowest payout ratio since 1999 was its payout ratio of 94.81 percent in 2000.

Q. How many rate cases has Empire filed since 1999?

A. This is the third one since 1999. Empire's Case No. ER-2001-299 was a contested case that was decided by the Commission. Empire's Case No. ER-2002-424 was settled among the parties. Consequently, it does not appear that the continuous filing of rate cases is going to allow Empire to attain its goal of achieving a more reasonable dividend payout ratio.

Q. Can Empire cut costs to help it achieve a more reasonable dividend payout ratio?

A. According to Mr. Gipson during his deposition, this not an option. Mr. Gipson stated the following during his deposition:

> There -- you know, really the only opportunities to remove costs would be in things that I think would -- in my opinion,

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> would have a significant impact on reliability and safety with respect to the service. So it's kind of a long answer to a very short question and that is if we're going to maintain reliability and safety, the answer is, no, I don't think we can -- we can cut enough costs out of the organization to have any significant impact on -- on net income.

Consequently, the earnings needed for Empire to improve its dividend payout ratio would have to come from the growth in demand for electricity and through possible rate increases.

Q. Are you aware that Empire believes it would be able to sustain its current dividend level if it is able to earn its cost of common equity?

A. Yes, I am aware of this, but I have not seen any financial information that supports this position, which leads to my main concern on this issue. Based on information obtained from Empire's officers during their depositions, it does not appear that Empire has done much analysis and planning of its dividend policy. This is what concerns me most. The dividend policy of a company requires careful consideration. While a company would like to maintain its dividend at its current level to appease certain investors, sometimes a company must react to its financial situation. If a company has consistently been unable to support its dividend, then it is time to re-evaluate its dividend policy. The ability of the company to have earnings to support its dividend and investment needs should be a part of a company's consideration on the level of dividends it can pay—not its belief that investors may initially react negatively to such a decision. Ultimately, the financial health of the company should be considered by management. If management can keep its cost of capital lower by retaining more earnings for future investment, then not only will this enhance the financial health of the company, but it will ultimately increase shareholder value because Empire will not depend on external equity to the extent that it has had to since 1992. As each

rate-of-return witness in this case recognizes, one of the basic assumptions in cost-of-capital analysis is that investors employ a buy-and-hold strategy. If Empire decided to improve its long-term financial health by reducing its dividend to achieve a more reasonable payout ratio, then investors that employ this buy-and-hold strategy would ultimately be rewarded, because of the value that this long-term vision will create.

Q. On page 9, lines 23 through 25 of his rebuttal testimony, Dr. Murry quotes from your direct testimony to attempt to support his position that you committed analytical errors in your DCF analysis. Did Dr. Murry provide proper context for your quote?

A. No. If one were to look at the question that was asked, one would understand the context of the quote that Dr. Murry provided. In my direct testimony, I had asked why I was analyzing Value Line's calculated historical growth rates, rather than calculating these growth rates as I did in Empire's last rate case, Case No. ER-2002-424. I indicated that it appeared to be more logical to review Value Line's historical growth rates, because investors have this information readily available to them. If one were to review Schedule 12 attached to my direct testimony, it clearly shows that my proposed range of growth gave little weight to the average historical growth rate of negative 0.67 percent. While I believe that investors will evaluate this information in their investment decision, I ultimately chose to recommend a growth rate of 2.25 to 3.25 percent, which is significantly different from the average historical growth rates of negative 0.67 percent. Actually, a growth rate of 2.25 to 3.25 percent is much more consistent with the multiple sources of projected growth rates that are available to the average investor.

Additionally, if an investor sought to understand how Value Line calculated the negative historical growth rates, which I think a rationale investor would do, then that

investor would understand how Value Line calculated its projected three-to-five-year growth rate of 6.50 percent. If investors knew that Value Line's earnings projections were double what other sources were projecting, then it would only be prudent to investigate the fundamentals as to why Value Line's projections were so much higher. I explained why Value Line's projections were higher in detail in my direct testimony on page 29, line 17 through page 30, line 8. However, I will repeat this again because I believe it is important for the Commission to have a firm understanding of this issue.

The historical growth rates for Empire were negative as a result of an anomalous year in 2001. Value Line calculates its historical five-year and ten-year compound growth rates by taking an average of three years of data for the beginning and ending values in order to smooth out the results. Even with this smoothing, 2001 was such an abnormal year for Empire that it still caused the historical growth rates to be negative. Therefore, I didn't give as much weight to the historical growth rate as I might normally. For this same reason, I did not give as much weight to Value Line's projected growth rate. Value Line's projected compound growth rate is based on a base period that includes Empire's anomalous year in 2001. This results in an upwardly-biased projected growth rate. If an analyst uses a base year that contains an anomalous low EPS, then this will result in a five-year projected (EPS) growth rate that is not sustainable. It appears that some of the analysts' projections provided by I/B/E/S and S&P have taken the anomalous year into consideration because I/B/E/S's median estimated five-year EPS growth rate was 2.50 percent and S&P's projected five-year EPS growth rate was 3.00 percent. Considering all of this information, I chose a reasonable growth rate range of 2.25 percent to 3.25 percent (see Schedule 12 attached to my direct testimony).

Actually, I gave quite a bit of weight to the reasonable projected growth rates in this case. Once I normalized Value Line's projections to eliminate the effect of the anomalous year in 2001, I determined that their projected growth rate would have been 3.25 percent. The low end of my growth rate was actually encompassed in the range of projected growth rates provided by I/B/E/S in August 2004. The low estimate provided by I/B/E/S was 2 percent, whereas the high estimate provided by I/B/E/S was 3 percent.

Q. Is there any other way for an investor to determine the sustainability of an estimated growth rate for Empire?

A. Yes. An investor can look to Empire's projected demand growth over the next several years. As I indicated in my direct testimony, in 2001, Empire projected an annual growth rate of 2.8 percent kilowatt-hour sales over the next several years. During Mr. Gipson's deposition, he indicated that Empire is now projecting a demand growth rate of 2.4 to 2.5 percent in kilowatt hours. If one were to consider the fact that Mr. Gipson does not believe that Empire can cut its costs because these cost cuts may jeopardize safe and reliable service, then the maximum growth rate, absent unreasonable rate increases, would be based solely upon Empire's predicted growth in demand and on rate increases to recover costs. This information provides a tremendous amount of insight on the sustainability of a projected 6.5 percent growth rate. In fact, as has been demonstrated by Empire's consistently high dividend payout ratio over more than the past 10 years, Empire has not been able to grow its EPS in order to achieve a more reasonable dividend payout ratio. Therefore, I am sure there are some investors that believe that Empire's EPS growth rate may even be less than its expected growth in demand for electricity. Usually the annual growth in DPS gives some insight as to the sustainability of EPS growth and, as has been demonstrated by Empire's flat

dividend over more than the last ten years, Empire's EPS growth for any given time frame over this period has not been sustained.

Q. On page 9, lines 29 through 31 of his rebuttal testimony, Dr. Murry indicates that you should have compensated for rising interest rates. Do you agree that you have not compensated for the possibility that interest rates will increase?

A. No. The DCF results contemplate investors' expectations about the future level of interest rates. The fact that investors' expectations are embodied in the price they are willing to pay for the stock of a company is what makes the use of the DCF model intuitively appealing. Dr. Murry was asked during his deposition on November 10, 2004, if interest rates were a consideration of investors when buying stock. The following questions and answers occurred between Mr. Keith Krueger, Staff counsel, and Dr. Murry:

> Q. How about expectations of future levels of interest rates?
>
> A. That would be a factor, yes. But one has to ask the question why. If it's an investor looking for a return that's close to interest rate as an alternative investment, then they'd be very interested in interest rates. If you're buying a speculative west coast software company, you probably wouldn't consider the interest rate very important in your decision process. So speculating on long-term capital gain and not expecting dividends, anything in between. So those are different kinds of investments.
>
> Q. It would depend upon the extent to which earnings correlate to interest rates?
>
> A. That's a good way to express it, I think.

Consequently, during Dr. Murry's deposition he acknowledged that when investors are buying a stock they will contemplate the expected future level of interest rates in their

buying decision. Therefore, any additional explicit adjustment to the DCF results would be duplicative because the stock price already captures this expectation.

Q. On page 10 of his rebuttal testimony, Dr. Murry indicates that, because you completed mechanical calculations that averaged averages, this "series of averages simply hides from analytical view and subsequent interpretation the various market valuations." How do you respond to this criticism?

A. As Dr. Murry is well aware, rate-of-return witnesses often go through a series of calculations before arriving at their final estimate of a reasonable cost of common equity. Sometimes these mechanical calculations may provide insight on the cost of common equity, but sometimes these mechanical calculations will be dismissed because the results are illogical. One need not look any further than Dr. Murry's Schedules DAM-13 through DAM-16 attached to his direct testimony, to observe an example of Dr. Murry himself going through a set of mechanical calculations that he ultimately decides not to use in making his recommendation. In Dr. Murry's application of the DCF model to Empire in these Schedules, he arrives at a range of cost-of-common-equity estimates for Empire of 5.70 percent to 8.99 percent. While I believe that his DCF result for Empire of 8.99 percent is a much more realistic estimate of Empire's cost of common equity than Dr. Murry's estimated cost of common equity of 12 percent, the point of this discussion is that Dr. Murry did not give these calculations much weight in recommending a cost of common equity for Empire. I also went through a set of mechanical calculations, and arrived at an average historical and projected growth rate of 1.67 percent. However, my recommended growth rate was 2.25 to 3.25 percent for Empire.

The reason I did not give as much weight to the historical growth rates in this case is that I realized that Value Line was including Empire's anomalous 2001 EPS results in its historical averages and it was also including this anomalous result in its base period to calculate Empire's projected growth. This causes Empire's historical growth rates to be skewed downward and its projected growth rates to be skewed upward. It is critical for a rate-of-return witness to understand this and consider it in his recommendation.

Q. Was Dr. Murry aware of why Value Line's growth rate was double that of S&P's?

A. No. Dr. Murry was involved in the following questions and answers during his deposition on November 10, 2004:

> Q. Do you know why ValueLine's estimate of Empire's future earnings growth is so much greater than S&P's estimate of Empire's future earnings growth?
>
> A. I cannot distinguish those two numbers, and I guess the answer is no, I do not. I cannot tell you why S&P's forecast is so much lower than ValueLine's.
>
> Q. Did you do any investigation or analysis to determine why it would be so much higher, why ValueLine's would be so much higher?
>
> A. Well, I was -- I can say that I recall trying to understand why they were different, and so in that sense I'm sure I did investigate, and, of course, I had people working with me and I was asking them. I cannot sit here today and pinpoint the difference, and I don't know that I ever felt that I comfortably knew the difference.
>
> Q. Do you believe that a 6 percent growth rate is sustainable for Empire?
>
> A. Well, this was a forecast out for, I guess, four years at the time, three to five years at the time of the testimony, and I think that's a fair time horizon for many investors. Sustainable indefinitely? No, I don't think that.

Consequently, it does not appear that Dr. Murry was able to fully grasp the differences in the various projected growth rates. I believe Dr. Murry's analysis is the one lacking "analytical view and subsequent interpretation," because to blindly accept Value Line's projected growth rates, without knowing how they were calculated, shows a bias towards the highest growth rates that are available in order to arrive at a recommended cost of common equity.

Q. Are you aware of any studies that discuss the situation that you discovered in Value Line's projected growth rate for Empire?

A. Yes. David C. Parcell's book, The Cost of Capital – A Practitioner's Guide, page 8-27, discusses this limitation on the use of projected growth rates. He cites a study by Brigham and Gapenski, which states: "Analysts' growth rates include the impact of growth from a base year (or period) that may be characterized by abnormally depressed or high earnings. Such growth rates thus often assume non constant growth and may not be sustainable." Consequently, it is imperative for the rate-of-return witness to consider this when recommending a reasonable long-term growth rate for purposes of estimating the long-term cost of common equity for a utility company. It appears that the analysts' growth rates reported in S&P and I/B/E/S took such situations into consideration because their estimates are more in line with Empire's expected growth in demand.

Q. On page 10, line 15 through page 11, line 2 of his rebuttal testimony, Dr. Murry indicates that you should have adjusted your Capital Asset Pricing Model (CAPM) to take into consideration the smaller size of Empire. Is the evidence on this issue conclusive for utility companies?

A. No. The adjustment for size premium that Dr. Murry advocates is based on a study of all of the stocks in the New York Stock Exchange, the American Stock Exchange and the NASDAQ National Market. The study did not apply specifically to regulated utilities. Annie Wong, associate professor at Western Connecticut State University, performed a study that refutes the need for an adjustment based upon the smaller size of public utilities. She stated:

> First, given firm size, utility stocks are consistently less risky than industrial stocks. Second, industrial betas tend to decrease with firm size but utility betas do not. These findings may be attributed to the fact that all public utilities operate in an environment with regional monopolistic power and regulated financial structure. As a result, the business and financial risks are very similar among the utilities regardless of their size. Therefore, utility betas would not necessarily be expected to be related to firm size.

Because smaller utilities operate in a regulated environment, just as large utilities do, making an adjustment for firm size appears to be questionable.

Q. On page 11, lines 11 through 12 of his rebuttal testimony, Dr. Murry criticizes your pre-tax interest coverage ratio calculation because it didn't include unamortized debt expense. Is this a valid criticism?

A. No. When calculating the pre-tax interest coverage ratio, the objective is to determine the coverage of the cash interest expense. The unamortized debt expense is not a cash expense item. This is completely contrary to the objective of determining the ability of a company to cover its cash expenses.

Q. On page 12, lines 8 through 11, Dr. Murry indicates that you shouldn't have included a couple of your comparable companies because they have reduced or suspended their dividends recently. Do you agree that this renders the use of the DCF analysis on such companies as not being useful?

A. Not in and of itself. I do not believe that a reduction of the dividend means that the utility is unhealthy. A reduction of the dividend could position a company to become more healthy in the future, because it is considering its long-term need to conserve cash for financial flexibility. Additionally, Dr. Murry's proxy estimates of growth for Empire and his comparable companies are largely based on their projected earnings growth rates and not on dividend growth rates. Therefore, Dr. Murry understands that if a dividend is not growing at a constant rate, and even if it is reduced, there are other proxies that an analyst can evaluate in order to estimate the growth component of the DCF model.

Q. Regardless of the companies' dividend reductions, weren't the ten-year dividend growth rates for these companies positive?

A. Yes. I didn't even consider the short-term negative growth in dividends that these companies incurred. This simply wasn't a part of the growth proxies that I considered.

Q. Dr. Murry criticizes your use of DPL, Inc. (DPL) because it does not have an investment grade credit rating. Is this a valid criticism?

A. Yes, it is. The source that I used to determine DPL's credit rating must not have been updated at the time I did my study. Based on further review, DPL's credit rating had been reduced to below investment grade before I performed my study. However, DPL's credit rating is not B+, as indicated by Dr. Murry, it is BB-.

Q. Has the discovery of this information caused you to change your recommendation in this case?

A. No. After I had a chance to review the DCF cost of common equity results for both Dr. Murry's and Dr. Vander Weide's proxy groups, I became even more comfortable with my opinion that the cost of common equity for utilities has continued to come down and

that, if anything, Empire's cost of common equity may be a bit higher than some of the comparable companies.

Q. Dr. Murry indicates that you mistakenly excluded Central Vermont Public Service and Green Mountain Power based on your criterion that they had nuclear operations. Is Dr. Murry correct that these companies do not have nuclear exposure?

A. Yes. However, this was not clear from the Value Line tear sheets for these companies. For example, Central Vermont Public Service's (Central Vermont) tear sheet indicated that it owned 58.85 percent interest in Vermont Yankee Nuclear Power Corporation. However, S&P's research report on Central Vermont indicated that it didn't have any nuclear exposure. The same issue applies to Green Mountain Power.

Q. Would you have included these companies in your comparable group if you had known that they didn't have nuclear exposure?

A. Initially I would have, but after further investigation, I found that these companies were not covered by S&P and I/B/E/S, so I would have eventually excluded them anyway.

Response to Dr. Vander Weide's Rebuttal Testimony

Q. On page 2, line 23, through page 3, line 8 of his rebuttal testimony, Dr. Vander Weide criticizes your use of the annual form of the DCF model. How do you respond?

A. It is interesting to note that Empire's other rate-of-return witness in this case, Dr. Murry, believed that the annual form of the DCF model was the most appropriate form to use to estimate Empire's cost of common equity.

Q. What was Dr. Murry's rationale for using the annual form of the DCF model to estimate Empire's cost of common equity?

A. During Dr. Murry's deposition on November 10, 2004, the following exchange occurred between Mr. Keith Krueger, Staff counsel, and Dr. Murry:

> Q. Do you believe that the use of the annual form of the DCF model is appropriate for use in making estimations of the cost of common equity for a utility company?
>
> A. If I understand the question, I think I do, you're describing my method, methodology, and I think it's appropriate.
>
> Q. Have you ever used the quarterly form of the DCF model?
>
> A. I believe I used it in a FERC case or two at the time when I believe FERC was more or less prescribing it, and so I think I can say that I have used it, but that was a number of years ago.
>
> Q. Would that be the only reason you know of to use that form?
>
> A. I can tell you why I don't or why I normally would not. I think what we're trying to do in the DCF, as I stated earlier, is to determine from the data what we think investors are using to make their decisions. The quarterly model, if I understand how you're using, I think I do, you're assuming the investors are making a very precise discount of the dividends they're going to get each quarter. And I think most investors, especially utility investors, don't fine tune their investment that precisely. I think they're more likely to buy and hold. I think they're more likely to look at dividends as an income stream and for retirement and those sorts of things. And this, of course, is changing also as to who may be buying these utilities. So it's my interpretation that investors are not that precise in choosing what that income stream looks like, and that's why I do not use it normally.

Consequently, it is the reliability of the results that matter, not necessarily the strict technical accuracy of the rules of the model. A rate-of-return witness' objective is to estimate what investors' required rate of return is on their investments. Therefore, it is important to understand the thought process that investors go through in their investing decisions.

Q. Do the company witnesses agree with you that recommending a rate of return based on the cost of capital is reasonable?

A. Yes. Both witnesses admitted so in their depositions. In fact, they went one step further and indicated that this was consistent with the principles set forth in the *Hope and Bluefield* cases. Dr. Murry and Mr. Krueger had the following exchange during Dr. Murry's deposition on November 10, 2004:

> Q. Do you believe that setting the return on equity for a utility equal to the cost of capital is consistent with the policies announced or principles announced in the Hope and Bluefield cases?
>
> A. As I understand it, yes.

Dr. Vander Weide and Mr. Krueger had the following exchange during Dr. Vander Weide's deposition on November 12, 2004:

> Q. Thank you. Do you believe that setting the allowed return on equity for a utility equal to the cost of capital is consistent with the principle announced in the Hope and Bluefield cases?
>
> A. Yes.

Consequently, it is clear that the rate-of-return witnesses in this case agree that setting the allowed rate of return equal to the cost of capital is consistent with the principles set out in the *Hope* and *Bluefield* cases. Setting the allowed return based on Empire's cost of capital balances the interest of the investor and the ratepayer. Setting the allowed return based on

what other states have authorized for other companies may not accurately reflect Empire's cost of capital.

Q. On page 3, lines 9 through 23 of his rebuttal testimony, Dr. Vander Weide indicates that you applied the annual form of the DCF model incorrectly. Do you agree?

A. No. When determining D_1 for purposes of determining the dividend yield, one is trying to determine the dividend that the investor will receive over the next 12 months. Therefore, the growth of the dividend in the future is not what investors consider when determining the expected dividend yield. However, investors may consider the growth of the dividend in the future to determine the expected growth of the stock in the long-run.

Q. What dividend did Dr. Murry use to determine his dividend yields in Schedules DAM-13, DAM-15 and DAM-17 to determine his low and high dividend yields?

A. He used Value Line's expected dividend for 2004.

Q. Are there any supporting sources for the use of the expected dividend over the next 12 months to determine the dividend yield?

A. Yes, Dr. Roger A. Morin's book, Regulatory Finance: Utilities' Cost of Capital, 1994, states on page 139: "In implementing the standard DCF model, it is the dividend that an investor who purchases the stock today expects a company to pay during the next 12 months that should be used, and not the dividend that was paid last year." Obviously, when one considers the variable itself, D_1, in the DCF model, it is readily apparent that the subscript "1" indicates that this is supposed to be the dividend that is expected next year. I am not sure that any investor that is investing in Empire this year would reasonably expect that Empire's current dividend of $1.28 will be increased next year.

Therefore, the use of $1.28 for next year's dividend is entirely appropriate in the case of estimating Empire's cost of common equity.

Q. Starting on page 4, line 13 of his rebuttal testimony, Dr. Vander Weide criticizes your use of six months of stock prices to determine the dividend yield for Empire because analyst estimates are made quarterly. Do you agree with Dr. Vander Weide that your use of an average of six months of stock prices results in a "mismatch of data sets" of quarterly analyst estimates and stock prices?

A. No. As Dr. Vander Weide recognized during his deposition on November 12, 2004, utility investors are investing for the long-term (Vander Weide deposition on p. 11, ll. 2-19). Therefore, if there are any extreme fluctuations in earnings growth rates from quarter-to-quarter, investors are going to recognize this in developing their expectations for the sustainable growth reflected in the value of a company's stock. For example, in Empire's last rate case, Case No. ER-2002-424, Value Line's projected growth rate in EPS went from 4.50 percent on January 4, 2002 to 9.50 percent on April 5, 2002. One would expect that if Empire's growth expectations increased that much that Empire's stock price would increase dramatically because of attractive growth opportunities; but obviously, as I have discussed before, investors investigate matters a little further to determine whether the 9.50 percent growth rate is sustainable. I have attached Schedule 1 to show that Empire's stock price did not increase dramatically after the jump in Value Line's expected growth from one quarter to the next. Actually, Empire's stock price declined in the second quarter of 2002.

Q. Why did Value Line's expected earnings growth increase so much from one quarter to the next in 2002?

A. The Value Line expected growth rate as of January 1, 2002 did not include the anomalous 2001 results in the base year for purposes of calculating a projected growth rate. However, the Value Line expected growth rate for the April 1, 2002 report did include the anomalous 2001 results in the base year for purposes of calculating the projected growth rate. Value Line's future expected EPS used for both quarters' estimates was $1.75 per share. Therefore, the reason for the significant change in Value Line's EPS projection was its use of the anomalous 2001 EPS results in the base figure.

Q. Aren't these the same concerns you have with relying too heavily on Value Line's projections in this case?

A. Yes. Dr. Murry was made aware of this issue in Empire' last rate case. However, he chose not to take this into consideration then, or in this case, either.

Q. Beginning on page 5, line 4 of his rebuttal testimony, Dr. Vander Weide criticizes your consideration of historical growth rates in making your recommendation on the growth component of the DCF model. How do you respond?

A. I believe my discussion on investigating how Value Line calculates its projected growth rates explains my concerns about relying on projected growth rates without doing some further analysis of both historical growth rates and other projected growth rates. I believe my example of the fact that when Value Line over doubled its projected EPS growth rate for Empire, the stock price didn't increase, supports my position that investors do not blindly accept projected growth rates provided by outside sources. Regardless, it is interesting to note that the source that Dr. Vander Weide relied on, I/B/E/S, had a mean projected growth rate of 2.5 percent for Empire, which is actually lower than the midpoint of my recommended growth rate for Empire.

Q. Dr. Vander Weide indicates that you should have used a projected growth rate of 4 percent for the growth component in your DCF model to determine Empire's cost of common equity. What would the use of the 4 percent growth rate assume that investors do when estimating the future growth of Empire?

A. It would assume that investors give as much weight to Value Line's Empire growth projections as they are currently giving to Empire's projected growth rates from other sources. As I have demonstrated, I do not believe that Empire's investors or potential investors are currently giving Value Line's projected growth rates for Empire as much weight as other sources because of how Value Line calculates its 3-5 year projected growth rates.

Q. Beginning on page 7 of his rebuttal testimony, Dr. Vander Weide indicates that looking at a shorter period (2004-2008) of Value Line information would result in a higher projected growth rate for Empire. Is looking at a shorter period consistent with the principles of the DCF model?

A. No. This appears to be an attempt by Dr. Vander Weide to find growth rates that are higher in order to support his position in this case. Dr. Vander Weide should also have been aware that Value Line's current EPS estimate for Empire contemplates another year, 2004, that is not going to be useful for determining Empire's long-run sustainable growth rate.

Q. Did Dr. Vander Weide recognize, during his deposition, that the growth component for the DCF model is supposed to be based on projections for the longest period available?

A. Yes. Dr. Vander Weide indicated the following on page 47, line 18 through page 48, line 3 of his deposition:

> Q. Do you believe it's appropriate to look at projected growth rates for shorter periods of time to determine what long-term sustainable growth rate to use in the DCF model?
>
> A. I don't understand the question. When you say "shorter periods of time," do you mean shorter than what?
>
> Q. Oh, a period of five years or less.
>
> A. I wouldn't use one or two years. I would use the longest growth -- the longest period available, and take that as a view across many companies of what investors believe the future growth projects are.

Consequently, Dr. Vander Weide understands the importance of using the longest period available.

Q. By looking at the projected growth from Value Line for 2004-2008, isn't Dr. Vander Weide implying that investors will investigate matters a little further before determining whether to rely on a certain source to determine an appropriate projected growth rate?

A. Yes. That is why I believe that if investors are trying to determine a more sustainable growth rate for Empire, they would look at a more "typical" year for Empire to determine reasonable future expectations for Empire's growth. It appears that analysts from S&P and I/B/E/S have undertaken such an analysis.

Q. Beginning on page 8, line 4 of his rebuttal testimony, Dr. Vander Weide explains why he believes it is more desirable to choose a relatively large group of comparable companies for the proxy group. Do you agree that this is a worthwhile goal?

A. Yes. I believe this is a worthwhile goal, but there are certain tradeoffs in selecting a large group of companies that are not truly comparable. There are certain business risks that only regulated electric utility companies face. While there may be certain risk ratings that are compiled by various financial sources that may indicate reduced risk, as I demonstrated in my rebuttal of Dr. Vander Weide's direct testimony, these risk ratings may not be consistent with the cost of common equity that is estimated for that industry. Dr. Vander Weide indicated in his direct testimony that the use of a natural gas proxy group to estimate Empire's cost of common equity was "conservative," because all of the financial risk factors that he evaluated indicated that the natural gas industry was less risky than the electric utility industry. However, the average DCF result for his proxy group of natural gas utilities was higher than the average DCF result for his proxy group of electric utilities. If his natural gas proxy group provided a conservative estimate for the cost of common equity for an electric company, then the cost of common equity for that proxy group would be lower than the cost of common equity for the electric proxy group.

Q. Do you believe that this is why many rate-of-return witnesses try to select "pure play" companies when performing a proxy group analysis of the cost of common equity?

A. Yes. There is no question that business risk is one of the key components of the total risk that a company faces. The only way to truly ensure that the comparable companies you select are going to provide an accurate proxy of the cost of common equity for the operation you are analyzing is to select companies that are confined, as much as possible, to that operation.

Q. Isn't it true that finding companies that are only in the regulated electric utility business has become a challenge in recent years?

A. Yes. This is why I am not opposed to Dr. Murry's or Mr. Allen's decision to use a looser restriction on the amount of revenues from electric utility operations.

Q. Regardless of the number of electric utility companies that you chose in your proxy group, doesn't it appear that the DCF cost-of-common-equity results for all of the witnesses' electric utility proxy groups confirm the low cost-of-capital environment?

A. Yes. An objective review of these results confirms that this is the case.

Q. Beginning on page 9, line 16 of his rebuttal testimony, Dr. Vander Weide indicates that you shouldn't have eliminated, from your comparable group, companies that have nuclear operations, because the investment community does not consider nuclear operations to be a significant risk factor. Does S&P still cite nuclear exposure as a risk factor when discussing the credit risks of a company?

A. Yes. For example, when I was researching Dr. Murry's claim that I had incorrectly excluded Green Mountain Power as a comparable company because they no longer have nuclear exposure, I discovered that in a November 3, 2004 S&P research report, S&P cited the fact that Green Mountain Power had "low operating risk with no nuclear exposure" as one of the major strengths affecting Green Mountain Power's credit quality. Consequently, apparently an entity that influences debt investors' perceptions of risk, S&P, still believes that this is a risk factor to consider.

Q. Beginning on page 11, line 20 of his rebuttal testimony, Dr. Vander Weide criticizes your application of the CAPM. Please respond to some of his criticisms.

A. First, Dr. Vander Weide incorrectly states in a footnote that I had selected the wrong average yield for August 2004 for the 30-year Treasury bond. The Federal Reserve stopped reporting the average monthly yield on 30-year Treasury bonds in February 2002. The yield that Dr. Vander Weide provides in his rebuttal testimony is for a 30-year interest rate swap. I know that the August 2004 average yield for the 30-Year Treasury bond that I used is correct because the Staff's Financial Analysis Department has been downloading the daily closing 30-Year Treasury bond yields into a spreadsheet in order to determine the average yield on a monthly basis.

Second, Dr. Vander Weide claims that I used the geometric mean to calculate the risk premium for my CAPM analysis. This is incorrect. The notes on Schedule 15 attached to my direct testimony explain how I calculated my risk premium. However, I will explain it again. I subtracted the arithmetic average annual total return of long-term government securities (5.8 percent) from the arithmetic average annual total return of large company stocks (12.4 percent). This results in the 6.60 risk premium that I used in my CAPM analysis. I have attached as Schedule 2 the table that I used from Ibbotson Associates' *2004* Yearbook. Consequently, Dr. Vander Weide's criticisms about the use of a risk premium based on geometric means for the period from 1926-2003 do not apply.

Dr. Vander Weide is correct that the risk premium that I calculated for the period 1994-2003 was based on geometric means. Considering the fact that investors invest for the long-run, geometric means are a better measure of an average annual return to the investor. However, as can be determined from the results that I arrived at with the use of this shorter period for the risk premium, I have not given this result much weight; but I do believe that this result has important informational value. These results illustrate the fact that, in recent

years, returns achieved on common stocks have not been much higher than the returns achieved on risk-free securities. This lends support to a lower recommended cost of common equity.

Q. Dr. Vander Weide criticizes your failure to adjust your CAPM for Empire's small size, just as Dr. Murry did. How do you respond?

A. My response to Dr. Murry's criticism regarding this adjustment equally applies to Dr. Vander Weide's criticism. However, I would like to point out that if Dr. Vander Weide was concerned about considering Empire's smaller size in a cost-of-common-equity analysis, then one would believe that he would not have included some of the larger companies that he selected for his "largest possible group of comparable risk companies." According to Dr. Vander Weide's workpapers, over half of his DCF comparable companies had market capitalizations greater than $5 billion. As a comparison, I determined Empire's market capitalization to be approximately $550 million.

Q. Dr. Vander Weide indicates that your risk premium analysis is not useful because "accounting rates of return are frequently poor indicators of future required returns in the market place…" How do you respond?

A. This is interesting because during the "On-the-Record Presentation" in this case on July 26, 2004, Mr. Bill Gipson used Empire's accounting returns on equity to support his position that Empire had not been able to earn its allowed return on common equity in recent years. Because the book return on common equity is used as a measure of whether a company is able to earn its cost of common equity, I believe it is appropriate to analyze these book returns on common equity as they compare to the 30-year Treasury bond yields to determine a risk premium. However, I do recognize that the book return on common equity

for a company may not always be equal to its cost of common equity and that is why I primarily use this form of the risk premium model as a check on the reasonableness of the market-driven DCF cost of common equity that I recommend for the return on common equity for a company.

Summary and Conclusions

Q. Please summarize the conclusions of your surrebuttal testimony.

A. My conclusions regarding the capital structure, embedded cost of long-term debt and cost of common equity are listed below.

1. Empire's consolidated capital structure is the appropriate capital structure for ratemaking purposes in this case. It is the most logical and identifiable capital structure. Additionally, use of this capital structure is consistent with the Staff's position in the recent MGE rate case and the Commission's decision in that rate case;

2. My embedded cost of long-term debt, which reflects all of Empire's debt, is the appropriate cost of debt to utilize in the recommended rate of return, because it reflects all of the funds that Empire has available to it; and

3. My recommended cost of common equity, which is in the range of 8.29 percent to 9.29 percent, would produce a fair and reasonable rate of return of 7.85 percent to 8.34 percent for Empire's Missouri jurisdictional electric utility rate base.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

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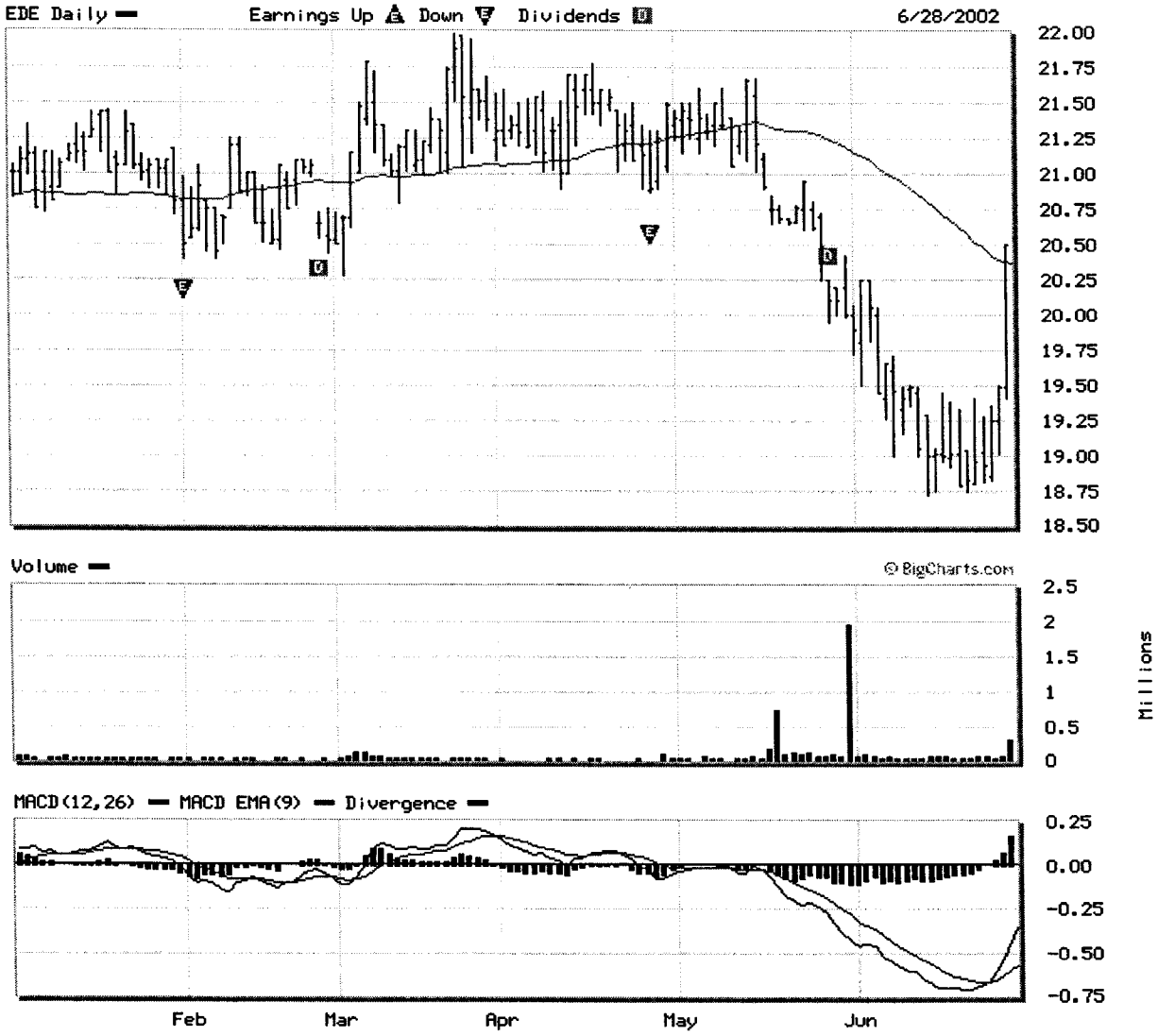

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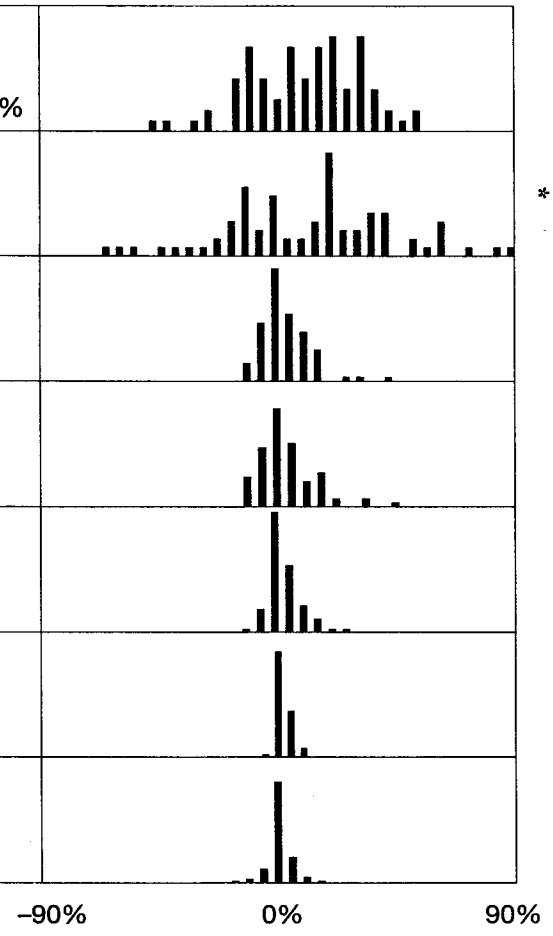
Table 2-1

Basic Series: Summary Statistics of Annual Total Returns

from 1926 to 2003

Series	Geometric Mean	Arithmetic Mean	Standard Deviation	Distribution
Large Company Stocks	10.4%	12.4%	20.4%	
Small Company Stocks	12.7	17.5	33.3	*
Long-Term Corporate Bonds	5.9	6.2	8.6	
Long-Term Government	5.4	5.8	9.4	
Intermediate-Term Government	5.4	5.5	5.7	
U.S. Treasury Bills	3.7	3.8	3.1	
Inflation	3.0	3.1	4.3	



*The 1933 Small Company Stocks Total Return was 142.9 percent.