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Issue: Capital Structure/Rate of Return
Witness: John C. Dunn
Sponsoring Party: Missouri Gas Energy
Case No.: GR-2001-292

BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI



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**Q. Please state your name and business address.**

A. My name is John C. Dunn. My business address is 7400 West 110th Street, Suite 750, Overland Park, Kansas 66210.

**Q. Are you the same John C. Dunn who filed Direct Testimony in this case before the Missouri Public Service Commission ("Commission") on behalf of Missouri Gas Energy ("MGE"), a division of Southern Union Company ("Southern Union")?**

A. Yes sir, I am.

**Q. What is the purpose of your testimony at this point in the proceeding?**

A. This testimony is Rebuttal Testimony to the Direct Testimony of Mr. David Murray, Financial Analyst with the Missouri Public Service Commission Staff ("Staff"), and to the Direct Testimony of Mr. Mark Burdette, Financial Analyst with The Office of the Public Counsel ("Public Counsel"). Both filed testimony in this case recommending a cost of equity, a regulatory capital structure and an overall rate of return.

**Q. How will your Rebuttal Testimony be organized?**

A. There are three overriding problem areas which I believe are extraordinarily important and I will deal with those initially. Each of these three problem areas applies equally to the Staff testimony and the Public Counsel testimony and I believe each is so severe as to eliminate any weight to be given to the Staff and Public Counsel recommendations in this proceeding.

## Overriding Problem Areas

**Q. What are the three overriding problem areas in both analyses?**

A. The three areas are as follows:

(1) Both analysts reviewed "comparative" groups of companies. Both "comparative groups" had average equity ratios in the 50% to 55% range. (The Public Counsel Group equity ratio was 55.4%, and the Staff Group equity ratio was 53.74%). After determining a "cost of equity" for the groups, both analysts applied the cost to a low equity capital structure for MGE without adjustment for the considerable difference in risk associated with a 32% equity ratio for MGE as compared to a 53% equity ratio for the comparative group. This is a failure to make a financial risk adjustment.

(2) Neither analyst completed his cost of capital analysis. Both analyzed the cost of capital for a group of gas distribution companies in the natural gas business. (The lack of comparability will be discussed later.) After developing an estimate of the group of companies, both then applied that cost to MGE, using Southern Union's capital structure without adjustment for business risk differences between MGE and the distribution companies in the business area.

(3) Both analysts omitted any review or consideration of MGE. Both used the atypical and unusual Southern Union capital structure and other Southern Union costs as a surrogate or proxy for MGE capital cost and capital structure without conducting any analysis establishing comparability between Southern Union and MGE and without making any adjustments to recognize differences between Southern Union and MGE. MGE is a very different company from Southern Union and that fact was not taken into consideration.

**Q. Are there any other significant issues which you believe should be considered in assigning weight to the testimony of the Staff witness and the Public Counsel witness on rate of return in this proceeding?**

A. Yes. First, neither witness, in spite of substantial lip service paid to a selection process, made a serious effort to select a group of comparable companies. I will discuss that in detail, but the fact of the matter is that whether or not a company's historical record is published in Value Line has absolutely nothing to do with the risk of investment in that company. Likewise, whether or not a company has Missouri operations has nothing to do with risk (unless Missouri regulation itself in some way significantly impacts the risk of a company in ways unlike regulation in other states impacts the risk of a company).

Second, I believe that a group of companies which are not selected on the basis of risk and the use of that group of companies without a risk adjustment to recommend a return for MGE is fatal to these analyses. In summary, neither the

Staff nor Public Counsel analysis has been completed and neither provides a return recommendation which is specific for MGE. Both in fact are incomplete and neither should be used in reaching any conclusions on the required return for MGE.

**Q. Are there any other matters to be addressed at the outset?**

A. Yes. Mr. Murray's Direct Testimony contains a substantial amount of boilerplate and was confirmed by Mr. Murray to be, in the main, a policy document prepared in conformity with the requirements of his supervisors and modeled in excruciating detail after other testimony filed by the Staff. (See the deposition of David Murray attached to this Rebuttal Testimony as Schedule JCD-11 and the Affidavit of David Murray attached to this testimony as Schedule JCD-12.)

In his deposition testimony (attached hereto as Schedule JCD-11 at p. 44), Mr. Murray admits that a significant portion of his testimony was prepared and submitted in compliance with policies of his office. In his Affidavit, Schedule JCD-12, Mr. Murray states that there are only six differences in the words used in the boilerplate portion of his Direct Testimony, and in the words used in the Direct Testimony of Staff Witness Ronald L. Bible submitted in Commission Case No. GR-98-140. In fact, some parts of the GR-98-140 Bible testimony were copied into Mr. Murray's testimony even though there is no relevance or issue in this case related to the copied material. (See Murray Testimony, p. 6, lns 13-19 and

Murray Deposition, Schedule JCD-11, pp.28-30.) The Affidavit goes on to state that other than the six items mentioned, there may be word changes, but that the highlighted and underlined portions of Mr. Bible's testimony (Exhibit 1 to the deposition of Mr. Murray), the boilerplate testimony, are identical or substantially similar to related portions of Mr. Murray's testimony. The underlined portions of Mr. Bible's testimony, JCD-11, encompass a substantial portion of the total testimony of Mr. Murray in this case. In fact, Mr. Murray's entire capital structure rationale specific for this case is set out on only five lines of his direct testimony and the approach which he used for determining the capital structure and cost of equity in this case encompasses not quite three pages (Schedule JCD-11, pp. 38, 39 and 43).

Q. **If the policy portion of the testimony is on point and relevant for the Commission in this proceeding, is it appropriate to include that testimony in the record in this case?**

A. If the testimony is thoughtfully prepared, considered and relevant, it is certainly appropriate to include it in this proceeding. However, I don't believe that Mr. Bible's testimony meets this standard. It is my view that this testimony is simply "dumped into the record" in this proceeding and used to obfuscate the fact that there is no meaningful determination of the cost of equity for MGE presented by the Staff in this case.

**Q. Has Mr. Murray accurately calculated the various equity costs as represented in his Direct Testimony?**

A. With minor exceptions, I believe the calculations made in connection with the various models are accurate, but there are several flaws in the process rendering them useless in this proceeding. These flaws include the fact that the comparable companies were selected without any meaningful index of comparability and the analyses were not completed using appropriate risk adjustments. Some of the arithmetic is also contrived to lower the return recommendation. As a consequence, whether or not accurately calculated, the recommendations are not helpful to the Commission in this proceeding and should be accorded little or no weight. Furthermore, I will show later that some of the methodology and calculations are so tortured that the effort to produce a low return number ruined the application of the discounted cash flow ("DCF") model.

**Q. Is there an objective criterion which can be used to indicate or demonstrate the fact that the Staff and the Public Counsel recommendations in this case are too low and should not be given any weight by the Commission?**

A. Yes. Both analysts reviewed and analyzed Southern Union, the parent of MGE. Both purport to establish a rate of return and, more importantly, a return on equity for Southern Union which then is used as a proxy return for MGE.

<u>It is a well-established principle of finance that as risk increases, costs likewise increase. The higher the risk, the higher the cost.</u>

Southern Union has a series of preferred stock outstanding which has a cost to the company of 9.93%. While this preferred stock was issued some years ago at $25 a share, it still trades at $25 a share, indicating that the cost to Southern Union on a market basis is still 9.93%. The preferred stock is substantially less risky than the common stock of Southern Union. The preferred stock has priority over the common stock in dividends, its dividends being treated as interest payments by Southern Union to a Trust. Furthermore, the dividends are cumulative and are supported by a commitment of Southern Union equal to Southern Union's commitments on its long term subordinated debt. The preferred stock also has priority in the event of a liquidation. Both of these priorities, payment and liquidation, are supported by the full faith and credit of Southern Union and are legally attached to the preference. The equity investment in Southern Union does not enjoy these advantages and is without a doubt a lower quality investment instrument with much greater risk than the preferred stock.

**Q. What is the significance, if any, of these differences?**

A. Given these substantial differences, financial theory says that the preferred stock, the lower risk investment, should have a lower cost than the common equity. <u>However, both the Staff and the Public Counsel in this proceeding have made recommendations to this Commission that the return on equity to be authorized</u>

should, in most cases, be less than the cost of preferred. For example, the Public Counsel has recommended a cost of common equity of 9.90%, which is less than the actual cost of the preferred stock at 9.93%. Either all of finance theory is wrong or the recommendation being made by the Public Counsel is wrong.

Moreover, the Staff has made a recommendation based on a range of possible returns for common equity of 9.45% to 10.25%. The majority of the Staff range is below the cost of preferred as demonstrated by the market currently. This means that the majority of the Staff recommendation is less than the current market and clearly wrong by the objective standard of absolutely well-accepted, non-controversial finance theory.

Q. **Is it possible that the differential in the Staff range of 25 basis points, i.e. the portion of the recommendation from 10 to 10.25%, is adequate compensation for the difference in risk between the common and the preferred stock?**

A. Not by any means. The preferred stock here is much less risky than the common stock and the cost of equity, i.e. the cost of ordinary common equity invested in this company, is much higher, perhaps by 200 to 300 basis points, than the cost of this preferred stock.

## Capital Structure Risk Adjustment

**Q. Now Mr. Dunn, I'd like to go back and cover in somewhat greater detail the three separate criticisms which you believe are the overriding problems in the recommendations of the Staff and the Public Counsel. The first of those had to do with the equity ratio risk adjustment. Please explain that criticism.**

A. As I noted earlier, a fundamental element of the theory of investment finance states that as investor risk increases, capital costs increase. In other words, the higher the risk, the higher the cost of capital. Conversely, the lower the risk, the lower the cost of capital. In the analysis of investor risk, there are two types of risk, financial risk and business risk. Financial risk refers to the amount of risk created by adding leverage or debt to the capital structure of the company. The more debt or leverage added to the capital structure, the greater the financial risk. If a company is financed with 100% equity, it has no financial risk. As debt is added to the capital structure, financial risk is created and increases with increases in the percentage of debt.

**Q. What about business risk?**

A. Business risk is entirely different. Business risk is the risk associated with the operation of the entity. It is risk which rises up from the operation of the assets and it is related to weather, customer mix, the fact that revenues for any number of reasons may be lower than planned, returns may be different than expected, and overall operations different than usual. Business risk also encompasses the risk of regulation, the risk of service obligations and the risk of general legal liability. These business risks are substantially unrelated to financial risk but add to the total risk of the company. Total risk or shareholder risk is the sum of business risk and financial risk.

**Q. How does this relate to the analysis of the Staff and the Public Counsel in this case?**

A. Both have used a variety of financial models to estimate the cost of common equity. Both rely most heavily on the DCF model and both use a "comparative group" of natural gas distribution companies. In fact, as revealed in the Direct Testimony of both witnesses, the natural gas companies are not comparable to either Southern Union or MGE.

**Q. Why did you mention Southern Union?**

A. Both the Staff and Public Counsel have analyzed Southern Union to determine the cost of common equity for MGE. After determining the cost of capital for Southern Union, both have said that cost is the cost for MGE. I believe that is absolutely incorrect and I will demonstrate that matter in detail later.

**Q. Do the capital structures in the Staff and Public Counsel comparative groups differ from the capital structure of Southern Union?**

A. Yes. There is a substantial difference between the equity ratio of the comparative groups in both testimonies and the equity ratio of Southern Union used by both the Staff and the Public Counsel in calculating the rate of return for MGE. On Schedule 22 of Mr. Murray's testimony, the Staff comparative companies are identified and the 2000 common equity ratio is shown for each of the companies and averaged for the group. The equity ratio average for the group is 53.74%. The Public Counsel comparative group equity ratio is shown on Public Counsel Schedule MB-2. The 2000 equity ratio for that group is 55.4%.

**Q. What equity ratio did the Staff use in its calculation of rate of return?**

A. As shown on Staff Schedule 25, the equity ratio is 31.2%.

**Q. What was the equity ratio used by the Public Counsel in its calculation of rate of return?**

A. The equity ratio was 32.47%.

**Q. Should anything be done to reflect this lower level of equity ratio?**

A. Yes, an adjustment should be made.

**Q. Why?**

A. It is absolutely clear that all other things equal there is much greater risk associated with an equity ratio in the low 30% range than there is for an equity ratio in the 50 to 55% range. The capital structure used by both the Staff and the Public Counsel has much greater financial risk than the capital structure of their comparable groups. This requires that the cost of common equity be set much higher for MGE than for the Staff and Public Counsel comparative group on the basis of capital structure differences alone. In other words, a risk adjustment. However, neither the Staff nor the Public Counsel has made a recommendation to adjust the return on equity to reflect this significant risk difference.

**Q. What did the Staff and Pubic Counsel do?**

A. Both the Public Counsel and the Staff simply calculated a cost of common equity for the "comparative distribution" groups which they used and then applied that cost of common equity to the Southern Union capital structure. <u>The cost of common equity for the comparative groups, has in back of it a 50 to 55% equity ratio and is intimately linked to that equity ratio. The cost of equity for the Staff and Public Counsel comparative groups is tied to the financial risk level of a 50% to 55% equity ratio and does not apply to other equity ratios.</u>

**Q. How do you respond to this approach taken by the Staff and Public Counsel?**

A. It is entirely wrong to take a cost of common equity derived from a 50 to 55% common equity group and apply it to a 30 to 32% equity ratio without adjusting for the substantial difference in financial risk.

<u>I believe that this is a fatal flaw in both of these recommendations. Neither of the analyses is complete. Both lack an absolutely required adjustment to reflect the substantial difference in risk between a company with a 55% equity ratio and one with a 30% equity ratio</u>. The magnitude of the difference is so great and the adjustment to compensate for the financial risk differential so widely and completely accepted that both the Staff and Public Counsel recommendation should be rejected for this major failing.

**Q. Has the Commission considered this issue in the past?**

A. Yes it has. In Case No. ER-93-41 and Case No. EC-93-252 involving St. Joseph Light & Power Company ("SJLP"), the Commission reached the conclusion that the SJLP common equity ratio was higher than the average and, as a consequence, in calculating the return on equity, the equity ratio should be reduced to a more "typical" equity ratio for the industry. In other words, the Commission made an adjustment in the SJLP case for the difference in financial risk.

**Q. Is the SJLP decision of the Commission relevant in this case?**

A. Absolutely. It is an identical set of circumstances except that in the SJLP case, the equity ratio was higher than the average and, in the present case involving MGE, the equity ratio is much lower than the average. The Commission procedure and precedent in SJLP would be appropriate here, that is, to use an equity ratio which is typical of the industry in calculating the average rate of return for MGE.

I can't emphasize enough that both cases involve symmetrical facts. It is unreasonable to make an adjustment when it seems to reduce the overall cost of service in the case of SJLP and not make the same adjustment when it is equally appropriate but seems to increase the cost of service in the case of MGE.

**Q. What is the impact on the customers from granting a company a much higher return based on its lower equity ratio?**

A. Customers will not pay more than the average cost of capital.

**Q. Please explain.**

A. If the Commission uses its same technique in this case as it used in the SJLP case, the customers will pay the same as they would have if the equity ratio was the industry average. The difference in return percentage would be compensation to the investors in Southern Union for the higher level of financial risk.

**Q. What is the magnitude of adjustment in return on equity required to compensate for a 20 to 25 percentage point difference in equity ratio?**

A. The difference in equity ratio is substantial. Furthermore, the difference is from the average to a relatively low number. It is from 55% to an aggressively leveraged 32%. The adjustment would be likewise substantial probably on the order of 200 basis points or more.

**Q. Would this increase the customers' cost of capital above the cost of capital for other gas distribution companies with typical equity ratios when those costs are measured in dollar terms?**

A. No. The cost of capital measured in dollar terms would be the same as the cost of capital for any typically financed natural gas distribution company. Only the percentage return on equity would be different.

**Q. Does the use of a 30% equity ratio without a risk adjustment produce a lower dollar amount of capital costs?**

A. Yes, but such an approach is clearly wrong, contrary to sound financial theory and Commission precedent.

## Business Risk Adjustment

**Q. You indicated that your second criticism involved the failure of both the Public Counsel and the Staff to adjust their recommendations for the business risk of MGE.**

A. That is correct. We have established, I believe beyond a doubt, that the financial risk of MGE or Southern Union is hugely different than the financial risk of the comparative companies. Business risk is different and, in my opinion, it is higher for MGE than it is for the comparative companies. Neither the Staff nor the Public Counsel adjusted for that difference in business risk and, as a consequence, neither has made a recommendation which is relevant for either Southern Union or MGE. I believe that the Staff and the Public Counsel both have incomplete analyses and those analyses, since they lack this required risk adjustment, should not be used by the Commission in reaching a decision as to the appropriate rate of return in this case.

## MGE Not Analyzed

**Q. Mr. Dunn, based on Mr. Murray's deposition, there seems to be on-going confusion on the part of the Staff about the company which is regulated in this case. Is it MGE or is it Southern Union?**

A. It is MGE. MGE is a division of Southern Union. The MGE division consists of natural gas distribution properties situated in the State of Missouri and used to provide natural gas service to Kansas City, Missouri, Joplin, Missouri, and several other cities in the State of Missouri. Southern Union is a New York Stock Exchange traded company with natural gas divisions operating in several states from Florida to the Northeast U.S. including Missouri. One of Southern Union's natural gas divisions operates in more than one state. Southern Union is also an entity with financial holdings separate from its gas distribution holdings, which have had a significant impact on its income over the past several years.

**Q. What is the appropriate regulatory approach here?**

A. The appropriate regulatory approach to determining the cost of capital for MGE is to analyze MGE and not to analyze the parent company and to use companies comparable to MGE and not companies comparable to Southern Union. In analyzing MGE, the risk of MGE, which is unique within Southern Union and unique among other gas distribution companies must be taken into consideration. The risk profile of MGE is different than the risk profile of Southern Union. While one is a part of the other, they are different and are not inerchangeable.

**Q. How do you respond to the fact that the Staff and the Public Counsel used the capital structure of Southern Union?**

A. This approach is unreasonable unless MGE is studied and established to be comparable to Southern Union or unless differences between Southern Union and MGE are recognized by appropriate adjustments. It is based on the naive idea that because Southern Union raises the capital which is used to finance the assets of MGE (while the Staff and Public Counsel apparently ignore Southern Union's other holdings), that the appropriate capital structure to use in analyzing MGE is the Southern Union capital structure.

**Q. Mr. Dunn, you have indicated that the Staff and Public Counsel criteria for company selection does not involve risk. Have you made a risk calculation which quantifies the comparative risk of MGE and the three comparative groups?**

A. Yes I have. The difference in risk of the three comparative groups, is best measured using a standard deviation or the coefficient of variation. I have calculated the standard deviation and coefficient of variation of return on total capital for my group, the Public Counsel group, and the Staff group of gas distribution companies. I have made a similar calculation for MGE.

**Q. What does the calculation demonstrate?**

A. The calculation demonstrates that MGE has substantially greater total risk than any of the three groups of gas distribution companies.

**Q. What are the numeric results of your analysis?**

A. The numeric results of my analysis are as follows:

Comparative Risk Analysis

| | Dunn Group | Staff Group | Public Counsel Group | MGE |
|---|---|---|---|---|
| Average Return | 7.50% | 7.86% | 7.93% | 6.04% |
| Standard Deviation | .33% | .32% | .41% | .62% |
| Coefficient of Variation | 4.43% | 4.12% | 5.01% | 10.20% |

**Q. What did these data show?**

A. The average return on equity for each of the groups, my comparative group, the Staff comparative group, and the Public Counsel comparative group is similar. The standard deviations for each of the groups are also similar and the coefficient of variations are also similar. MGE, however, has a lower average return, a higher standard deviation, and a much higher coefficient of variation. This indicates that MGE is substantially more risky than the comparative group.

**Q. Is this coefficient of variation measuring financial risk or business risk?**

A. It is measuring business risk since the calculation is made at the rate of return level.

**Q. What is the coefficient of variation?**

A. The coefficient of variation is the standard deviation divided by the average. The purpose of the coefficient of variation is to make a series of such variability calculations comparable one to the other since all are stated as a percentage.

**Q. Is it possible to analyze each of the companies individually and establish a qualitative risk differential as a result of that analysis?**

A. Yes it is. Unfortunately, it would be a long and laborious time-consuming task and the end result would be a very subjective assessment.

**Q. How would such an analysis be undertaken?**

A. A series of criteria would be established and those criteria would be measured for each of the gas distribution companies. A scale or weighting would be developed and each company would be assigned a total risk measure.

**Q. What type of criteria would you use in measuring the risk of individual companies?**

A. I would use measures which capture the risk of the operations of the company. For example, natural gas distributors generally are the suppliers of last resort and generally supply most of the natural gas to their customers. The mechanism by which each of these gas distributors collects its gas cost and passes it on to the customers would be an important measure of risk.

MGE, for example, is at risk as the Commission reviews its gas cost and PGA applications each year, plus its true-up application. It may be found to have been imprudent or it may be found to have incurred unnecessary costs in connection with its gas acquisition program. In any event, it may not be able to collect all of the costs associated with natural gas acquisition for its customers. The extent to which a company cannot collect all of its costs, or is at risk for undercollection is a business risk.

**Q. Is this risk offset by excess revenues associated with the natural gas cost pass through?**

A. It is not. There is no upside profit potential associated with the natural gas cost pass-through, only downside risk of disallowance. MGE cannot collect more than its actual cost of gas, but it may, under the current regulatory framework, collect less.

**Q. Are there any notable exceptions to this rule in the comparative companies?**

A. Yes. AGL, the holding company for Atlantic Gas Light, has no natural gas supply operations or obligations. All of the natural gas consumed by its customers is supplied by marketers and each year the Commission in Georgia selects marketers to be suppliers of last resort. Under no circumstances does AGL become involved in the risky activity of gas acquisition and sale. This is a significant risk difference between AGL and MGE.

**Q. Are there any other differences between MGE and the comparative companies which indicate the need for a substantial adjustment as shown by the calculation of the standard deviation?**

A. The average depreciation rates calculated for each of the comparative companies in the Staff group has been supplied to me. The average depreciation rates for the companies is 3.21%. The average Staff recommended depreciation rate adjusted to include net salvage is 2.40%. This amounts to a difference of many years in the capital recovery associated with these regulatory assets.

**Q. How does that affect the risk of an investment and more specifically the risk of the capital associated with supporting that investment?**

A. Over a long number of years, many things can happen to an investment, both good and bad. Inflation, changes in the type of supply, the quantity of supply, changes in demand and so on. All of these factors have the potential for negative consequences to investors and cause investors to value shorter capital recovery periods as compared to longer capital recovery periods.

**Q. Why is the assumption, implicit in the Staff and Public Counsel's proposed capital structure, that Southern Union's capital structure is an appropriate proxy for MGE unreasonable?**

A. This approach assumes that those responsible for financial budgeting decisions at Southern Union do not use contemporary financial theories and do not approach the matter seriously. The Staff and Public Counsel approach is absolutely beyond a doubt inappropriate and incorrect. It is simply naive to say that companies do not allocate capital to their various enterprises, divisions and subsidiaries and investments based upon management's appraisal of the risk of the various entities which results in different capital structures and different capital costs for different activities. In this case, management allocates capital to Missouri and makes its investment decisions for Missouri based on Missouri risk and opportunity. It makes similar decisions for other distribution operations based on their risks and opportunities. It makes similar decisions for its financial investments based on its appraisal of those risks and opportunities. The risks and opportunities are clearly different and to say that all entities are financed with simply the average capital mix of the parent company is wrong.

**Q. Can you provide a reference which demonstrates this process?**

A. Yes. In a 1985 text book, *Managerial Finance,* Lawrence J. Gittman, Michael D. Joehnk and George E. Pinches include the following statement:

> "Because of the vast differences in business and financial risk among various lines of business and because of the growth

> of conglomerates and other diversified firms, many companies have begun to use risk adjusted divisional costs of capital. By division, we mean some sub-unit of the firm whether it is an actual division, a subsidiary, a project or a line of business. If the capital expenditure projects undertaken by the division are essentially similar with respect to risk (but differ in general risk level from projects of other divisions), the use of divisional screening rates which are the division-specific MCCs (marginal costs of capital) should be used. Those divisions with greater risk than that of the firm as a whole will have higher MCCs, whereas those with below average risk will have lower costs of capital than the firm-wide MCC.
>
> The concepts discussed earlier in the chapter apply as well to divisional screening rates; that is, we must concern ourselves with the appropriate target capital structure for each division, and then calculate the explicit costs for each source of financing. The explicit cost of debt and preferred stock should be adjusted from those for the firm as a whole, but typically they are not. However, the cost of common equity, which reflects economic conditions in the exposure to business risk for a firm with no debt or preferred stock must be determined for each division. In calculating divisional costs of capital, the important elements are the division's target capital structure (reflecting primarily financial risk) and its cost of equity capital (reflecting primarily business risk." *Managerial Finance,* Lawrence J. Gittman, Michael D. Joehnk and George E. Pinches, Harper and Lowe Publishers, New York 1985. (Emphasis supplied.)

Clearly, this is not a new concept since it appears in an introductory text book in 1985. Furthermore, it is absolutely clear that appropriate target capital structures for each division and subsidiary are a fundamental part of the capital budgeting process which is a key activity of the management of any corporation.

**Q. Are there other academic references which support this position?**

A. Yes. I have included as Schedule JCD-13 a seven page annotated bibliography on the issue of division capital structures and target capital ratios.

## Other Rebuttal Comments

**Q. In addition to the three major criticisms of the Staff and Public Counsel analysis which you have characterized as overriding problems, have you individual criticisms of other elements of their analysis?**

A. Yes. There are several areas which deserve mention because they represent flaws in their analyses. In the main, each of these criticisms apply to an application of the discounted cash flow model which, in my view, causes the result to be less than accurate and biased to the low side.

**Q. What are these additional criticisms?**

A. The additional criticisms associated with the analyses of the Staff and Pubic Counsel are the following:

- Staff and Public Counsel selected companies not comparable to MGE;
- Capital Structure used in Staff and Public Counsel recommendations unusual and atypical;
- Staff dividend growth calculation is wrong;
- Results of different estimates of equity cost are inconsistent;
- Wrong form of DCF model issued in estimating DCF cost of equity;

- Pre-offering pressure not considered in analysis.

In addition, there are two matters which are not covered in the testimony of either but which should be considered. One is a result of the very low return recommendations combined with the very low equity ratio. The two matters are:

- Bond down rating a likely result of Staff and Public Counsel recommendation;

- New business risk.

Finally, I will total up the estimated impact of the errors and omissions in the Staff analyses. I will calculate a risk differential for the three groups of companies -- the Staff group, my group and the Public Counsel Group -- and provide my conclusion on the cost of equity given the information in the Staff and Public Counsel filing.

## Bond Ratings

**Q. Do you believe there will be any effect associated with the Staff and Public Counsel recommendation in terms of bond ratings?**

A. Yes, the effect will be detrimental and the data supporting that position is contained in Staff witness Murray's direct testimony, Schedule 23. Although I have used the Staff data in these comments, the problem of inadequate coverage applies equally to the Public Counsel recommendation.

**Q. Please explain.**

A. One of the primary determinants of a company's bond rating or grade is the pre-tax interest coverage produced on the company's income statement. Interest coverage is essentially a measure of the cushion between the amount of interest payments made by the company and the amount of cash available to make those interest payments. For example, if a company had $10 in interest payments and also had income and income taxes of $10, it would be considered to have interest coverage of two times.

**Q. Why is the Staff recommendation likely to result in a lower bond rating?**

A. The Staff recommendation would likely result in the lower bond rating because the interest coverages associated with the Staff recommendation are so low that they do not fully support BBB+ bond ratings. MGE's parent, Southern Union, is currently rated BBB+, which is the lowest investment grade rating. If Southern Union has its bond rating reduced below BBB+, its market for new debt will be extremely restricted and the cost of that new debt will be dramatically higher because the bonds will be rated as junk level bonds. I don't believe this Commission or its Staff wants to have, or even risk having a major utility in the State of Missouri with junk level bonds.

**Q. What is the interest coverage associated with the Staff recommendation?**

A. The pre-tax interest coverage ranges from 2.1 to 2.18 times as shown on Schedule 23 to Mr. Murray's testimony.

**Q. What is the median coverage, that is the coverage which divides all of the BBB companies into two equal groups, the lower half and the upper half?**

A. The median coverage for BBB bonds according to Standard & Poor's Corporation as shown on Mr. Murray's Schedule 23 is 2.85 times.

**Q. If MGE earns less than the amount authorized in this proceeding, would the realized interest coverage be lower than the calculated coverage?**

A. Yes.

**Q. Do you believe that there will be an automatic bond rank reduction if the Staff recommendation is adopted by the Commission?**

A. I do not, but there is no question that the Staff recommendation is too low and the resulting interest coverage is marginal. It will contribute to long run problems.

## New Business Risk

**Q. Are there any new business risks which impact directly on the cost of common equity for MGE?**

A. Yes. There are two factors operating on the business risk of MGE which are not recognized in the recommendations because they are not historic business risks.

**Q. Please explain.**

A. When assessing the risk of a company, we generally operate under the assumption that business risk in the future will be a continuation of the level of past business risk. The appropriate approach is to establish the level of historic business risk and then adjust that level of risk for known changes to estimate a future level of business risk.

**Q. What new business risk has emerged for MGE?**

A. The potential for attrition in earnings, that is realized earnings at a level less than that authorized by the Commission, has increased substantially. It is very likely that MGE, unless a specific adjustment is made to recognize this risk, will be able to produce the level of income anticipated by the order of the Commission in this proceeding.

**Q. Why?**

A. The elasticity of demand and the carrying costs associated with uncollected natural gas costs.

**Q. In what way is the elasticity of demand a new business risk?**

A. Elasticity of demand is a circumstance where the total quantity demanded by customers tends to decline as price increases. For many years, we have had relatively stable natural gas prices and they have been relatively low. Because circumstances have caused the price of natural gas to increase substantially. As price increases, high probability exists that the amount demanded by MGE customers, all other things equal, will decline. This is particularly true for MGE given the fact that it competes against numerous providers of electricity throughout its service territory.

**Q. How will this affect MGE?**

A. Reduced volume will translate into reduced revenues, which will translate into reduced earnings unless specifically anticipated in the order of the Commission.

**Q. What are the carrying costs associated with uncollected natural gas expense?**

A. The operation of the mechanism which permits the company to collect the cost of natural gas is such that the company, particularly during times of rising prices, finds itself financing natural gas which has been consumed by customers but not paid for under the appropriate tariff mechanisms. In addition, due to the high gas prices and extremely cold weather during the winter of 2000-2001, MGE applied its level pay program (called "ABC" for average bill calculation) in a liberal fashion to help customers which resulted in significant deferred settlement balances. The carrying costs associated with this unrecovered or deferred natural gas cost reduces the income of the company unless specifically anticipated in this rates proceeding.

## Staff and Public Counsel Comparative Companies

Q. **Earlier you indicated that you believed that neither the Staff nor Public Counsel selected a group of comparable companies. Please explain the basis for that assertion.**

A. By way of background, I should point out that risk is defined as outcomes which are different than the expected outcomes and the probability associated with the expected outcome. If it is 100% certain that the expected outcome will take place, there is no risk. As the probability associated with the expected outcome declines, risk is said to increase. Because we believe that the past, properly adjusted, is a reasonable forecaster of the future, variability and past outcomes suggest variability and future outcomes unless there is a transitional change. Furthermore, the higher the variability in past outcomes, the higher the expected variability in future outcomes and consequently the higher the risk. All of this is reduced to measurement using the standard deviation and the coefficient of variation. All other things being equal, when past outcomes have high levels of variability, past outcomes will have higher standard deviations. As the levels of variability decrease, the calculated standard deviation will decrease and the risk will be perceived as lower.

The Staff and the Public Counsel have indicated that they have selected a group of companies which are comparable to either MGE or Southern Union. Previously, I have expressed my opinion that Southern Union is very different from MGE and not in fact comparable to it. Nonetheless, I do not believe that the groups of companies selected by the Staff and the Public Counsel are risk comparable to MGE or Southern Union unless it occurred by accident.

Q. **Why?**

A. To select a group of risk comparable companies, it is necessary to select on the basis of the elements in corporate operations, including leverage, or the use of debt in the capital structure which create risk. The elements for a natural gas distribution company which would create risk include the variability in weather patterns, the efficacy or absence of a natural gas purchase price adjustment clause, the difficulty of service, the probability of bypass by large customers and other similar elements which reflect on the predictability of the company's income. For example, if a company was subject to bypass and prices increased, it is probable that customers would be lost and income would decline. This is a risk. Also, if a company had no purchase gas adjustment clause, it would be considered to be more risky than a company with a purchase gas adjustment clause because variations in the price of gas would translate into variations in income without the moderating effect of the purchase gas adjustment clause. Risk is also created by regulatory policy and environment.

**Q. How did the Staff select its comparative group?**

A. On page 24 of Mr. Murray's Direct Testimony, he describes the six criteria used in selecting his "comparable natural gas distribution group." The criteria are:

(1) stock publicly traded;

(2) distribution revenues greater than 90% of total revenues;

(3) information printed in Value Line;

(4) positive dividend per share growth;

(5) no Missouri operations;

(6) ten years of data available.

In my view, these measures or selection criteria have nothing to do with risk. Whether or not ten years of data are available is not a measure of risk. Whether or not information is printed in Value Line is not a measure of risk. Simply, companies selected using these criteria would only be risk comparable by accident.

**Q. If these measures do not adequately select for risk, how does one proceed with this type of analysis?**

A. It would be appropriate to select a group of natural gas distribution companies and then, after calculating a cost of capital for those companies, measure the risk of the comparative group against the risk of the subject company to determine an appropriate return. This approach which is now the accepted methodology for this type of analysis is called "pure play analysis." In a pure play analysis, a group of companies whose activities are confined to a single line of business is selected. Then a calculation of capital cost for the pure play group is made. Then a risk adjustment is calculated to determine a cost of equity for the subject company. The methodology responds to the fact that each company is unique and there are no truly comparable companies.

**Q. Did the Public Counsel select a group of comparative companies in a similar fashion?**

A. Yes. The Public Counsel had slightly different risk criteria but in the main the criteria had nothing to do with risk. The Public Counsel risk criteria are as follows:

- publicly traded company;
- no Missouri operations;
- regulated gas sales 80% of revenues;
- total revenues less than 2 billion;

- Standard & Poor's bond rating at least BBB;
- covered by Value Line.

The Public Counsel witness goes on to state on page 30 of his Direct Testimony that several risk indicators were examined. Unfortunately, the impact of that examination is highly qualitative and is not apparent in any way in the analysis. Careful reading of the testimony leads one to believe that while risk measures may have been examined, risk had no impact whatsoever on the final result of the Public Counsel recommendation.

<u>Capital Structure Employed is Unusual</u>

**Q. You have commented that the capital structure of Southern Union is the incorrect capital structure. If the Commission were to decide to select it, should it be adjusted?**

A. Yes. It is unusual and distorted as a consequence of several recent acquisitions.

**Q. Please explain.**

A. Over the past several years, Southern Union, the parent of MGE, has employed virtually every technique available to it to increase its equity ratio. In fact, at the end of the last fiscal year (June 30, 2000), the equity ratio of Southern Union had increased to 46%. However, after the end of the last fiscal year, Southern Union made several acquisitions and a substantial amount of cash was involved in those acquisitions. As a consequence, the equity ratio of Southern Union was suppressed to an unusually low level. To use this artificially suppressed equity ratio may produce lower rates for a short period of time but it is incorrect.

**Q. Why?**

A. The current equity ratio is an anomaly. It is abnormal and it shouldn't be used in this calculation. To do so will simply require that MGE immediately return for additional rate relief as the equity ratio improves. It also means that MGE will earn less than an appropriate return the instant the equity ratio improves from the abnormally low number used in the Staff and Public Counsel recommendation.

**Q. Isn't that entirely within the prerogative of a company to seek rate relief to obtain a reasonable return?**

A. It is, but it is impractical. MGE cannot file rates and go through the rate-making process repeatedly simply to fine-tune its net operating income. As a consequence, it is appropriate to use more long term ratios to more adequately reflect the underlying fundamentals of the company.

**Q. If the Commission were to use the Southern Union capital structure, what do you believe would be appropriate?**

A. First, I must say that I believe that in any event it would be completely inappropriate to use the Southern Union capital structure. However, if it is ultimately decided that that capital structure be used, I believe it would be appropriate to use a five-year average or Southern Union's target equity ratio for the intermediate term.

**Q. What is Southern Union's five-year average equity ratio?**

A. Approximately 38%.

**Q. What is Southern Union's target equity ratio?**

A. For the intermediate term, approximately 45%. This is based on Southern Union's stated public position that it will do what is necessary to maintain investment grade securities.

**Q. If the Southern Union capital structure is used, is an adjustment for the higher equity ratio of the comparative group still required?**

A. Yes.

**Q. If an adjusted Southern Union capital structure is used, is a business risk adjustment also required?**

A. Yes.

## The Staff Dividend Growth Calculation is Wrong

**Q. Is anything wrong with the Staff dividend growth calculations in its DCF analysis?**

A. Yes. First, it is based on an incorrect assumption. Second, it is an average of averages of averages. It has lost all meaning by virtue of repeated averaging designed to accomplish an inappropriate objective.

**Q. In what way is it based upon an inaccurate assumption?**

A. The Staff dividend growth rate used in its DCF analysis is based on the assumption that an investor's growth horizon is unlimited and that earnings, book values and market prices grow hand in hand. Unstated here is the additional assumption that dividends grow hand in hand with earnings.

**Q. Is this linkage between growth in book value, market price dividends and earnings an accurate assumption?**

A. It is not. At one time, there was a substantial linkage between growth in dividends per share, earnings per share, and book value per share. That linkage has been severed and is no longer relevant. The DCF model is based on the assumption that there is a linkage between dividends and market price. However, with a new objective for management, this assumption is not true and the dividend model must be modified to account for the new reality.

**Q. Please explain.**

A. Historically, utilities paid a specific percentage of their earnings as dividends, increasing the dividends every year. More recently, it has come to be understood that this is tax-inefficient and that shareholders and customers would be better served if dividends were held relatively constant and earnings per share permitted to grow, driving internal growth as opposed to driving dividend growth.

**Q. Is there any evidence of this fact?**

A. Yes, there is evidence from the Staff's own testimony. Mr. Murray's direct testimony, Schedules 15-1 and 15-2 contain a calculation and analysis of ten-year earnings per share growth and five-year earnings per share growth, dividend per share growth and book value per share growth for the Staff natural gas distribution companies. As can be seen from these schedules, dividend per share growth has declined as a percentage of earnings per share growth by a significant amount in the five-year period as compared to the ten-year period. The relevant comparison is as follows:

Historic Growth Ratio

| | Ten Year | Five Year |
|---|---|---|
| Dividend per share | 2.45% | 2.39% |
| Earnings per share | 4.64 | 6.05 |
| Difference | 2.19 | 3.66 |

The dividend growth on a ten-year basis is 52% of the earnings growth. On a five-year basis, dividend growth is only 39% of earnings growth. Clearly, dividend growth is slowing as compared to earnings growth. If dividend growth is used as a dominant variable in the calculation of growth for the DCF model, it will result in a substantial understatement of the actual inherent growth of the company that shareholders are buying.

**Q. You indicated that the Staff growth rate was an average of averages. Please explain.**

A. The final determination of the Staff growth rate is contained on Mr. Murray's Schedule 16. The growth rate appears to be an average across the page of columns 1 through 7. In reality, the growth rate, 4.79%, which is used in the Staff DCF calculation, is an average of the averages contained in columns 1 and 6 and that number was used in the DCF calculation.

**Q. Is there a reason for averaging the averages?**

A. I don't believe there is a valid reason. First, column 1 is the average of the three calculations for the ten-year growth rate, plus the three calculations for the five-year growth rate. We have discussed that and I have indicated that the earnings per share growth, the true driver in this calculation, is artificially suppressed by averaging it with a low dividend growth rate which is a result of industry-wide policy and the even lower book value growth rate. Even the ten-year growth rate, which does not reflect the full impact of the current dividend policy, is 4.64% as compared to the final average of averages of 3.96%. The current earnings per share growth rate for the five-year period is 6.05%. Clearly, averaging the averages for ten years and five years suppresses the most relevant number and leads to an artificially low growth rate and an artificially low DCF indication of the cost of common equity.

Q. **What is the effect of averaging the other numbers and then averaging that result with the Value Line result?**

A. It suppresses the numbers and makes the calculated growth rate lower than the actual growth rate which investors would reasonably expect.

Q. **What do you mean it makes it lower than what investors would expect?**

A. Consider a reasonable, prudent and well-informed investor. That investor may well look at Value Line, and the investor may also look at other sources used by the Staff in this case. I find it hard to believe, however, that the investor would not notice, in a comparison of Schedules 15-1 and 15-2 to Mr. Murray's direct testimony, that the growth in earnings is higher than the growth in dividends and that the difference between earnings growth and dividend growth is accelerating, i.e., earnings growth is increasing while dividend growth is holding flat. Next, I find it hard to believe that the investor would say that the future growth rate is not related directly to historic earnings growth but the sum of all of those numbers averaged.

I find it impossible to believe that after that exercise, an investor would find four additional sources and average those sources together with the average of the first set of numbers, not directly, but rather by averaging averages of the numbers.

Q. **Are there any other activities here which cause this number to be suppressed?**

A. Yes, negatives are included in the calculation. The lowest number which appears on Schedule 16 of Mr. Murray's directtestimony in terms of a group average is the projected Standard & Poor's earnings per share growth at 3.83%. That number is calculated by including expected negative growth rates for Peoples Energy Corporation and South Jersey Industries. Investors do not behave in that manner, expecting negative growth in the future as a part of determining their expected cost of capital. They simply avoid negatives – they do not factor them into their cost requirements. Furthermore, it is more reasonable to expect that an investor, given the radical difference in forecasts between Standard & Poor's and all other sources for Peoples Energy Corporation and South Jersey Industries, would exclude those two from the analysis rather than attempt to cope with such deviant estimates.

**Q. What do you believe is the effect of this averaging and misuse of other data in calculating the DCF growth rate in terms of the cost of common equity?**

A. I believe that the cost of common equity has been suppressed by up to two full percentage points as a consequence of this artificial arithmetic which can only be designed for the purpose of producing a low growth rate. I believe investors would be very influenced by the actual five-year earnings per share growth of over 6%, and by other forecasts ranging from 5 to 7%. I believe that investors would consider this data in concluding that a 6% growth rate would be far more reasonable than the 4.79% growth rate proposed by the Staff. The difference amounts to 1.2 percentage points on the DCF estimated cost of common equity.

## Inconsistent Results

**Q. What do you mean by your assertion that the results produced by the Staff analyses are inconsistent?**

A. The Staff did a DCF analysis, CAPM analysis and a risk premium analysis. The results of each of these analyses, if each of the analyses were accurate in their result, should be reasonably comparable. In fact, they are quite inconsistent and the level of inconsistency is such that it causes all of the results to be questionable.

**Q. Please demonstrate the inconsistencies associated with the Staff analyses.**

A. The Staff analyses produced the following estimated costs of common equity for each of the three methodologies:

| | Cost of Equity | | |
|---|---|---|---|
| Company | DCF | CAPM | Risk Premium |
| AGL Resources | 8.40% | 10.17% | 10.37% |
| Cascade Natural Gas | 10.15 | 9.78 | 10.34 |
| Energy Growth, Inc. | 10.98 | 9.39 | 12.66 |
| New Jersey Resources | 10.16 | 9.78 | 11.37 |
| Peoples Energy | 8.80 | 10.95 | 10.57 |
| Piedmont Natural Gas | 9.89 | 10.17 | 10.97 |
| South Jersey Industries | 8.46 | 9.00 | N/A |
| WGL Holdings | 8.56 | 10.17 | 10.79 |

[11] DCF analysis taken from Staff witness Murrays direct testimony, Schedule 18, Footnote 2. CAPM results taken from Murray direct Schedule 19, Footnote 3. Risk Premium Cost of Equity estimates taken from Murray direct Schedule 21.

**Q. Why do you believe that these analyses are inconsistent?**

A. Each of the analyses purports to be a determination of the cost of common equity for each of the companies included in the selected group. It is reasonable to expect that the results of each of the analyses would be similar. In fact, they are not. Consider, for example, the first company, AGL Resources, Inc. (The Atlanta Gas Light Company).

Its cost of common equity, as calculated using the DCF methodologies employed by the Staff, is one of the lowest in the selected group at 8.42%. On the other hand, its cost of common equity, calculated using the CAPM model, is one of the highest at 10.17%. The cost of equity, calculated using the risk premium methodology, is higher still at 10.37%.

**Q. Are there others which are in a similar pattern?**

A. Yes. New Jersey Resources Corporation has one of the lowest estimated costs of common equity using the DCF calculation, and one of the highest using the risk premium analysis.

**Q. Did the Staff give equal weight to each of the three analyses?**

A. Apparently not. The Staff results range from 9.43%, using the DCF methodology, to 11.01% using the risk premium methodology. The Staff has made a recommendation of 9.45% to 10.25%, apparently disregarding the results of the risk premium analysis.

**Q. Is the Staff recommendation tied to the DCF result?**

A. In the Staff testimony, it appears that the DCF result is 9.45% to 10.25%. The full range of the Staff÷s DCF calculations is from 8.40% to 10.98%.

**Q. Why is South Jersey Industries not included in the risk premium analysis?**

A. Mr. Murray÷s testimony at pages 28 and 29, lines 23 and 1, states that additionally, the necessary information both actual returns and projected returns for South Jersey was not readily available. In my opinion, that company should have been excluded from the list since it did not meet the criteria originally established by the Staff that data be available for the company.

## Wrong Form of the DCF Model Employed

Q. What is the nature of your criticism of the form of the DCF model employed by the Staff and Public Counsel witnesses in this analysis?

A. The DCF analysis has several functional forms. The form of the DCF model depends on the assumptions made about when dividends are paid and how they are compounded. The simplest form of the model assumes that dividends are paid and compounded continuously, that is, from moment to moment.

This particular form of the DCF is seldom, if ever, used because it is clear that dividends are not paid and compounded continuously. The next form of the DCF model assumes annual payments of dividends. However, the most accurate form of the DCF model is a quarterly compounding form, anticipating that the dividends can be and are paid quarterly rather than continuously or annually.

**Q. Which of these models produces the higher dividend or indicated cost of common equity?**

A. The quarterly compound model, which is the model which most closely represents reality. Most of the companies in all of the comparative groups pay dividends on a quarterly basis.

**Q. What is your source of your information concerning the various functional forms of the DCF model?**

A. I have taken it from the Cost of Capital, A Practitioner÷s Guide by David C. Parcel. That is one of the two major outside non-data sources relied upon by the Staff in this proceeding. I have attached pages 8-7 to 8-17 of this source as Schedule JCD-14 to this testimony.

## Pre-Offering Pressure

**Q. What is pre-offering pressure?**

A. At any moment in time, most common stocks are in price equilibrium, i.e., there is a balance between supply and demand and a reasonably stable price. When the supply is increased as a result of a new offering of common stock, there is a tendency for the price of the stock to decline. The preoffering adjustment permits the stock to trade above book value so that the pressure on price created by the new supply does not force the price below book value.

**Q. What are flotation costs?**

A. Flotation costs are the expenses incurred in connection with the sale of new common equity. They include legal fees, printing expense, regulatory expense and broker or underwriter fees and commissions. These costs are not recorded as expenses, but rather deducted from proceeds under the uniform system of accounts.

**Q. Did the Staff or the Public Counsel make an adjustment to its cost of equity for floatation costs?**

A. No.

**Q. Is such an adjustment ordinarily made?**

A. Yes, because it is proper and reasonable.

**Q. What is the nature of the adjustment?**

A. There is an implicit assumption in the DCF model that market value will be driven down to book value if the DCF cost of equity is actually earned. If less is earned than the DCF cost of equity, the price will be driven to less than book value creating a circumstance where equity cannot be raised on reasonable terms. Utilities frequently issue common stock. In order to successfully issue common stock above book value and without impairment of capital, it is necessary to adjust the DCF result for cost of offering or make a floatation expense adjustment.

Q. **What is the typical adjustment for pre-offering pressure and floatation expense?**

A. It ranges from 5 to 10% of the dividend yield.

Q. **How would a floatation adjustment affect the Staff recommendation?**

A. It would increase it by 24 basis points if the adjustment was 5% and it would increase it 52 basis points if the adjustment was 10%.

## Summary and Impact of Comments and Criticisms

Q. **Please summarize the return impact of the criticisms which you have made of the Staff and Public Counsel testimony.**

A. The first and overriding criticism relates to the fact that there is a substantial difference in leverage between the comparative group and MGE which, under the Staff and Public Counsel methodology, was not properly offset by a risk adjustment. As I indicated in the testimony, this is not controversial and such an adjustment is widely accepted and necessary. I have not specifically quantified such an adjustment simply because it is more appropriate to use an average capital structure to avoid the necessity for such an adjustment.

The second major criticism had to do with the difference in risk " specifically business risk " between MGE and the comparative groups. As my calculations of standard deviation and coefficient of variations show, MGE is substantially more risky than companies which comprise the comparative group. As a consequence, MGE should be authorized a substantially higher return on equity.

**Q. Have you made specific calculations as to the difference and required return associated with any of your recommendations?**

A. Yes. The preferred stock has a cost of 9.93%. As was discussed, the preferred stock has characteristics designed to make it substantially less risky than the common stock including preference in liquidation, preference for dividends, cumulative dividends, and a standing above equity in all other events. I have estimated that the value of those differences is as much as two percentage points.

**Q. What about the difference associated with pre-offering pressure which was not included in the calculations presented by the Staff and the Public Counsel?**

A. A simple calculation of the appropriate preoffering pressure adjustment shows that the cost of common equity should be increased by 24 to 52 basis points.

**Q. Did you estimate the difference in the required return if the appropriate form of the DCF model is used?**

A. Yes. If the quarterly compounding DCF is used rather than the continuous compound model used by both the Staff and the Public Counsel, the yield component would increase by approximately 25 basis points, resulting in an increase in the overall cost of equity of 25 basis points.

**Q. Does that conclude your prepared testimony at this time?**

A. Yes, sir, it does.

**Q. Thank you.**

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

| | | |
|---|---|---|
| In the Matter of Missouri Gas Energy's Tariff Sheets Designed to Increase Rates for Gas Service in the Company's Missouri Service Area. | ) ) ) ) | Case No. GR-2001-292 |

AFFIDAVIT OF JOHN C. DUNN

STATE OF KANSAS )
) ss.
COUNTY OF JOHNSON )

John C. Dunn, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, to be presented in the above case; that the answers in the foregoing Rebuttal 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.

John C. Dunn

JOHN C. DUNN

Subscribed and sworn to before me this 18th day of May 2001.

Notary Public — State of Kansas
SHARI L. MILLER
My Appt. Exp. 02-23-2002

Shari L. Miller

Notary Public

My Commission Expires: 2-23-2002

BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

| | |
|---|---|
| IN THE MATTER OF TARIFF REVISIONS OF MISSOURI GAS ENERGY, A DIVISION OF SOUTHERN UNION COMPANY, DESIGNED TO INCREASE RATES FOR NATURAL GAS SERVICE TO CUSTOMERS IN THE MISSOURI SERVICE AREA OF THE COMPANY. | ) Case No. GR-2001-292<br>) May 9, 2001<br>) Jefferson City, Mo |

DEPOSITION OF DAVID MURRAY

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Schedule JCD -11

BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

| | | |
|---|---|---|
| IN THE MATTER OF TARIFF REVISIONS OF MISSOURI GAS ENERGY, A DIVISION OF SOUTHERN UNION COMPANY, DESIGNED TO INCREASE RATES FOR NATURAL GAS SERVICE TO CUSTOMERS IN THE MISSOURI SERVICE AREA OF THE COMPANY. | ) | Case No. GR-2001-292<br>May 9, 2001<br>Jefferson City, Mo |

DEPOSITION OF DAVID MURRAY,

a witness, sworn and examined on the 9th day of May, 2001, between the hours of 8:00 a.m. and 6:00 p.m. of that day at the law offices of Brydon, Swearengen & England, PC, 312 East Capitol Avenue, in the City of Jefferson, County of Cole, State of Missouri, before

PATRICIA A. STEWART, RPR, CSR, CCR
Registered Merit Reporter
ASSOCIATED COURT REPORTERS, INC.
714 West High Street
P.O. Box 1308
Jefferson City, Missouri 65102
(573) 636-7551

within and for the State of Missouri, in the above-entitled cause, on the part of Missouri Gas Energy, taken pursuant to notice.

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Dan Joyce, Missouri Public Service Commission

SIGNATURE INSTRUCTIONS:

Obtain signature; waive presentment.

EXHIBIT INSTRUCTIONS:

Exhibit No. 1 retained by the witness, to be returned later; Exhibit No. 2 retained by Mr. Swearengen.

CERTIFIED QUESTIONS:

Page 73, Lines 14 and 15

INDEX



EXHIBITS

DAVID MURRAY, having been sworn, testified as follows:
DIRECT EXAMINATION BY MR. SWEARENGEN:
Q. State your name for the record, if you would, please.
A. David Murray.
Q. Mr. Murray, I'm Jim Swearengen. I'm going to be asking you some questions this morning on behalf of Missouri Gas Energy in connection with Case GR-2001-292.
If at any time today you would like to take a break for any reason, to talk to your lawyer, to use the restroom, to get a drink or something, just say so and we will stop and accommodate you.
And we want to try to keep this as informal as we can, and try to move it along as quickly as possible.
Have you ever had your deposition taken before?
A. No.
Q. Let me ask you this question: Are you the same David Murray who caused to be filed in a Missouri Public Service Commission Case GR-2001-292 certain direct testimony?
A. Yes.
Q. And do you have a copy of that testimony --
A. Yes, I do.
Q. -- with you this morning?
Now, based on my understanding of that

testimony, you became employed as a financial analyst for the Missouri Public Service Commission in June of 2000. Is that right?

A. Yes.

Q. Could you briefly describe your duties and responsibilities in connection with that position, which is your present position. Right?

A. Yes. As a financial analyst, the principal duties are to calculate rate of return for companies when rate cases are filed.

Additionally, as a financial analyst, I will review merger applications, finance applications, certificate applications, things of that nature.

Q. Have you held any other positions with the Commission other than the one that you just described?

A. No.

Q. Prior to June of 2000, by whom were you employed?

A. Missouri Department of Insurance.

Q. Okay. And what position did you hold there?

A. I held several positions.

Q. Okay. Why don't you just describe them, if you would, please?

A. My latest position there was a Workers' Compensation specialist. Before that it was insurance product analyst. As far as the duties -- which I assume you would want to know also -- the Workers' Compensation specialist, I worked with the Workers' Compensation advisory organization.

They more or less produced the loss costs, which I'm going to speak in some insurance terms here that some may not understand, but that's basically the losses that are paid by insurance companies, or estimated will be paid by insurance companies, without the expenses and the profit margin and things of that nature.

So I worked with the advisory organization on rules, also, that they would file to change certain class codes which could have an impact on employers in the State of Missouri.

And I also worked with the assigned risk pool, which basically that's the market of last resort for employers that cannot find coverage in the voluntary market as a result of -- of just having various situations or circumstances that may not be beneficial to a voluntary carrier.

I also reviewed products of insurance companies to make sure they're in compliance with Missouri statutes and regulations.

And I, also, in addition to my Workers' Compensation duties, I reviewed credit insurance products -- which I'm certain most people are familiar with, with credit insurance, is something that you may buy for in case of death or disability or what have you, to pay off your credit card bills in case of that situation.

But we would review the rates to make sure they complied with certain loss cost requirements in the State of Missouri.

And I also reviewed mortgage guarantee, which is commonly referred to as PMI insurance products.

Q. Now, all of this that you have just described took place while you were employed by the Missouri Department of Insurance?

A. That's correct.

Q. And over what period of time were you employed by the Department of Insurance?

A. As soon as I graduated from college.

I think it was two months after July '95, through -- up to the employment with the Missouri Public Service Commission. Approximately five years.

Q. When did you graduate from college?

A. In May of 1995.

Q. And during college or prior to college could you briefly describe any employment experience that you may have had?

A. While I was in school I worked at United Parcel

Service, a part-time job. I was going to school full time, so it was just basically to help supplement my expenses.

Q. Okay. In connection with any of your past employment -- and I guess that would be limited to the Missouri Division of Insurance -- did you ever file prepared testimony or testify otherwise in any type of proceeding?

A. Excuse me. With the Department of Insurance?

Q. Yes.

A. No.

Q. Have you filed any prepared testimony or have you otherwise testified in any proceeding before the Missouri Public Service Commission?

A. Yes.

Q. What cases would those be?

A. They were telephone cases. One was Ozark Telephone Company. The other was Northeast Missouri Rural Telephone Company. I don't recall the case numbers.

Q. What type of testimony did you file in those cases?

A. Rate of return direct testimony. I apologize. That was -- excuse me. That was direct.

The telephone cases were kind of hectic. I believe one of them was rebuttal, and I believe the others were direct.

Q. But in both of those cases, the Ozark Telephone and the Northeast Missouri Rural Telephone case, your testimony was rate of return testimony?

A. That's correct.

Q. Okay. Have you participated in any fashion with respect to any other proceeding or matter before the Commission?

A. Could you elaborate, please?

Q. Well, I think earlier you indicated that you had done some work, perhaps, reviewing some merger applications. Is that correct?

A. That's correct.

Q. Why don't you go back and touch on that a little bit and give us some more detail.

A. Okay. As far as the merger in finance cases, with finance cases, more or less we evaluate the impact of -- with finance cases we evaluate what the impact is going to be of whatever issuance it's going to be, which could be debt or equity. We would analyze how that is going to affect various ratios of the company.

Q. Specifically, you'd indicated that those types of duties were in your job description. Can you give me some examples of specific instances involving specific companies where you have done this?

A. Specific companies?
Q. Yes.
A. Middle Fork Water Company would be a company that I analyzed a finance case on.
Q. What company was that?
A. Middle Fork Water Company.
Q. Any other companies?
A. You're going to test my memory here, but as far as merger cases, Hotel Associates and also Kimberling Investments. I believe that was a joint application.
Q. And these are all matters before the Missouri Public Service Commission?
A. That's correct.
Q. Any others that you can think of?
A. There are many CLEC applications that I review, too many to really -- to be able to tell you all of the names.
Q. That you have reviewed, applications that you have reviewed?
A. Yes.
Q. And what was your responsibility in connection with that review?
A. To make sure that they meet the minimum financial requirements of the Missouri Public Service Commission.

Q. If you'd turn to your testimony for a minute, please, beginning at the top of page 15, why is there a discussion of Southern Union Company?
A. Southern Union is the parent company of MGE.
Q. That's your answer?
A. Yes.
Q. On that same page, on line 27, I believe, you say that the net plant and service has a book value of over $2 billion. Is that right?
A. Yes.
Q. What does that figure represent in your mind, the $2 billion? Is that a gross plant figure?
A. No. It's a net utility plant service figure.
Q. Would that include any acquisition premium?
A. I don't know for sure.
Q. On page 17 you discuss Standard and Poors outlet for Southern Union Company.
A. Yes.
Q. Would you agree that in this outlook, Standard and Poors seems to be quite complimentary in its assessment of the management of Southern Union, its ability to cut and control costs, the strong growth prospects that Southern Union has created and so forth? Would you agree with that?
A. I believe they point out certain positive

aspects of the management. They also point out some other issues also.

Q. Would you agree, though, with the -- that Standard and Poors is complimentary in its assessment of Southern Union Company as I just described?

A. If I can refer to specific quotes within that outlook, I believe they indicate there is management's ability to cut and control costs, strong growth prospects and the financial profile is adequate for the current ratings.

They indicate some information about management has demonstrated its commitment to strong investment grade ratings. I believe those are not bad comments.

Q. Do you have any reason to disagree with that assessment?

A. No.

Q. You mentioned that Missouri Gas Energy -- excuse me -- that Southern Union is the parent of Missouri Gas Energy?

A. Yes.

Q. Is it your understanding that Missouri Gas Energy is, in fact, an operating division of Southern Union Company?

A. Yes.

Q. And so when you say parent, you mean operating division? Is that a fair statement?

A. Well, the parent company, Southern Union Company, has several operating subsidiaries underneath: the New England Division, we have Southern Union Gas Company, a variety of subsidiaries underneath the parent company of Southern Union Company.

Q. So I guess what I'm trying to get at is, is that -- in your mind is Southern Union -- excuse me -- is Missouri Gas Energy a subsidiary corporation or is it an operating division?

A. Southern Union Company is the corporation. MGE is the operating subsidiary.

Q. And once again, what I'm trying to clarify in my mind is your understanding.

When you say operating subsidiary, are you talking about a subsidiary corporation, a wholly owned subsidiary corporation of Southern Union, or do you mean it's an operating division of Southern Union?

Do you know the difference between the two?

A. Well, if you could clarify it, that would help.

Q. Well, I'm asking you, do you know the difference between an operating corporate subsidiary and an operating division?

MS. SHEMWELL: I think he's indicated that he doesn't understand the question. So if you can clarify what you mean by those two, that would be helpful.

BY MR. SWEARENGEN:

Q. I'm just asking --

A. Are you asking whether or not they trade in their own stock? Do they have their own stock listed?

Q. I'm asking you if you know the difference between an operating corporate subsidiary and an operating division.

A. They don't have their own books, so I would say that they may be an operating subsidiary.

Q. And when you say "they," who are you talking about?

A. Missouri Gas Energy.

Q. So it's your understanding that Missouri Gas Energy is an operating corporate subsidiary of Southern Union?

A. I said operating subsidiary.

Q. Okay. And when you say subsidiary, what do you mean?

A. They are a division of Southern Union.

Q. A division?

A. Southern Union Company.

Q. And in your mind is there a difference between an operating division and a subsidiary corporation?

A. As far as any legal, I wouldn't know.

Q. Okay. Other than the quoted material from Standard and Poors, which you have on page 17 of your testimony, and the information which you quote from Southern Union's annual report on page 15 of your testimony, what is your understanding as to the nature of the business of Southern Union?

A. It is, generally, a natural gas distribution company.

Q. How familiar are you with the business of Missouri Gas Energy?

A. Could you expand on that, please?

Q. Well, I'm asking you to expand on it.

I mean, how familiar are you with the business of Missouri Gas Energy? Can you describe that business?

A. I've reviewed their financial statements. I realize that they are a natural gas distribution company. That is their principal business. That's my understanding.

Q. Is Missouri Gas Energy in any other business that you're aware of?

A. Not that I'm particularly concerned with. Just the natural gas distribution.

Q. What knowledge do you have of their service territory?

A. Just a general knowledge as far as maybe the towns.

Q. And what is that knowledge?

A. The main cities that they operate in are Kansas City, Joplin, St. Joe. Mainly the western part of the state.

Q. Do you know whether or not Missouri Gas Energy operates in any other state?

A. No, they do not operate in any other state.

Q. Are you familiar with any of Southern Union's other natural gas distribution operations other than the Missouri Gas Energy operations?

A. Other than what I cited -- I cited some information about the other operations.

Obviously, I'm aware of the acquisition of the New England Division, PG Energy, which used to be Pennsylvania Enterprises, I believe. They have large operations in Texas, a small operation in Florida. That's what comes to mind right now.

Q. And those are all gas operations?

A. Gas distribution, yes.

Q. Are you aware of any investments which Southern Union might have in nonutility businesses?

A. I'm aware that there may be nonutility or unregulated investments by Southern Union.

Q. And what are those?

A. I believe there may be some propane business. There also may be some heating and air conditioning. I'm not sure if they diversified.

Keep in mind, there are many companies that I may look at, but I do realize that they do some business in unregulated areas.

Q. In connection with the preparation of your direct testimony in this case, did you review, refer to or utilize in any fashion any financial reports or financial publications?

A. Yes.

Q. And what are those?

A. As far as the sources, I think Value Line. Standard and Poors has an earnings guide and a stock guide. They also -- we also use some internet services, Standard and Poors utilities ratings direct.

Q. How did you utilize that information that you just described in putting together your testimony?

A. Do you want the specifics of each source?

Q. Just generally.

A. Generally.

Many of those sources went directly into the DCF calculation.

Q. Did you make any other use of them other than the DCF calculation?

A. I'd have to review my testimony. I don't recall anything offhand. Value Line has betas for CAPM, risk premium. Basically, those are interest rates. Those would be the history rate which would be in the Wall Street Journal. But a lot of that is not completely committed to memory.

Q. I want to make sure I understand.

This information that you're talking about, is it general financial information pertaining to the industry of various companies, or is it Southern Union/ MGE specific?

A. Value Line will contain Southern Union/MG-- or Southern Union information. But as far as the DCF calculation, used a comparable group. So the information was used to calculate DCF for MGE, because that's what we had available to calculate DCF, return on equity.

Q. Did you review or refer to any Southern Union/ Missouri Gas Energy specific financial information in putting together your testimony?

A. Yes.

Q. And what would that be?

A. Specifically, balance sheet information for capital structure purposes.

Q. Anything else?

A. There is also some information in the schedules, as far as general schedules, to show a trend in capital structure, some various ratios, as a comparison, comparative analysis.

Q. When you say a trend in capital structure, are you talking about the trend in Southern Union's capital structure?

A. Yes, historical capital structures in the past five years.

Q. In connection with putting together your testimony, did you review or refer to any financial textbooks, treatises or other similar publications?

A. The two primary references that we use, textbooks that we use, are Costs of Capital by David Parcell.

Q. How do you spell that?

A. P-a-r-c-e-l-l.

And then the other textbook that we use frequently is Roger Morin's Utility -- Regulatory Finance Textbook.

Q. Now, how did you use those two textbooks for purposes of your testimony in this case?

A. Just in a general sense as far as the methodology to use for DCF. Maybe some for risk premium and CAPM, as far as just general -- general principles of these models.

Q. Did you review any prepared testimony from any prior Missouri Public Service Commission cases in connection with putting together your direct testimony in this case?

A. Yes.

Q. What cases would those be?

A. Two previous MGE cases, 98-140, and also, like I said, the '96 case, and I don't recall the case number. But those were specifically reviewed for preparation of this case.

Q. What testimony did you look at in those cases?

A. Ronald Bible's direct testimony, rebuttal, surrebuttal. Obviously, the Company's, Bruce Fairchild, direct testimony, surrebuttal, rebuttal. Mark Burdette, direct testimony, rebuttal, surrebuttal.

As far as the '96 case, I don't think I went in as much detail, but I did review certain aspects of the direct testimony.

Q. What aspects were those?

A. Just the general view of the staff in the '96 case, as far as the stance the staff has taken in '96.

Q. Do you recall looking at any specific witness's testimony in the '96 case?

A. David Broadwater and Bruce Fairchild.

Q. Did you review the transcripts of any hearings before the Missouri Public Service Commission with respect to either of those two cases, or any other cases for that matter?

A. Not on those two cases. I reviewed the transcripts for a recent St. Louis County Water case.

Q. And you did that in connection with your preparation of the testimony in this case?

A. Not directly. Just -- I worked with Roberta McKiddy on the case, and I was obviously curious as to how the proceedings went.

Q. Okay. Let me restate that question.

In connection with putting together this direct testimony, did you review the transcripts of any proceedings before the Public Service Commission?

A. Not specifically.

Q. Did you review the depositions of any witnesses in connection with any prior Commission cases in connection with putting together your direct testimony in this case?

A. No.

Q. Did you issue any data requests to Southern Union or Missouri Gas Energy in connection with this case?

A. Yes.

Q. Do you recall how many offhand?

A. It was initially 10. It ended up being 11.

Q. How did you utilize the information which you received in response to those data requests in the preparation of your testimony?

A. Do you want me to run down the data requests?

Q. Well, whatever is the easiest way for you to answer it. Just generally speaking.

A. I used the specific balance sheet information for, obviously, the capital structure. Obviously, all of the debt issuances, where you needed specific information about the interest rates, maturity dates, issuance expenses, et cetera, et cetera.

Also, asked for information regarding the financial correspondence between a credit analyst and Southern Union, and any anticipated changes in capital structure.

Some of those were used specifically and some were of a general use, at least to take it into consideration.

Q. Are you finished? I don't want to cut you off.

A. Yes.

Q. And I believe it's page 3 of your direct testimony, there at the bottom you reference four decisions by the United States Supreme Court which you indicate provide a legal framework for regulation and for what constitutes a fair and reasonable rate of return for a public utility. Is that correct?

A. Yes.

Q. Have you read those four cases which were set out there at the bottom of page 3 of your testimony?

A. Not entirely.

Q. Did you read any of those cases in their entirety?

A. No.

Q. Can you describe generally what portions of each of those cases you did read?

A. I couldn't say specifically what I cited here.

Q. Other than what is -- let me make sure I understand.

Other than what you have specifically set out in your testimony, you're not sure whether you read any other parts of those cases?

A. I've read other parts. I just don't recall specifically. It's not the most exciting reading.

Q. Did you make any photocopies of those cases in connection with the preparation of your testimony for these -- in this case?

A. I did not make photocopies.

Q. Did someone do that for you?

A. I have photocopies. Who made them, I don't know.

Q. Someone provided you with photocopies of those cases?

A. Yes.

Q. Do you recall whether or not those photocopies have on them any notations or underlining?

A. There may have been some highlighted portions.

Q. You don't recall?

A. There was some highlighted portions.

Q. Do you recall what those highlighted portions were?

A. I believe -- obviously, some of the testimony -- or what I've cited in my testimony were highlighted.

As far as specifics, without having that in front of me, it would be pretty hard to answer that.

Q. So I want to make sure, again, I understand.

Would you say that the testimony that -- excuse me -- that the portions of those opinions, those cases which are cited in your testimony, were highlighted?

A. I can't say specifically if all of the excerpts were highlighted, but I do recall some of them were highlighted.

Q. You think there may have been portions of those opinions that were highlighted that do not show up in your direct testimony?

A. I believe so.

Q. On pages 4 and 5 you cite -- or you quote language from the Bluefield Waterworks case and the Federal Power Commission versus Hope Natural Gas case. Is that correct?

A. On page 4 and 5?

Q. That's right.

A. Yes.

Q. And then on page 5, lines 28 and 29, you emphasize the point that a utility such as Southern Union or Missouri Gas Energy is entitled to a level of rates or a return comparable to returns achieved by other enterprises that have corresponding risks. Is that correct?

A. You're referring to 28 and 29 on page 5? Is that what you're referring to? I'm sorry.

Q. Yes.

A. I don't believe I -- I state anything specific about Southern Union. It's more of a general sense.

Q. Would that statement be true with respect to Southern Union or Missouri Gas Energy?

A. Could you please repeat the statement?

Q. Would that statement that you referred to, the concept of -- let me just refer you to it.

Looking at page 5, line 28, the Hope case restates the concept of comparable returns to include those achieved by any other enterprises that have corresponding risks.

That's the statement to which I am referring that's in your testimony.

Would you say that that statement is applicable to a utility such as Southern Union Company or Missouri Gas Energy?

A. I would say in a general sense, yes.

Q. And when you say "in a general sense," to me you're qualifying that statement in some regard.

Is there any qualification that you would have to that statement?

A. No.

Q. So you would agree that the concept of risk is very important in this process? Would you agree with that?

A. Yes.

Q. Now, over on page 6 of your direct testimony, you reference a case entitled Pennsylvania Electric Company, et al, versus Pennsylvania Public Utility Commission.

Let me ask you this question: Have you read that case in its entirety?

A. No.

Q. Have you read any portions of that case?

A. Yes.

Q. Turning back, at the bottom of page 5 of your direct testimony, in reference to that Pennsylvania case, you say, the Supreme Court of Pennsylvania in that case extends the Hope decision beyond balancing the interest of the investors and the consumers.

My question is: What do you mean by that statement?

A. I believe the Pennsylvania Electric Company case expands on that, because it indicates that return on equity is not going to be set at a level that is going to afford a company to stay in business no matter what their actions are. So that, obviously, some investors might not like that.

Q. So that's what you mean by your statement that the Hope decision -- excuse me -- the Pennsylvania decision extends the Hope case decision?

A. Yes, because of the fact that -- that if you were truly balancing the investor interest and the consumer interest, that would have to apply in all cases, which the Pennsylvania case, I believe, points out, that's not the case.

Q. On page 6, line 14 of your testimony, when discussing a Pennsylvania case, you state as follows: Captive ratepayers of public utilities should not be forced to bear the brunt of management decisions which result in unnecessarily high costs.

Is that correct?

A. Yes, sir.

Q. What evidence do you have in this case before the Commission involving Missouri Gas Energy of any management decisions by Missouri Gas Energy or Southern Union which have resulted in unnecessarily high costs for their customers?

A. Well, I don't believe -- when I make the reference to management decisions, this is in a general sense. Nothing is intended to specifically apply to Southern Union.

Q. So would your answer be none, that you don't have any evidence of any management decisions by Southern Union or Missouri Gas Energy which have resulted in unnecessarily high costs for their customers?

A. As of in the past? No.

Q. Presently, at any time.

A. Obviously, with the rate case proceeding, I think that some of that is going to be determined. So I can't say for sure.

Q. Well, let me make sure I understand now.

The question is: Do you have any evidence in this case of any management decisions by Southern Union or Missouri Gas Energy which have resulted in unnecessarily higher costs for its customers?

A. That have resulted in unnecessarily higher costs?

Specifically in reference to MGE, I don't believe anything has been passed along to the consumers as of now.

Q. So would it be fair for me to conclude that that statement has no real relevance for this case?

A. Like I say, I used it in a general sense. I would not say it does not have any relevance.

Obviously, management is going to make decisions, and whether or not they result in higher costs is something that may be determined in the future.

Q. Would you agree that the customers in Missouri Gas Energy are presently being charged those rates which have been approved by the Missouri Public Service Commission?

A. In 1998? Yes, the 1998 case?

Q. Well --

A. I'm sorry. Can you clarify?

Q. The rates that Missouri Gas Energy is presently charging its customers are rates which have been approved by the Missouri Public Service Commission. Would you agree with that?

A. They were approved in the 1998 case.

Q. Are they still in effect?

A. Yes.

Q. Would you agree that those rates are presumed to be just and reasonable?

A. As far as any ongoing investigation, I mean, without -- without doing an earnings investigation, I would presume that they're just and reasonable.

Q. Would you agree that those rates do not reflect costs of any unreasonable management decisions on the part of Southern Union or Missouri Gas Energy?

A. Could you rephrase -- or restate the question?

Q. Would you agree that those rates which are now in effect do not reflect the costs of any unreasonable management decisions on the part of Southern Union or Missouri Gas Energy?

A. I really can't reflect on the specific management decisions that have occurred in the last couple of years as far as the rates in effect at that time.

Obviously, specifically, my boss Ron Bible came up with a rate of return that he felt was just and reasonable.

Q. Well, let me kind of get back to the question here.

The present rates which are now in effect and have been approved by the Commission for Missouri Gas Energy, would you agree that those rates do not reflect the costs of any unreasonable management decisions on the part of either Southern Union or Missouri Gas Energy?

A. I don't know.

Q. You don't know?

A. I don't know.

MS. SHEMWELL: Jim, could we take a break?

MR. SWEARENGEN: Sure.

(A RECESS WAS TAKEN.)

BY MR. SWEARENGEN:

Q. Mr. Murray, returning, once again, to the Pennsylvania Electric Company case which we have been discussing, do you recall what management decision was the subject of that case?

A. No, I don't.

Q. Do you know whether or not the Pennsylvania Public Service Commission or the Pennsylvania Supreme Court in those cases reviewed or considered any management decisions by Pennsylvania Electric Company?

A. No.

Q. Do you know whether or not the Supreme Court of Pennsylvania in that case recited that the issue presented to it in that case was a narrowing?

A. No.

Q. Do you know what the Three Mile Island accident was?

A. I'm familiar with it generally.

Q. And what is your knowledge of that?

A. I'm aware that it happened.

Q. And what kind of accident was it?

MS. SHEMWELL: I'm going to question the relevance of this.

MR. SWEARENGEN: Okay. You can make the objection.

BY MR. SWEARENGEN:

Q. Do you know what the Three Mile Island accident was about?

A. Not specifically.

Q. Okay. Do you know whether or not the Three Mile Island accident had anything to do with the Pennsylvania case which you have cited in your testimony?

A. No.

Q. If you would turn to the top of page 6 of your testimony, on line 1, and you're quoting, I believe, the Pennsylvania Electric Company case that we have been talking about.

And it says, we do not believe, however, and then there is a series of dots, and then it begins with the words, that the end result. Is that correct?

A. Yes.

Q. Do you know what words from the court's opinion have been omitted from your testimony?

A. Not specifically.

Q. Would the meaning of the paragraph on the top of page 6 of your testimony for which I just referred be different if it read, we do not believe, however, that the Hope decision stands for the proposition urged by Metropolitan Edison and Pennsylvania Electric, that the end result of a ratemaking body's adjudication must be the setting of rates at a level that will in any given instance or case guarantee the continued financial integrity of the utility concern?

A. I don't know.

Q. Would you agree with me that the words that have been omitted are as follows: That the Hope decision stands for the proposition urged by Metropolitan Edison and Pennsylvania Electric?

MS. SHEMWELL: I'm going to object. He's already answered that and said he didn't know.

BY MR. SWEARENGEN:

Q. Do you know?

MS. SHEMWELL: You can answer.

THE WITNESS: I don't know.

BY MR. SWEARENGEN:

Q. So you can't tell us today if that is really what the court said or didn't say?

A. I don't know.

Q. Let me hand you a copy of that decision and refer you to a paragraph which has been highlighted in yellow, and I would ask you simply to read that into the record.

A. We do not believe, however, that the Hope decision stands for a proposition urged by Metropolitan Edison and Pennsylvania Electric, that the end result of the ratemaking body's adjudication must be the setting of rates at a level that will in any given case guarantee the continued financial integrity of the utility concerned.

Q. Thank you.

So wouldn't you agree with me that really what the Pennsylvania court is doing is simply commenting on what the Hope decision means or doesn't mean?

Is that correct?

A. I don't know.

Q. Wouldn't you agree that the Pennsylvania court is not really adding anything to or extending a decision of the United States Supreme Court?

A. I believe there is some clarification.

Q. You believe that the Pennsylvania court is clarifying what the United States Supreme Court said?
A. I believe my statement in the testimony was that it extends the Hope case decision.
Q. Okay. Is that still your testimony, that the Pennsylvania Supreme Court is extending a decision of the United States Supreme Court?
A. I believe I specifically state that the Supreme Court of Pennsylvania extends the Hope case decision beyond balancing the interest of the investors and the consumers.
Q. And let me ask you, then, when you say extends the Hope case decision, what do you mean by that?
A. As cited in my testimony, I believe it just clarifies that there is more to a decision than just balancing the investors and the consumers interests.
Q. And in your view, is that what the Pennsylvania court is saying the law is, or is that what the Pennsylvania court is saying what the United States Supreme Court said the law said?
A. I don't know.
Q. Your direct testimony is about 31 pages long, is that fair, not including the schedules?
A. Let me refer and I can tell you.
31, correct.

Q. And you're the author of this testimony. Is that right?

A. Yes.

Q. Is it fair to say that the first 18 or so pages of your testimony concerns your employment circumstances, your education and training, what you refer to as the economic and legal rationale for regulation, a review of historical economic conditions, economic projections made by others and a description of the business operations of Southern Union Company?

A. Could you repeat the question? I'm not sure what you're asking.

Q. Let me ask it again then.

Is it fair to say that the first 18 or so pages of your testimony concern your employment circumstances, your education and training, what you refer to as the economic and legal rationale for regulation, a review of historical economic conditions, some economic projections made by others and a description of the business operations of Southern Union Company?

A. Yes.

Q. Then at the bottom of page 18 and for part of page 19 you talk about the approach for determining a utility company's cost of capital. Is that correct?

A. Yes.

Q. At the bottom of page 19 you begin an explanation of the capital structure you have used for this case. Is that correct?

A. Yes.

Q. And that discussion encompasses three lines at the bottom of page 19, all of page 20 and the first ten lines of page 21. Is that correct?

A. That includes capital structure and embedded cost, that's correct.

Q. So would it be fair to say that you have about a page and a half of testimony on capital structure?

A. Capital structure and embedded costs, that's correct.

Q. Thank you.

And then as you state on page 19, line 20, that you have made a decision to use the Southern Union capital structure for purposes of this case. Is that correct?

A. Yes.

Q. And your reasons for that are set out on lines 11 to 15 over on page 20, where you say -- the question is, why didn't you use the Missouri Gas Energy's capital structure? And then you have an answer on line 11 that runs through line 15. Is that correct?

A. Yes.

Q. So is it fair to say that your entire rationale for using the Southern Union capital structure in this case is set out in those five lines?

A. Yes.

Q. And what is your understanding as to the value of this issue from a standpoint of revenue requirement in this case?

A. As far as a dollar amount?

Q. Right.

A. It's significant.

Q. Would you agree that it's in the neighborhood of 10 to $11 million?

A. That sounds about right.

Q. Then over on page 21, at line 11, you begin your discussion of how the cost of equity for Missouri Gas Energy may be determined for purposes of this case. Is that correct?

A. Sir, can you refer me back to what page you're referring to?

Q. I'm at page 21, starting at line 11.

A. Line 11.

I do talk about how --

Q. And that's where your discussion of how the cost of equity for this case should be determined. That's where it begins. Is that right?

A. Yes.

Q. And that discussion ends over on, I believe, page 30, line 11. Is that correct?

That's where your discussion of the cost of equity ends?

A. I'm looking, please.

Q. Sure.

A. That's correct.

Q. And would it be fair to say, then, that your testimony on cost of common equity, you really have only about eight or nine pages devoted to a discussion of how that should be calculated for MGE in this case?

And I'm looking at pages 22 through 30.

A. That's correct.

Let me clarify. The schedules attached to the back are also devoted to calculating the return on equity.

Q. I understand.

Now, within those eight or nine pages, a substantial portion of your testimony is devoted to a discussion of how the so-called discounted cash flow or DCF model works. Is that correct?

A. Yes.

Q. So, for example, you begin your discussion of the DCF model at the bottom of page 21, you talk about it on page 22, all of page 22 is devoted to a discussion of the DCF model, all of page 23 is devoted to a discussion of the DCF model. Is that correct?

A. Yes.

Q. So is it fair to say that you really don't start talking specifically about the cost of common equity for Southern Union Company or Missouri Gas Company until the top of page 24?

A. Please be patient with me here.

I would say as far as the direct, yeah, the direct analysis of the cost of equity, yes.

Q. Would you also agree that a substantial portion of your explanation of your analysis of the cost of equity for Southern Union or Missouri Gas Energy consists of a discussion of how the risk premium and capital asset pricing models work. Is that correct?

A. There is a portion of my testimony that discusses the risk premium and the CAPM model.

Q. Would you agree that it's a substantial portion of your explanation?

A. Substantial is relative. I'm not sure what you're referring to when you say "substantial."

Q. Well, for example, you begin on page 24 at the top to discuss the cost of equity for Southern Union, and you conclude that discussion on lines 20 and 21 on page 26, where you state an estimated DCF cost of equity range for Southern Union of 9.45 to 10.25 percent. Is that correct?

A. Yes.

Q. And then at the bottom of page 26 you discuss an analysis you performed to determine the reasonableness of your DCF model. Is that right?

A. Yes.

Q. And that leads into a discussion of the risk premium and the capital asset pricing models. Is that right?

A. Yes.

Q. And the discussion of these other models takes up all of pages 27 and 28 and down through line 9 on page 29. Is that correct?

A. That's correct.

Q. Starting at line 9 on page 29, you simply summarize what you've said previously with respect to your cost of equity analysis. Is that right?

A. Yes.

Q. Then at lines 17 and 18 on page 29, you state what your recommendation is in this case for a return on common equity. Is that right?

A. Yes.

Q. So would you agree with me that in all fairness, your testimony explained how you approached the determination of the cost of equity for Southern Union begins on page 24, at line 6, with the question, please explain how you approached the determination of the cost of equity for Southern Union, and it ends on page 26 at line 21?

A. As far as my specific DCF analysis, specific formula and explanation of the inputs of the formula and the results of the formula specifically to the DCF, that's correct.

Q. And that's the approach that you used in determining the cost of equity for Southern Union in this case. Is that right?

A. Yes.

Q. And that encompasses not quite three pages of your testimony. Would that be a fair characterization?

A. A specific explanation of the DCF, correct.

Q. For Southern Union Company?

A. That's correct.

Q. Would you agree with me that the return on equity issue in this case is worth approximately $8 billion?

Is that your understanding?

A. That sounds about right.

Q. Now, I think you indicated earlier that you had reviewed some testimony of Public Service Commission employees in connection with prior rate cases involving

Missouri Gas Energy. Is that right?

A. Yes.

Q. Are you familiar with the direct testimony which Mr. Ron Bible of the Commission staff filed in Case No. GR-98-140?

A. Yes.

Q. Would I be correct if I said that for the most part, for the most part, your direct testimony in this case is very similar, if not almost word for word identical, to Mr. Bible's testimony in Case GR-98-140?

A. I would say we have department policy, and some of those policies were followed.

Q. So is that a yes or a maybe or a no?

A. Well, it's not -- I mean, there is some standardized portions that we have as a department. Obviously, we want some consistency in what we do.

As far as the specific recommendation, my recommendation is different.

MR. SWEARENGEN: Could I have a document marked, please.

(EXHIBIT NO. 1 WAS MARKED FOR IDENTIFICATION BY THE COURT REPORTER.)

BY MR. SWEARENGEN:

Q. Mr. Murray, I'm going to hand you what has been marked for purposes of this deposition as Deposition