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Witness: John C. Dunn
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Sponsoring Party: Missouri Gas Energy
Case No.: GR-2004-0209
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BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

MISSOURI GAS ENERGY
CASE NO. GR-2004-0209

SURREBUTTAL TESTIMONY

OF

JOHN C. DUNN

ON BEHALF OF MISSOURI GAS ENERGY

June 2004

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.	))))	GR-2004-0209

AFFIDAVIT OF JOHN C. DUNN

STATE OF Missouri)
) ss.
COUNTY OF Cole)

John C. Dunn, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form, to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

JOHN C. DUNN

Subscribed and sworn to before me this 14th day of June 2004.

Lori Rackers
Notary Public

My Commission Expires: 7/14/05

LORI RACKERS
Osage County
My Commission Expires
July 14, 2005

SURREBUTTAL TESTIMONY OF JOHN C. DUNN
ON BEHALF OF
MISSOURI GAS ENERGY

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SURREBUTTAL TESTIMONY OF JOHN C. DUNN
ON BEHALF OF
MISSOURI GAS ENERGY

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, KS 66210.

Q. Are you the same John C. Dunn who filed direct testimony and rebuttal 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 I am.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of this testimony is to respond to the rate of return rebuttal testimony of Mr. David Murray, a witness for the Commission Staff ("Staff"), the rate of return rebuttal testimony of Mr. Travis Allen, a witness for the Office of the Public Counsel ("Public Counsel") and the statistical rebuttal testimony of Ms. Barbara Meisenheimer also a witness for the Public Counsel.

ORGANIZATION OF SURREBUTTAL

Q. How is your surrebuttal testimony organized?

A. The surrebuttal testimony is organized into two main sections. Each deals with a point by point response to the individual rebuttal testimonies of the Staff and Public Counsel witnesses.

More specifically, in connection with Staff witness Murray's rebuttal testimony I will comment on the following matters:

- The cost of debt.
- The proper capital structure.

- The comparable companies.
- The determination of return on equity.
- The issue of floatation cost.
- The issue of a risk adjustment.
- The matter of including dividend growth in the discounted cash flow ("DCF") calculation.
- The issue of financial risk.
- The consideration of other Commission decisions in determining the appropriateness of the rate of return recommendation.

In connection with the Public Counsel witness Allen's rebuttal testimony, I will discuss the following areas:

- The proper capital structure.
- The comparable companies.
- The use of the retention rate calculation.
- The use of the dividend per share growth rate in the growth rate calculations.
- The recommendation of a hypothetical capital structure.
- The matter of floatation cost.
- Risk adjustments.

With respect to the Public Counsel witness Meisenheimer's rebuttal testimony, I will comment on the single issue which is discussed in that testimony, i.e. the statistical risk analysis which I included in my direct testimony.

Q. It appears that there is some commonality in the areas of discussion between the Staff and Public Counsel rate of return issues. Will your comments cover both rebuttal testimonies?

A. In the areas of capital structure, the comparative company selections, the issue of floatation cost and the inclusion of dividend growth in the DCF growth rate calculations, my surrebuttal testimony will apply to both the Staff and the Public Counsel rebuttal testimonies. The other issues will be discussed separately.

RESPONSE TO STAFF REBUTTAL TESTIMONY

Cost of Debt

Q. What is the issue with respect to the cost of debt?

A. Staff witness Murray, at page 3 of his rebuttal, states that he relies on the imbedded cost of long term debt for Southern Union on a consolidated basis which was provided to him by MGE in Response to Data Request No. 0102. He goes on to criticize my cost of debt and the fact that I did not include short term debt in the capital structure (p. 3, lns 20-23).

Q. How would you characterize the approach of Staff witness Murray to the calculation of the imbedded cost of long term debt?

A. It is not correct.

Q. Why not?

A. The Staff witness has calculated a cost of long term debt based on all of the Southern Union debt outstanding on a consolidated basis, including the debt of Panhandle Eastern Pipeline Company ("Panhandle Eastern"). This approach is wrong for at least two reasons.

Q. What is the first reason?

A. The Staff has repeatedly indicated in previous proceedings that when a company has a subsidiary which issues its own debt, that subsidiary is subject to a stand-alone analysis. In this case Panhandle Eastern is a subsidiary of Southern Union. Panhandle Eastern has its own long term debt outstanding, which is separately rated by the ratings agencies and which was issued by Panhandle Eastern based on its own financial structure without recourse to Southern Union. In fact, all of the Panhandle Eastern long term debt used by witness Murray in his calculation and shown on his as shown on Schedule 10 was issued well before Panhandle Eastern was acquired by Southern Union.

Q. What is the second reason?

A. The Staff witnesses' approach of including the Panhandle Eastern debt violates the Commission's order in Case No. GM-2003-0238 which requires that MGE be "insulated" from Panhandle Eastern.

Q. Does the Staff witness imply that Standard & Poor's is not aware of the Commission Order in Case No. GM-2003-0238?

A. Yes. In his discussion of capital structure, Mr. Murray quotes a portion of a Standard & Poor's ("S&P") Credit Rating Research Report on Southern Union. Mr. Murray concludes from this report that S&P does not recognize the fact that MGE's natural gas distribution properties have been effectively "insulated" from Panhandle Eastern. (p. 12, lns 6-27).

Q. Do you agree with his interpretation of this report?

A. No. S&P apparently was unaware of the stipulation when opining that Southern Union would use available cash to support debt service for either entity. I say this because in a subsequent S&P research report dated April 6, 2004, S&P changed the rating methodology, although not the credit ratings of Southern Union and Panhandle Eastern. Importantly, S&P dropped the statement that Southern Union management would use available cash to support debt service for either entity.

Q. Do you believe that the change in methodology is recognition by S&P that its June 11, 2003 research report was in error?

A. Yes, I do.

Q. Why?

A. A change of that magnitude by S&P is an important event. Many companies have a rating methodology which does not change for years. Here, there was an abrupt change and it was significant.

Q. What is the proper cost of MGE's long term debt for purposes of this case?

A. It is 7.434% at April 30, 2004, the true up date for the capital structure.

Q. Is there a difference between the Staff and MGE in the cost of preferred stock?

A. No. There is only a rounding difference in the costs. Mr. Murray calculates his cost of preferred stock on Schedule 11 to his direct testimony. The source of that calculation is MGE's response to Data Request 0102. The correct number is 7.758%.

Capital Structure

Q. What is the issue concerning capital structure that Staff witness Murray addresses in his rebuttal testimony?

A. In his rebuttal, Staff witness Murray criticizes my use of the Southern Union capital structure exclusive of Panhandle Eastern at June 30, 2003. Mr. Murray proposed in his direct testimony the consolidated capital structure, including the Panhandle Eastern long term debt, and he continues on pages 7 and 8 of his rebuttal testimony to make a series of calculations using an erroneous capital structure which was first introduced in his direct testimony. Mr. Murray then reiterates in his rebuttal his support for the consolidated capital structure. This significant error by the Staff witness is discussed in the rebuttal testimony of MGE witness Gillen.

Q. In discussing the capital structure issue in his rebuttal, Staff witness Murray states that it has always been the Staff position that when a company (such as MGE) is a division of a "parent" company (such as Southern Union) and relies on the "parent" for its capital needs the Staff "has consistently recommended the consolidated capital structure of the parent company," for ratemaking purposes. (rebuttal, p. 10, lns 5-6) Is this a correct statement?

A. No.

Q. Please explain.

A. In Docket No. RP99-485-000, a rate proceeding before the Federal Energy Regulatory Commission ("FERC") involving KPC (the former Kansas Pipeline Company) the Commission presented the testimony of Mr. Ron Bible, the Commission's Manager of the Financial Analysis Department. The examiner's report in that case summarizes the Commission's position and states that the

> "MoPSC asserts that in setting the rate of return allowance for a regulated pipeline, the Commission has a preference for using the actual capital structure of the pipeline, so long as the pipeline can demonstrate that it is an independent financial entity. To demonstrate the requisite financial independence, the pipeline must show: (1) without a guarantee from its parent it issues its own debt; and (2) it has its own bond rating." (Footnotes omitted)

Q. How does the Commission's position in the KPC case apply in this case?

A. The Panhandle Eastern subsidiary is an independent financial entity according to the definition advocated by Mr. Bible for the Commission. Therefore, in this case the independent financial entity, Panhandle Eastern, should be removed from the Southern Union consolidated capital structure because it will be regulated separately on its own capital structure by FERC. Consequently, the Southern Union standalone capital structure, without Panhandle Eastern, should be the capital structure used for determining the rate of return for MGE in this case.

Q. Mr. Dunn, what evidence do you have that Southern Union and Panhandle Eastern are separately rated?

A. The research report of S&P dated April 6, 2004, (Surrebuttal Schedule JCD-1) clearly identifies both Southern Union and Panhandle Eastern each with their own S&P ratings.

Q. Has Moody's separately rated both Southern Union and Panhandle Eastern?

A. Yes. In its analysis dated February, 2004, (Surrebuttal Schedule JCD-2) Panhandle Eastern is separately discussed by Moody's. It is clear from that document that Panhandle Eastern has a rating separate from Southern Union.

Q. Mr. Dunn, please summarize how the position on financial independence advocated by Mr. Bible on behalf of the Commission in the FERC proceeding involving KPC mandates the use of the Southern Union standalone capital structure in this case without Panhandle Eastern?

A. The position advocated by Mr. Bible on behalf of the Commission in the KPC case is that a financially independent company should be regulated using its own capital structure, and Panhandle Eastern meets this definition of financial independence. This can only mean that divisions of Southern Union such as MGE should be regulated using the remainder of the consolidated capital structure, exclusive of the capital structure of Panhandle Eastern, as long as the remaining divisions form a homogenous group and are financed as a group.

Q. What impact does this have on the capital structures and calculations that appear on pages 6 through 9 of Mr. Murray's rebuttal testimony?

A. It demonstrates that Mr. Murray's capital structure calculations are incorrect and should not be accorded any weight. The capital structure that should be used in calculating rate of return is the capital structure for Southern Union, exclusive of Panhandle Eastern.

Q. In connection with the discussion of the capital structure and the Staff's effort to justify the use of the consolidated capital structure with a low common equity ratio, Staff witness Murray describes the refinancing of the Southern Union TOPrS with a new issue or series of preferred stock. This discussion begins at page 13, line 7 of Mr. Murray's rebuttal and continues on to page 14. Do you have a response?

A. Yes. Mr. Murray implies that proceeds from the October preferred issuance were used to fund the acquisition of Panhandle Eastern. This is not true because it would have constituted a violation of the Stipulation and Agreement approved by the Commission in Case No. GM-2003-0238 precluding the flow of cash from Southern Union to Panhandle Eastern, absent Commission approval, and otherwise insulating MGE from Panhandle Eastern.

Q. Mr. Dunn, have you made an affirmative calculation of rate of return including a proforma capital structure and actual costs of debt and preferred?

A. Yes.

Q. What is the date of that capital structure used in that calculation?

A. The date of the capital structure is April 30, 2004. This date is the true-up date for this rate proceeding. MGE and the Staff have agreed to true-up the capital structure as of that date.

Q. What is the cost of long term debt which will be used in that capital structure?

A. The cost of debt included in the capital structure is 7.434%.

Q. What is the cost of preferred stock?

A. The cost of preferred stock included in the capital structure is 7.758%.

Q. What is the total capital structure?

A. The total capital structure is $2,002,287,943. That capital structure is composed of the following elements:

TABLE 1
Pro Forma Capital Structure
Southern Union Company Only
April 30, 2004

	Amount	Ratio
Long Term Debt	$ 948,833,985	47.39%
Preferred Equity	230,000,000	11.49
Common Equity	823,453,958	41.13
TOTAL	$2,002,287,943	100.00%

Q. The capital structure has no short-term debt included. Is there a short-term debt balance at April 30, 2004?

A. Southern Union has no short-term debt balance on April 30, 2004. All of its short term debt has been repaid.

Q. What adjustments have been made to this capital structure?

A. There have been three adjustments. The purpose of which was to eliminate any effect of the Panhandle Eastern acquisition from the resulting capital structure. The first adjustment is to eliminate $48.9 Million of common equity which is related to the Panhandle Eastern purchase. This is the value of three million shares of Southern Union stock that were included in the transaction. The second adjustment is to eliminate $91 Million in equity related to retained earnings of Panhandle Eastern since the acquisition. The third adjustment eliminates the hybrid security. The last adjustment recognizes that the balance of the purchase price, approximately $145 million, was raised through the issuance of common equity and equity units; approximately $84.5 million in equity and $60.5 million in debt (the 5.75% equity units).

Q. In your opinion does this capital structure eliminate all amounts related to the acquisition of Panhandle Eastern?

A. Yes. This capital structure eliminates all Panhandle Eastern related capital and complies with Generally Accepted Accounting Principles ("GAAP").

Q. What is the rate of return associated with this capital structure using the cost of debt and preferred stock that you previously stated?

A. The overall rate of return, using the cost of debt and preferred previously stated and a return on equity of 12%, is 9.35%. That calculation is as follows:

TABLE 2

Rate of Return
Southern Union Company Only
April 30, 2004

	Ratio	Cost	Weighted Cost
Long Term Debt	47.39%	7.434%	3.52%
Preferred Equity	11.49	7.758	.89
Common Equity	41.13	12.000	4.94
TOTAL	100.00%	----	9.35%

Q. Do your comments with respect to capital structure apply equally to the Staff and Public Counsel rebuttal testimonies?

A. Only to a certain extent. Public Counsel advocated the consolidated capital structure in its direct testimony, but it did not use the Panhandle Eastern debt to attempt to reduce the cost of debt for MGE. The use of the consolidated capital structure was wrong, but the calculation of the cost of debt was correct. In the rebuttal testimony, the Public Counsel recommended the use of a hypothetical capital structure. (p. 14, lns 13-20) I agree that the use of a hypothetical capital structure is appropriate, but I disagree with the ultimate selection of the hypothetical capital structure. I will discuss that later in this testimony.

Q. Have you reviewed the deposition of Dr. Roger A. Morin which was taken in this case by the Staff and Public Counsel on June 10, 2004?

A. Yes. I attach a copy of the transcript of Dr. Morin's deposition as Surrebuttal Schedule JCD-3.

Q. Did Dr. Morin comment on the use of a hypothetical capital structure in his deposition?

A. Yes, he indicated that the use of a hypothetical was very appropriate, in fact probably the best approach in this case because of the low equity ratio of the consolidated capital structure advocated by the Staff in this case. (Morin deposition, p. 97 and following)

Comparable Companies

Q. Does the Staff witness indicate that he has concerns with respect to the proxy companies that you use for your return on equity analysis?

A. Yes. Beginning at page 18 of Mr. Murray's rebuttal testimony, there is some discussion concerning the selection and the resulting group of companies that I use to establish a benchmark or baseline return on equity.

Q. What is the essence of the criticism?

A. The primary criticism is that some of the companies in my comparative group are not in the Edward Jones natural gas distribution group at December 30, 2003 and therefore are not the least diversified group of gas distribution companies available.

Q. Do you believe this is a reasonable criticism?

A. No. Furthermore, I don't believe that it has any meaning.

Q. Please explain.

A. As I explained in my direct testimony, in a rate of return analysis, it is impossible to develop a group which is precisely comparable to any subject company. Consequently it is essential that a benchmark return be developed for a proxy group of companies and that the risk differential between the proxy group and the subject company then be quantified using statistical and qualitative tools so that appropriate adjustment for risk/comparability differences can be made.

Q. Did you perform such an analysis, i.e. determine a benchmark return and then calculate adjustments using statistical and qualitative tools?

A. Yes, I did.

Q. Did either the Staff or the Public Counsel witnesses follow this approach?

A. No.

Q. Did Dr. Morin comment on the selection of comparable companies in his deposition?

A. Yes.

Q. And what was said?

A. He indicated that in the past he tried to select companies that were as comparable as possible in making a comparative group. However, he went on to say that with the changes in the utility industry, he now selected as broad a group as possible and did his analysis followed by an appropriate risk adjustment. (Surrebuttal Schedule JCD-3, pages 52 & 53)

Q. Is this the methodology you used?

A. It is.

Q. Since the Staff witness did not make a qualitative analysis or quantitative analysis of the risk differences between its proxy group and MGE, is it possible that there are substantial differences between MGE and the Staff proxy group?

A. Yes. There are very substantial differences between the proxy companies used by Staff and by MGE. As a matter of fact, the Staff's proxy group just isn't comparable to MGE.

Q. Please give us an example.

A. One of the companies in the Staff proxy group is AGL Resources, the parent company of Atlanta Gas Light. AGL Resources does not own the natural gas in its system in the traditional distribution sense. AGL Resources simply sells transportation services to its customers.

Q. What impact does this difference with AGL have on a comparative analysis?

A. It has a major impact on risk. The weather exposure for natural gas cost and the exposure to disallowances of natural gas costs incurred by the company is eliminated for Atlanta Gas Light, while it is substantial for MGE. As a result MGE has much greater risk.

Q. Are there other differences?

A. Yes. The depreciation rates for MGE are lower than for the Staff comparative group. This means that MGE's investors will recapture their capital investment over a longer period of time than will the investors in the companies that comprise the Staff proxy group. This means that, all other things equal, the return of investment in MGE is at greater risk, simply because the investment is exposed to higher levels and greater numbers of unexpected events over a longer period of time.

Q. Are there any other differences?

A. Yes. Several of the companies in the Staff proxy group (AGL Resources, New Jersey Resources, Northwest Natural Gas, Piedmont Natural Gas, South Jersey Industries and WGL Holdings, Inc.) have weather normalization or moderation clauses of one type or another. This is also true for a number of companies the Public Counsel proxy group (AGL Resources, South Jersey Industries, Northwest Natural Gas and WGL Holdings, Inc.) as well as for several companies in the MGE proxy group (AGL Resources, Atmos Energy, Laclede Gas, NUI Corp., New Jersey Resources, Northwest Natural Gas, Piedmont Natural Gas, South Jersey Industries and WGL Holdings, Inc.). MGE does not have such a clause. MGE has requested one in this proceeding, but the Staff and Public Counsel have opposed that request. Consequently, MGE has greater risk exposure due to the impact of weather on its revenue streams. Furthermore, in comparison to Atlanta Gas Light, the risk for MGE is magnified because Atlanta Gas Light has no costs associated with any weather related commodity costs. AGL Resources, Nicor and Peoples Energy also have in place environmental recovery surcharges/riders related to manufactured gas plant costs that mitigate risk related to the recovery of MGP-related costs.

Q. Did the Staff witness make any analysis of the companies which he included in his proxy group?

A. Incredibly he did not. MGE's Data Request No. 0163 to Staff witness Murray on 5/11/04 requested that Mr. Murray describe his evaluation of his comparable companies including a specific evaluation of:

a. the equity ratio of each of the companies;

b. the sales mix of each of the companies;

c. the ownership of pipelines by each of the companies as it compares to Southern Union and MGE;

d. the sale or propane by each of the companies as it compares to Southern Union and MGE;

e. the number of customers of each of the companies as it compares to Southern Union and MGE;

f. whether or not the companies are legally established as a holding company;

g. whether or not each of the companies engage in exploration;

h. whether or not the companies generate electricity;

i. whether or not he companies own natural gas storage.

Mr. Murray did not evaluate any of these important factors except for the sales mix of each of the companies. Attached as Surrebuttal Schedule JCD-4 is a copy of his response.

Q. One of the concerns expressed by the Staff in its rebuttal testimony is that you included in your proxy group a Missouri company, Laclede Gas Company. How do you respond?

A. It is not a valid concern.

Q. Please explain.

A. Many years ago, when the Commission made its determination of the required return on equity using book data only, it was appropriate that it not consider companies under its jurisdiction in reaching conclusions about other companies under its jurisdiction. Clearly there was a problem of circularity if the Commission used its own prior decisions to make current decisions.

Today, however, things are entirely different. The Staff and other witnesses before the Commission on the issue of rate of return have used the DCF methodology. The DCF model breaks the chain that makes circularity or feedback a problem in the decision making process.

Q. How does it do that?

A. The Commission makes a decision. That decision may impact the book returns on equity and the book earnings of the company. However, it is the multitude of shareholders and institutions acting independent of the Commission and independently from each other which causes stock prices to move up and down and dividend yields to be established. It is these shareholder determined dividend yields that become a crucial part of the DCF calculation and dominate the DCF cost of common equity. Thus even though the Commission made a decision that impacts book returns, it has limited impact on the DCF return and those DCF returns therefore do not have the potential for introducing material circularity or feedback into the decision making process if they are an appropriate part of a comparative group. It is simply incorrect to exclude Missouri companies from the process just because they are Missouri regulated.

Determination of Return on Equity

Q. What does the Staff witness say in his rebuttal testimony concerning your determination of the required return on equity for MGE?

A. Beginning at page 23 of his rebuttal testimony, Mr. Murray presents his position on calculating the return on equity. An important part of that position is that no floatation costs should be taken into consideration in calculating the DCF cost of equity, in spite of the fact that floatation cost is a required and a well-accepted part of the DCF formula. The Staff witness also asserts that MGE cannot be classified as a small company and consequently does not experience greater risk as a result of its size; that I did not calculate a growth rate by averaging a series of numbers as the Staff did, but rather used judgment in determining the appropriate growth; that I should have used a geometric mean rather than an arithmetic mean in calculating historical growth rates in my year-to-year growth rate calculation; and that it is impossible to make an adjustment for financial risk because it is impossible to hold everything else equal or constant in a proxy group (p. 39, lns 1-9)

Q. How do you respond?

A. These are not valid criticisms and some of the assertions, such as the inability to make a financial risk adjustment, are incorrect.

Floatation Cost

Q. Staff suggests that the stipulation approved by the Commission in connection with the acquisition of Panhandle Eastern prohibits an adjustment for floatation expense. Do you agree with that assertion?

A. No. Staff uses the stipulation or ignores it as suits its purpose. Staff ignores it, for example, by including the lower cost of debt of Panhandle Eastern when calculating the cost of debt of Southern Union. Staff then takes advantage of the stipulation to argue that a conventional, ordinary and reasonable adjustment to the DCF for floatation expense is prohibited.

Q. What is the floatation adjustment?

A. The floatation cost adjustment is explained in the direct testimony but it is simply an adjustment to reflect the fact that expenses are incurred in connection with the sale of new common stock and that the only way in which the shareholder can be reimbursed for those expenses is if they are accounted for in the rate proceeding. It also accommodates pre-offering pressure.

Q. Does Southern Union anticipate a sale of common stock?

A. Yes.

Q. Is there any affirmative evidence of that fact?

A. Yes. The Massachusetts Commission received a presentation by Southern Union in connection with the sale of that common stock and has approved the sale by an order. I have attached that order as Surrebuttal Schedule JCD-5.

Q. Will MGE benefit from the issuance of new common stock?

A. Yes, it will. There will be additional equity capital available to MGE to add to the facilities which are used and useful in supplying natural gas distribution service to its Missouri customers; there will be an improvement in the equity ratio of Southern Union; there will be a maintenance of investment grade ratings for Southern Union's bonds and the capital structure will be more balanced. All of these factors will benefit the customers of MGE.

Q. Will any of these funds be used for the direct benefit of Panhandle Eastern?

A. No. None of these funds related to the proceeds of the sale of equity securities will be distributed to Panhandle Eastern. It will not be a beneficiary of the equity offering.

Q. Is an adjustment for floatation costs an ordinary part of the DCF model?

A. It is.

Q. Did Dr. Morin comment on the lack of a floatation adjustment in the Staff DCF calculation?

A. Yes he did. On pages 13 and 14 of the transcript of his deposition he indicates that the floatation cost adjustment is omitted from the Staff DCF calculation and that it results in an understatement of the cost of equity of 30 basis points to Surrebuttal Schedule JCD-3. On page 40 of his deposition he describes the Murray DCF as lacking "the real world refinements like floatation costs" and concludes at page 26 of his deposition that this is one of the errors which causes him to conclude that Mr. Murray is not an expert in the field of rate of return. (id.)

Growth Rate Calculation

Q. Staff witness Murray is critical of the fact that you did not have a specific calculation to determine your growth rate for the DCF. How do you respond?

A. It is not a valid criticism.

Q. Please explain.

A. The Staff witness has employed a very mechanical approach to the determination of the cost of equity using the DCF model. In my opinion, rather than following this rigid "mechanical" approach, it is much more appropriate to examine the data and apply judgment to that data to determine the appropriate return on equity using the DCF model. Specifically, a component of the DCF calculation is the growth rate and the appropriate way to determine the growth rate is to examine the historic growth rates and available projected growth rates, and based upon that array of data to reach a conclusion about a reasonable growth rate for the future of a typical natural gas distribution company. Reaching that conclusion is a matter of judgment; it is not just a matter of mechanically running raw data through a series of calculations.

Q. Does Dr. Morin agree that the process is one of judgment and not simply calculation?

A. Yes. During his deposition, he indicated that he reviews all of the information that he can develop and then reaches a "global judgment" on the issue of rate of return. It is not a calculation. (Surrebuttal Schedule JCD-3, page 103)

Q. Are there any other pitfalls associated with the use of the mechanical approach such as that used by the Staff witness?

A. Yes. After layering average on top of average, Staff witness Murray has included historical growth in dividends per share in his calculation several times. As has been abundantly demonstrated in testimony in this proceeding and by the data included in the Staff and Public Counsel testimonies and schedules, the dividend policy of natural gas distribution companies has changed. Many of the companies in the Staff group, for example, have not raised their dividends for many years at a time. As a result, the growth in dividends per share is abnormally low and no longer relevant investors' forward looking growth expectations. Unfortunately, Mr. Murray's mechanical approach excludes the application of judgment, and ultimately produces an end result radically at odds with reality simply because these anomalous numbers are averaged into the calculation when they should be excluded.

Q. Does Dr. Morin agree that the current dividend growth rates are not relevant and using them leads to incorrect answers?

A. Yes he does. In fact, he is clear that the use of historic dividend growth is totally in error. (Surrebuttal Schedule JCD-3, pages 29-31)

Q. Why does Mr. Murray use a mechanical approach without the exercise of judgment?

A. Based on his testimony and his deposition which was taken in this case I believe it is because he lacks the expertise to determine the reliability of the methodology and data that he uses. Consequently, he simply goes through a "mechanistic" approach without the exercise of judgment that one would expect from an expert. I am not alone in my view that Mr. Murray is not an expert. I have reviewed the testimony of Dr. Roger A. Morin, as well as his deposition which was taken in this case by the Staff and Public Counsel on June 10, 2004, and he concurs. I attach a copy of the transcript of Mr. Murray's deposition as Surrebuttal Schedule JCD-6. As indicated, Dr. Morin's deposition is Surrebuttal Schedule JCD-3.

Q. Does this criticism with respect to including historic dividend per share growth in the calculation apply to the Public Counsel witness?

A. Yes it does.

Risk Adjustment

Q. The Staff witness is critical of your discussions with respect to the risks associated with a small company as compared to a larger company. He says that the company being regulated is Southern Union and that Southern Union is a large company.

A. Southern Union is a large company. However, MGE, the division of Southern Union which is regulated by the Commission and whose rates are under consideration in this proceeding, is a small company as compared to the companies in the proxy group.

Q. Mr. Dunn, did you make a specific adjustment to the return on equity for the size effect?

A. No, I did not.

Financial Risk Adjustment

Q. Staff witness Murray failed to make an adjustment for financial risk and, on page 39 of his rebuttal testimony, indicated that such an adjustment is impossible since it requires everything else be held equal in order to make a comparison. Do you agree?

A. I do not. The matter is much less complex than implied by Mr. Murray. In fact, it is entirely appropriate, reasonable and in fact essential to make a financial risk adjustment when a company has a significantly different equity ratio than the proxy group such as the equity ratio attributed to MGE by the Staff witness.

Q. Why is the matter less complex then suggested by Mr. Murray?

A. There are only two types of risk which genuinely concern the shareholder. The first of these is "business risk" and the second "financial risk." Financial risk is an observable matter. If a company has a lower equity ratio than its peer group, it has greater financial risk. The business risk may be higher or lower than the business risk of the comparable group of companies, and that can be dealt with separately. The fact of the matter, however, is that financial risk differences are absolute and can be considered independently of business risk differences. Consequently, it is inappropriate to say the matter is too complicated when in fact it is really simply and direct. Part of Mr. Murray's problem with this is that it appears he does not understand the meaning of the term "financial risk," a point that I will address later. This again demonstrates that he is not a cost of capital expert.

Q. Is a financial risk adjustment required?

A. Yes. If the Staff persist in using the low equity capital structure, it is essential that the Staff make an adjustment for the increased risk caused by the low equity ratio. In the alternative, a hypothetical capital structure could be used.

Q. Did Dr. Morin comment on this issue in his deposition?

A. Yes. During his deposition, Dr. Morin clearly indicated that either there is an adjustment for the low equity ratio or a hypothetical capital structure should be used. (Surrebuttal Schedule JCD-3, pages 108 & 109)

Consideration of Other Decisions

Q. On page 39 of his rebuttal testimony, Staff witness Murray is critical of your consideration of the results of other jurisdictions and the returns authorized by other jurisdictions in various rate proceedings involving natural gas distribution companies. Do you believe this is an appropriate criticism?

A. No. As a matter of fact, I believe that the criticism applies to the Staff witness for not using such information.

Q. Why?

A. The Staff witness, in discussing his failure to use information concerning other companies and other Commission decisions, says that he has done a thorough and complete job of his analysis and that he calculated the right answer.

Q. Why, then, does he refuse to confirm the reasonableness of his result?

A. If Staff analysis truly produces the "right answer,", there should be no reason why the Staff witness is reluctant to compare his "right" answer with the decisions made by other commissions based on recommendations from other analysts who also believe that they are making valid studies of the cost of equity.

Q. What would Mr. Murray discover if he compared the end result of his work with the decisions of other commissions?

A. He would discover that his views are radically out of step with the rest of the regulatory world. Mr. Murray is recommending in this proceeding a return on equity in the range of 8.52% to 9.52%. The return on equity authorized by other commissions for 2003 and the first quarter of 2004 is 11% to 11.1%. Such a significant difference, given the fact that the decisions of other commissions involve numerous commissioners and experts, suggests that Mr. Murray's estimate is so far below the range of reasonableness that it cannot be helpful to this Commission in reaching a decision. For that reason alone, his recommendation should be afforded no weight.

Q. Mr. Dunn, have the Staff rate of return recommendations to the Commission always fallen significantly below the decisions made by other commissions around the country?

A. No sir, they have not.

Q. Have you prepared a comparison of Staff recommendations and nationwide commission decisions over an extended period?

A. Yes I have. Surrebuttal Schedule JCD-7 is an analysis for the period 1993 through 2004 of natural gas decisions by commissions around the country compared to Staff recommendations. Also included on the schedule are the recommendations of the Public Counsel during the same period. This schedule contains data reported by Regulatory Research Associates ("RRA") on natural gas distribution return on equity decisions and all of the Staff and Public Counsel return on equity recommendations on natural gas distribution companies for the period.

Q. Do financial analysts making rate of return determinations typically rely on information such as that reported by RRA?

A. Yes.

Q. Is the information reported by RRA considered reliable?

A. Yes.

Q. What does the data show?

A. The data shows that for the period 1993 through about 1997, the Staff made recommendations which were comparable to the decisions made by regulatory commissions around the country. The average regulatory commission decision for that period, 1993 through 1997, was 11.32%. The average Staff recommendation for 5 cases during that period was 11.13%. Starting in about 1998, however, the Staff went off in a different direction.

Q. What is the comparison for the period 1998 through 2004?

A. During that six year span, the average nation-wide regulatory decision for natural gas distribution companies was 11.07%. However, the Staff, during that same period, for a total of ten cases, had an average recommendation of only 9.71%.

Even more striking is the difference between the Staff recommendations to the Commission and the average commission decisions nation-wide for the period 2001 through 2004.

Q. What does that comparison reveal?

A. The average nation-wide regulatory commission decision for return on equity for natural gas distribution companies for the period 2001 through 2004 is 11.02%. The average recommendation of the Staff to the Commission for six cases for that same four-year period is 9.34%. Clearly, there is a substantial difference and that difference is striking with the Staff recommending 9.25% return on equity in three cases and 9.22 and 9.02% and 10.05% return on equity in two others.

Q. What is the detail which supports these averages?

A. The specific decisions as reported by RRA and the recommendations of the Staff in natural gas rate cases for the period 2001 to 2004 is as follows:

Year	RRA Regulatory Decisions	Staff Recommendations
2001	10.95%	9.25%/10.05%
2002	11.03%	9.25%
2003	10.99%	9.25%
2004	11.10%	9.22%/9.02%

Q. How would you characterize these Staff recommendations?

A. They are clearly outside of the mainstream of return on equity decisions by commissions around the country. They do not in any way reflect the true cost of equity during this period. There is no way the Staff recommendations can be reconciled with the decisions made by commissions nation-wide.

Q. Did Dr. Morin comment on the level of the Staff recommendation?

A. Yes. He indicated on page 105 of his deposition that if the result of the Staff analysis was in the range of 9.01 to 9.34 using two different methods, that the results of both would be wrong. (Surrebuttal Schedule JCD-3)

Q. Does Dr. Morin use or review the results of other commissions in making his analyses?

A. Yes. On pages 32 and 33 of his deposition Dr. Morin refers to the RRA report on the decision of other commissions and concludes that the data indicates that the Staff result is too low. In fact, he says that the data speaks for itself. (Surrebuttal Schedule JCD-3)

Q. What else does Mr. Murray's criticism on pages 39 and 40 of his rebuttal testimony tell you about the Staff's overall approach to its cost of capital recommendations in rate cases?

A. The Staff's approach, in failing to consider what is going on in the rest of the world is clearly outside the mainstream. In this regard, Mr. Murray's testimony in the recently concluded Aquila, Inc. electric rate case, Case No. ER-2004-0034, is instructive. I attached as Surrebuttal Schedule JCD-8, pages 1610 to 1743 of the transcript in that proceeding which reveals, among other things, that:

- Mr. Murray would not agree that what the courts have said with respect to a fair return is the standard this Commission should follow. "There are other things that have to be taken into consideration." (Tr. 1618)

- According to Mr. Murray the comparable risk standard "may be one of the standards that is considered." (Tr. 1620)

- It is the policy of the Staff not to look at allowed ROE's or earned returns of other utilities to come up with cost of capital recommendations in rate cases. (Tr. 1733). Mr. Murray cannot square this Staff policy with the requirement of the *Hope* case. (Tr. 1734) and is not sure that the *Hope* case must be followed in any event. (Tr. 1618, 1619).

- Mr. Murray has never read any decisions from any other Commissions (Tr. 1732), including rate case decisions. "As far as what goes on in the specifics of cases throughout this country, I would be working 24/7 to be able to keep up with that." (Tr. 1625)

- Mr. Murray is not really familiar as to how one finds returns actually being earned by other utilities. (Tr. 1622, 1624)

- Mr. Murray has never looked at the textbook *Principles of Utility Rates* by James Bonright. (Tr. 1706)
- Mr. Murray incorrectly defines "financial risk" as "the ability of a company to meet its debt." (Tr. 1633)

- Most of his criteria for selecting comparable companies have nothing to do with risk. (Tr. 1642)

<u>Murray's "thorough and complete analysis"</u>

Q. Mr. Dunn, on page 40 of his rebuttal testimony, Staff witness Murray testified that he has based his return on equity recommendation for MGE in this case on what he calls "a thorough and complete analysis of the cost of common equity for a comparable group of companies, primarily using the DCF model..." What is your understanding of the other techniques which Mr. Murray used in his "thorough and complete analysis" to calculate a cost of equity for MGE in this case?

A. It is my understanding that he also used the risk premium model and the capital asset pricing model ("CAPM") to check the reasonableness of the results from use of his primary DCF method.

Q. How does his approach compare to your approach?

A. I also used the DCF model which has been utilized for many years by this Commission.

Q. Did you check the reasonableness of your results by using the risk premium model or the CAPM?

A. No. I did not. However, a proper performance of a CAPM and risk premium cost of equity analysis on the Staff's group of eight comparable companies would not support the return on equity result which Staff witness Murray says, in his rebuttal testimony, resulted from a "thorough and complete analysis." Furthermore, Mr. Murray did not accord the risk premium method and the CAPM approach any weight in his conclusion in spite of the fact that both of his alternate calculations produced higher indications of the cost of equity than his DCF calculation.

Q. By way of background, please summarize Mr. Murray's risk premium analysis and CAPM analysis.

A. Mr. Murray's risk premium analysis is contained on Schedule 21 to his direct testimony and is based in part on data from his Schedule 20. His result indicates a cost of equity of 10.41% which is substantially above his recommendation for MGE in this case. Even that, however, is a result which is lower than the result which is indicated by an analysis using published data. His CAPM analysis is on his <u>Schedule 19</u>.

Q. In response to Mr. Murray's statement at page 40 of his rebuttal testimony concerning a "thorough and complete analysis" have you performed a "thorough and complete" cost of equity analysis for Mr. Murray's comparable companies?

A. Yes.

Q. What did you do?

A. I performed a risk premium and CAPM analysis.

Q. Did you make a risk premium analysis using published data?

A. Yes I did.

Q. Please describe the results.

A. The first step in my risk premium analysis was to obtain a risk premium for equities for the period 1928 to 2003. I obtained that information from a web site at the New York University Stern School Website Page of Professor Damodaran. The data indicated a market return for the period of 11.82% and a long term treasury rate for the same period of 5.28% for a risk premium of 6.54%. I added Mr. Murray's 2004 long term yield rate of 4.93% to the risk premium amount for an indicated cost of equity of 11.47%. This is substantially different than the result obtained by Mr. Murray.

Q. Please summarize your CAPM model and the result.

A. I used the same CAPM model as used by Mr. Murray. I also used his information to the extent I could.

Q. Please explain.

A. In analyzing the long run market returns for the CAPM analysis, I noticed that the market returns were higher for shorter periods. For example, the 1928-2003 return was 11.82 % while the 1963-2003 return was 12.10% and the 1993-2003 return was 12.63%. As a result of this pattern of returns, I determined that it was appropriate to use the most recent 1993-2003 data in my calculation.

Q. What did you use as the proper beta?

A I used the Value Line betas from the March 19, 2004 issue, a more current issue than used by Mr. Murray.

Q. Did using the more current issue result in any changes?

A. It did. One of the eight betas increased from .60 to .65. All of the other betas remained the same. The result of this change was to increase the average beta of the group from .68 to .69.

Q. What was the result of your calculations?

A. I reduced the 12.63 market return for the period by the current 4.80 long term risk free, treasury rate from the Wall Street Journal June 11, 2004. The result was a return of 7.83% which I multiplied by the average beta of .69 for a premium amount of 5.40%. I then added back the 4.80% risk free rate for a total return of 10.20. This compares to the calculation made by Mr. Murray which resulted in a cost of 9.29% as shown on his Schedule 19.

RESPONSE TO PUBLIC COUNSEL REBUTTAL TESTIMONY

Rate of Return

Q. At page 7, line 25 of the rebuttal testimony Public Counsel witness Allen, Mr. Allen attempts to recalculate your return estimate using the Value Line edition of September 19, 2003, and the Public Counsel methodology of "BR+SV." How do you respond?

A. This is not appropriate.

Q. Please explain.

A. The BR+SV methodology contains a circularity so fundamental that the calculation is absolutely worthless in this context as a methodology to estimate the cost of common equity.

Q. Why is it worthless?

A. The methodology can be applied either historically or in a projected format. Regardless of which calculation is made, you must know the answer before you make the calculation.

Q. Discuss what you mean by a "historical calculation."

A. If the BR + SV applied historically, the actual historical results absolutely determine the calculation of BR+SV and those historical results, whether abnormal or not, completely determine the recommended cost of equity. If, for example, a company has bad years and those bad years are incorporated in the calculation, the result will be a low recommended return on equity for that company. On the other hand, if the company has had excellent or outstanding years, those will also be reflected in the BR+SV calculation and result will be a very high recommendation. The simple fact is the past absolutely determines the future using this methodology, and thus there is a serious problem in using this approach in a historical fashion.

Q. What about using this method in the forecasted or projected format in the manner used by the Public Counsel?

A. The problem with this approach is that the return on equity must be known for future years in order to make the calculation. This can be established from Public Counsel witness's direct testimony in this case.

Q. How is this established by examination of the Public Counsel witness's testimony in this case?

A. Mr. Allen's BR+SV calculations appear beginning at Schedule TA-6, page 2 of his direct testimony. The top half of this schedule shows a historic calculation of BR+SV, and the bottom half of the schedule is a calculation of a projected BR+SV. As can be seen from the top half of the schedule, the BR component of the calculation is a multiplication of the retention ratio times the equity return. The purpose of this exercise is to develop a cost of equity recommendation. However, in order to make that recommendation using the BR+SV approach, it is necessary to know the answer, i.e. the equity return, and the dividend payout before the calculation can be made. This can be seen less clearly from the bottom half of the page where the 2007-2009 estimated return on equity are multiplied times a retention ratio, both of which must be known in order to derive the BR component of the calculation. Simply stated, in order to use the formula, one must know the answer before one makes the calculation. This is a fundamental flaw in the methodology and one which cannot be overcome.

Q. Did the Public Counsel witness make a risk adjustment in his calculation of the required return on common equity?

A. No. In fact, for some reason, Mr. Allen has suggested in his rebuttal testimony at page 22, lns 9-11 that he is now supporting the lower end of his recommended range of returns rather than the upper limit of the range of returns that he recommended in his direct testimony (p. 16, lns. 12-17).

Q. What was the point of the recommendation toward the upper limit of the Public Counsel range of returns on equity in the original testimony?

A. The Public Counsel witness indicated that he (felt) that the recommendation at the upper end of the range properly compensated MGE for the higher level of risk associated with the fact that using a consolidated capital structure resulted in a much higher level of leverage for Southern Union than for the comparable companies in his group.

Q. Do you believe that is accurate?

A. Absolutely not. An adjustment so small to compensate for such a substantial difference in the common equity ratio is simply absurd.

Q. How much difference is there in the Public Counsel recommended equity ratio for MGE and the average equity ratio of his proxy group?

A. The Public counsel proxy group equity ratio is 40.0%. The Public Counsel witness recommended equity ratio for MGE is 25.98%. This is a very substantial difference.

Q. Are there any other risk adjustments which Mr. Allen has failed to make?

A. Yes. In his rebuttal at page 19, Mr. Allen dismisses the notion of longer depreciation as a risk factor. This dismissal flies in the face of fundamental principles of finance. For example, long term bonds pay higher interest rates than short term bonds and the differential in interest rate is compensation for the fact that the funds are exposed to greater levels of risk over longer periods of time, whereas short term lendings have less exposure to such risk by virtue of the fact that the time element is shorter. The same applies to depreciation. The longer a capital investment is exposed to unknown risks, the greater the risk to the investor. The greater the risk and the higher the required return. Mr. Allen should know this, and it is absolutely improper and unreasonable that he rejects it in his surrebuttal testimony.

Q. Mr. Allen asserts, on page 21 of his rebuttal testimony, that the recently enacted infrastructure system replacement surcharge ("ISRS") legislation serves to reduce MGE's risk. How do you respond?

A. The information upon which Mr. Allen apparently relies in reaching this conclusion is insufficient to support that conclusion. As I understand it, the ISRS legislation allows companies like MGE to adjust rates periodically outside the context of a general rate proceeding to recover the cost of governmentally-mandated, non-revenue producing capital expenditures. A significant proportion of such costs for MGE relate to safety line replacement program ("SLRP") expenditures, the earnings degradation impact of which has historically been mitigated through the Commission's issuance of accounting authority orders ("AAOs"). In many ways, the ISRS process simply replaces the AAO process and, as such, should not be expected to have any material impact on risk experienced by MGE. Moreover, Mr. Allen's assertion that MGE is the only gas company that has an ISRS is wrong. Laclede Gas recently implemented an ISRS. In addition, Atmos Energy Corporation has a pipe replacement surcharge mechanism in Georgia.

Q. On page 22 of his rebuttal testimony, Pubic Counsel witness Allen asserts that a downward adjustment to return on equity is appropriate if the Commission adopts a weather mitigation rate design for MGE. How do you respond?

A. I disagree. All of the comparable company groups used by the various rate of return witnesses in this proceeding include companies that have some form of weather mitigation rate design. Therefore, investor expectations related to such rate design are already appropriately reflected in the discounted cash flow analysis and no further adjustment is needed for this item. In any event, if any adjustment is to be considered the starting point, prior to any such adjustment, must be reasonable. Comparison to equity returns being authorized by other regulatory authorities clearly establishes that the Staff and Public Counsel return on equity recommendations in the proceeding do not qualify as such a reasonable starting point.

Capital Structure

Q. The Public Counsel witness has proposed a hypothetical capital structure in his rebuttal testimony in this proceeding. Do you have any comments with respect to that capital structure?

A. Yes I do.

Q. What are they?

A. First, I should note that I believe it is appropriate to consider a hypothetical capital structure in this proceeding. Furthermore, it is not unreasonable to make a series of calculations similar to those made by the Public Counsel witness. The problem arises from Mr. Allen's selection of a hypothetical capital structure from the zone of reasonableness that he calculated.

Q. What was the zone of reasonableness established by the Public Counsel witness in his rebuttal testimony?

A. The zone of reasonableness for the hypothetical capital structure ranged from a common equity ratio of 37.6% to 58.2% (p. 13, ln. 1).

Q. After establishing that zone of reasonableness, what did Mr. Allen determine as the appropriate capital structure?

A. He selected "the very bottom of the range, 37.6%" (p. 13. ln. 12).

Q. How do you respond?

A. This is not appropriate. As a matter of fact, the analysis and calculations made by the Public Counsel witness, if they have any validity, would suggest that the mid-point of the range is the point of greatest reasonableness. In other words, the mid-point of the range is the best point for a calculation of a hypothetical capital structure.

Statistical Risk Analysis

Q. Public Counsel witness Meisenheimer, in her rebuttal testimony, is critical of your statistical analysis of risk. What is the nature of her criticism?

A. On page 4 of her rebuttal she states that it would be more relevant for the Commission to examine each of the individual companies in my proxy group against MGE rather than examining the average of the proxy group against MGE.

Q. Did she make such a calculation?

A. Yes.

Q. What did that calculation show?

A. According to the Public Counsel calculations, of the 15 companies in my proxy group, 10 are less risky than MGE as demonstrated by a lower standard deviation and 12 of the

15 companies are less risky as demonstrated by the calculation of the co-efficient of variation. This data, taken from Table 2 on page 8 of Ms. Meisenheimer's rebuttal testimony, supports my conclusion that MGE is significantly riskier than the proxy group.

STANDARD &POOR'S | RATINGSDIRECT

Return to Regular Format

Research:
Southern Union Co.

Publication date: 06-Apr-2004
Credit Analyst: Judith Waite, New York (1) 212-438-7677

Corporate Credit Rating

BBB/Negative/--

Business Profile

1 2 3 4 5 6 7 8 9

Financial policy:
Aggressive

Debt maturities:
2005 $125 mil.
2006 $141 mil.

Bank lines/Liquid assets:
$415 million of total bank lines

Total rated debt:
About $2.7 billion

Outstanding Rating(s)

Southern Union Co.	
Sr unsecd debt	
Local currency	BBB
Sr secd debt	
Local currency	A-
Pfd stk	
Local currency	BB+
Panhandle Eastern Pipe Line LLC	
Corporate Credit Rating	BBB/Negative/--
Sr unsecd debt	
Local currency	BBB

Corporate Credit Rating History

Apr. 7, 1998	BBB+
Mar. 7, 2003	BBB

Company Contact
Richard Marshall, Treasurer (570) 829-8795

Major Rating Factors

Strengths:

- Stable earnings,
- Good growth prospects for gas distribution, and
- Ample sources of natural gas for pipelines.

Weaknesses:

- Highly leveraged balance sheet, and
- Dependence on state regulators for adequate allowed return.

Rationale

Southern Union Co.'s corporate credit rating reflects the company's highly leveraged balance sheet and strong business profile. The regulated gas distribution and transportation businesses, which account for 98% of earnings, produce stable and predictable cash flows. The company serves growing markets in

Missouri, Pennsylvania, Rhode Island, and Massachusetts, has limited commodity price risk, and is authorized reasonable rates of return by federal and state regulators. Southern Union has acquired several companies in recent years, a trend the company may continue to follow. However, any acquisitions are expected to be of low-risk, state-regulated gas distribution businesses and federally regulated gas transportation pipelines.

Southern Union's mid-2003 acquisition of Panhandle Eastern Pipeline Co. and its subsidiaries Trunkline Gas Co. LLC and Trunkline LNG Co. LLC and Panhandle's joint venture Sea Robin Pipeline Co. resulted in a highly leveraged consolidated balance sheet. Although Southern Union financed the acquisition with proceeds from selling its Texas gas distribution business and a portion of the proceeds from the sale of common equity and convertible debt, Panhandle Eastern itself had $1.2 billion of debt. This drove Southern Union's total debt up to 72% of total capital at closing.

Management has committed to rapidly improving its balance sheet. It refinanced Panhandle's debt shortly after the acquisition, lowering interest expense by about $6 million. In addition, the company issued $230 million of noncumulative preferred stock, using proceeds to reduce debt. Cash from operations, which management expects to improve by at least $15 million through the successful integration efforts, including implementation of a new companywide IT platform, together with free cash flow, will be dedicated to debt reduction, as will the proceeds from any future equity sales equity. Furthermore, the company is expected to continue its stock dividend policy, allowing it to build equity through retained earnings.

By the end of 2005, Standard & Poor's expects that the total debt to total capitalization ratio will be appropriate for the 'BBB' rating target benchmark of 56%. Moreover, in 2006, the conversion of $125 million of debt to equity will lower that ratio to around 50%. Also, by the end of 2005, funds from operations (FFO) should improve to around 16% of average debt, close to the rating target of 17%. Interest coverage ratios will improve as well.

Liquidity.

Liquidity is adequate based on Southern Union's sources of operating cash flow over the next year and committed bank facilities relative to short-term liabilities. The working capital needs of the company are adequately met with a total of $415 million of committed bank facilities, of which $163 million was unused at Dec. 31, 2003. The facilities are used primarily to purchase gas for retail customers, and are paid down annually.

The company intends to reduce debt by about $600 million by the end of 2005. In October 2003, the company issued $230 million of noncumulative preferred stock. Proceeds were used to pay down $100 million of trust preferred and remaining funds were used to pay down other debt. Cash and free cash flow are expected to provide another $250 million to $280 million. The remainder will come from the sale of equity or assets.

Still, access to the capital markets at reasonable rates will be important as debt matures in each of the coming years: $125 million in 2005; $141 million in 2006.

The working capital needs of the company are adequately met with a total of $415 million of committed bank facilities. The facilities are used primarily to purchase gas for retail customers. The cost of gas, as well as the carrying charge, is fully recovered from natural gas customers in all jurisdictions.

Outlook

The negative outlook reflects the execution challenges facing the company in achieving its commitment to deleverage rapidly. Southern Union has been acquisitive for several years, which has resulted in significant and frequent swings in leverage. The company must demonstrate sufficient balance-sheet strength before consummating any future acquisition in order for Standard & Poor's to maintain current ratings.

Business Description

Southern Union sells and distributes natural gas to retail customers in Missouri, Pennsylvania, Rhode Island, and Massachusetts. These businesses are divisions of Southern Union. Panhandle Eastern Pipeline, a wholly owned subsidiary, transports natural gas through Panhandle Eastern Pipeline, Trunkline Gas, and Sea Robin Pipeline. Panhandle Pipeline Co. also owns Trunkline LNG, the largest LNG import facility in North America.

Rating Methodology

The corporate credit rating is based on the consolidated business and financial profile of Southern Union and its subsidiaries. The corporate credit rating is assigned to the senior debt at Southern Union, which is itself an operating business, and its subsidiary, Panhandle Eastern Pipe Line LLC. The equal rating of senior debt at each entity reflects Standard & Poor's view that there are substantial parent-level assets relative to liabilities, which obviates the need to notch Southern Union's debt down for structural subordination.

Business Profile

The overall strong business position of Southern Union is defined by growing markets, limited commodity price risk, tight cost controls, and stable and predictable earnings and cash flow from its regulated gas distribution and transmission businesses.

Markets.

The gas distribution businesses serve retail customers in central and western Missouri (Missouri Gas Energy), northeastern and central Pennsylvania (PG Energy), Rhode Island and Massachusetts (New England Gas Co.). In Missouri, where more than one-half the gas is sold, the principal franchises are in Kansas City, a contract that expires in 2010, and St. Joseph, where the franchise is perpetual. In Pennsylvania, where 20% of the gas is sold, statewide service rights are also perpetual. In Rhode Island and Massachusetts, where 29% of gas is sold, New England Gas holds perpetual franchises in Providence and Fall River. Retail demand for natural gas is forecast to increase 1% to 1.5% for residential customers, and slightly more for commercial customers. Transportation for larger customers who buy directly from suppliers is expected to increase 1.5% (Pennsylvania) to 1.75% (Missouri).

The gas transportation business is conducted through two pipelines: Panhandle Eastern Pipeline, which originates in the Anadarko Basin of western Oklahoma and the Panhandle region, transports gas to customers in Missouri, southern Illinois, Indiana, northeastern Ohio and southern Michigan. Trunkline Gas runs the length of the Texas and Louisiana Gulf Coast, and transports gas up the Mississippi Valley through southern Illinois into northern Indiana. Trunkline was originally built to feed Panhandle, and through the 1980s Panhandle was its only customer. But as Panhandle's Missouri and southern Illinois market grew, Trunkline became a more significant direct supplier for the Indiana, Ohio, and Michigan customers. Panhandle, which can deliver 2.7 bcf per day of natural gas, and Trunkline, which can deliver 3.2 bcf per day, supply about 20% of the gas delivered to the upper Midwest markets. The pipelines have a large, long-term customer base. In 2003, about 55% of transportation and storage revenue came from gas distribution utilities and their affiliated marketers, and another 15% came from regional marketers selling to utilities and industrial customers. About 10 customers account for about 65% of the fee-based transportation and storage revenue. Overall, 64% of revenue comes from pipeline reservation fees, 9% from gas storage fees, 6% from firm commodity charges, 6% from interruptible commodity charges, 3% from other services, and 13% from the firm contract with the BG Group for LNG storage capacity in Louisiana. That contract expires in 2023. The LNG facility is being expanded, as is the Trunkline pipeline, under a new long-term contract with BG Group. In addition to having good access to gas basins in the Mid-Continent and the Gulf Coast regions, the pipelines are interconnected with other interstate pipelines in Lebanon, Ohio (Texas Eastern Transmission), Defiance, Ohio (Columbia Gas), and Centerville, Louisiana (Columbia Gulf, Florida Gas Transmission, and Southern Natural Gas Pipeline).

Regulation.

Regulators of the gas distribution companies have allowed generally reasonable returns based on an ROE of around 11%. In November 2003, Missouri Gas Energy filed a base rate increase request for $54 million. Since the Missouri Public Service Commission (MPSC) can take up to 11 months to make a ruling, new rates may not go into effect until late summer 2004 at the earliest.

The monthly customer bills in all jurisdictions include a fixed service charge that is designed to cover most fixed operating costs and a volumetric charge. Exposure to gas price risk is limited by the purchased gas adjustment mechanism, which allows gas distribution companies to recover the full cost of gas purchased. Various incentive mechanisms require the sharing of cost savings with ratepayers. In Providence, R.I., a weather-normalization clause allows the company to collect the allowed tariff by adjusting the rates up or down depending on the volume of gas sold that is attributable to variations in weather, the single most significant driver in year-to-year sales changes. In Missouri, Missouri Gas Energy is the first energy utility allowed to collect a service connection charge, which is a positive step in modifying rate design. This follows a long period of investment in replacing all service line connections. The program is currently spending about $8.5 million per year, down from about $16 million in 2001.

The pipelines and gas storage operations are regulated by the FERC, which approved tariffs based on an ROE of around 14%. There is no obligation, or need, to seek a rate review. The prevailing rates into the regional end-markets of southern Illinois, Indiana, Ohio, and southern Michigan are about 75% of Panhandle's maximum allowed tariff. A rate moratorium is in effect for Trunkline until May 1, 2004, and for Sea Robin until April 30, 2006. No rate moratorium exists for Panhandle or for Southwest Gas Storage.

Competitive position.

Southern Union's gas distribution businesses enjoy a strong competitive position. In addition to having long-term franchises in the primary cities they serve, they own the only gas distribution network serving their rural and urban customers. The only major competitor is electricity, which is almost always more expensive than gas. Fuel oil and propane also compete, but are not significant. To maintain this competitive advantage, and to mitigate rate increase requests, Southern Union has continued to control operating costs. Three profitable subsidiaries also sell gas-fired appliances and service contracts in the Northeast.

The pipelines face a more competitive market. However, at the end of the cold 2002-2003 winter, competing pipelines were issuing operational flow orders, indicating that they had to retain the gas left in storage for customers with firm contracts. Panhandle and Trunkline, with capacity to spare, were able meet requests for increased delivery, and were therefore able to charge full tariffs. More importantly, utility regulators saw the need for longer-term gas delivery contracts. As a result, the average delivery contract on Panhandle has increased to 6.5 years, with a few of the largest customers extending out seven and eight years, and at similar or higher rates. Contracts on Trunkline are shorter term, averaging one to two years, but this average is also weighted toward the shorter term because BG Group traditionally sold gas into the spot market and contracted for short-term interruptible use of the pipeline. About one-third of the contracts roll off each year, exposing the company to renewal risk, but also giving management the opportunity to push for longer-term contracts for most of its customers over the next several years.

Most importantly, the management of Panhandle and Trunkline has adopted a sales strategy that provides customers more flexible service while cutting back on operating costs. Contracts are tailored to meet specific capacity and storage requirements; remaining capacity is sold to other customers. Much of the surplus capacity, which occurs in the summer months, is sold to gas-fired electric generating plants. Four years ago, there were only two power plants taking gas directly from the pipeline. Now there are 25, an addition of 11,000 MW. And, the consolidation of operations and a reduction in the number of employees has greatly reduced overall operating costs. Between 1989 and 2002, the number of employees fell to 1,150 from 4,000. Subsequent to the acquisition, the number of employees was again reduced marginally, but more importantly, the operations were consolidated on a single IT platform that will incorporate the gas distribution businesses as well. Annual cost savings are expected to be around $15 million. Of that, $10 million had been achieved by the end of 2003.

Financial Policy: Aggressive

Southern Union's management will continue to acquire energy assets, and, as exhibited in the recent acquisition of the Panhandle and Trunkline pipelines, management is not averse to highly leveraged transactions. However, it is expected that acquired assets will have the strong business profile of the companies it currently owns, and that management will sell assets and equity in a timely manner to bring the financial profile back in line with the targets for an investmen -grade rating.

Financial Profile

Profitability and cash flow.

The stability of earnings and cash flow over the next several years is supported by reasonable expectations for gradually increased demand for gas in the service territories of the utilities and the pipelines' end-markets. However, it is also based on management's expectation that overall operating costs will be held in line. After the acquisition of each of the utilities, operation and maintenance costs were reduced 25% at Missouri Gas, 21% at PG Energy, and 8% at New England Gas.

Debt reduction will also help keep earnings up and interest coverage ratios in line with an investment-grade rating. FFO (or cash from operations before the changes in working capital) are expected to cover interest expense by more than 3.5x by the end of 2004, which is stronger than the target benchmark of 2.6x.

Net cash flow (FFO net of preferred dividends) is expected to exceed capital spending by 15% to 20% in the next two years when the Trunkline LNG facility and pipeline are being expanded. Beyond that, net cash flow is expected to be 2.0x to 2.5x capital spending.

Capital structure and financial flexibility.
The acquisition of CMS Panhandle Pipeline added $1.2 billion to the consolidated financial profile, raising debt-to-capital to 72%. To reduce leverage, management is repaying debt with cash from operations as well as proceeds from the sale of preferred and common stock. Just after the acquisition closed, management refinanced about one-half of Panhandle's debt, lowering overall interest expense. By the end of 2005, Standard & Poor's expects that Southern Union's management will have lowered the ratio of debt/capital to the 'BBB' rating target benchmark of 56%. In 2006, the conversion of $125 million of debt to equity will lower that ratio further, to around 50%. Accordingly, by the end of 2005, FFO should improve to around 16% of average debt, much closer to the rating target of 17%.

Table 1 Southern Union Co.--Competitors

Industry Sector: Regulated T&D - Gas

	--Average of past three fiscal years--				
	Sector median	Southern Union Co.	TXU Gas Co.	Southwest Gas Corp.	UGI Utilities Inc.
Rating		BBB/Stable/--	BBB/Negative/--	BBB-/Stable/--	BBB+/Watch Neg/--
(Mil. $)					
Sales	923.4	1,351.7	2,913.3	1,250.6	504.1
Funds from operations (FFO)	103.9	122.1	97.3	179.3	78.0
Net income from cont. operations	41.2	35.4	(4.7)	39.8	47.6
Capital expenditures	77.3	105.8	157.3	254.8	37.1
Total debt	608.4	1,194.8	724.0	1,128.8	275.1
Preferred stock	20.0	66.7	148.0	60.0	20.0
Common equity	467.9	714.4	920.7	563.6	232.7
Total capital	1,119.4	1,975.8	1,792.7	1,752.4	527.8
Ratios					
EBIT interest coverage (x)	2.8	1.6	1.0	1.7	5.1
FFO interest coverage (x)	3.1	2.2	2.3	3.1	4.5
FFO/avg. total debt (%)	15.8	11.1	11.2	15.7	27.6
Net cash flow/capital expenditures (%)	77.2	109.4	59.5	60.0	100.8
Total debt/capital (%)	57.0	62.9	45.5	66.2	53.1
Return on common equity (%)	9.9	4.5	(0.9)	6.6	20.0
Common dividend payout (%)	83.0	0.0	0.0	70.6	84.9

Table 2 Southern Union Co.--Financial Summary

Industry Sector: Regulated T&D - Gas

	--Average of past three fiscal years--		--12 months ended Dec. 31, 2003--	--Years ended June 30--				
Rating history			BBB/Stable/--	BBB/Stable/--	BBB+/Stable/--	BBB+/Stable/--	BBB+/Stable/--	BBB+/Watch Neg/--
	Sector median	Issuer	2003	2003	2002	2001	2000	1999
(Mil. $)								
Sales	923.4	1,470.6	1,481.2	1,188.5	1,290.6	1,932.8	831.7	605.2
Funds from operations (FFO)	103.9	161.3	313.7	201.2	150.0	132.7	83.5	94.5

Net income from cont. operations	41.2	43.2	69.1	43.7	19.6	66.2	20.5	20.0
Capital expenditures	77.3	98.9	152.7	79.7	93.3	123.8	100.4	73.1
Total debt	608.4	1,882.1	2,569.6	2,750.4	1,322.2	1,526.1	736.0	414.0
Preferred stock	20.0	33.3	230.0	0	0	100.0	100.0	100.0
Common equity	467.9	775.9	946.5	920.4	685.4	721.9	735.9	301.1
Total capital	1,119.4	2,691.3	3,746.1	3,670.8	2,007.6	2,348.0	1,571.8	815.1
Ratios								
EBIT interest coverage (x)	2.8	1.6	1.7	1.5	1.5	1.8	1.6	1.0
FFO interest coverage (x)	3.1	2.6	3.6	3.0	2.7	2.3	2.6	3.7
FFO/avg. total debt (%)	15.8	10.7	12.3	10.2	9.9	11.3	13.9	21.9
Net cash flow/capital expenditures (%)	77.2	159.9	202.8	252.4	160.8	99.6	73.7	116.2
Total debt/capital (%)	57.0	70.4	68.6	74.9	71.3	65.6	48.0	51.9
Return on common equity (%)	9.9	6.5	7.0	5.4	2.8	7.8	2.1	3.5
Common dividend payout (%)	63.0	0	0	0	0	0	0	0

This Analysis provides a discussion of the factors underpinning the credit rating(s) and should be read in conjunction with our Credit Opinion. The most recent ratings, opinion, and other research specific to this issuer are provided on Moodys.com. Click here to link.

Analysis

February 2004

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Southern Union Company

Risks/Weaknesses

- High levels of absolute debt as a portion of total capitalization.
- Compressed credit measures related to high levels of acquisition debt.
- Historical tendency to grow through various acquisitions involves financial and event risks, even as the company continues integrating the operations of more recent acquisitions.

Opportunities/Strengths

- Low business risk with almost all business lines regulated when calculated on the basis of total assets and the addition of Panhandle's more stable and predictable cash flows and earnings which tend to compensate for the more seasonal variations inherent in the LDC divisions
- Possibility of improved rate designs that could include updated weather normalization clauses and fixed charges in some jurisdictions, helping to protect operating margins from warmer than normal weather patterns.
- No cash dividend on common stock, allowing for internal equity formation and conserving cash to fund capital expenditures, debt repayment, and business reinvestment.

Rating Rationale

Southern Union Co.'s (SUG) Baa3 rating (sr. uns/sr. imp., negative outlook) reflects its low business risk, with little diversification outside its regulated gas distribution and transmission businesses (52% and 48% of assets, respectively as of December 31, 2003). Its regulated rates provide a measure of predictability, but the distribution business is seasonal. The company has mitigated some of the seasonality through weather normalization clauses and more favorable rate designs in its Rhode Island service territories. With the acquisition of Panhandle Eastern Pipe Line Company (Panhandle, Baa3 sr. uns, negative outlook), it is expected that SUG will gross approximately half of its earnings from the gas pipeline transmission business which while mature, is steady and predictable under a regulated price environment. Unlike its LDC diversified peers, SUG pays no cash dividends, allowing internal equity formation. However, the rating also reflects SUG's current high debt and preferred securities level at 77% of total capitalization (factoring in goodwill, operating leases, pension obligations and deferred income taxes) as of December 31, 2003. Until further permanent debt reductions take place, we expect that in the near-term its credit measures will remain compressed from the high levels of debt incurred in acquisitions made over the past few years.

SUG's negative outlook reflects our expectation that SUG's debt reduction progress will be slower than originally anticipated. The outlook will remain negative until SUG achieves its de-leveraging objectives and demonstrates improved returns from the combined companies.

Panhandle's ratings reflect the low business risk as a regulated gas transmission company, earnings stability met through revenues underpinned by flat reservation fees and long-term contracts with a diverse group of creditworthy shippers, a mature asset given some upside by its subsidiary Trunkline LNG Holdings, LLC's LNG facility, and a measure of credit protection provided Panhandle by (i) restricted payments covenants in its indenture, though it still leaves abundant capacity to make a large dividend to SUG and (ii) $260 million of Trunkline LNG project financed non-recourse debt. However, Panhandle's ratings are restrained by higher leverage and weaker coverage measures relative to many of its pipeline company peers (debt-to-capital in the low 60% range and EBIT/interest in 2x range), the prospect of increased capital spending over the medium term from its LNG facility's upcoming $250 million expansion project, a competitive environment that has caused persistent discounting from the pipeline's allowed tariffs, pressuring its ability to earn its allowed returns; above-average re-contracting risk from shorter than industry average contract life of 3.7 years, and an operating record that has yet to be established under SUG's ownership.

The negative outlook for Panhandle mirrors that for SUG, as the parent's efforts to de-leverage and to cut costs could have a credit impact on Panhandle. Execution risk in integrating the two companies is notable, since this acquisition is the largest to-date for SUG, doubling its size and transforming it from a gas distributor to a more diverse gas distribution and transmission company. It is conceivable that over the medium term, SUG will consider issuing additional equity not only to prune the debt heightened by recent acquisitions, but also to fine-tune its strategic focus.

Management Strategy

Southern Union's management team transformed the company in 2003 with the purchase of Panhandle Pipe Line Company and its subsidiaries (which SUG has since renamed Panhandle Energy). In fiscal 2002 and 2003, SUG was primarily a gas distribution company. The acquisition of Panhandle has transformed SUG into a gas distribution and transmission company with consolidated assets split about evenly between these two major segments. With such a large acquisition, SUG management is now focused on integrating the acquired assets and reaching a level of operational and financial performance consistent with its vision for the company. In this endeavor, management has named four primary goals for fiscal 2004 and beyond:

- Integrating acquired operations
- Improving balance sheet and liquidity position
- Achieving earnings targets
- Providing customers with safe and reliable service

Successful Integration Key to the Company's Future

SUG aims to create operational efficiency through the integration of the Panhandle Energy businesses. The company has begun to implement its restructuring and reorganization program and has completed certain phases of its plan in order to fully maximize their cost savings. These integration initiatives include a "shared services initiative" which will streamline back office functions such as information technology, human resources, payroll, etc. The company is contemplating the integration of such functions as regulatory relations and legislative initiatives. SUG's rating is based on a successful integration of the acquired Panhandle businesses.

Over the long term, the possibility of SUG making another major acquisition lends unpredictability to its future financial risk profile. However, Moody's expects that SUG will finance any such acquisition in a manner that will allow it to maintain an investment grade rating.

Improving the Balance Sheet is Key to Maintaining Ratings

Southern Union's leverage remains high at December 31, 2003 with debt to capitalization at 70% (*excluding* the impact of goodwill, operating leases, pension obligations and deferred income taxes) and 77% adjusting for these items with about $2.7 billion of adjusted debt on its balance sheet. For a company of SUG's business mix in the Baa3 rating category, debt to capitalization on an unadjusted basis would be more acceptable around the mid-50% range. SUG indicated that it intended to issue new stock or equity-like securities to help improve its balance sheet, which along with its earnings retention and distribution of stock dividends should help conserve cash and build equity. Toward this end, on October 8, 2003, SUG issued $230 million of 7.55% non-cumulative preferred stock, the proceeds from which were used to repay indebtedness and to redeem $100 million of preferred securities (TOPRs), which were treated as debt in Moody's leverage calculations. SUG management recently indicated that it expects to generate $225 million of free cash flow during its fiscal year ending June 30, 2004. Free cash flow was defined by SUG as the sum of net income, depreciation and working capital changes less capital expenditures exclusive of Trunkline LNG expansion projects. SUG will use the free cash flow generated in fiscal year 2004 to repay indebtedness.

SUG management is also considering the sale of non-core assets to supplement funds for debt reduction. One such asset being contemplated for sale is Sea Robin Pipeline Company, an interstate gas pipeline acquired in the Panhandle Transaction, although it is not expected to yield cash proceeds of any great significance.

Continued Expansion

SUG's LNG import terminal subsidiary, Trunkline LNG, has obtained regulatory approvals from FERC to expand its capacity to 1.2 billion cubic feet (Bcf) per day, approximately double its current sendout capacity, and to increase its storage capacity from 6 Bcf to 9 Bcf. The expansion is expected to be complete by December 31, 2005. In addition, Trunkline LNG is seeking approval from FERC for a second phase expansion of the LNG import terminal, which will increase the sendout capacity to 1.8 Bcf per day. The second phase expansion is expected to be completed by early to mid-2006. The existing and expanded sendout and storage capacity is 100% contracted to BG LNG Services, LLC. Trunkline LNG currently has approximately $260 million of project financed debt outstanding at December 31, 2003. Although this debt is structured without legal recourse to SUG or Panhandle, in Moody's analysis the project financed debt is added to leverage calculations for credit rating purposes.

Rates & Regulation

Southern Union operates in numerous regulatory jurisdictions consisting of about half of its assets under the jurisdiction of FERC and about half by a spade of state regulatory commissions. This regulatory diversity is positive from a ratings perspective because the company is less influenced by the actions of any single regulatory body. SUG actively seeks rate increases in its jurisdictions to achieve satisfactory recovery of its costs. Each of SUG's regulatory jurisdictions has an individual rate design and weather mitigants of varying degrees of effectiveness. The company's future challenge will be to achieve the operating and rate design efficiencies that would enable it to maintain or raise its returns in the jurisdictions in which it operates. Achieving fair rates of return and favorable rate designs would tend to enhance SUG's ability to attract investor capital and deliver stable cash flow and earnings patterns resulting in improved coverage ratios and debt repayment.

Northeast

Approximately 60% of the company's LDC gross margins come from its two northeastern divisions acquired over the last four years. This region serves approximately 460,000 customers.

The Rhode Island Public Service Commission allows New England Gas Company to share incremental earnings with customers when the division's operations return on equity exceeds 11.25% (on a 50%/50% basis for the first percentage point over 11.25% and 75% customer/25% company therafter). The New England Gas Company is allowed to defer the margin impact of weather that is greater than 2%colder-than-normal and will recover the margin impact of weather that is greater than 2% warmer-than-normal.

The Massachusetts Department of Telecommunications and Energy (DTE) allows an 11.25% return on equity (ROE) for Fall River Gas.

To mitigate earnings from the volatility of weather in Pennsylvania, rates have been designed so that customer charges and increased distribution rates are in the first rate block, which has a lower degree of weather-sensitivity.

Missouri

Approximately 40% of the company's LDC gross margins come from its Missouri Gas Energy (MGE) operation which serves approximately 500,000 customers in central and western Missouri.

MGE is regulated by the Missouri Public Service Commission (MPSC), which sets a fairly stringent regulatory environment. On November 4, 2003, MGE filed a proposal with the Missouri Public Service Commission to increase annual base rates by $44.8 million. In January 2004, MGE increased its claim to approximately $54 million. Management has stated that the proposed increase is necessary to allow MGE the opportunity to earn a fair rate of return on the investment made in connection with providing service to its customers. The rate increase is necessary as a result of capital expenditures made since 2001, increased depreciation, taxes and operations and maintenance expenses, declining average usage per customer caused by increased efficiency of heating equipment and conservation and a need for an improved rate of return on MGE's entire investment in rate base. MGE does not have a weather normalization clause, which makes MGE sensitive to weather. MGE is attempting to obtain a fixed charge rate design as that granted to Laclede Gas Company in 2002. This fixed charge rate design would mitigate some of the earnings and cash flow volatility related to weather. Although MGE's prior base rate proceeding was concluded through settlement, if fully-litigated, this proceeding will not be concluded and new rates will not go into effect on October 2004.

Capital Structure

Leverage remains high at the consolidated level with adjusted debt to capital at 77% and unadjusted debt to capital at 70%. Although some of this $2.7 billion adjusted debt burden can be attributed to the Panhandle acquisition, SUG was highly leveraged before it acquired Panhandle from previous LDC acquisitions and incurred large amounts of goodwill through the various transactions. SUG's debt is higher than its diversified LDC peers which average in the mid-50% range. We expect that debt as a portion of total capital to decline as SUG pays down debt through internally generated cash flow and continues to provide internal equity formation as a result of its stock dividend policy. Debt reduction is also possible through the sale of some remaining non-core assets.

The company's equity base has been weak for the last few years with common equity exceeding goodwill at fiscal year end 2003 for the first time since fiscal 2001. Equity was boosted in fiscal year 2003 with the issuance of $175 million of common equity and $125 million of equity units in June 2003 and additional net income of $76 million during the year. Equity was further boosted in October 2003 with the issuance of $230 million of non-cumulative preferred equity. Goodwill is not expected to be impaired and stands strong at $643 million. Moody's backs goodwill out of diversified gas companies' capital bases in the adjusted debt to adjusted capitalization metrics. Hence, the high goodwill balance pressures SUG's leverage.

Also factored into Moody's definition of adjusted debt is underfunded pension liabilities as determined by the gateway decision tree model[2]. For the fiscal year ending 2003, this added about $73 million to SUG's adjusted debt in Moody's analysis. Although medical and pension costs are rising in line with the national trend, SUG's management expects to be required to fund less than $5 million in 2004 as the company determines funding requirements according to ERISA's 80% threshold rule, which all of SUG's pension plans meet.

Panhandle is also highly leveraged with debt to capital around 66%. Moody's expects Panhandle to remain leveraged in the mid-to-low 60% range for the near and intermediate term. These ranges are higher than Panhandle's regulated pipeline peer averages which sit closer to 50%.

Liquidity

SUG has sufficient liquidity with two committed bank facilities: one for $150 million due in April 2004 and another for $225 million due in May 2004. SUG does not utilize a commercial paper program, but instead borrows from its credit facilities for liquidity needs that cannot be met with internally generated cash flow. We expect these facilities will be used mainly for temporary, self-liquidating working capital requirements to purchase gas supply during the winter heating season, although they contain the unfavorable aspect of "material adverse change" clauses. These facilities also carry financial covenants with which the company is currently in compliance including limitations on liens, debt to capital caps, minimum net worth requirements, and coverage ratio thresholds.

Panhandle does not have credit facilities of its own as internally generated cash flow is typically sufficient to meet normal cash needs. Panhandle dividends excess cash up to the parent, supplementing SUG's liquidity.

Southern Union does not operate a corporate money pool given its corporate structure – namely, that the utilities are divisions of the same company and not separate legal entities. Because SUG's distribution divisions are part of the same legal organization, funds are intermingled among the gas utilities. SUG has also agreed with the Missouri Public Service Commission not to loan or invest any funds into Panhandle without prior consent from the commission. Panhandle has its own bank accounts separate from SUG's and its funds are not commingled with those of the gas utilities. Thus far, Panhandle has been cash positive and self-sufficient.

2. *Please see Moody's January 2003 Special Comment: Analytical Observations Related to Pension Obligations*

Federal Energy Regulatory Commission

Panhandle Energy is regulated by the Federal Energy Regulatory Commission (FERC). FERC regulates Panhandle with a light hand. There are currently no issues outstanding at the FERC that management expects to have a material impact on the company.

Financial Analysis

Earnings

SUG's LDC business is seasonal, with most of its income earned in the first and fourth calender quarters.

Hence, the company's earnings are weather sensitive, as are those of many other LDCs, since most of its gas volumes are used for space heating. Although SUG employs some weather mitigants in certain jurisdictions to combat the impact of warm weather, these mitigants currently leave approximately 42% of the company's LDC earnings exposed to weather volatility.[1] This percentage of earnings that is subject to earnings variance on account of warmer than normal weather drops to about 15% when the Panhandle earnings are included.

Earnings have begun to creep higher with the acquisition of Panhandle and its subsidiaries. For the twelve months ending December 2003, operating income (excluding "other income/expenses) increased to approximately $101 million from about $50 million at 2003 fiscal year end. Return on assets and return on equity declined somewhat for the same period due to the increase in equity and asset accounts. We expect that these measures will improve as SUG benefits from a full year of Panhandle earnings in fiscal 2004. Once SUG settles into its new business profile as a combination gas distribution and transmission business, we expect earnings to stabilize.

Coverages for SUG consolidated have remained relatively flat since fiscal 2001 with EBIT to interest in the 1.8x range and funds from operations to fixed charge coverage improved modestly over the last few years to 2.7x range as interest rates have decreased, somewhat offsetting the higher levels of interest from an increase in debt outstanding. These coverages are in line with SUG's Baa3 diversified peers. However, we expect coverages to improve as SUG pays down debt levels and achieves a predictable earnings pattern.

Cash Flow

Gross cash flow levels for SUG consolidated are improving, while free cash flow is more volatile. Free cash flow was negative for the twelve months ended September 30, 2003 and 2003 fiscal year end due to negative working capital balances. SUG expects free cash flow to be generally positive going forward, depending on working capital balances. Fortunately, SUG pays stock rather than cash dividends on its common stock, which helps to maximize cash flows available for capital expenditures and to build equity. Moody's views this practice favorably, since it maximizes the cash flows available for capital expenditures and debt reduction, reduces the need for external financing, and helps increase its equity. The stock dividend policy is unusual for a gas utility, which typically pays out most of its earnings and seeks to increase dividends regularly.

Its asset-heavy position has also given rise to high levels of capital expenditures for the twelve months ending September 30, 2003 of around the $100 million range versus about $78 million of depreciation. It is anticipated however, that annual capital expenditure levels for the LDC segment will remain at approximately $70-75 million over the next few years and another $70-75 million for the transmission business, reflecting the Company's commitment to increasing free cash flow. Moody's estimates the level of maintenance capex for both segments to be around 60% of total capital spending during the next few years, excluding special projects such as the Trunkline LNG expansions.

Cash flow to debt coverage is modest for SUG with gross cash flow covering only about 6% of total debt for the twelve months ending September 30, 2003 which compares to a range in the low teens for SUG's Baa3 diversified peers. SUG's current cash flow to debt coverage dropped from 8% - 9% in fiscal 2001 and 2002 with the company's increase in debt burden from the Panhandle acquisition. Because the debt was added on to SUG's consolidated balance sheet at fiscal 2003 year end and annual cash flows were not, there is a lag in the true cash flow to debt for the company. Moody's expects that this coverage will settle out in the low teens range on a steady-state basis.

Panhandle's cash flow is relatively stable with gross cash flow around the $180 million mark for the last couple years. Moody's believes that Panhandle will continue to generate relatively stable cash flows, covering its capital expenditures. This steady stream of internally generated cash will supplement SUG's distribution's business cash flow well, particularly in more volatile weather environments when the distribution segment's cash flow may contain some variability.

1. *See Moody's October 2002 special comment: Negative Rating Trend for Local Gas Distribution Companies: Impact of Diversification and Warm Weather*

Related Research

Special Comments:

Negative Rating Trend For Local Gas Distribution Companies: Impact Of Diversification And Warm Weather, October 2002 (76344)

Moody's Sees Refinancing Risk as Manageable for the Natural Gas Transmission and Distribution Sector, December 2002 (77008)

Diversification Risk Impacts Credit Quality of Gas Distribution Companies, August 2003 (78958)

Industry Outlook:

Diversified Gas Transmission, September 2003 (79462)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Financial Statement Ratios

Financial Statement Ratios: Southern Union Company

To access any Financial Statement Ratios click on the entry above or to download Financial Statement Ratios in .csv format.

Description	Coupon (%)	Currency	Face Amount (mil)	Maturity	Moody's Rating
Southern Union Company					
SENIOR IMPLIED RATING	—	Domestic	—	—	Baa3
Conv. Sr. Notes	5.750	USD	125	2006	Baa3
Sr. Notes	7.600	USD	475	2024	Baa3
Sr. Notes	8.250	USD	300	2029	Baa3
7.55% Noncum. Perp. Pfd. Stk.	—	USD	230	—	Ba2
Panhandle Eastern Pipe Line Company, LLC					
Sr. Notes	7.875	USD	100	2004	Baa3
Global Senior Notes	6.125	USD	300	2004	Baa3
Senior Global Notes	4.800	USD	300	2008	Baa3
Global Senior Notes	6.500	USD	200	2009	Baa3
Global Senior Notes	8.250	USD	100	2010	Baa3
Senior Global Notes	6.050	USD	250	2013	Baa3
Global Senior Notes	7.000	USD	300	2029	Baa3
415 Shelf Registration	—	USD	300	—	(P)Baa3
415 Shelf Registration	—	USD	200	—	(P)Baa3

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BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

In the Matter of Missouri Gas Energy's)
Tariff Sheets Designed to Increase)Case No. GR-2004-0209
Rates for Gas Service in the Company's)
Missouri Service Area.)

DEPOSITION OF ROGER MORIN
Taken on behalf of Staff
June 10, 2004

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EXHIBIT INSTRUCTIONS
None marked.

BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

In the Matter of Missouri Gas Energy's)
Tariff Sheets Designed to Increase)Case No. GR-2004-0209
Rates for Gas Service in the Company's)
Missouri Service Area.)

DEPOSITION OF WITNESS, ROGER MORIN, via telephone, produced, sworn, and examined on June 10, 2004, between the hours of eight o'clock in the forenoon and six o'clock in the afternoon of that day at the offices of the Public Service Commission, Jefferson City, Missouri, before TRACY L. THORPE, a Certified Shorthand Reporter, a Court Reporter, C.C.R. No. 939 and Notary Public within and for the State of Missouri, in a certain cause now pending before the Public Service Commission, State of Missouri.

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IT IS HEREBY STIPULATED AND AGREED by and between Counsel that this deposition may be taken by TRACY L. THORPE, a Certified Shorthand Reporter, a Certified Court Reporter, C.C.R. 939 and Notary Public, thereafter transcribed into typewriting, with the signature of the witness being requested.

ROGER MORIN,

of lawful age, having been produced, sworn, and examined on the part of the Staff, testified as follows:

DIRECT EXAMINATION BY MR. BERLIN:

Q. Are you the same Roger Morin who's submitted Rebuttal Testimony on behalf of MGE in this proceeding?
A. Yes, sir.
Q. And for the purpose of this deposition, I will refer to you as Dr. Morin. Is that acceptable to you or do you have another preference?
A. That is my preference.
Q. All right. And for purposes of this deposition, who is your attorney?
A. Michael Fay.
Q. Okay. Dr. Morin, have you been deposed before?
A. Very few times, but I have.
Q. Then you know that I will be asking questions and that at any time that you do not understand my question, you will tell me?

A. Yes, sir.
Q. Dr. Morin, how are you employed presently?
A. I am distinguished professor of finance at the Robinson College of Business, Georgia State University and professor of finance at the Center for the Study of Regulated Industries at the same institution.
Q. Dr. Morin, how did you come to file testimony in this case?
A. I received a telephone call from the office of Michael Fay asking me to perform a Rebuttal Testimony.
Q. When were you contacted?
A. Approximately a month and a half ago.
Q. What were you told was the scope of the work that you were to perform?
A. The scope was narrowly defined as engaging in the Rebuttal Testimony of Staff Witness Murray's rate of return testimony.
Q. Who told you that?
A. Mr. Fay.
Q. What else did Mr. Fay tell you?
A. That's it. Go ahead and do your Rebuttal, and I did.
Q. What were you told not to do?
A. No instructions were given as to what not to do, just to do a Rebuttal of the Staff witness rate of return

testimony, period.
Q. Who else did you talk with on the scope of your work?
A. No one.
Q. What documents do you have that describe your scope of work in this proceeding?
A. I don't have any specific -- you mean like a contract or --
Q. Well, any document that might describe your scope of work?
A. I don't have a written document. It was done through the telephone. And my main base was described on page 3 -- page 2 and 3 of my rebuttal. Page 3.
Q. Do you have a contract for purpose of retaining your services in this case?
A. Yes, I do.
Q. Who did you contract with?
A. I dealt strictly with Mr. Fay for every aspect of this mandate.
Q. I have a copy of a letter dated May 19th from Utility Research International --
A. Yes.
Q. -- Utility Financial Consultants with your signature and address, contact information. Do you recall that letter?

A. Yes, that's the standard engagement letter.
Q. Is that document the only document that you have that covers or addresses the scope of the work that you were to perform for MGE?
A. Yes, sir.
Q. So there are no other documents?
A. No documents.
Q. Do you have any other electronic communications regarding the scope of this work?
A. No.
Q. When did you meet Mr. Fay?
A. I met him for the first time about an hour ago.
Q. When did you first talk with Mr. Fay?
A. Approximately a month and a half ago.
Q. With regard to your work for MGE in this proceeding, how much are you being paid for your services?
A. If you look at the engagement letter, you will see a fee that is dependent on the absence or presence of a full hearing or settlement and so on. So it can vary from 25 to 30,000.
Q. Have you already been paid?
A. No, sir.
Q. When will you be paid?
A. I have no idea. I don't know how the accounts payable run over there. I have no idea.

Q. Dr. Morin, whose testimony were you retained to review?
A. Mr. Murray.
Q. In your preparations, did you review or look at any other testimony?
A. I reviewed Mr. Dunn's testimony and -- and Mr. Allen.
Q. Have you ever had any prior business dealings with Southern Union?
A. No.
Q. So that I understand, you have never had a business dealing in the past with Southern Union?
A. That is correct.
Q. With regard to this proceeding, who is your contact at Southern Union?
A. I don't have one. I'm dealing strictly with Mr. Fay.
Q. Do you know if Mr. Fay is working with Southern Union or MGE in this matter?
A. I believe it's MGE.
Q. Have you had any prior dealings with MGE?
A. No, sir.
Q. Do you have a standard draft that you use for capital structure and/or rate of return testimony?
A. Could you be more explicit on that question? I don't quite know what you mean.

Q. Do you have any material that you consider as a standard narrative that you use for testimony purposes?
A. Yes, sir. I have some boilerplate text that talks about the rudiments of rate of return regulation, describes the various methodologies that one uses. So the answer's yes.
Q. When can you provide Staff a copy of that boilerplate that you use?
A. All I can do for you is provide you any copy of any testimony that you want me to send to you. Now, I have most of them for the last five years so just tell me which one you want and I'll be glad to send it to you electronically.
Q. Dr. Morin, were you given a draft of testimony for purposes of this proceeding?
A. No, absolutely not. I have a mind of my own in these matters.
Q. Did Mr. Fay provide any assistance to you in preparing your testimony?
A. None whatsoever, other than send me the documents.
Q. So who wrote your testimony?
A. I did.
Q. Did you have any conversations with Mr. John Dunn in preparing your testimony?

A. No. I have never met Mr. Dunn in any way, shape or form.
Q. But you did review Mr. Dunn's testimony; is that correct?
A. I -- I scanned it and read it once.
Q. Did you do that before preparing your testimony?
A. No. Actually I did that afterwards.
Q. Do you know a Mr. Eric Hirschmann?
A. No, I do not.
Q. Do you know Mr. Kvapil?
A. No, I do not.
Q. Mr. Marshall?
A. No.
Q. Mr. Dennis Morgan?
A. No.
Q. Do you know Mr. Rob Hack?
A. No.
Q. Do you know Mister -- you know Mr. John Dunn through the testimony and only through the testimony; is that correct?
A. Yes, sir.
Q. Do you know Mr. John Guillen?
A. No, I don't.
Q. Do you know Mr. Mike Noack?

A. No, I do not.
Q. Do you know a Mr. John Quain?
A. No, sir.
Q. Do you know Mr. Jim Oglesby?
A. No, sir.
Q. So you have not had communications with any of the people that I just asked you about; is that correct?
A. That is correct.
Q. Dr. Morin, what documents did you rely on in preparing your testimony?
A. Obviously Mr. Murray's testimony and my own knowledge and some of the articles that I cite in the Rebuttal, but 99 percent was my own knowledge and experience and materials.
Q. Are there any documents that support your work in preparing this testimony?
A. They are contained in the appendix, so the answer would be no. Everything is in the Rebuttal. I cite a few documents like the Ibbotson Valuation Yearbook and I did rely on the Value Line Investment Survey for Windows on CD-ROM. Those are the two major sources utilized in this Rebuttal.
Q. In preparing your Rebuttal Testimony, did you make any upward adjustments to Mr. Murray's recommendations?
A. Yes, sir.

Q. How many individual upward adjustments did you recommend based on your review of Mr. Murray's testimony?
A. Would you repeat, please? I'm sorry.
Q. How many individual upward adjustments did you recommend based on your review of Mr. Murray's testimony?
A. Well, they are enumerated in detail on page 42, lines 3 through 8 for the DCF results and they are also stated on lines 21 through 25 as far as the CAP-M methodology is concerned. So I refer you to that page 42.
Q. So page 42 gives a -- is it strictly page 42, if I understand you, that gives the summary of your upward adjustments?
A. Yes, sir.
Q. Did you recommend any downward adjustments to Mr. Murray's testimony?
A. No, I haven't seen a need.
Q. Could you restate your answer, please?
A. I said, no, I did not see any need for that. If I had, I would have.
Q. Referring to your testimony, Dr. Morin, do you have a copy of it before you?
A. Yes, sir.
Q. On page 11, you state that, Floatation costs amount to 5 percent which, in turn, amount to approximately 30 basis points for MGE. Is that a correct statement?

A. Yes, sir.
Q. How did you arrive at the figures of 5 percent and 30 basis points?
A. For the 5 percent, I relied on an extensive array of empirical studies that have examined location costs in the case of electric utility stock offerings and those studies are cited in the appendix. And those studies indicate pretty unanimously a floatation cost adjustment of approximately 5 percent. 4 percent for direct cost and another 1 percent for what we call market pressure or indirect costs. And if you divide the dividend yield of a utility -- a typical dividend yield of 4 or 5 percent by .95, in view of the 5 percent, you get 30 basis points.
Q. So you had to make some calculations; is that correct?
A. Well, I used the 5 percent based on the empirical evidence which is pretty consistent at 5 percent. And then if you divide the typical dividend yield of the utility by .95, 1 minus 5 percent, that translates into a 30 basis points adjustment.
Q. Do you have any work papers that show that adjustment?
A. Yes. It's in the appendix -- the Floatation Cost Appendix, Schedule RAM-2. The calculation is shown on page 5 of 9, Schedule RAM-2.

Q. On page 14 you're addressing the functional form of the DCF model used by Mr. Murray?
A. Yes, sir.
Q. You state on lines 7 to 8, quote, This creates a downward bias in his dividend yield component and underestimates the return on equity by approximately 30 basis points?
A. Yes.
Q. Is that a correct reading of your testimony?
A. Yes, sir.
Q. How did you calculate this 30 basis points?
A. If you are compare the quarterly version of the DCF model to the plain vanilla annual version, there's a difference of 30 basis points. The idea here is like if you deposit some money in the bank at 10 percent compounded annually, whereas, the bank across the street gives you 10 percent compounded quarterly, the effective rate of return is about 10.3 in the latter bank. It's the same idea for stock prices and dividends.
Q. Do you have any work paper that shows that calculation that you made?
A. Not directly, no.
Q. Do you have any indirect calculations or papers that show that?
A. In my book, which is entitled Regulatory

Finance, there is a discussion of the quarterly model. It appears in Chapter 7. And the 30 basis points that you are referring to can be found around page 184, 185. There's some illustrative calculations there that show that quarterly compounding results in an extra 30 basis points or so. That would be Chapter 7, pages 185 through 189, approximately.
Q. All right. On page 14, lines 21 to 23 you say, By failing to recognize the quarterly nature of dividend payment in his DCF computation, Mr. Murray understates the required return on equity capital by about 20 basis points?
A. Correct.
Q. How do you arrive at this approximate 20 basis point figure?
A. In the case of gas utilities as opposed to electric utilities, gas utilities have a smaller dividend yield component. So the bias from using the plain vanilla annual model instead of the quarterly model is not as severe as in the case of electric utilities. So the 20 basis points is the underestimation because the dividend yield component to which that adjustment applies is smaller in the case of gas utilities versus the case of electric utilities.
In other words, more of the return on gas utilities is from growth rather than from dividend yield. So the misstatement, so to speak, is not as severe in the case of gas utilities.

Q. Did you make a calculation to arrive at that number?

A. Yes, I did. It's not specified here. I didn't think there was a need for it, but if you have a dividend yield of the gas utilities in the gas group, which is approximately 4 percent, and include the quarterly adjustment, it's approximately 4.2 percent effectively. Just like my bank example earlier.

Q. Do you have any work papers supporting that?

A. No. It's in the book on the same pages I cited earlier.

Q. Do you have any work papers to support any of the upward adjustments that you recommend in your testimony?

A. Well, let's go on page 42, which summarizes in the table form the various understatements. We've already addressed No. 3 -- or excuse me, line 3 in Exhibit RAM-2, the floatation cost exhibit.

Your line of questioning in the last minute or so addressed line 4 -- excuse me, line 5, the quarterly DCF. The negative growth rates -- if you eliminate companies with negative growth rates, there's a table in my testimony that shows that resulting growth rates is 50 basis points higher. And same with the others. It's all discussed in the testimony pretty clearly in table form.

Q. Okay. But my question is, do you have any work

papers?

A. The work papers are actually in the testimony in the form of tables. For example, tables on page 17, pages 18, pages 20. There's five tables that incorporate the corrective data, so to speak, so that's the work papers in a sense. That's the foundation for the understatement.

Q. Do you have any other pages or documents supporting your testimony that are not contained in your filed testimony?

A. No, sir. Well, maybe -- let me backtrack on that one. One particular criticism that I have is the FM-- the appropriate functional form of the CAP-M, which I refer to as the empirical CAP-M in my testimony. I do have the document that explains that in much more detail than I did here. If you want to have that, you're quite welcome to it.

Q. Yes, I would like to have that.

A. Okay.

Q. Just give me an e-mail address and I will electronically forward it to you. It's called the CAP-M and the Empirical CAP-M.

Q. All right. I'm going to give you my e-mail address.

A. Okay. Shoot.

Q. It's Bob.Berlin@psc.mo.gov.

A. Okay. You'll have it tomorrow morning.

Q. All right. Thank you.

Dr. Morin, when did you start the work that resulted in the testimony that you filed in this case?

A. Well, time is of the essence here. I did get the original phone call about six weeks ago and I think I only had about -- or less than a week to do this. And I recall having to work with my staff on the weekend and everything. So it was all done in accelerated time schedule in a period of about four to five days.

Q. When did you complete the work?

A. I would say something like five weeks ago.

Q. You indicated that you have a staff that works with you; is that correct?

A. Yes.

Q. Who is on your staff?

A. They're typically former master's students that help me out with data, exhibits and so on and so forth. I typically use them in Direct Testimony rather than Rebuttal. I tend to do the Rebuttal work myself.

Q. How many individuals are on your staff that worked on this?

A. On this one, none.

Q. I thought you told me that you had a staff that worked on this testimony because you had a short time frame.

A. Well, I did use these resources. I thought

your question was sort of generic about Utility Research International. In the case of a Rebuttal, and in view of the time frame that was involved, there wasn't that much time to -- or need to gather that much data in a sense. But when I do a Direct Testimony with, you know, 15, 20 exhibits, then I do resort to the staff.

Q. So you did not use members of your staff for the purposes of preparing this Rebuttal Testimony; is that correct?

A. Correct. For this specific document, no.

Q. How many hours did you work to develop the testimony that you presented in this case?

A. I'll give you a rough estimate. Somewhere around 25 hours.

Q. Dr. Morin, are you familiar with the term "expert" in a legal proceeding?

A. Well, I don't think -- I don't want to venture into the legal terrain here, but I certainly know what an expert is.

Q. Are you an expert in all areas of finance?

A. Not in all areas of finance, but I am an expert in the areas of corporate finance and certainly in regulatory finance. But I am not an expert in other areas of finance like portfolios or derivatives or capital markets or banking. Finance is a very broad field and we can only manage some expertise in one narrow part of that field.

Q. **Are you a leading expert in the area of capital structure and rate of return?**

A. Well, I think so. Certainly considered as such throughout the world, but I'll let you be the judge of that.

Q. **Are you the only expert in the area of capital structure and rate of return?**

A. No. Of course not.

Q. **What is your definition of an expert?**

A. Somebody that has a scholarly academic approach to a certain topic, somebody that has written extensively on the topic and has been confronted with peer reviews of his ideas and materials. Somebody preferably with a Ph.D in finance. Those would be some of the criteria I would be looking for. Someone who's taught finance for several years, somebody who's conducted research and published in scientific journals subject to peer review. That would be my definition of an expert. It's nice to have that experience as well in the field, practical experience.

Q. **Who else would be considered an expert according to your criteria in capital structure and rate of return?**

A. Boy, that's a tough question. You mean -- you want me to give you some names?

Q. **Yes. Names of --**

A. I'll --

Q. **-- individuals.**

A. -- name you a couple of people that I would respect highly. One of them would be Eugene Brigham, B-r-i-g-h-a-m, Brigham. He's a very, very well-known scholar in the field of utility finance. I would definitely put professor Stewart Myers from MIT in the category of a scholar and expert and leading guru, so to speak, in the field of regulatory finance. Another one that comes to mind would be James Vanderweide, V-a-n-d-e-r-w-e-i-d-e, Vanderweide, professor at Duke University who's written extensively and published extensively in the field of regulatory finance.

Those are some of the names that come to mind. There are not that many in regulatory finance proper. Most of the experts are in corporate finance, rather than regulatory finance. So those are some of the names tha come to mind.

Q. **Do you know a David Parcell?**

A. Yeah. David Parcell and I met each other several times in prior cases and we have met at professional meetings, we have been on panels and conferences together.

Q. **Does Mr. Parcell meet your definition of an expert on capital structure and rate of return?**

A. I have a lot of respect for Mr. Parcell and I know him very well. He's a little bit short of what I would qualify as an expert, but I do consider him a respectable

scholar and sort of a colleague. The only missing link here would be the research experience and the doctorial designation, but he's a good man.

Q. **Have you consulted with anyone to determine whether you are qualified as an expert on capital structure and rate of return in the state of Missouri?**

A. No. I thought that -- well, this is going to sound awful, but I thought my resume spoke for itself.

Q. **Dr. Morin, how do you keep yourself current on the subject of utility capital structure and rate of return?**

A. I read a lot of the academic journals, the ones that are practical oriented and the ones that are more theoretical oriented. I supervise the doctorial dissertations that have to do with utility topics. I teach national seminars all over the country and other countries as well in utility finance. I do a lot of training of attorneys and staff members and utility analysts, company analysts throughout the country. Just a lot of reading and keeping up with the journals and research and conducting my own research and I write books on utility finance. Does that answer that question or --

Q. **Do you have any one or, say, group of publications that you rely heavily on?**

A. Journal of Finance, Journal of Financial Economics and the Journal of Applied Corporate Finance would

be the three journals that I rely on. And one more, sorry, Financial Management.

Q. **All right. I'm going to read for you section 490.651 of the Revised Statutes of Missouri. And subsection 1 states, In any civil action, if scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education may testify thereto in the form of an opinion or otherwise.**

Do you believe that Staff Witness David Murray is an expert qualified in Missouri on the area of capital structure and rate of return?

A. No.

Q. **Why not?**

A. If he was, I don't think he would have committed some of the errors that I point out in my Rebuttal.

Q. **Is there anyone who works now as a financial analyst for any state utility commission that you would consider to be an expert on capital structure and rate of return?**

A. Yes.

Q. **Who is that?**

A. I'm just -- I mean, I've worked in 45 different states and 9 different provinces and different countries. I'm

just trying to get my thoughts together here.
I would say Ron Kencht, K-e-n-c-h-t, of Nevada; Steve Kim with Wisconsin Public Service Commission; and there's -- it escapes me right now, but the Illinois Commerce Commission has an excellent rate of return Staff Witness; Mr. Bolinger in Michigan; Mr. Andrew Morey, Florida PSC. Those are people that are -- I find very, very competent in the area of rate of return and capital structure. Doesn't mean I agree with everything they say, but I agree with their expertise generally.
Q. Of this group of individuals you just listed for me, how many of them have Ph.D.s?
A. Two that I know, but I really -- I haven't studied the resume of each one of those, but I think two of them do.
Q. So you don't know which ones of the --
A. Mr. Ron Kencht has a Ph.D. This is not something that I studied or done or -- I have to check, but --
Q. So you know of one for certain who has a Ph.D. in that list you gave me?
A. I'm almost certain.
Q. But you think maybe one more has a Ph.D.?
A. Yes. I think the fellow from Illinois. His name escapes me, but I'll remember it in a minute.
Q. Now, you indicated some other individuals in

that group that do not have Ph.D.s apparently. What makes them qualified as experts on capital structure and rate of return?
A. Three things: One, experience; No. 2, their methodologies and procedures, their testimonies that I have scrutinized in the past, they don't make a lot of the theoretical and methodological errors that I point out in this Rebuttal; and then No. 3, experience through the years, participation in various rate of return forums or conferences.
Q. What kind of experience do you think they should have to be experts?
A. I think they should have taught finance, they should have minimum of a master's degree in economics or finance, should have gone through several rate cases at the junior level before they participate at a more senior level. They should have had some kind of writing -- some kind of publication, perhaps not in the journals that I mentioned but in other more trade-oriented journals. Those are some of the things I'd be looking at, just the quality of their work as well.
Q. So of that group that you gave me, all of them would have at least a master's degree; is that correct?
A. I would think so, yes.
Q. Dr. Morin, are you familiar with the term "interest rates" and what they have been in the past?

A. Of course, yes, sir.
Q. Can you identify a time in the past when interest rates were similar to today's interest rates?
A. Well, let's use treasury bond yield as sort of a benchmark here, long-term treasury bond yield. They've been at the 5, 5 1/2 percent level for several years now and they have started to escalate in the last month or so.
But if you take a longer term perspective, let's say 10 years, there clearly has been a steady decrease in interest rates up until about a month or so ago. And as the economy is in the process of recovering and in view of Chairman Alan Greenspan's remarks, we have seen long-term rates starting to go up again in response to the recovering economy.
Q. Did you perform any cost of capital or cost of equity studies at the time that -- in the past when interest rates were similar to today's interest rates?
A. Yes.
Q. What studies did you perform?
A. Well, I -- I've testified several times in the last 25 years, probably four or five times a year. If you could be a little bit more specific, I could help you more.
Q. Well, all right. I'll be more specific. The last time that interest rates were at 5 to 5 1/2 percent before 10 years ago?

A. I don't think there was such a case prior to 1994.
Q. Dr. Morin, you have reviewed Staff Witness Murray's testimony in its entirety, have you not?
A. Yes, sir.
Q. What portions of Mr. Murray's study did he do right?
A. Well, he did use the right beta risk measures. I don't have too much of a problem with the comparable group. Those are two areas that I would agree with.
Q. Any others?
A. I don't have a problem with the raw dividend yield, the spot dividend yield with respect to the stock price. And that's about it.
Q. Did you analyze the past five years of dividend payout ratios for the comparable companies used by Mr. Murray?
A. I did notice a decrease in the payout ratios of energy utilities in general, not so much historical but the forecast as well. Utilities right now are in the process of lowering their dividend payout in response to increasing competition and in response to restructuring. So dividend growth has been quite a bit less than earnings growth, both historically and prospectively while they're still traversing this process.
Q. Okay. So you said you observed it, but did you

analyze the past five years of dividend payout ratios in any kind of a study of Mr. Murray's comparable companies?

A. Well, all we have to do is look in the tables in my Rebuttal and you'll find that information. If you look at -- well, for example, just pick one table, Table 3 on page 20 or Table 4 on page 21.

Q. Okay. I'm at Table 3 on page 20.

A. All right.

Q. Let's go to Table 4, probably easier to deal with. And it's pretty clear that if you look at the last column, which is only a dividend for shared growth, the historical numbers of 1.7 percent are quite a bit lower than the earnings growth rate numbers and quite a bit less than the earnings forecast. So you can see it pretty obviously there in the data that dividends have been growing at a slower pace than earnings historically and the same is true prospectively.

Q. Have you analyzed where Mr. Murray's recommended rate -- I'm sorry, recommended return on equity falls in relation to other recommended ROEs approved by other state utility commissions?

A. Yes. The primary source of data, which is fairly standard in the industry, is a document which is entitled Regulatory Research and Associates Survey of ROE Decisions. And it comes out every quarter. And the average ROE that was allowed in 2001 was 11 percent, 2002 was

11 percent, 2003 was 11 percent and so the first quarter of this year it's 11.1 percent. So I think the -- that speaks for itself in terms of the answer to your question.

Q. Are you referring to any particular portion of your testimony?

A. No. I'm referring to my own knowledge and my own familiarity with Regulatory Research and Associates Survey. It's pretty well standard -- pretty well-known standard document in the field.

Q. So that information that you just gave me is not contained in your testimony?

A. Yes, it is. I will refer you to page 10, lines 6 through 11. You see line 6 through line 11?

Q. Yes, I do.

A. Okay. Well, it seems that 11 percent is the currently authorized rate of return as well as the historical one.

Q. Now, these returns, if I understand you correctly, are ones that were approved in the first quarter of 2004?

A. Yeah. The average for the first three months of 2004 was 11.1 percent, that's correct. And the publication date is March 30th, 2004.

Q. So that means that the utility commissions issued orders approving those returns in the first quarter of

2004?

A. Yes, sir.

Q. Should the authorized return on equity for utilities reflect their cost of common equity?

A. Yes.

Q. Should the allowed return on equity be based on the company's cost of common equity?

A. Yes.

Q. If the allowed return on equity is based on the cost of capital, do you believe this will allow a company to raise capital and maintain the financial integrity?

A. Yes, sir.

Q. If an allowed return on equity in another state is set above a utility's cost of common equity, do you believe that other states should adjust their recommended cost of common equity to take that into consideration?

A. No. I think every Commission should have a mind of its own. We have a potential circularity problem if we focus strictly on what other commissions are doing. The authorized ROE is but one piece of the big giant puzzle here. If we were just to look at what other commissioners were doing, we'd be looking at sort of multiple mirror images of one another and nothing would ever change. So I think you have to go a little bit beyond that and look at the capital market data as well as authorized return.

The only reason I examined authorized return is to provide some perspective to the Commission on the Staff's recommendation here. And also we have to admit that authorized rates of returns do influence analysts' forecasts of future growth and, therefore, are very influential in determining investor expectations.

Q. Is it your practice to support floatation costs when you sponsor a rate of return recommendation in your testimony?

A. Yes, sir. Always. Except in the rare case of a publicly-owned type utility like Tennessee Valley or Hydrokibec (ph.), but the answer's yes, for investor-owned utilities.

Q. Do you recommend that MGE collect floatation costs for Missouri ratepayers?

A. Yes, sir. Because equity is simply not free. We do it for bonds, we do it for preferred stock and we should do it for equity costs as well.

Q. Can you tell me why Southern Union had to recently issue common stock?

A. Can you repeat that, please?

Q. Can you tell me why Southern Union had to recently issue common stock?

A. Well, their capital structure is relatively weak compared to the industry averages. So I believe they're trying to bolster their capital structure by increasing the common equity ratio and they intend to continue doing that over time.

Q. When you say that Southern Union's capital structure is weak, why is that?

A. Well, if you look at the common equity ratio of the company, it's substantially less than comparable on natural gas utilities.

Q. And what caused that?

A. I haven't studied all of that, but I suspect there may have been some acquisitions in the past that were financed by debt that caused that.

Q. Would an acquisition such as the acquisition of Panhandle operations be the type of acquisition that might affect their or does affect their capital structure?

A. Yes.

Q. Do you believe that it's appropriate for MGE to collect floatation costs for Southern Union's equity issues that are used to drive down the debt that Southern Union incurred from its acquisition of the Panhandle operations?

A. Repeat that, please.

Q. Sure.

A. I'm sorry.

Q. Do you believe that it is appropriate for MGE to collect floatation costs for Southern Union's equity issues

that are used to drive down the debt that Southern Union incurred from its acquisition of the Panhandle operations?

A. No, I do not. I do believe that MGE should pay the freight for the equity that is used to finance rate-base assets in its jurisdiction.

Q. Do you believe that a hybrid security such as a trust originated preferred securities is more or less risky than traditional non-cumulative preferred stock?

A. I don't know.

Q. If both securities were issued, do you have any opinion as to what might be subordinate?

A. As far as common equity is concerned, it's senior debt. These securities are ahead in the food chain, so to speak, as far as common equity is concerned. So for a shareholder, that's debt or debt equivalent. From a bond holder's perspective, it's part of the equity cushion. Since we're talking here about return on equity, it would be a debt-like instrument.

Q. Okay. But do you have any opinion as to whether a trust originated preferred securities would be subordinate to non-cumulative preferred stock?

A. No, I don't. I'm sorry.

Q. How does the market view this?

A. The way bond rating agencies view it, the way the equity research views it is debt equivalent.

Q. What is the current yield on Southern Union's preferred stock, do you know?

A. No, I do not.

Q. Is the cost of capital influenced by the level of interest rates?

A. Yes, sir.

Q. What is the appropriate risk premium to be awarded to a utility on common stock over the current yield on triple B rated utility bonds?

A. Triple B bonds, as we speak, are yielding close to 7 percent. And an appropriate risk premium on top of that would be somewhere between 4 and 5 percent. And the only reason for my hesitation is what company are we talking about here? It may be closer to 5 percent for a B double A three, may be closer to 4 percent for a B double A1. It depends on the company, its business risk, its S&P business risk score and a variety of other factors. But as an order of magnitude, I would say 4 to 5 percent over 7.

Q. When you sponsor rate of return recommendations, what model or models do you use?

A. Oh, ever since I began in the business some 25 years ago, I've been very, very, very consistent in using an equally weighted average of CAP-M to DCF and the risk premium methodology. I've always done it that way for reasons of consistency and comparability and credibility.

As I explained in the Rebuttal, it's very dangerous to rely on one methodology and back yourself into a corner when that methodology doesn't work. It's sort of like a pilot flying on a single instrument, could be a very dangerous flight. So I prefer to fly on all the instruments in front of me so I get a better read on the investor-expected returns.

Q. Do you use a quarterly DCF model?

A. It depends. I have tended not to recently because it's technically complex. For -- for utilities where you have a historical test year, I do use a quarterly DCF. In the case of utilities that have a forward test year, I tend to use the annual DCF.

Q. Are you familiar with what is called the End Result Doctrine?

A. Yes. I presume you're referring to the Hope principle that the end justifies the means. Is that what we're talking about here?

Q. I would refer to page 13 of your textbook.

A. Okay. I have it. I'm on page 13.

Q. You're on page 13?

A. Yes.

Q. All right. Referring to page 13 of your textbook, the End Result Doctrine, could you please explain that?

A. You want me to explain the End Result Doctrine?
Q. Yes, please.
A. Well, the End Result Doctrine -- I'm just quoting out of my book -- strongly suggests that the -- the methodology is really sort of immaterial if the end result is reasonable to both the consumer and the investor. In other words, you're not handicapped or you're not in a straightjacket in terms of what method you use. You're not a slave to any single formula or sort of a robot. That's sort of the spirit of the End Result Doctrine.
Q. All right. Dr. Morin, what in your terms or definition is the DCF model?
A. Well, the DCF model says something very intuitively that when you're buying stock, your return comes in part from dividends and in part from capital gain. And the DCF model is an expression of that reality.
Q. On page 3, line 18 of your testimony --
A. Yes.
Q. -- you refer to Mr. Murray using the -- and I'll quote -- plain vanilla, unquote, DCF model as the primary tool to determine the required return on MGE. What is a plain vanilla DCF model?
A. That is the sort of naked DCF model without any adjustments for floatation costs , without any adjustment for the expected dividend yield as opposed to the spot dividend

yield, no adjustment for the fact that dividends come in every quarter as opposed to every year. That's what I have in mind with that expression.
Q. Is the term "plain vanilla" a term you use in your textbook?
A. Probably not. I don't know. I suspect not.
Q. Did you develop the concept of a plain vanilla DCF model?
A. Well, I don't think I'm going to take credit for that. It is what I just described it to be. It's a DCF model without any of the real-world refinements like floatation costs and the forward-looking nature of dividends and the quarterly nature of dividend payments.
Q. Are you aware of whether the term "plain vanilla" is used in other leading finance textbooks?
A. I don't know. I didn't survey textbooks to see if they use the same language I use. I -- I've seen some reference to the term "a raw DCF model." I guess that means the same thing.
Q. What other flavors of DCF models do you sponsor or find acceptable?
A. I tend to use the DCF model with adjusted floatation costs and historical test year jurisdictions adjusted for quarterly dividend payments as well. And also I do the prospective dividend yield as the model requires as

opposed to the spot dividend yield.
Q. When did the DCF model become more popular than the comparable earnings approach?
A. Roughly when Professor Gordon came up with the model in the approximately mid-'60s.
Q. Can you tell me how many models Mr. Dunn used to estimate the cost of common equity in this case?
A. Well, I can't speak for Mr. Dunn, but I read his testimony and I think he basically used the DCF method because that's been the Commission's tradition in the past.
Q. Do you agree that the use of the DCF model is a cost of capital model that will equate to an investor's required rate of return?
A. Yes. And the key word is one model. But yes, I agree with you.
Q. When analyzing historical growth rates, do you believe it appropriate to average five- and ten-year growth rates?
A. It depends on the circumstances of the industry. If the industry is in a state of flux or transition, historical growth rates are not representative of the future. If the industry is very, very stable, then I would say yes. And, of course, the electric and the gas industries have been anything but stable in the last five years, so I would be very cautious on using history, if at

all.
Q. Do you believe that dividend per share and book value per share growth rates can be used as a test of reasonableness of earnings per share growth rates projected for the future?
A. Yes. As a general proposition, I agree with that. That's if everything is stable, if dividend policies are stable and capital structure policies are stable. And, of course, have not been through -- as we discussed earlier, you and I, energy utilities are in the process of altering their dividend payoff policy so you have to be a little bit careful in equating the growth rates of booked dividends and earnings per share.
Q. Are you aware of any period in which all of the assumptions of the DCF model have been completely accurate?
A. Completely accurate, no. It's a question of degree of accuracy. Prior to the passage of the Energy Policy Act, I think the DCF model was effective with more stability than it is right now.
Q. Which one would you use right now?
A. Excuse me?
Q. I mean what would hold right now, I should say?
A. Which assumptions?
Q. Yes. What assumptions hold right now?
A. Well, I think one assumption that would hold is

the fact that Wall Street or investment analysts do use it to some extent. That certainly would continue to be true. That's one assumption.

Another one would be that -- which one holds true? I mean, in the social sciences in general, there are very, very few models that hold perfectly true in all circumstances in all cases, but I would think that the idea that value is the present value of discounted cash flows to the investor, that's a very generic idea that prevails to this day and it's quasi-universal.

Q. Okay. Dr. Morin, is it appropriate to rely on one analyst and two historical growth rates to determine a reasonable projected future growth rate?

A. I believe your question was directed to historical growth rates?

Q. Let me restate the question. I think we had a phone line interrupt.

Is it appropriate to rely on one analyst and two historical growth rates to determine a reasonable projected future growth rate?

A. No. I'm having a little bit of trouble understanding the question. I think before you engage in projections and forecasting, obviously you take history into account, but you also take into account current circumstances.

I mean, historical growth rates are historical

growth rates and if you think -- I don't know where you're coming from here, but if you're asking me if Value Line historical growth rates are correct, I would say yes. But if the question is should we project them in the future blindly mechanically, no.

Q. Okay.

A. Am I answering the question? I'm not sure I've answered your question here.

Q. Okay. Is it appropriate to use the spot dividend yield or the expected dividend yield in the application of the DCF model?

A. Clearly it's -- the expected dividend yield of finance is a forward-looking process. And when you invest money in securities, you're always looking forward so the answer is expected dividend yield.

Q. How do you define the expected dividend?

A. Well, if you're a prisoner of the annual DCF model, you're looking at the dividend that's coming at the end of the year. So you look at the current dividend and you inflate it by one year of growth and that will give you the dividend at the end of the year. That's what's required by the -- like you and I have called the plain vanilla DCF model or the annual DCF model, I should say.

Q. So if I understand you correctly, it's what the -- you're stating that it is what the investor expects

over the next 12 months or at the end of a year?

A. If you're using the annual DCF model, it's an annual model that assumes that cash flows occur once a year at the end of the year and you have to use the dividend at the end of the year, which is the current dividend inflated by one year of growth.

Q. Okay. I want to direct you to your textbook. And you have a copy of that. Am I correct?

A. Yes, sir.

Q. Page 139.

A. Okay. Have it.

Q. I'm going to read from the first paragraph starting seven lines down with the first sentence and it says, In implementing the standard DCF model, it is the dividend that an investor who purchases the stock today expects a company to pay during the next 12 months that should be used and not the dividend that was paid last year --

A. Yes.

Q. -- is that correct?

A. Yes.

Q. Is Value Line's indicated dividend yield that is listed on its tear sheets based on the estimated cash dividends that the company will declare over the next 12 months?

A. Yes.

Q. Earlier in response to one of my questions, you stated that you have met Mr. David Parcell?

A. Yes, I have. I've also rebutted him.

Q. Okay. So you have testified in hearings on the subject of capital structure and rate of return when David Parcell was the opposing witness?

A. Yes. Several times.

Q. In the cases where you opposed David Parcell, who did you represent?

A. Typically the regulated utility.

Q. And who did David Parcell represent?

A. Sometimes it's the industrial users group and sometimes it's Commission Staff. But it's typically industrial users group.

Q. On the occasions that you opposed David Parcell, was David Parcell's recommended rate of return lower than your recommended rate of return?

A. Yes. Slightly.

Q. How much?

A. Oh, typically we differed by an order of magnitude of 100 basis points.

Q. Any times where you had a bigger difference than that?

A. I'd have to check that. That's a tough question to answer from memory here.

Q. Do you know of a Mr. Stephen G. Hill?
A. Yes, I know Mr. Hill.
Q. How do you know him?
A. I've rebutted him several times in past cases in various states.
Q. Do you consider him to be an expert in the area of capital structure and rate of return?
A. I'm hesitating on that one.
Yes.
Q. So you have --
A. Of course not in the same stature as myself, but -- seriously, yes, I think he's an expert and he's done a lot of work. I'm fairly familiar with his work. He's published quite a few things on risk premiums and other subjects, yes.
Q. So you know him by way of your opposing him in the rate of return cases?
A. That's correct. And we get to meet socially, of course, in these rate cases.
Q. How many cases have you testified in where Mr. Hill was an opposing witness?
A. Approximately five.
Q. On those occasions, who did you represent?
A. Typically the regulated utility.
Q. And who did Mr. Hill represent?

A. The last time I saw Mr. Hill was in Louisiana. He represented the Staff, the Louisiana Staff.
Q. Well, in that case, the Louisiana case, you represented the regulated utility and Mr. Hill represented the utility Staff; is that correct?
A. Yes. To the best of my recollection here, yes.
Q. And was your rate of return greater than Mr. Hill's?
A. Yes. Well, I'd like to put it another way. Mr. Hill's return was lower than mine.
Q. You indicated that there were other cases where you opposed Mr. Hill. Do you recall those?
A. I just recall having done that in the past I believe in Arizona. And I would have to check my records and my past rebuttals to give you a better answer, but the freshest one in my mind is the recent one in Entergy in Louisiana, which is about a year ago.
Q. Do you know of a Mr. Bruce H. Fairchild?
A. Yes.
Q. How do you know him?
A. I believe he was my predecessor at Entergy. He's, I believe, a consultant in rate of return who has appeared on behalf of companies in the past.
Q. Do you consider him to be an expert in the area of capital structure and rate of return?

A. Yes.
Q. Have you ever testified in cases in which Mr. Fairchild was an opposing witness?
A. No.
Q. Do you know of a Mr. Jeremy Siegel?
A. Oh, yes, of course.
Q. How do you know of him?
A. Well, being a graduate of the Wharton School and he being a professor at the Wharton School, I'm very much aware of his stature. And, of course, I'm familiar with his book, Stocks for the Long Run, sort of a best-selling book in investments. So I'm generally familiar and I've seen him on the TV and media before. But I've read his publications.
Q. Does Mr. Siegel teach currently?
A. Yes. I believe he teaches at University of Pennsylvania.
Q. Do you know of a Mr. Cliff Asness?
A. No.
Q. A Warren Buffet?
A. Yes. Of course.
Q. Okay.
A. Yes.
Q. Would you consider Jeremy Siegel and Warren Buffet to be individuals influential in the world of investing and finance?

A. I certainly would consider Mr. Siegel very influential more from an academic perspective, but I would consider Mr. Buffet as well influential in strategy and marketing and finding under-values or assets.
Q. Do you -- let me restate.
Do the returns that are required by investors in the broader market have an influence on the required returns for utilities?
A. Yes. Of course. Investors are always making comparisons between prospective returns from utility stocks versus returns from industrial stocks comparable in risk. And if they're not comparable in risk, they will make the required risk adjustment using something like beta, for example.
Q. When you recommend a cost of common equity for a natural gas distribution company, do you adjust a proxy group's estimated cost of common equity downward if some of the companies in the proxy group have risk year non-regulated options?
A. Yes, I've done that in recent testimonies. And it works both ways. If the company is less risky, you make a downward adjustment. If the company is riskier, you make an upward adjustment.
Q. When you select a proxy group, what criteria do you use to the comparable group of companies?
A. In the past, I used to use a very specific

criteria like bond rating, a percentage of revenues from utility operations, uninterrupted dividend history. I had a fairly detailed filter, so to speak.

But in the last several years, the utility data has become so noisy and unstable because of mergers and acquisitions and write-offs and write-downs and restructurings and the changing faces of so many companies, what I have done in the last several years is take a wide broad group representative of the industry as a whole and based on the risk differential between the utility and the broad average, I made the adjustment as required.

Sorry for the long answer, but the quick answer is I used industry proxies and then made adjustments based on the risk difference between the subject company and those industry proxies.

Q. If a subject company is rated investment grade, do you select companies that are also investment grade?

A. I tend to exclude companies that are not investment grade in my work.

Q. Why is that?

A. Because they're much riskier.

Q. Did you provide testimony in the Nevada Power Company case, Docket Nos. O3-10001 and 03-10002?

A. Yes.

Q. Did you use a group of companies to perform an analysis for Nevada Power?

A. Yes.

Q. Were the companies that you selected in this group considered to be investment grade?

A. I have to check that, but I think most of them were. But, of course, Nevada Power and Sierra Pacific are not investment grade so some risk adjustments had to be made at the end.

Q. So Nevada Power Company at that time did not have an investment grade rating; is that correct?

A. That's right.

Q. In your opinion, what amount of risk premium is required on the cost of common equity for a company that is double B rated if the comparable group has an average credit rating of triple B?

A. Well, I'm not ducking your question, but it would depend on the prevailing spread. What I would do is go on the website and look at the yield on triple B bonds versus double B bonds, and that tends to fluctuate and change over time, and maybe take an average of the last few months or something like that. So it varies.

It depends on the risk aversion -- the degree of risk aversion of investors like junk bonds versus investment rate bonds. Two years ago, that spread would have been absolutely enormous. Now the spread between quality and lesser quality electric utilities and gas utilities has -- has decreased substantially. It depends on the time frame. But that's what I would do.

Q. Do you believe that setting the allowed rate of return equal to the cost of capital balances the interests of ratepayers and investors?

A. Yes.

Q. What is your opinion on the future direction of long- term interest rates?

A. Wow. I don't think my opinion matters very, very much, but I can certainly communicate what the consensus forecast is. I've looked recently at the blue chip forecast that we have here at the University's forecasting department. I've also looked at the consensus forecast publication from Consensus Economics in London, England for the US economy. And all of those publications suggest that an increase of at least 50 basis points for 2005 in long-term rates.

I happen to agree with those forcations because of the struggling economy and perhaps the ugly specter of inflation may be rearing its head very, very soon. And, also, of course, Alan Greenspan recently made it quite clear that the Fed was more inclined to raise rates rather than reduce them. So for all of these reasons I would be in the camp of rising interest rates. And that rise has already begun.

Q. How high do you think long-term interest rates will rise in the next three years?

A. I'll give you a forecast for one year, 6 percent for long-term treasuries. I'm not sure I want to go beyond that.

Q. Okay.

A. Don't hold that against me. I'm not in the business of forecasting interest rates.

Q. Do you believe that the current level of long-term interest rates are more in line with the average level of interest rates occurring over the past century?

A. Past century or the past 10 years?

Q. Past century.

A. I cannot answer that question. There have been periods when interest rates are much higher and interest rate periods much lower. There's cycles in interest rates that roughly track the business cycle and inflation. I can be a lot more specific if you have a shorter time frame than 100 years.

Q. Would you agree that the calculation of historical growth rates is one of the first steps taken in estimating a proxy for future growth rates?

A. Yeah. The first thing an analyst would do in projecting the future growth would be to figure out what's gone on in the past and then decide on the relevance of that history, and then couple that with what's going on in the industry and the current trends of the industry before you arrive at a future projection. So the answer is yes.

Q. Okay. So do some investors still rely on historical growth rates to estimate possible future growth?

A. I think historical -- well, let me put it this way. Growth forecasts by analysts already contain historical information plus a lot more. Because, as you say, they rely on historical growth rates as a starting point.

Q. Dr. Morin, I'm going to ask one more question before I propose that we take a break. And I think that this question will only take a couple of minutes, but I'd like to refer you to Mr. John Dunn's Direct Testimony, Schedule JCD-5.

A. I have it.

Q. You have it? Please look at the five-year earnings per share growth rates.

A. Yes.

Q. Specifically I'm referring to the higher listed five-year growth rates of 8 percent for AGL Resources, 9 percent for Atmos Energy, 8 1/2 percent for New Jersey Resources, 9 1/2 percent for Southwest Gas and the higher 12 1/2 percent for UGI.

A. Yes.

Q. Are those five-year earnings per share growth projections sustainable growth rates?

A. Some of them are. I'm pretty familiar with AGL

Resources here in Atlanta and because of the growth of the southeastern economy in the Atlanta area, that is not too surprising. And also, natural gas is being increasingly used as a fuel of choice because it's environmentally cleaned by electrical utilities, so we're dealing with a fairly robust demand for gas of the future.

Some of those growth rates probably are not sustainable forever. I would certainly be a little bit suspicious of UGI at 12 1/2 percent in the same way that I would be suspicious of the 3 percent growth rates as well. Value Line is rather robust in their forecast of earnings growth for LDCs, for gas LDCs as compared to the consensus forecast of analysts that you find perhaps in Thompson or First Call or Yahoo Finance or any of the websites

MR. BERLIN: All right, Dr. Morin. I might have just a couple more questions, but I would propose that we take a break. Five minutes, is that --

THE WITNESS: That's fine

MR. BERLIN: -- agreeable to everybody? All right. We'll take a five-minute break. We'll come back, I might have one or two questions and then I'll turn you over to Office of Public Counsel. So five minutes from now we'll return. And we'll go off the record.

(A recess was taken.)

MR. BERLIN: We're going to go back on the

record now. This is Bob Berlin, Staff counsel. Dr. Morin, I appreciate your answering my questions. I have no further questions at this time and I will turn you over to Office of Public Counsel, Mr. Doug Micheel.

THE WITNESS: I thank you and hope I've answered your questions.

MR. BERLIN: Thank you.

DIRECT EXAMINATION BY MR. MICHEEL:

Q. Dr. Morin, my name's Doug Micheel. I represent the Office of the Public Counsel in this case and I've got some questions for you here today.

A. It's a pleasure to speak with you.

Q. It's a pleasure to speak with you, such a preeminent expert.

When you were discussing with Mr. Berlin what DCF assumptions currently were in effect, could you tell me which DCF assumptions are not holding in the current market?

A. The one that's rather disturbing is the idea of stable price earnings ratio, the stable market to book ratio. The DCF model assumes a very, very unusual world of complete stability where prices, book value, earnings, dividends, everything grows at a nice stable constant rate forever; whereas, when you observe Wall Street and the stock market, you find gyration in market to book ratios and PE ratios because the industry is getting more volatile, more diverse

and riskier.

So I would say that the assumption of stability is the one that I would question the most, particularly growth rates. We've already had a discussion with Mr. Berlin about the gyrations and the lack of reliability of a history because of all the write-offs and the restructurings and the mergers and the squeeze in the competitive margins of utilities. So the quick answer to your question would be stability is lacking.

Q. And the reasons you just gave, the mergers and the write-offs and things, those are the reasons for the instability?

A. Those are reasons for the lack of reliability of historical data. You find historical growth rates zero or negative or -- because of write-offs and because of deteriorations in margins and because of mergers and acquisitions. History doesn't mean anything if the company's identity has changed over time.

Q. Based on that instability, do you believe that the DCF model is unreliable then?

A. I think it has to be treated with caution along with the other two generic methodologies. All the models have to be treated with caution. I mean, this is not peculiar to the DCF model, but I would be a little bit worried about the stability assumption right now.

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Q. When you say treated with caution, how would an analyst such as yourself deal with the instability of the market in their DCF analysis?

A. By putting a lot of weight on the alternative methodologies like risk premiums, CAP-M, by doing a lot of DCF on comparable groups, by being very, very, very careful in your implementation of DCF and excluding negative growth companies and looking at current data and so forth.

Q. So you would look at, for example, the capital asset pricing method and the risk premium method along with the DCF method?

A. Yes, sir. And I would look at what regulators are doing currently in other jurisdictions, allowed risk premiums over time. And I would be probably supportive of using large groups in the DCF method implementation to alleviate some of those measurement errors and then make some individual risk adjustments based on the risk difference between the company and those large groups. That's one way to sort of palliate measurement error.

Q. During this deposition has Mr. Fay given you any notes?

A. None whatsoever. He's remained here in front of me speechless and motionless and lifeless.

MR. FAY: Hey, I'm not a potted plant.

THE WITNESS: No, absolutely not.

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BY MR. MICHEEL:

Q. What did you review to prepare for this deposition other than your testimony?

A. To be honest with you, just my testimony. And I did put some yellow markers on certain chapters of the book and certain sections that I thought would come up. That's all I did really.

Q. Okay. Do you have your May 19th letter to Mr. Fay with you there, sir?

A. No.

Q. Are you familiar with the contents of that letter?

A. Yes. Probably, yes. It's -- I sent it to him electronically, that's why I don't have a hard copy. I didn't think it would come up, so --

Q. Well, in that letter you indicate that you have fond memories of your previous involvement and successes both social and professional in the state of Missouri.

A. Yeah. I was referring to the Ameren case that I was involved in previously.

Q. And let me unpack that. First of all, what are your fond memories of the social successes that you've had in Missouri?

A. Well, it was cordial, it was friendly, it was a good working relationship. That's what I had in mind. It's

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just being courteous and cordial in the letter.

Q. And who did you work with?

A. I don't remember, to be honest with you. It was, what, two years ago this case came up?

Q. And what Ameren case was that, sir?

A. Union Power and Light.

Q. Was it a rate case?

A. Yes. AmerenUE.

Q. AmerenUE had a rate case in Missouri a couple years ago? You don't remember the case number?

A. No.

Q. Do you have copies of your testimony that you filed in that case?

A. Yes. I have them in my file, sure.

Q. Could you get that for me?

A. Absolutely.

Q. Could you e-mail me that?

A. Yes. Give me your e-mail number -- or e-mail address.

A. It's Doug, D-o-u-g, dot Micheel, M-i-c-h-e-e-l@ded.mo.gov, g-o-v.

MR. FAY: Could you do that again, Doug?

MR. MICHEEL: Sure. Doug.Micheel, M-i-c-h-e-e-l@ded.mo.gov, g-o-v.

THE WITNESS: Okay. We have it.

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BY MR. MICHEEL:

Q. And you indicate that you have fond memories of the professional successes that you've had in Missouri. What professional successes have you had in Missouri?

A. The company was -- the client was pleased with my work, and that's it.

Q. Other than the testimony you filed on behalf of AmerenUE in Missouri, what other Missouri jurisdictional utilities have you worked on behalf?

A. That was the only one in Missouri, I believe.

Q. So this is only your second time filing testimony in the Show-Me State?

A. Yes. And I'm looking forward to more participations perhaps.

Q. Are you filing Surrebuttal Testimony in this case?

A. No, I am not. This has not even been discussed, so the answer's no.

Q. Who do you believe are the most influential individuals in the field of regulatory finance?

A. Wow, that's a really difficult question to answer. I don't know where you're coming from or what perspective you have in mind, but I would say that Moody's and Standard and Poor's periodic publications are very influential in the field as to investor expectations, particularly bond holders. And I would say people that provide information like Value Line. I would say the people that analyze utility stocks, Morgan-Stanley, Soloman Brothers, Goldman Sachs and the very, very large institutional investors that have a very good utility investment group are influential.

From the academic perspective, there are not too many that specialize in the utility finance other than myself. I hate to pronounce myself as such a person, but I think I have some modicum of influence in the business with all my books and seminars and writings.

Q. Are there any other influential people in that area other than yourself, or are you it?

A. No, I'm not it.

Q. Why don't you give me some names of some other folks?

A. Well, I would say the people I mentioned earlier in my deposition are very influential scholars in the field of regulatory field, certainly Professor Stewart Myers, who is a principal of Brattle Group, does testify a lot in utility-related issues as a professor at MIT. He is certainly a luminary both in research and the academic regulatory finance field. That's one name that comes to mind immediately.

Q. Any others?

A. Gene Brigham would be another name. Very

prominent scholar in the field of utility finance. He was head of the Public Utility Research Center at University of Florida for several years. Very, very well known in the field, very influential.

Q. Anyone else that you can think of?

A. No, not right now.

Q. What person or persons most influenced your opinions regarding regulatory finance?

A. When I was at USC Pennsylvania, the Wharton School, I was a GRA, graduate research assistant for Irwin Friend who at the time had basically a monopoly on rate of return testimony throughout the country particularly for the AT&T company.

And I worked for him as his research assistant and I was very, very inspired by his research, did my dissertation for him, participated in a lot of telecommunications rate cases as a very young graduate student. And I would say he was one of my mentors in the field of utility finance.

Q. How do you spell his name?

A. Friend just like friend and foe, Friend; Irwin Friend.

Q. And how many books as Dr. Friend -- I assume he's got a Ph.D. How many books has Dr. Friend published?

A. His resume is probably the size of my book. I

can probably send you or fax you a copy. It's literally hundreds and hundreds of articles and several, several, several books.

Q. What books do you believe are authoritative in the field of regulatory finance?

A. Professor Gordon's book on utility cost of capital would be one.

Q. Any other books?

A. Judging from the reception in the field, I guess my own book, Regulatory Finance, seems to enjoy some popularity or some prominence. There are very few books that deal specifically with utility finance. That's why I'm hesitating a little bit, but probably Professor Gordon's book would be a major work.

Q. How many universities utilize your book as a textbook?

A. It's not really designed to be an academic type of text. It's more of a trade reference type publication. It's used by at least five universities that I know that have a regulatory interest, University of Michigan, University of Utah. It's typically used when you have regulatory finance type seminars, schools that have a JD, MBA program will typically use it. But it's used more by Wall Street, by analysts, by regulators, by staffs, by utility analysts. It's really not an academic textbook, it's more of -- sort of a

practical trade-oriented book.

Q. Is it possible to get a Ph.D. in regulatory finance?

A. It's possible to get a Ph.D. in finance with a sort of major in regulation at those schools that offer such a program.

Q. And which schools offer that program?

A. Michigan, Utah, and here we do it. You would probably do that by taking sort of a minor in utility-related topics, regulatory economics, regulatory accounting, regulatory finance.

Q. Do you consider Dr. Myron Gordon to be an expert in the field of regulatory finance?

A. Yes.

Q. Do you consider Dr. Gordon's book The Cost of Capital to a Public Utility published by Michigan State University in 1974 to be an authoritative book?

A. That's the one I mentioned to you earlier, yes.

Q. Is Dr. Gordon the father of the DCF method?

A. Yes, he is. Grandfather by now, but yes, he is.

Q. Is he one of the individuals who you look to who influenced your opinions regarding regulatory finance?

A. He is one, yes.

Q. Do you consider Mr. Parcell's book, The Cost of

Capital, a Practitioner's Guide, the 1997 edition, to be an authoritative book?

A. No.

Q. Have you ever seen that book?

A. Yes, I've seen it. And Mr. Parcell and I have discussed it. It's an excellent practitioner's guide. It is not sort of a scholarly innovative type of work. It's a very, very good summary of one man's opinion of practice and methodology. It's very well done.

Q. Is it something that a practitioner, somebody who practices in the field of cost of capital for a utility, could utilize?

A. Yes. Absolutely.

Q. Do you consider your book to be a scholarly book?

A. It's not really an academic type of book. It's more of, again, trade-oriented professional type book designed more for managers and practitioners and analysts and technicians as opposed to studens in the MBA class.

Q. So your book and Mr. Parcell's book are similar in nature?

A. No. Not really. My book is, what, 400 or 500 pages and his book is more of a -- it's a much smaller, much less ambitious type of work.

Q. How many pages is Mr. Parcell's book,

Dr. Morin?

A. I don't know.

Q. Well, I mean, by number of pages is that how you determine whether a book is influential or not?

A. No. It's the quality of the context. They're different orientations.

Q. Well, you've told me that both are practitioner guides.

A. Yeah. Mine is probably a little bit more rigorous, it goes into a lot more depth with the theory and assumptions and modeling and the functional forms. It's more thorough -- a more thorough version, so to speak.

Q. In what areas is your book more thorough than Mr. Parcell's book specifically?

A. Well, I have chapters that are pretty lengthy on incentive regulations, capital structure. I have very comprehensive chapters on PBR, perform-based rate-making, four or five chapters on capital rate structure, theory and practice. They are very, very thorough chapters on different theoretical versions of the DCF model and CAP-M model. It's just a little bit -- it's got more -- a little bit more depth. And that's not a criticism of Parcell, they're just different books. I like Mr. Parcell's book.

Q. Do you consult Mr. Parcell's book?

A. No.

Q. You don't use it at all?

A. No. I'm very familiar with it and I've read it. And, in fact, we've made some exchanges in comments to each other about it, but it's not something, you know, that's next to my desk or anything like that.

Q. Do you know if other practitioners in the area of cost of capital for a public utility utilize Mr. Parcell's book?

A. Yes. I think some do. Probably the Missouri Staff people do.

Q. Are you aware of any other staff people that do?

A. I'm sure they do, I just don't know who they are.

Q. Are there a lot of different points of view in the field of regulatory finance as to how to determine the appropriate cost of capital for a regulated utility?

A. Not very many. The mentoring that I was referring to earlier that influenced a lot of my thinking used to say that judgment is only about 100 basis points thick, which basically means that when there's differences of opinion that exceed that rough boundary, one can smell a rat, so to speak, you know.

Q. And that rat can be going either way, either too high or too low, can't it?

A. Absolutely. I agree.

Q. How many different points of view are there in the field of regulatory finance?

A. I can't answer that. You have to give me an issue and I'll give you the points of view on each issue.

Q. All right. How many different points of view are there on the appropriate DCF model to use?

A. Probably four or five, which functional form to use annual versus quarterly. Another difference of opinion, the inclusion or exclusion of floatation cost. Another debate would be the -- what we talked about earlier in the deposition as to the spot dividend versus the expected dividends. Those would be some of the potential areas of disagreement.

And, of course, the area of samples and sample size and what company you apply it to and how do you measure growth rates. There's some disagreements about which is the best way to measure growth rates, although the literature is pretty clear on that issue. But those are potential areas of disagreement and I try to resolve those in my own work.

Q. Well, let's unpack that because, you know, the DCF model has got a formula. How many different points of view are there on the G component of the DCF model?

A. Everybody agrees on the theory and the model itself. Where the disagreements occur is the execution, implementation of the model. How do you measure what's in the minds of investors for long-term growth? Do you look at history? Do you look at analyst forecasts? Do you look at sustainable growth rates? How much weight on each one? Is it relevant? Those are the kinds of disagreements you have. It's not on the model itself, it's on the implementation or finding the inputs to the model. That's where the disagreements occur.

Q. Are there any other ways to measure growth than the three that you just talked about?

A. No.

Q. So the only ways to measure growth are looking at historical, analysts and the sustainable growth?

A. Yes. Those are the -- by far the three principal ways of doing it.

Q. Are there some minor ways?

A. I've done it another way in the past. I've recorded the DCF and the CAP-M and solved for the growth rate that would equate the two, because presumably expected return answers would be the same regardless of which framework you employ. So if you have the dividend yield and you have the CAP-M return, with the CAP to dividend yield, you get the implied growth rate as sort of a check.

I'm not sure you would call that a method -- a full-fledged method, but it's certainly a useful check. The ones you mentioned are the principal ones.

Q. Are there different ways to determine the current dividend yield and is there controversy about that?

A. No. Just divide the dividend by the price.

Q. Is there controversy about how to pick comparable companies?

A. Yes.

Q. And what's the nature of that controversy?

A. How do you define comparability? How do you deal with investment grade versus non-investment grade? How do you exclude companies that haven't paid dividends or should you include them? Do you include or exclude negative growth rate companies? What about the size effect? You only limit yourself to large companies or their size effect that should be accounted for. So there are many different ways of tailoring or defining a universe or sample of companies.

Q. With respect to determination of the current dividend, is there an issue about whether you use the expected dividend yield or the historic dividend yield?

A. You have to use the expected dividend yield. I think there's almost unanimous agreement on that.

Q. Why do you have to use the expected dividend yield?

A. Because the model of stock price valuation is forward-looking. The investor is paying a price today in view of the upcoming cash flows down the road. Everything is

prospective in nature in finance so you have to look at the upcoming dividend. That's what's being valued, not yesterday's dividend.

Q. You indicated earlier in response to Mr. Berlin that you'd reviewed Witness Dunn's Direct Testimony in this case; is that right?

A. Yes. I read it once.

Q. Did you see anything in that Direct Testimony that you disagreed with?

A. Yes.

Q. And what were those items that you disagreed with?

A. I would have liked Mr. Dunn to perhaps have relied on more methodologies to check the DCF results, but I think his choice was dictated by the fact that Commission precedent prevented him from doing that, but I would have liked to have seen that.

I think Mr. Berlin brought up an interesting point on sustainability of certain growth rates, that's a valid point. Those are the two main preoccupations I would have. I would have liked him to include flo-- no, I think he did include floatation cost, that's correct. So those are the two big things that I noticed without having engaged in a complete, you know, analysis of his testimony.

Q. What were the minor things that you noticed?

A. I don't have anything to say on that. I haven't scrutinized it enough.

Q. So you haven't paid close attention to Mr. Dunn's Direct Testimony?

A. No. Not really. My mandate was very focused on Staff's testimony.

Q. Do you know if Mr. Dunn only utilized DCF?

A. Yes. I mentioned that already. I would have liked him to have perhaps give equal weight to other methodologies to check the DCF result.

Q. Do you know if Mr. Dunn has a Ph.D.?

A. I don't know. I'd have to check his credentials. To be honest with you, I did not know Mr. Dunn prior to this experience here.

Q. Do you know if Mr. Dunn has written any peer review articles?

A. I'm looking at his testimony in the front here and his qualifications are in Appendix A, so I refer you to that.

Q. Well, I'm asking you. I can read too. I want to know your views, Dr. Morin.

A. I don't have any views on Mr. Dunn. I wasn't asked to provide views on Mr. Dunn.

Q. So you haven't even looked enough to know if Mr. Dunn is a qualified expert in this case?

A. He's an economist and a partner in a consulting firm that specializes in public utility economics, and I did not pay attention to his -- the details of his qualifications because my mandate was not to critique or rebut Mr. Dunn.

Q. Well, why don't you read his qualifications there. I want to ask you some questions about them.

A. Okay. Let me see if I can get a hold of it.

MR. FAY: I'm not sure we have it here. We have his testimony. Are you talking about his resume?

THE WITNESS: I have his testimony here, November 2003.

BY MR. MICHEEL:

Q. Could you look at Appendix A?

MR. FAY: We don't have Appendix A. We've got his schedules and we have his testimony.

MR. MICHEEL: So you don't have Appendix A?

MR. FAY: No, we don't.

THE WITNESS: Let me check one more -- no, we don't have it. Sorry.

BY MR. MICHEEL:

Q. So you're unaware, Dr. Morin, of Mr. Dunn's qualifications?

A. Correct.

Q. Did you review Witness Dunn's Rebuttal Testimony?

A. No. I haven't read it yet.

Q. Did you review Public Counsel Witness Allen's Direct Testimony?

A. No.

Q. Now, earlier today in response to a question from Mr. Berlin, you indicated that you had read Mr. Allen's testimony.

A. You asked me about his qualifications, didn't you? I thought you said did I review his qualifications.

Q. Why don't I have the court reporter read the question back to you?

MR. FAY: That's okay. Just ask it again.

BY MR. MICHEEL:

Q. Okay. Did you review Public Counsel Witness Allen's Direct Testimony?

A. Direct Testimony I read, yes.

Q. Did you see anything that you disagreed with in that testimony?

A. Exclusive reliance on DCF, no floatation cost allowance, again, some weight -- some misplaced weight on dividend growth that really should not be there. So those are some of my observations.

Q. Okay. Is it your belief that Mr. Allen relied exclusively on a DCF analysis to arrive at his conclusion?

A. No, he did not. He -- he relied on other

methodologies as well.

Q. And what methodologies did he rely on?

A. He used the CAP-M as well as sort of a check.

Q. And is that an accepted methodology?

A. Very much so.

Q. The second item you talked about was the weight of dividend growth. And what was your problem with that?

A. Well, I don't think you should put any emphasis on historical dividend growth or forecast dividend growth. And we discussed this three times already. Utilities, including gas utilities, are in the process of lowering the dividend payout. So obviously dividend growth for the next couple years is going to be very, very, very minute. And once the dividend tab ratio has been lowered to the target level, then dividends and earnings will resume the same growth pattern.

Q. Is it your belief that Witness Allen utilized dividend growth for his recommendation?

A. I just don't remember since I was not asked to rebut him.

MR. FAY: Doug, if you want to ask him these kinds of questions, you're going to have to give him an opportunity to go back through the testimony. You can't just sit here and expect Dr. Morin to remember this.

MR. MICHEEL: Is that an objection?

MR. FAY: It is an objection, yes.

MR. MICHEEL: Okay

MR. FAY: If you want, give him a few moments to go through it.

BY MR. MICHEEL:

Q. All right. Take a few moments. Let me know when you're ready.

A. I am ready. He did look at historic-- it's all spelled out on his page 10. He looked at five-year and ten-year growth rates, projections and the same quantities. He also looked at the retention approach, which I don't agree with.

Q. And what growth rates did he rely on in coming to his conclusion?

A. Well, if you look on page 13, he sort of picked a range -- summarized on page 13.

Q. Did you see anything in Mr. Allen's Direct Testimony that you agreed with?

A. I agree with his use of growth projections.

Q. How about his comparable companies?

A. Comparable companies, I didn't really scrutinize that too closely. I wouldn't have a problem with those 15 companies, no. I don't have a problem with that.

Q. Did you review Public Counsel Witness Allen's Rebuttal Testimony?

A. No.
Q. At page 6 of your Rebuttal Testimony --
A. Yes.
Q. -- you say that MGE is riskier than the average natural gas utility?
A. Yes. Absolutely.
Q. What's the basis for your claim?
A. They have a weaker capital structure.
Q. And how did they get that weaker capital structure?
A. Well, I don't know how through the years, but the point is they are, as we speak, riskier because of a thinner equity ratio or a thicker debt ratio, if you wish.
Q. What is their capital structure?
A. Well, if you look at my testimony at the very end where I do the adjustments for the capital structure effect, that's on page 37. Of course, I use the capital structure that Mr. Murray attributed to MGE, which is only 25 percent of common equity.
Q. Well, what is Southern Union Gas Company -- or Southern Union Company's actual capital structure? Have you taken time to determine that?
A. No, I have not.
Q. Have you reviewed Value Line that would indicate what Value Line believes Southern Union Company's

capital structure to be?
A. No.
Q. Have you asked anybody at the company what they believe Southern Union Company's capital structure is?
A. No, I have not. My mandate, again, was limited to critique of Mr. Murray's capital structure assumptions, which he assumed to be 25 percent common equity.
Q. And so the sole basis for your claim in page 6 of your Rebuttal Testimony that MGE is riskier than the average natural gas utility is your belief as to what the capital structure is?
A. That is correct. And also the smaller size, although I did not place any weight on that. The capital structure is definitely much weaker, at least the one assumed by Mr. Murray was.
Q. Did you do any studies to determine that the capital structure was much weaker?
A. Yeah. I just compared it to the average that I see in -- in Value Line or in C.A. Turner Utility Reports. And it seemed that the average common equity ratio was somewhere around 47 or 50 percent range compared to Mr. Murray's assumption of 25.38 percent.
Q. Now, you indicated in response to my question that you didn't rely on the smaller size of MGE. And why is that?

A. I just didn't do -- because Mr. Murray didn't do it, so I didn't want to introduce new evidence basically. Size issue was not raised by Mr. Murray so I had no business raising it.
Q. Do you know if MGE is a smaller size than comparable companies?
A. Yes, I believe it is. I didn't study it, but --
Q. And what's the basis for your belief?
A. My general sense is that it's smaller -- a smaller utility, but I have to check those figures. But I don't discuss that in my Rebuttal so I didn't attach any importance to it.
Q. So you don't know whether or not MGE is smaller sized than the comparable companies?
A. I suspect that it is, but I didn't study that in depth because it was not part of Mr. Murray's work.
Q. Did you study it at all?
A. No.
Q. Now, on the table -- your Table 1, sir, on page 10 and 11 of your testimony --
A. Yeah.
Q. -- it's my understanding that you got that information from C.A. Turner Utility Reports?
A. Yes. That's right.

Q. Is C.A. Turner Utility Reports a source of information that regulatory finance experts use?
A. Some do, along with Value Line.
Q. Do you believe it is a source that's appropriate for use by regulatory finance experts?
A. Yes. But I prefer Value Line. But Turner conveniently provides the allowed rates of return.
Q. Does Turner provide any other information that's useful to a regulatory analyst such as yourself?
A. Yes, bond ratings, percent of revenues due to utility operations, common equity ratios. There's a variety of classic financial information, dividend yield.
Q. Do you view it as an authoritative source in the field of regulatory finance?
A. It is a source of data. Again, I would prefer Value Line, but in some cases it's very convenient to extract the authorized returns for those companies on Table 1.
Q. Is it appropriate for a regulatory finance individual expert to utilize C.A. Turner?
A. In some cases, yes.
Q. Is it appropriate for use in this case?
(Deposition interrupted.)
(Off the record.)
BY MR. MICHEEL:
Q. Dr. Morin, do you recall the question? I'm

sorry about that.

A. Repeat it again to make sure.

Q. Is the C.A. Turner Utility Reports a source appropriate for use in this proceeding?

A. Yes.

Q. Are you aware of any textbooks that support your claim?

A. Which claim? That Turner is a source of data?

Q. Yes.

A. No. Not really. It's just a source of data.

Q. How do analysts arrive at projected earnings growth estimates?

A. That's a fairly lengthy process. They begin with a projection of revenues, the top line, based on the GEP growth of the national economies, regional economies, based on the demand growth of the territory and they look at the cost structure and the margin and all the way down to sort of the bottom line, the earnings figure. So it's sort of a top-down approach where you start with revenue projections and then cost projections and then you arrive at the bottom line and then make projections accordingly.

Q. Is it reasonable to believe that analysts look at what return on equity a company will return in the future?

A. Yeah. They make projections about their expectations as to the ROE in the future.

Q. Would an analyst look at the sub-components of the return on equity?

A. Well, they would look at the drivers of return, which is margin, which is the asset efficiency, the turnover, base of assets, the amount of leverage. Those are the three drives of return on equity and, of course, what commissions are allowing or have allowed.

Q. Are there any other sub-components than those that they would look at?

A. Those are the principal ones.

Q. Are you familiar with the Dupont Analysis?

A. Yeah. I was just explaining to you that the ROE is essentially the product of margin, turnover or asset utilization or leverage. And that's what analysts look at when they project ROE.

Q. Are you familiar with the Pratt Analysis?

A. No.

Q. So you don't know what the Pratt Analysis is?

A. No, I don't.

Q. In arriving at growth estimates, is it reasonable to look at dividend earnings and the level of earnings being retained by a company?

A. Yes. One of the drivers of growth is the increments to the asset base. In other words, the retention of earnings. What is -- what earnings are not paid out of

dividends are plowed back or retained in the asset structure and then that will translate into future growth later on. That's the sustainable growth model approach.

Q. And is that an acceptable approach?

A. It is widely used and should be used except in the utility context. The problem with using it in the utility rate case, it's very, very circular. You have to assume an ROE to get an ROE so you're caught in a hopeless circular logical trap here.

Q. What if you use projected growth?

A. What do you mean by that? You mean --

Q. For your sustainable growth rate.

A. But, again, if you're projecting an expected ROE, the only way that the company can earn it is if the Commission sets rates to produce that ROE. So how can the cost of equity be any different than the ROE? See the circular logic here?

Q. Are you aware of any studies that suggest flotation costs should not be recovered in rates?

A. No, I'm not.

Q. Are you aware of any commissions that deny floatation cost adjustments in rates?

A. Yes. Some do. It's kind of split down the middle. You have maybe half the commissions that allow all or some of floatation costs and some do not. The reason for my

slight hesitation is that it's rare that a commission will openly divulge its recipe, so to speak, on how they arrive at the final ROE determination. They're a little bit reluctant to divulge the exact details, whether they did this or did that, included this, excluded that. But the data that I've seen and I've had experience in 43, 44 states, it's roughly split down the middle.

Q. Have you recommended floatation cost recovery in any case where such recovery has been denied?

A. Yes.

Q. In what cases would those be?

A. Oh, the Entergy cases in Louisiana would be an example.

Q. And in the Entergy case was it -- why did the Louisiana PSC deny floatation costs?

A. One typical argument for exclusion is that, well, we don't anticipate any common stock offering. And that's a pretty empty argument because the idea of floatation costs is to recover the costs associated with tax issues, not the ones that are coming up in the same way that depreciation on plant is to recover past plant investment, not the ones that are coming up is the typical argument that's used.

Q. In the Entergy case that you mentioned where your floatation cost adjustment was adjusted, did the Commission in its decision specifically say why it rejected

your adjustment?

A. No. I don't think so. They're not that explicit in the rate orders in Louisiana.

Q. Have you seen any rate orders from other states that explicitly state why they rejected your proposed floatation cost adjustment?

A. I've seen those, but I don't recall what they are. And you'd have to do a search on LexisNexis with floatation costs and see as to why that is. But, again, the typical justification for exclusion is there are no anticipated common stock issues.

Q. Are you aware of any court decisions that have found that the denial of a floatation cost recovery is contrary to the ideas set out in Hope and Bluefield?

A. No, I'm not aware of that at all. And that would be surprising because it's a legitimate cost of doing business and equity is not free.

Q. I said the denial of floatation costs.

A. No, I am not familiar with the legal -- the case that you're referring to.

Q. So you have not read the Hope case?

A. Oh, I read that a long, long time ago.

Q. Have you read the Bluefield case?

A. Long time ago.

Q. I haven't read your book, but are those

cases -- do you quote those cases in your book?

A. Yes. I quote the portions that deal with rate of return and the notion of a fair return.

Q. And are those the seminal cases?

A. Yes, sir.

Q. What is Southern Union Company's dividend policy?

A. None. They don't take dividends.

Q. So they don't pay dividends on a quarterly basis?

A. They don't pay dividends at all.

Q. And how did you find that out?

A. Well, you look at the data and I used Southern Union as a member of my comparable groups in other testimonies and I'm aware of the fact that they are -- the dividend yield is zero.

Q. And why don't they pay dividends?

A. Have to ask them. Perhaps they have a strategic emphasis on growth and they're retaining all earnings to -- to pursue a more aggressive growth strategy.

Q. But you don't know why?

A. I just explained to you why. Probably because they have a growth strategy. And they have many, many expansion plans and perhaps they have a high construction budget and they need to retain earnings and finance it

internally as opposed to externally. But it's something that you'd have to ask the company senior management.

Q. Would you agree with me, Dr. Morin, that historical growth rates in dividends, earnings and book value are often used as proxies for investor expectations in DCF analysis?

A. Yes, I would agree with that. But that has been less and less the case in the last couple of years because you get ridiculous results if you match historical growth rates with current dividend yields. You get preposterous of equity results. In other words, those growth rates are not representative of the future growth because of all the factors we've already discussed in the deposition, restructuring, mergers, acquisition, dividend suspension, write-offs, restructuring and so on.

Q. Would you agree investors are influenced to some extent by historical growth rates in formulating their future growth expectations?

A. We discussed that a little earlier. Mr. Berlin and I discussed at the point of departure for an analyst forecast is the historical track record. And you go from there and you super-impose current circumstances and what's going on in the industry and remove any contamination from what we call transitory effects. You normalize the earnings, so to speak.

Q. Historical growth rates and earnings dividends, market price and book value during some past periods are among the most widely used proxies for expected growth, are they not?

A. Yes. I suspect you're quoting from my book here. And that was true prior to the passage of The Energy Act, but since then, there's so much noise and so much erratic patterns of interest rates that I'm very suspect in projecting future growth rates.

Q. You mentioned The Energy Act. When was that Act passed? What is that?

A. '92, I believe.

Q. And what did that do?

A. Well, it specifically sanctioned competition in the industry and liberalized essentially the format of regulation --

Q. Competition --

A. -- and allowed for retail wheeling and wholesales and unbundling and so on and so forth. The whole movement was sort of launched there.

Q. Competition in what industry, sir?

A. Electric particularly.

Q. Did it launch competition in the local gas distribution industry?

A. Well, only to the extent that gas and electricity are now rivals and competitors.

Q. And have you seen studies that indicate that gas and electric utilities are now rivals and competitors?

A. Well, there's a lot of market share warfare going on as to the fuel of choice for industrial customers. And we've seen on issues with the very high price of gas, for example, switching to electricity. We have seen Standard and Poor's now equating gas utilities and electric utilities in the same group and the same pot, so to speak, as far as bond rating benchmarks are concerned. So there is this convergence movement that has taken place with respect to gas and electric.

Q. Would you agree with me because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run growth rates provide a sound basis for estimating required returns?

A. Yes, I do. It sounds like you're quoting from one of my statements, yes.

Q. Would you agree that an average of all the available forecasts from investment houses is likely to produce the best DCF growth rate?

A. I would agree with that statement that the consensus forecast of many analysts is about the best proxy you can think of for long-term growth, I agree.

Q. And that would be better than one individual

analysts' determination of growth?

A. Yeah. I would think it's better to rely on the consensus forecast rather than one person's forecast. That stands to reason.

Q. Would you agree with me that investment analysts use the retention method or the sustainable growth method to predict future growth in earnings and dividends?

A. I don't know. It's not something that you see in the equity research documents from the big institutional investors. They don't specify we use this method or that method. I did mention earlier it was very circular in the case of utility finance because you're trying to figure out an ROE so it's hard to figure out an ROE based on another ROE.

Q. So you haven't discussed with large institutional investors what methods they utilize to determine expected growth?

A. I'm very familiar with the CFA, which is the Chart of Financial Analysts sort of body of teaching to be certified as an analyst. And in those publications they delineate the process that they follow to arrive at earnings forecast, and it's the one I described earlier in answer to one of your earlier questions, sort of the top-down approach.

Q. So it's your view -- do you know if the CFA books recommend use of the sustainable growth rate method for returning growth?

A. The ans-- excuse me. I interrupted. I'm sorry.

IThe answer is yes, they do recommend the method and the method is great and it's fine and it's all -- it's in all the corporate finance textbooks. But in a case -- in a very specific case of regulated utilities, there's an element of circularity which really tarnishes the method because, again, you need to come up with an estimate of ROE to get ROE. And that's very, very disturbing.

Q. Are you aware of any studies that say that?

A. It's something I've been talking about for a long, long time in my publications.

Q. Have you conducted any academic studies that indicate that?

A. There are some studies, one by James Vanderweide, I think I cited him earlier, and Carlton that have examined which is the best growth proxy by going back to the future, looking at the forecasts and what did materialize. And they found that analysts' forecast outperform the other methods of specifying growth.

Q. My question to you is, are there any academic studies that indicate the alleged circularity of use of the sustainable growth method?

A. I haven't seen that except in my own publications.

Q. And other than your book that you published that I guess you have a sentence or two in there or something, or do you have a complete chapter on that issue, the circularity issue?

A. There's quite a few pages on it. It starts -- well, there's not a whole chapter on it, but it starts on page 157 and goes through quite a bit -- to the end of the chapter actually, so quite a bit of stuff there on that.

Q. And how big is that chapter?

A. Well, Chapter 5 is 24 pages.

Q. And how many pages in Chapter 5 discuss the circularity of the sustainable growth rate method?

A. I don't know. I'd have to look it up. Does this really matter?

Q. Are you aware of any academic studies that support the use of the BR growth rate?

A. It's on page 161 of my book and I just finally found the whole discussion there. I haven't seen -- again, I have to point out that there are not that many, if any, specialized textbooks on regulatory finance. There's a lot of book on corporate finance, but not on the regulatory finance, per se. It's not something that I've seen in academic books, and it's so-- you know, sort of transparent that if you need an ROE to specify an ROE, you've got a problem.

Q. What does Dr. Gordon say about using the BR

plus SV in utility finance?

A. He's an advocate of the method, but again, in the context of a rate case, there is an element of circularity, which I don't think he points out.

Q. Does Dr. Gordon in his book recommend utilizing the BR plus SV to determine growth?

A. Yes. That's one of the methods he recommends.

Q. Is that the method he prominently recommends?

A. Yes, it is.

Q. Are there many dimensions and factors that determine a utility's financial integrity?

A. Wow. That's a pretty good question. My first reaction is to say that being investment grade would be part of financial integrity or access to markets under all circumstances. I would say having a market to book ratio that is comparable to other utilities and industrials would be another element of financial integrity. Those are the two that come to mind that are pretty important in capital markets. Does that answer the question or do you have something else in mind?

Q. If that's the best you can do, that answers the question.

A. I think that's pretty good.

Q. Is the notion of financial integrity fluid?

A. No. Capital attraction and access to capital

markets under all conditions of reasonable cost is a fairly eternal concept in the annals of regulation, I would think.

Q. So it's your testimony that the notion of financial integrity is not fluid?

A. I believe it's a notion that's been around a long, long time. It's structural, it's part of the corpus of regulatory wisdom, so to speak. It's part of the Hope and Bluefield criteria. They talk about capital attraction and financial integrity.

Q. What are the Hope and Bluefield criteria?

A. Comparability of risk, comparable returns, capital attraction standard. Those are the two main ones.

Q. Are there any other?

A. Those are the two main ones. It depends how you interpret them, but they're not that specific on the actual ratios that we should use. I interpret it myself as having investment grade bond rating in a competitive market to book ratio.

Q. And that's how you interpret meeting those two requirements?

A. That's a practical -- very practical implementation or manifestation of financial integrity. If you're a junk bond, you're not -- you don't have financial integrity. If your market to book ratio is completely out of kilter with the industry and the market, you don't have

financial integrity.

Q. Does the notion of financial integrity encompass several different considerations?

A. Yes, sir.

Q. And what would those considerations be?

A. Access to markets under all conditions at reasonable cost, offering a competitive rate of return to investors that is commensurate with returns offered elsewhere.

Q. Anything else?

A. Those are -- those are pretty -- pretty broad and pretty important and encompass just about everything else.

Q. I'm just trying to learn some stuff. Does each rate case possess different circumstances?

A. Yes. Absolutely.

Q. And are you familiar with the circumstances -- all of the circumstances present in this rate proceeding?

A. No, sir.

Q. And, in fact, the only thing that you've reviewed in this rate proceeding is Mr. Murray's testimony?

A. That's all I was asked to do.

Q. And that's all you're going to do?

A. That's all I'm going to do.

Q. Do you think that Southern Union Company is an appropriate comparable company for a natural gas distribution company?

A. I -- in my own work for gas rate cases, I tend to exclude it because it doesn't pay dividends so you can't do a DCF analysis on that company.

Q. And if you were going to do a DCF analysis on that company, how would you do it?

A. You couldn't because they don't pay dividends.

Q. Should more than one cost of equity capital estimating technique be consulted?

A. Absolutely. I mentioned earlier that a smart and efficient pilot would fly a plane on several instruments, not fly on one instrument in the same way that rate of return experts should rely on a variety of gauges or meters or signals or indicators to get as accurate an estimate as possible on investor-expected return. So the answer is yes, a variety of techniques should be used definitely.

Q. Must other cost of capital estimation techniques be employed as an additional check on the reliability and the reasonableness of any DCF estimate?

A. No. I don't think that you should employ the other technologies as checks. They should be elevated to full-fledged techniques on the same footing as DCF.

Q. So it should be always 50/50?

A. No. It should be probably be a third, a third, a third.

Q. A third, a third, a third?

A. Risk premium, DCF, CAP-M.

Q. Are you aware of any Public Service Commissions that use a third, a third, a third?

A. Again, they don't -- they don't rely or state explicitly how they arrive that their decisions. They do not discuss weight typically in rate orders. Some commissions are DCF oriented. Others do not divulge their methodology or recipe, so to speak, to arrive at their final orders.

In a survey that was done at NARUC, N-A-R-U-C, on rate of return, it's pretty clear from that survey that commissions rely on all the information that is presented to them that is relevant. Why would you not rely on evidence if it's relevant?

Q. And when you say "NARUC," does that stand for the National Association of Regulatory Utility Commissioners?

A. Yes, sir.

Q. And what survey is it that you're talking about?

A. It's the annual yearbook. I have a copy of that page, that table, that NARUC survey where they essentially ask the commissions, What technique do you use, and they put X's in the columns of the methods they use.

Q. And does that yearbook tabulate what methods they use?

A. No. I just told you that the presence of all

the X's in the various columns indicate that commissions rely on variety of sources of information.

Q. Have you seen any surveys that indicate which methods public utility commissions rely on more than others?

A. I haven't seen that, but I think historically they've relied on DCF more than the other methods because it's been around for so long. The newer methodology, the asset pricing methodologies, are a little bit newer, more contemporary and are gaining increasing popularity and attention.

Q. Is the capital asset pricing method an appropriate check on the reliability and reasonableness of the DCF estimate?

A. I don't think it's an appropriate check. I think it should be a full-fledged method on the same footing as DCF and risk premium.

Q. And so you don't believe that the risk premium method is an appropriate check on the reliability and reasonableness of a DCF method?

A. Same answer.

Q. Is the cornerstone of public utility rate of return regulation the principle enunciated in the Hope case that, quote, The return to the equity owner should be commensurate with returns on investments in other enter-- in other enterprises having corresponding risks, closed quote?

A. Yes. That is one of the seminal principal on which rate of return testimony should rely, along with capital attraction.

Q. So does the CAP-M method present a conceptual framework that meets the legal criteria for establishment of a fair return and that operationalizes the Hope decision?

A. Yeah. It's almost -- when you read the Hope quote that you just cited, it's almost a statement of the CAP-M. Return should be commensurate with the risk involved and the CAP-M articulates that and formulizes that into a measure of risk that we call beta. So I agree with your statement. It's almost an extension of the Hope doctrine.

Q. Does the Hope decision require the consideration of relative risk?

A. Yes.

Q. Does the beta measure of the CAP-M measure the relative risk required by the Hope decision?

A. Yes. It's one measure.

Q. And how does it do that?

A. Well, for a diversified investor -- and most investors are diversified, just think of institutional investors -- beta is a relevant measure of risk. It's the only measure of risk that's relevant in a perfect world. So, yes, the beta would be a risk differentiator that would be quite consistent with the Hope doctrine.

Q. And natural gas utilities, are they risk-- more risky or less risky than the general market?

A. Well, they have a beta that's roughly around -- the latest figures I've seen was .73, so they're about 75 percent as risky as the average stock in the market.

Q. That means that they're less risky, does it not?

A. Means they're less risky than the market. They're 75 percent as risky as the market.

Q. In the Bluefield decision did the US Supreme Court require that the allowed return be sufficient to assure a utility's financial soundness?

A. Yes.

Q. Does that imply to you that market returns must be considered?

A. Yes.

Q. Does the CAP-M method consider market returns?

A. Yes, it is a market-based return.

Q. Does the DCF method properly consider market returns?

A. Yes, it does.

Q. Does sole reliance on the DCF model to come to a conclusion with respect to your recommendation meet the Hope principle that the return to the equity owner should be commensurate with returns on investment in other enterprises

having corresponding risks?

A. I don't think it does by itself. That's just one way to measure such returns and it presumes you've implemented it properly. But if implemented properly, yes.

Q. So if a cost of capital expert only proffers a DCF analysis, in your mind, they haven't met the requirements of Hope?

A. I think they subject themselves to very serious measurement error and potential lack of reliability of the recommendation. In other words, the DCF model on its own is fragile. Just like the CAP-M on its own would be fragile or the risk premium method on its own would be fragile. Again, you don't want to fly on one instrument. You want to fly on a variety of gauges and meters and signals and indicators and get an error-free estimate of the cost of capital.

Q. Are there any witness in this proceeding that are flying on one instrument?

A. Yes. Staff witness certainly is. I believe Mr. Allen at least used the CAP-M as a check and did rely on it in his recommendation. And, of course, Mister -- the company witness, Mr. Dunn -- Mr. Dunn, D-u-n-n, I guess was sort of forced or backed into a corner of following on Commission precedent to rely on DCF, but --

Q. Who backed him into that corner?

A. I don't know. You'll have to ask him.

Q. Well, do you know of anything that was preventing Witness Dunn from conducting a capital asset pricing method?

A. No. I'm -- perhaps he should have.

Q. Do you know of anything that prevented Witness Dunn from utilizing the risk analysis method?

A. Other than the Commission precedent, I am not aware of any such barrier.

Q. And what Commission precedent are you talking about?

A. Well, the Commission places reliance on DCF method is my understanding.

Q. And how did you get that understanding?

A. In discussions with the company people, with Mr. Fay particularly is the only one I really talked to.

Q. And what did Mr. Fay tell you?

A. He told me that the Commission in the past has placed almost exclusive reliance on DCF.

Q. And how did Mr. Fay determine that?

A. I don't know. You'll have to ask him that.

Q. So you don't know and you didn't ask?

A. No. I don't care. You know, my -- I stand on my own views. And my mandate was to criticize Staff's testimony, which is what I did. If I'd been asked to do Direct Testimony, I would have done what I've always done for

25 years, I would have looked at all the meters and all the signals, all the indicators and come up with a global judgment as to what the appropriate rate of return is.

I'm not a DCF man, I'm not a CAP-M man, I'm not a risk premium man. I'm trying to gauge investment returns with all the available techniques assuming. And I've always done it that way and will continue to do it that way.

Q. When you filed your testimony in AmerenUE, did AmerenUE indicate to you that the Missouri Commission had almost exclusive reliance on the discounted cash flow method?

A. I don't remember that at all. That was about two years ago. I just don't remember that.

Q. Well, in your testimony that you filed with AmerenUE, did you file a CAP-M analysis?

A. My testimony in AmerenUE was Rebuttal of Staff witness.

Q. And what Staff witness were you rebutting?

A. I believe it was Mr. Ron Bible.

Q. And do you know whether or not any of the witnesses in that proceeding relied solely on the DCF?

A. No, I don't -- I just don't know. I wasn't involved in the direct proceeding.

Q. Does the sole reliance on the DCF method meet the Bluefield requirement that allowed returns be sufficient to assure a utility's financial soundness?

A. No.

Q. And why not?

A. Because it's highly subject to measurement error. You've got to measure those returns accurately. And strict reliance on DCF, you run the danger that you will not do that.

Q. And explain to me this concept of measurement error, if you will, sir.

A. Measurement error is if you want to know how many people have blonde hair in the United States and you take a sample of one or a sample of ten, the statistical reliability of your sampling technique will be highly suspect and highly subject to measurement error and forecasting error. If you take a sample of 10,000, you minimize sampling error and measurement error. And if you use three or four different ways of trying to measure how many people have blonde hair, you minimize measurement error even more.

Q. And if you utilize two ways instead of one, you've doubled the amount of items you're looking at, so you'd minimize measurement error that way?

A. That's one way of saying it. The other way of saying it is you can use the results of one methodology as a cross-check on the validity of the other result. If you've got, you know, 11 percent, 11 percent and 8 percent, something is wrong somewhere in one of those estimates that seems to be an outlier.

Q. Well, let --

A. The idea of using several methodologies is to use each one as a cross-check on the validity of the other.

Q. Let me say that you have a DCF analysis and you come up with a DCF range of 9.01 percent to 9.34 percent. Can you make that assumption?

A. Yes.

Q. Let's say that you do a capital asset pricing method analysis and you come up with a result of 9.17 percent. Can you make that assumption?

A. Yes.

Q. What does that tell you?

A. That tells you that something's wrong, because I can't visualize a rate of return of 9 percent when the long-term treasury bonds are expected to be 6 percent.

Q. Well, that wasn't my question about whether or not -- my question was, what does that tell you about the reliability of the DCF method and the CAP-M method?

A. It tells you that those two are consistent with one another, but it doesn't tell you that that's the --'that that's the cost of equity. It's not implemented properly.

Q. What does it mean if they're consistent with one another from a statistical standpoint?

A. Roughly within the same range, maybe within

50 basis points of one another.

Q. And if you had that example that I just gave you of DCF range of 9.01 to 9.34 percent and a CAP-M result of 9.17 percent, wouldn't that indicate that your CAP-M and your DCF were compatible?

A. It would probably indicate to me that they're both wrong.

Q. Okay. Let me ask you this. What if it were -- your DCF was 10 percent to 11 percent and your CAP-M was 10.5 percent. What would that indicate to you?

A. They're roughly consistent, that they're within the ballpark. Seems like a reasonable estimate given the level of interest rate, given authorized return and given the industry profile, that seems to be a reasonable number. Given the cost of debt, interest rate forecast, it would seem to be reasonable.

Q. When is it appropriate in a regulatory setting to use a hypothetical capital structure?

A. When the company's capital structure is completely out of whack, so to speak, with the industry capital structure or some very peculiar circumstances that would cause the equity ratio to be so different than the norm or the industry -- or the comparable group's capital structure, it would be appropriate to impute a -- for rate-making purposes, it would be proper to impute a cost

efficient capital structure.

Q. And when would an equity ratio be, to use your term of art, out of whack?

A. That's a judgment call you have to make. There's no recipes or no magic formula, there are no phaenicia. I would say -- again, it's very hard to answer but when you're 1 percent out, it would suggest to me that perhaps you should be thinking about imputing a capital structure.

Q. Let's say that a utility has an actual cap on actual equity ratio of around 26, 27 percent.

A. I wouldn't use that for rate-making purposes. I would impute a capital structure.

Q. So if a company had an actual equity ratio of 28 percent, you would not use that?

A. Probably not, no.

Q. You would utilize a hypothetical capital structure in that situation?

A. Yeah. Either that or if I'm going to use 28 percent, I'm going to adjust the rate of return accordingly. You've got to be consistent here.

Q. So if there's a local distribution company out there that has 28 percent equity, you think it would be appropriate to utilize a hypothetical capital structure?

A. Yes, I would. That's very unusual. To me that's sort of a last resort, not to use an actual capital

structure, but I think under those circumstances you suggest it would be appropriate to impute a more reasonable capital structure for rate-making purposes.

MR. MICHEEL: Thank you very much.

THE WITNESS: Either that or adjust the rate of return upwards to reflect the very low degree of equity ratio. You have to be sort of internally consistent here.

MR. MICHEEL: Thank you very much for your time, Dr. Morin. I really appreciate it.

THE WITNESS: I appreciate your questions. I enjoyed talking to you.

MR. MICHEEL: I look forward to seeing you up here in June.

THE WITNESS: Me too.

THE COURT REPORTER: Signature?

MR. FAY: Can you just send a copy to me and I'll make sure Dr. Morin gets it.

(PRESENTMENT WAIVED; SIGNATURE REQUESTED.)

CERTIFICATE OF REPORTER

I, Tracy L. Thorpe, CSR, CCR and Notary Public within and for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken, and further, that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

____
Tracy L. Thorpe, CSR, CCR
Notary Public State of Missouri
(Commissioned in Boone County)
My commission expires December 16, 2005.

Midwest Litigation Services
11 North Fifth Street
Columbia, Missouri
Phone 573-442-3600 * 573-636-7551

June 11, 2004

Mr. Michael Fay
1633 Broadway
New York, New York 10019

In Re: MGE's Tariff Sheets

Dear Mr. Fay:

Please find enclosed your copy of the deposition of Roger Morin taken on June 10, 2004 in the above-referenced case. Also enclosed is the original signature page and errata sheet.

Please have the witness read your copy of the transcript, indicate any changes and/or corrections desired on the errata sheet, and sign the signature page before a Notary Public.

Please return the errata sheet and notarized signature page to Mr. Berlin for filing prior to the trial date.

Thank you for your attention to this matter.

Sincerely,

Tracy L. Thorpe, Certified Court Reporter

Enclosure

cc: Mr. Berlin
Mr. Swearengen
Mr. Hack

STATE OF ______________)
COUNTY OF ______________)

I, ROGER MORIN, do hereby certify:

That I have read the foregoing deposition;

That I have made such changes in form and/or substance within the deposition as might be necessary to render the same true and correct;

That having made such changes thereon, I hereby subscribe my name to the deposition.

I declare under penalty of perjury that the foregoing is true and correct.

Executed this _________ of _________, 2003, at ____

____

____
Notary Public

My commission expires:______________________

____
ROGER MORIN

Signature page to Mr. Fay
TLT/RM, 06/11/04
In Re: MGE

WITNESS ERRATA SHEET

Witness Name: Roger Morin
Case Name: In RE: MGE
Date Taken: 6/10/04

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Reporter: Tracy L. Thorpe, CSR, CCR

MISSOURI GAS ENERGY
A Division of Southern Union Company

MISSOURI GAS ENERGY **DATA INFORMATION REQUEST** **Missouri Rate Case No: GR-2004-0209** Data Request No: 0163

Requested From: David Murray

Date Requested: 5/11/04

Information Requested:

On page 27 of his direct testimony, witness Murray describes his final group of eight publicly traded companies as comparables. In determining that these companies are comparable, did witness Murray evaluate:

A. the equity ratio of each of the companies;
B. the sales mix of each of the companies;
C. the ownership of pipelines by each of the companies as it compares to Southern Union and MGE;
D. the sales of propan by each of the companies as it compares to Southern Union and MGE;
E. the number of customers of each of the companies as it compares to Southern Union and MGE;
F. whether or not the companies are legally established as a holding company;
G. whether or not each of the companies engage in exploration;
H. whether or not the companies generate electricity;
I. whether or not the companies own natural gas storage?

Requested By: Michael R. Noack

Information Provided:

A. No.
B. Yes.
C. No.
D. No.
E. No.
F. No.
G. No.
H. No.
I. No.

Date Response Received:________

Signed By: David Murray

Date: 5/18/04

Surrebuttal Schedule JCD-4

The Commonwealth of Massachusetts

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

May 28, 2004

D.T.E. 04-36

Petition of Southern Union Company for approval and authorization to enter into a long-term $400 million revolving credit agreement providing borrowing capacity up to $230 million beyond the Company's recently authorized long-term debt issuance and issue up to $130 million in common stock for the purpose of refinancing outstanding debt and improving the debt-to-equity capital ratio pursuant to G.L. c. 164, § 14.

APPEARANCE: Cheryl M. Kimball, Esq.
Keegan, Werlin & Pabian, LLP
265 Franklin Street
Boston, Massachusetts 02110
FOR: SOUTHERN UNION COMPANY
Petitioner

I. INTRODUCTION

On March 16, 2004, Southern Union Company ("Southern Union" or "Company") filed a petition with the Department of Telecommunications and Energy ("Department") pursuant to G.L. c. 164, § 14, for approval and authorization to (1) enter into a long-term $400 million revolving credit agreement, and (2) issue up to $130 million in common stock. There were no intervening parties. The Department docketed the filing as D.T.E. 04-36.

Pursuant to notice duly issued, the Department conducted public and evidentiary hearings at the Department's offices on April 26, 2004. In support of its petition, the Company offered the testimony of Richard N. Marshall, Vice President and Treasurer of Southern Union. The evidentiary record consists of 31 exhibits and two record requests. The Company submitted post-hearing comments on May 5, 2004.

II. DESCRIPTION OF THE COMPANY'S PROPOSAL

A. Long-Term Debt

Southern Union seeks approval to enter into a long-term debt obligation of approximately $230 million in addition to the Company's recently authorized debt issuance of $400 million (Exh. SU-1, at 2). See Southern Union Company, D.T.E. 03-64 (2003). Of the $400 million authorized, the Company issued $230 million in preferred securities in October 2003 (Exh. SU-1, at 3). Rather than issue the remaining authorization of $170 million in the form of senior notes or preferred securities, the Company proposes to enter into a three- to five-year revolving credit agreement that would provide up to $400 million of borrowing capacity (id.).

The Company's proposed three- to five-year credit facility will replace two existing facilities, consisting of a $150 million revolving credit facility that matured on April 1, 2004, and a $225 million credit facility that expires on May 29, 2004 (SU-1, at 4). As of March 1, 2004, a balance of $175 million was outstanding on these two facilities (id.). The Company anticipates that the interest rate for the new facility will be based on the prime rate and the London Interbank Offering Rate ("LIBOR") (id. at 5). The prime rate will be applicable to overnight borrowings (id.). LIBOR-based borrowings will be available for 30-, 60-, 90-, and 180-day periods, with the interest charged to the Company calculated at a credit spread over the LIBOR rate based on the Company's senior secured long-term debt ratings by Standard & Poor's ("S&P") and Moody's Investor Service ("Moody's") (Exhs. SU-1, at 5; SU-DTE-1-2). The Company's senior secured long-term debt was rated BBB by S&P and Baa3 by Moody's at the time of filing (Exh. SU-1, at 5). Based on the Company's current credit ratings and anticipated credit spread of 0.75 percent, Southern Union estimates that interest rates would range between 1.85 percent and 7.0 percent over the term of the revolving credit agreement (Exh. SU-DTE-1-2).

B. Stock Issuance

Southern Union seeks approval and authorization to issue shares of common stock with an aggregate value of up to $130 million for the purpose of repaying long-term debt (Exh. SU-1, at 3). The Company is proposing the sale of approximately 6.5 million shares of common stock with an anticipated market value of $20 per share, with an aggregate value of $130 million (Exhs. SU-1, at 12; SU-DTE 1-13(b); Tr. at 12).

The Company states that the proceeds from the stock issuance will be used to repay long-term debt in order to maintain and enhance the Company's financial position (Exh. SU-1, at 7). According to the Company, the issuance will improve the Company's debt-to-equity ratio, improve overall borrowing liquidity that, in turn, should ensure that the Company is able to maintain its investment grade rating (Exh. SU-1, at 3; Company Brief at 7). The Company states that the recapitalization from debt to equity is consistent with Southern Union's utility-service obligations (Exh. SU-1, at 7; Company Brief at 10).

III. STANDARD OF REVIEW

In order for the Department to approve the issuance of stocks, bonds, coupon notes, or other types of long-term indebtedness[1] by an electric or gas company, the Department must determine that the proposed issuance meets two tests. First, the Department must assess whether the proposed issuance is reasonably necessary to accomplish some legitimate purpose in meeting a company's service obligations, pursuant to G.L. c. 164, § 14. Fitchburg Gas & Electric Light Company v. Department of Public Utilities, 395 Mass. 836, 842 (1985) ("Fitchburg II"), citing Fitchburg Gas & Electric Light Company v. Department of Public Utilities, 394 Mass. 671, 678 (1985) ("Fitchburg I"). Second, the Department must determine whether the Company has met the net plant test.[2] Colonial Gas Company, D.P.U. 84-96 (1984).

The Supreme Judicial Court has found that, for the purposes of G.L. c. 164, § 14, "reasonably necessary" means "reasonably necessary for the accomplishment of some purpose

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1 Long-term refers to periods of more than one year after the date of issuance. G.L. c. 164, § 14.

2 The net plant test is derived from G.L. c. 164, § 16.

having to do with the obligations of the company to the public and its ability to carry out those obligations with the greatest possible efficiency." Fitchburg II at 836, citing Lowell Gas Light Company v. Department of Public Utilities, 319 Mass. 46, 52 (1946) ("Lowell Gas"). In cases where no issue has been raised about the reasonableness of management decisions regarding the requested financing, the Department limits its Section 14 review to a determination of reasonableness of the Company's proposed use of the proceeds of a stock issuance. Canal Electric Company, et al., D.P.U. 84-152, at 20 (1984); see, e.g., Colonial Gas Company, D.P.U. 90-50, at 6 (1990). The Fitchburg I and II and Lowell Gas cases also established that the burden of proving that an issuance is reasonably necessary rests with the company proposing the issuance, and that the Department's authority to review a proposed issuance "is not limited to a 'perfunctory review.'" Fitchburg I at 678; Fitchburg II at 841, citing Lowell Gas at 52.

Regarding the net plant test, a company is required to present evidence that its net utility plant (original cost of capitalizable plant, less accumulated depreciation) equals or exceeds its total capitalization (the sum of its long-term debt and its preferred and common stock outstanding) and will continue to do so following the proposed issuance. Colonial Gas Company, D.P.U. 84-96, at 5 (1984). Where issues concerning the prudence of the Company's capital financing have not been raised or adjudicated in a proceeding, the Department's decision in such a case does not represent a determination that any specific project is economically beneficial to a company or to its customers. In such circumstances, the Department's determination in its Order may not in any way be construed as ruling on the appropriate ratemaking treatment to be accorded any costs associated with the proposed financing. See, e.g., Boston Gas Company, D.P.U. 95-66, at 7 (1995).

IV. CAPITAL STRUCTURE OF THE COMPANY

As of December 31, 2003, Southern Union's utility plant (including $119,132,000 in construction work in progress ("CWIP")) was $3,882,168,000 (Exh. SU-DTE 1-13(a)). After removing $698,858,000 in accumulated depreciation and amortization, the Company reported a net utility plant of $3,183,310,000 (id.). In addition, Southern Union had $230,854,000 of gas inventories (id.). Thus, as of December 31, 2003, the Company had a net utility plant and gas inventory balance of $3,414,164,000 (id.). As of December 31, 2003, the Company reported a total capitalization of $3,441,639,000, consisting of (1) $2,140,137,000 in long-term debt, (2) $230,000,000 in preferred securities, (3) $125,000,000 in mandatory convertible securities, and (4) $946,502,000 in common equity, which included a retained earnings balance of $47,567,000 (id.; Tr. at 14-15).

Southern Union proposed a number of adjustments to these capitalization and net utility plant balances (Exhs. SU-1, at 9-11; Exh. SU-DTE 1-13(a)). First, the Company excluded $14,535,000 ($16,909,000 in plant, less accumulated depreciation of $2,374,000) plus material and supply inventories of $8,173,000 from net plant in service to remove plant associated with unregulated operations and other non-plant related assets (Exhs. SU-DTE 1-13(a); SU-DTE-1-11). The Company then eliminated an additional $119,132,000 in CWIP from its property, plant and equipment accounts (Exhs. SU-DTE 1-13(a)). As a result of these adjustments, the Company's property, plant and equipment, amounted to $3,272,324,000 (id.).

In recognition of the above plant adjustments, the Company made corresponding adjustments to its capitalization. First, the Company reduced its total capitalization by $14,535,000, based on a pro rata reduction to long-term debt, preferred securities, and premiums on common stock related to the removal of unregulated operations (Exh. SU-DTE 1-13(a)).[3] Second, the Company similarly excluded $642,921,000 associated with acquisition premiums, representing the excess of the purchase price over book value of several natural gas utilities acquired in recent years (id.).[4] Third, the Company excluded from capitalization retained earnings of $47,567,000 (id.). As a result of these adjustments, the Company's total capitalization amounted to $2,736,616,000 (id.).

V. ANALYSIS AND FINDINGS

A. "Reasonably Necessary" Standard

1. Long-Term Debt

Southern Union proposes to enter into a $400 million three- to five-year credit facility for the purpose of financing ongoing utility operations (Exhs. SU-1, at 3). The Department has found previously that issuing debt for the purposes of reducing short-term debt and refinancing long-term debt is a "legitimate utility purpose" as contemplated by G.L. c. 164, § 14. Blackstone Gas Company, D.T.E. 03-65, at 4 (2003); Western Massachusetts Electric Company, D.T.E. 02-49, at 10 (2003); New England Power Company, D.P.U. 95-101, at 11 (1995). Moreover, the revolving credit agreement will allow Southern Union to fund general

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3 The Company's unregulated operations have been supported over the years through a combination of debt and equity (Exh. SU-1, at 12).

4 The Company stated that it has financed its acquisitions over the years through a combination of debt and equity and cannot directly attribute the acquired facilities to specific capital sources (Exh. SU-1, at 11).

working capital requirements, which is also a legitimate utility purpose. Berkshire Gas Company, D.T.E. 03-89, at 19 (2003); Cambridge Electric Light Company, D.P.U. 96-91, at 7 (1996); Eastern Edison Company, D.P.U. 93-24, at 8, 12 (1993). Accordingly, the Department finds that the $400 million three- to five-year credit facility is reasonably necessary to accomplish a legitimate purpose in meeting the Company's service obligations in accordance with G.L. c. 164, § 14.

The Company's petition relies on the issuance of $170 million in unused borrowing capacity associated with the $400 million securities issuance approved in Southern Union Company, D.T.E. 03-64 (2003). Authorizations from previous financings remain valid for purpose of later Section 16 reviews. Southern Union Company, D.T.E. 02-27, at 13 (2002). To allow the Company maximum flexibility to enter into the $400 million revolving credit facility, the Department approves the Company's request to apply the $170 million in unused authorization from D.T.E. 03-64 to the $400 million three- to five-year revolving credit facility sought in this proceeding.

2. Stock Issuance

Southern Union states that the objective of its proposed issuance is to improve the Company's debt-to-equity ratio (Exh. SU-1, at 3). Through the issuance of additional equity, the Company intends to repay long-term debt, improve the overall borrowing liquidity, and maintain its investment grade for financing purposes (id.).

The Department has found previously that issuing stock for the purposes of acquiring and maintaining equity is a "legitimate utility purpose" as contemplated by G.L. c. 164, § 14. Bay State Gas Company, D.P.U. 93-14, at 14 (1993); Colonial Gas Company, D.P.U. 90-50, at 6 (1990). Redeeming existing securities and funding utility operations is also a customary purpose of stock issuances. Berkshire Gas Company, D.T.E. 96-64, at 8-9 (1996); Berkshire Gas Company, D.T.E. 94-14, at 4, 9 (1994). In a previous proceeding, the Department directed the Company to improve its high debt to capitalization ratio. Southern Union Company, D.T.E. 03-3, at 16 (2003). Since that time, the Company has continued its efforts to achieve a more traditional utility capitalization ratio through repaying long-term debt and issuing additional equity (Exh. SU-1, at 7). The proposed issuance will reduce the ratio of long-term debt to total capitalization (including short-term debt) from 61.33 percent to 57.81 percent (Exh. SU-DTE-1-10). Accordingly, the Department finds that the proposed issuance of not more than $130 million in stock for the purpose of repayment of long-term debt is reasonably necessary to accomplish a legitimate purpose in meeting the Company's service obligations in accordance with G.L. c. 164, § 14, and therefore meets the first prong of the Department's two-prong standard.

B. Net Plant Test

With regard to the net plant test, the Department requires companies to demonstrate that their net utility plant equals or exceeds their total capitalization, thereby supporting the additional amount of financing, pursuant to G.L. c. 164, § 16. Colonial Gas Company, D.P.U. 84-96, at 5 (1984). The purpose of the net plant test is both to protect ratepayers from excessive rates associated with overcapitalization and to assure the creditors of a utility that the company has sufficient tangible assets to cover its liabilities. Boston Gas Company, D.T.E. 03-40, at 321 (2003); Colonial Gas Company, D.P.U. 1247-A at 7 (1982); Report of the Department of Public Utilities Relative to the Capitalization of Gas and Electric

Companies, Senate Document No 315, at 8-15 (January 1922). Under the net plant test, a company must present evidence showing that its net utility plant (utility plant less accumulated depreciation) is equal to or greater than its total capitalization (the sum of debt, preferred stock and common stock outstanding). Colonial Gas Company, D.P.U. 84-96, at 5 (1984). Southern Union has proposed a number of adjustments to its capital structure.

First, the Company has proposed to exclude CWIP from its plant investment balance and to exclude retained earnings from its capitalization (Exh. SU-DTE 1-13(a)). The Department has determined previously that CWIP should be excluded from a company's plant accounts for purposes of the net plant test calculation. Boston Edison Company, D.T.E. 03-129, at 16 (2004); Southern Union Company, D.T.E. 01-52, at 9; Colonial Gas Company, D.P.U. 84-96, at 5. CWIP is excluded because the term "fair structural value of the plant", as used in G.L. c. 164, § 16, includes only plant that is used and useful in providing utility service to ratepayers. Southern Union Company, D.T.E. 03-64, at 9 (2003); Colonial Gas Company, D.P.U. 84-96, at 5. In regard to retained earnings, the Department has determined previously that a company must demonstrate that its net utility plant (utility plant less accumulated depreciation) is equal to or in excess of its total capitalization. Berkshire Gas Company, D.T.E. 03-89, at 15-16 (2004); Colonial Gas Company, D.P.U. 84-96, at 5. Past orders of the Department have defined, or implicitly applied, a standard for total capitalization in treating of the net plant test. Id. The Department's definition of total capitalization is the sum of debt, preferred stock, and common stock outstanding.[5] Colonial Gas Company, D.P.U. 84-96, at 5. On the principle of construction that to express all items that are included

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5 For purposes of the net plant test, the premium on common stock is treated as common stock. Berkshire Gas Company, D.T.E. 03-89, at 23 (2004).

within a term is implicitly to exclude other, unexpressed items, see Boston Edison Company, D.P.U. 87-214, at 8 (1988), the Company has correctly interpreted the Department's net plant test as precluding crediting retained earnings to satisfy the net plant test. Accordingly, the Department finds that Southern Union's adjustments to exclude CWIP and retained earnings are appropriate.

Southern Union has proposed excluding unregulated property, plant and equipment in service and the capital used to finance those assets from the net plant calculation (Exh. SU-DTE 1-13(a)). The costs associated with unregulated operations, including those associated with capital costs, should not be borne by ratepayers. NYNEX Price Cap, D.P.U. 94-50, at 440 (1995); Colonial Gas Company, D.P.U. 84-94, at 51 (1984). Therefore, the Department finds that the Company has appropriately excluded its investments and capital associated with unregulated operations. Southern Union Company, D.T.E. 01-52, at 9-10 (2001); Southern Union Company, D.T.E. 01-32, at 10-11 (2001). See also NYNEX Price Cap, D.P.U. 94-50, at 440; Colonial Gas Company, D.P.U. 84-94, at 51 (1984).

Similarly, the Company's proposed adjustment for acquisition premiums is appropriate, given that an acquisition premium, or goodwill, is intangible and, as such, should be excluded as a component in a utility's plant for purposes of G.L. c. 164, § 16. Southern Union Company, D.T.E. 02-27, at 12; Southern Union Company, D.T.E. 01-32, at 11 (2001); New England Power Company, D.T.E. 00-53, at 8-9 (2000). Accordingly, the Department finds that the Company appropriately excluded acquisition premiums from its capital structure.

The record demonstrates that the approval of a $400 million credit facility for the purpose of financing ongoing utility operations, as well as the issuance and distribution of up to $130 million in common stock, will not exceed the Company's net utility plant following the securities issuance. After these adjustments, the Company's adjusted utility plant amounts to $3,272,324,000, which is $535,708,000 more than its adjusted capitalization of $2,736,616,000 (Exh. SU-DTE 1-13(a)). Accordingly, the Department finds Southern Union's request for a $400 million revolving credit facility and issuance of $130 million in common stock meets the net plant test as provided in G. L. c. 164, § 16.

Issues concerning the prudence of the proposed financing have not been raised in this proceeding, and the Department's decision in this case does not represent a determination that any project is economically beneficial to the Company or its customers. The Department's determination in this Order is not in any way to be construed as a ruling relative to the appropriate ratemaking treatment to be accorded any costs, including interest expense, associated with the proposed financing.

VI. ORDER

Accordingly, after due notice, hearing, and consideration, the Department:

VOTES: That entering into the long-term $400 million credit facility is reasonably necessary for a legitimate purpose in meeting the Company's service obligations, pursuant to G.L. c. 164, § 14; and further

VOTES: That entering into the long-term $400 million credit facility is in accordance with G.L. c. 164, § 16, in that the fair structural value of the Company's property, plant and equipment and the fair value of the gas inventories held by the Company will exceed its outstanding stock and long-term debt; and further

VOTES: That issuing up to $130 million in common stock is reasonably necessary for a legitimate purpose in meeting the Company's service obligations, pursuant to G.L. c. 164, § 14; and further

VOTES: That issuing up to $130 million in common stock is in accordance with G.L. c. 164, § 16, in that the fair structural value of the Company's property, plant and equipment and the fair value of the gas inventories held by the Company will exceed its outstanding stock and long-term debt; and it is

ORDERED: That the Department approves and authorizes the Company to enter into the long-term revolving credit agreement described herein; and it is

FURTHER ORDERED: That the Department approves and authorizes the issuance and sale by Southern Union Company, in conformity with all the provisions of law relating thereto, of common stock with an aggregate value of up to $130 million; and it is

FURTHER ORDERED: That the Secretary of the Department shall within three days of the issuance of this Order cause a certified copy of it to be filed with the Secretary of State of the Commonwealth; and it is

FURTHER ORDERED: That Southern Union Company comply with all other directives contained in this Order.

By Order of the Department

Paul G Afonso (DKM)

Paul G. Afonso, Chairman

James Connelly

James Connelly, Commissioner

W. Robert Keating

W. Robert Keating, Commissioner

Eugene J. Sullivan Jr. (DKM)

Eugene J. Sullivan, Jr. Commissioner

Deirdre K. Manning

Deirdre K. Manning, Commissioner

A true copy
Attest:

Mary L. Cottrell

Mary L. Cottrell
Secretary

Appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. (Sec. 5, Chapter 25, G.L. Ter. Ed., as most recently amended by Chapter 485 of the Acts of 1971).

STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

IN THE MATTER OF MISSOURI GAS ENERGY'S TARIFFS TO IMPLEMENT A GENERAL RATE INCREASE FOR NATURAL GAS SERVICE

Case No. GR-2004-0209

DEPOSITION OF DAVID MURRAY

May 4, 2004

COPY

ASSOCIATED COURT REPORTERS

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STATE OF MISSOURI

PUBLIC SERVICE

In the Matter of Missouri Gas Energy's Tariffs to Implement a General Rate Increase for Natural Gas Serviced.) Case No. GR-2004-0209

VIDEOTAPED DEPOSITION OF DAVID MURRAY,

a witness, produced, sworn and examined on the 4th day of May, 2004, between the hours of 8:00 a.m. and 6:00 p.m. of that day at the law offices of Brydon, Swearengen & England, 312 East Capitol Avenue, in the City of Jefferson, County of Cole, State of Missouri, before

KELLENE K. FEDDERSEN, RPR, CSR, CCR
MIDWEST LITIGATION SERVICES
714 West High Street
P.O. Box 1308
Jefferson City, MO 65101
(573)636-7551

and Notary Public within and for the State of Missouri, commissioned in Cole County, Missouri, in the above-entitled cause, on the part of Missouri Gas Energy, pursuant to Notice.

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ALSO PRESENT: John Niehaus, Videographer
John Quain
Dennis Morgan
Rick Marshall
John Dunn
Matt Barnes
Chuck Hyneman
Travis Allen

SIGNATURE INSTRUCTIONS:
Presentment waived; signature requested.
EXHIBIT INSTRUCTIONS:
Attached to original.

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MURRAY EXHIBITS INDEX

Exhibit No. 1 Prepared Direct Testimony of David Murray 4
Exhibit No. 2 Photocopy of the back cover of Professor Morin's book 70

DAVID MURRAY, being sworn, testified as follows:
DIRECT EXAMINATION BY MR. HERSCHMANN:
Q. Mr. Murray, my name is Eric Herschmann. I'm an attorney representing Southern Union Company and MGE here today. I'm going to ask you a series of questions. If you don't understand the question, will you please tell me so I'll try to rephrase it for you?
A. Yes.
Q. And is it reasonable for us to presume that if I ask you a question and you answer the question, you obviously understood the question and clearly understood the answer that you gave?
A. Yes.
Q. And the reason I'm doing that is because I want to make sure that, before answering a question, you understand exactly what's being discussed between the two of us.
A. Yes.
Q. Okay. Now, I understand that you submitted some prepared direct testimony in this matter; is that correct?
A. That's correct.
MR. HERSCHMANN: Can we mark this, please?
(MURRAY EXHIBIT NO. 1 WAS MARKED FOR IDENTIFICATION BY THE REPORTER.)

BY MR. HERSCHMANN:
Q. I'm handing you what we've marked as Murray 1. Can you take a moment to look at that exhibit?
Can you tell us if this is the prepared testimony that you submitted in this matter?
A. Yes, it is.
Q. And did you sign the affidavit on the second page of the deposition?
A. Yes, I did.
Q. And is it an accurate statement as you sit here today that the testimony that's contained in Exhibit 1 is true and correct?
A. I do have some corrections that need to be made to this testimony.
Q. And when did you first discover that you need to make corrections to your testimony?
A. It was about a couple weeks ago.
Q. Is there a reason you didn't submit the corrections prior to today?
A. No. I planned on submitting them with rebuttal testimony. That's usually the way I handle corrections.
Q. And can you tell us what corrections -- well, withdrawn.
Who did you discuss your testimony with

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prior to today?
A. My attorneys, attorneys assigned, Bob Berlin, Robert Franson, to some extent with Bob Schallenberg, a couple of my colleagues.
Q. Who are the colleagues that you discussed it with?
A. Matt Barnes.
Q. Who else?
A. John Kiebel.
Q. John Kiebel?
A. Yes.
Q. Who else?
A. The -- whenever I was discussing the issue that I notice where I made a mistake was with the Office of the Public Counsel Witness Travis Allen.
Q. That's Mr. Allen sitting here?
A. Yes, he is.
Q. Who else?
A. May have had some discussions with Tim Schwarz.
Q. Mr. Schwarz is counsel for the Staff --
A. Yes.
Q. -- of the Commission?
A. Yes.
Q. Anyone else?

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A. Not that I recall.
Q. Tell us about your conversations with Mr. Schallenberg. When did those occur and what was discussed?
A. I discussed the -- you know, I told him that I had made a mistake and that I wanted to make him aware of that, because obviously he's the individual in charge of more or less looking at possible settlement issues of any case. So I thought it was very important for me to -- to make sure he was aware of it. It wasn't -- the correction did not have a large impact on my recommendation, but he still needed to be made aware of that correction.
Q. So was there only one mistake?
A. It's one mistake, but it affects some of the numbers throughout the testimony.
Q. And what was Mr. Schallenberg's response?
A. We all make mistakes and we'll just get it taken care of.
Q. And did you review your testimony as contained in Exhibit 1 with Mr. Schallenberg before you submitted it?
A. He didn't ask to specifically look at the testimony. I think when there were some issues that came up with the testimony, he -- he reviewed it and gave his

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-- his opinion, his insight as to the testimony.
Q. When you say there's some issues that came up with the testimony, what do you mean?
A. As far as some of the inclusion of, you know, some -- some wording that we had in there in our testimony as the financial analysis department for some time as to whether or not we should keep that testimony within what we file.
Q. You mean -- let me take a step back. You submitted prepared testimony previously, right?
A. Yes, I have.
Q. And is that based on a standard type of form or testimony that's contained in the computer system at the Staff's office?
A. Some of the testimony we have is standardized somewhat.
Q. And you discussed with Mr. Schallenberg whether that standardized testimony would still be applicable to this case or whether it should be withdrawn?
A. Not necessarily this case. Just any cases going forward.
Q. Well, any of the recent rate cases that's been before the Staff, you tried to make a determination whether or not that testimony should be, let's say, stricken from the model or kept in?

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A. We're constantly trying to improve the work product. So we'll look at some of the -- you know, some of the testimony that's in some of the standardized portions and see if there's anything that we can, you know, change to improve the work product and get the point across a little bit better.
Q. Let's just talk about this for a moment. You're here submitting testimony on behalf of the Missouri Staff as it relates to MGE, right?
A. Yes.
Q. And your jurisdiction or your concern is strictly Missouri, right?
A. Yes.
Q. You're not claiming to have any jurisdiction or oversight over any other operations of Southern Union outside of Missouri, right?
A. No.
Q. And I know in your prior testimony you referenced the Hope case. Do you remember that?
A. Yes.
Q. And you've referenced the Bluefield case previously, right?
A. Yes.
Q. And those cases still apply in this jurisdiction, right?

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A. Yes.
Q. The Supreme Court hasn't reversed those decisions, right?
A. Not that I'm aware of.
Q. Have you ever shepherdized any of those cases?
A. No.
Q. Have you ever shepherdized any of the cases that you've looked at?
A. No.
Q. When's the last time -- withdrawn.
The first time you submitted testimony as it related to MGE in 2001, do you recall that testimony --
A. Yes.
Q. -- you submitted?
And you discussed your testimony with Mr. Bible before you submitted it, right?
A. Yes, I did.
Q. And Mr. Bible gave you his -- well, somebody at some point gave you the standard testimony, right?
A. Yes.
Q. And did someone explain to you when you first got there that this is the standard testimony that we use for each of the rate cases that come before the

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Commission?
A. Yes.
Q. And when you first came to the Commission, in what year was that?
A. June of 2000.
Q. And prior to coming to the Commission in June of 2000, you were employed by the Department of Insurance; is that correct?
A. That's correct.
Q. And did you have any rate of return testimony that you submitted while employed at the Department of Insurance?
A. No, I did not.
Q. Did you have any rate -- return on equity testimony that you submitted or worked on while at the Department of Insurance?
A. No, I did not.
Q. When -- prior to working for the Department of Insurance, where did you work?
A. I worked at United Parcell Service.
Q. And did that have anything to do with rate of return or return on equity or anything we're discussing today?
A. No. It was a position to help me with my expenses in college. That was my position before I got

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into the professional world.
Q. So you -- that's back when you were still in school; is that right?
A. That's correct.
Q. And when you graduated college, did you major in rate of return areas?
A. Finance. Finance.
Q. Well, was there a course that you took that was directed towards rate of return while in college?
A. The finance curriculum we -- actually, the model that is used in utility regulation has been referred to as discounted cash flow model. Obviously it's been a model that has been, you know, changed and manipulated somewhat to -- to be able to estimate the rate of return for a utility company.
In the financial curriculum at the University of Missouri - Columbia, it was referred to as the dividend growth model, the Gordon growth model or the dividend discount model. There's a few -- there's a few ways to label that model.
And the original intent of that model was to determine -- for an investor to try to determine what they think is a reasonable price to pay for a given security. So yes, I had -- I had experience with -- with that model as far as -- as far as in my studies with the

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University of Missouri - Columbia.
Q. Well, when you were in college, did you apply the model in any real world situations?
A. Other than maybe trying to determine the valuation of a stock, no. Not in the context that we're -- that it's used in utility regulation. Like I said, this is somewhat unique that the model has been changed to try to arrive at what -- what a witness feels the discount rate, the cost of capital is for a given security.
Q. So if I understand at least generally, the testimony that you're submitting today, you're doing that on behalf of the Staff, correct?
A. Yes.
Q. And it's your opinion as to what the return on equity should be and the rate of return, right?
A. Yes.
Q. And you're the fact witness at the Staff who's proposing to address those issues, right?
A. Yes.
Q. And there are some portions of this testimony that you used back in 2001, right?
A. Yes.
Q. And there's some portions of this testimony that you know based on prior depositions came from years

ago from other witnesses, right?
A. Yes.
Q. And your experience in the DCF modeling came from some classes that you may have taken in college, right?
A. Yes.
Q. And the first time you ever used it in a practical environment was when you came to work for the Missouri Staff, right?
A. That's correct.
Q. And was it Mr. Bible that explained to you how he felt the DCF model should be applied?
A. I wouldn't say Mr. Bi-- Mr. Bible coached me along with what I was reviewing, as far as both the regulatory, utility regulatory financial -- finance text, such as I see you have Roger Morin there and David Parcell. I also had to look back at some of my -- some of my textbooks from college that I actually kept and -- and found useful since I started dealing with rate of return on a more intensive basis again.
And so obviously I went back and did some, you know, some more studying on -- you know, from my own perspective, instead of just relying on -- my boss is a working manager. He has things that he's doing, and so a little bit of the responsibility lies on me to -- to study

and get back up to speed with these models.
Q. Let's take a step back, then, to the first time you submitted any testimony on rate of return. In which case was that?
A. I believe it was some -- the telephone cases. Those were the first cases I was assigned to when I started working for the Staff. And you're taking me back four years, so I'm going to try to recall from memory. I believe one of those cases was Oregon Farmers Mutual. I should just refer to my -- that would make sense.
Q. I think we're at A1.
A. Attachment A to my testimony, you see that I filed direct testimony in Ozark Telephone Company, direct testimony in Northeast Missouri Rural Telephone Company, rebuttal for Oregon Farmers Mutual Telephone Company.
Q. And whatever is contained on Attachment A1, would that cover the area?
A. Yes.
Q. And do you recall testifying in the Missouri Gas Energy 2001 case that you had assisted in preparing rate of return testimony, but not actually done the actual calculations yourself; that was your first involvement?

A. I assisted in rate of return testimony, I believe, on a water case. The Ozark, Northeast and Oregon Farmers Mutual, I prepared the testimony and prepared the studies.
Q. And you submitted this testimony after joining -- six months after you joined the Commission; is that correct?
A. That's approximately correct.
Q. And you mentioned Professor Morin's book. When's the first time you obtained a copy of that?
A. It's -- it's on file over at -- over in our department on our book shelf, so as soon as I started working there.
Q. So you had access to the book, the earliest would be June of 2000, right?
A. Yes.
Q. And when you first got to the Commission -- well, withdrawn.
Prior to joining the Missouri Staff, did you ever give any lectures on rates of return?
A. No.
Q. You ever publish any books dealing with rates of return or return on equity?
A. No.
Q. Did you ever write any articles about rates

of return, return on equity?
A. Yes.
Q. Okay. And when prior to June of 2000 did you write an article as it relates to rate of return?
A. I didn't say I wrote an article. I said -- you said read an article.
Q. No. No.
A. You said write?
Q. Write.
A. I didn't understand what you said. I thought you said read an article.
Q. I tend to speak quickly. I apologize.
A. No, I did not write an article.
Q. And have you published any peer review studies as it relates to rate of return or return on equity?
A. No.
Q. Have you consulted with any other staffs at any other commissions in any other jurisdictions as to how they're applying the DCF model in their recommendations regarding rate of return?
A. No.
Q. Have you ever tried to contact Professor Morin to see whether the methodology that you've been using is correct?

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A. I have not contacted Professor Morin for that specific reason, no.
Q. Well, have you contacted Professor Morin for any reason?
A. I had a -- I went to a utility finance seminar that he sponsors out in Washington, D.C. and -- and listened to what he had to say as far as his ideas about cost of capital in the utility environment.
Q. When did you go to that course?
A. It was probably -- it was a couple years after I started. I don't recall exactly.
Q. It would be some point after you submitted your testimony in 2001 as it relates to Ozark, Northeast and Missouri Gas Energy, right?
A. Yes.
Q. Do you still have the textbooks that you had in college that you say would have addressed the rates of return methodologies that you're using?
A. The dividend growth model, yes.
Q. And would you mind providing us later on with a listing of those books, and if you could tell us what editions they are?
A. Yes.
MR. FRANSON: Objection. That will call for a Data Request.

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MR. HERSCHMANN: Okay.
MR. FRANSON: That way the burden's on you to request it, so it doesn't leave a burden on the witness.
MR. HERSCHMANN: Not a problem.
BY MR. HERSCHMANN:
Q. Are you making any claim at all that Southern Union or MGE are in violation of any orders or agreements with the Missouri Public Service Commission?
A. No.
Q. Not making any claims that Southern Union has violated any SEC regulations, right?
A. No.
Q. There's no claims of any mismanagement by Southern Union, right?
A. No.
Q. And in all the times that you've submitted testimony, whether it be prepared testimony or testimony under oath, you believe that to be truthful and accurate, right?
A. Yes.
Q. When you told Mr. Schallenberg that you thought you made a mistake and he said, we all make mistakes, did you discuss with him how you came to the conclusion that you made a mistake?

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A. Yes.
Q. What did you tell him?
A. I told him that I -- when I was reviewing my testimony and reviewing Mr. Allen, Travis Allen's testimony with the Public Counsel, I noticed that there was a different -- I'm going to get into the mistake right now so you know what it is -- a different common equity balance in my capital structure.
And -- and after talking to Travis Allen, he indicated it looks like that I used the June 30th, 2003 balance instead of the update period of December 31st, 2003. So once I -- once I discussed that with him and verified it myself, that was indeed the mistake.
Q. That actually reminds me, what is a true-up?
A. The true-up is April 30th.
Q. No. What is a true-up?
A. The true-up is at the end -- we just referred to update. There's the test year, which is what's originally filed. Then you have the update, known and measurable changes. True-up period comes up -- comes up after the hearings, based on the update period, and true-up is if there's anything that is extraordinary that Staff or the company wants to include within its recommendation for purpose of updating the revenue

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requirement.
Q. Let me make sure I understand this. So you're saying -- I think it's the last question in your testimony, right before the attachment that you had.
A. Yes.
Q. You say that Staff -- is the Staff proposing a true-up audit in this case? Yes, I'm recommending a true-up audit be performed for the purpose of updating the capital structure and associated embedded costs through April 30th, 2004.
A. Yes.
Q. And does that mean that -- making it something that a lawyer can understand -- doing like a reconciliation, you can use the April 30th numbers?
A. It's more or less -- with an update you can do that within the period of time where testimony's being filed before the hearing where you can actually update the numbers, which actually a lot of witnesses went ahead and updated within their direct testimony through December 31st, 2003.
A true-up period, usually those -- that information is not going to be available until after the hearing --
Q. All right.
A. -- the evidentiary hearing, and many times

there will be discussion as to what items can be trued up through the true-up period, which is April 30th, 2004 in this case.

Q. So I just want to make sure that I'm clear on this. Since it's May 4th, there's some numbers that are available now that weren't available April 29th, you're going to take those April 30th numbers and apply them to whatever calculations you did; is that right?

A. I will look at the capital structure numbers, see what's occurred with -- within Southern Union since the update period, which is December 31st, 2003, see what kind of changes occurred. That includes, like I said, the actual amounts of the capital and the capital structure, the costs associated with those securities within the capital structure. That's typically what, as far as -- I'm speaking from a rate of return perspective only. That's typically what we would look at within a true-up.

Q. And then you make adjustment based on the new numbers; is that right?

A. We make adjustments based on the update period, December 31st, 2003 numbers, because that's what I filed.

Q. Right. But I'm saying -- I just want to make sure I understand this. When you say you want to do

a true-up audit as of April 30th, you're going to look at numbers from December 31st, then you're going to look at numbers from April 30th, and if there are changes in the numbers that you deem to be somewhat significant, you're going to make the changes based on April 30th numbers, right?

A. Yes, based on April 30th.

Q. Okay. You mentioned Professor Morin's book, and you said that it was available to you in June of 2000. When is the first time that you read his entire book?

A. Probably within a couple months that I started working there. I can't recall. I mean, it's -- it was sporadic to be able to read it, the entire book, obviously. I do -- I was assigned duties where I couldn't read it all through the whole book within a week or two when I started because I had other things I had to do as well.

Q. And, you know, you have a portion of your testimony that deals with legal standards; is that right?

A. Yes.

Q. And the first time you submitted the testimony dealing with legal standards as it relates to MGE was back in 2001, right?

A. Yes.

Q. And at that time you told Mr. Swearengen sitting here that you had not read any of the cases in their entirety. Do you remember that testimony?

A. I do remember that, yes.

Q. Was that truthful testimony back then?

A. Yes, it was.

Q. And you understand that the United States Supreme Court has set a standard as it applies to rates of return for utilities, right?

A. Yes.

Q. And the first time you submitted the testimony -- let me withdraw that.

Tell me how you created your testimony back in 2001. How did you decide which questions to ask yourself and how did you decide which answers to give?

A. I started with -- with the template of Mr. Ron Bible's testimony from a previous MGE case and made changes, additions as needed. Obviously then the main part of the -- of the testimony is the schedules. That was all updated. That actually gets into the quantitative analysis of what is reasonable as far as a recommended return on equity and rate of return as of the time period for that case.

But as far as the specifics of what I updated and didn't update back in that case, I don't

recall.

Q. Well, I'm not asking you whether you updated the schedules. I'm asking, do you sit down at a computer and say, I have to submit prepared testimony, you know, all right, I'm going to ask myself these questions, or did someone say to you, here's the template, here's the questions that you ask, here's some of the standard answers, update the schedules as it applies to these numbers?

A. There were parts of the testimony that were, you know, the same as what I had -- what Ron Bible had written in 1998. Like I said, I updated what I felt was necessary for purpose of that case, and I don't recall exactly what I updated at that time.

Q. Let me ask you this: How could you know what you need to update, let's say, on the legal standards if you'd never read the cases yourself?

A. I don't know that I updated anything specifically with the -- with the legal standards.

Q. I guess I'm asking, how do you know whether or not you needed to update things or you didn't need to update things if you never read the cases?

A. Because those cases were, you know, fairly standard and longstanding precedent within rate of return regulation, at least from the staff financial analysis

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department's concern.
Q. Do you think anything's changed in those cases as they apply to these -- this rate case?
A. No.
Q. The court hasn't abandoned it, right?
A. Not that I'm aware of.
Q. There hasn't been an expanding of the court's decisions by any other courts, right?
A. Not that I'm aware of.
Q. Do you recall testifying previously that there was a Pennsylvania Supreme Court case?
A. Yes.
Q. And do you recall testifying that the Pennsylvania Supreme Court expanded the United States Supreme Court's rulings in Blue -- Bluefield and Hope?
A. I'm sorry. Can you repeat the question?
MR. HERSCHMANN: Can you read that back please?
THE REPORTER: "Question: And do you recall testifying that the Pennsylvania Supreme Court expanded the United States Supreme Court's rulings in Blue -- Bluefield and Hope?"
THE WITNESS: I believe I -- that was my testimony in the previous MGE rate case.
BY MR. HERSCHMANN:

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Q. And can you just explain to me how you understand the hierarchy of the court systems to work between, let's say, Pennsylvania, Missouri and the United States Supreme Court, your just general understanding as to how the courts interact with each other?
A. Obviously each state has their own jurisdictional -- jurisdictional courts, and then if there's something within a state court that is raised to the level of that state's Supreme Court and the plaintiff still does not agree with that, then they may raise it to the level of the Supreme Court of the United States of America.
Q. And that's your understanding of how the court system works?
A. That's my understanding.
Q. So when you testified back in 2001 that the Pennsylvania Electric Company case expands, you used the word expands, or later on use the word extends the U.S. Supreme Court testimony, you now realize that's not accurate, right?
A. Whenever we -- we got into discussion of extending, I realize that may not have been the proper terminology to use, and that's why that's been changed.
Q. And have you shepherdized the Pennsylvania case?

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A. Can you please explain your question?
Q. Do you know what shepherdizing means?
A. No, I do not.
Q. Okay. Tell me how you -- well, I'll take a step back, and then I'll explain a little greater detail.
How did you select which cases to look at when you first decided to submit your testimony?
A. The cases that are within the testimony were in the testimony before, before I started working in the financial analysis department.
Q. So somebody handed you some cases that were highlighted and some testimony and says, this is what we use, right?
A. I was handed the cases after I -- when I was reviewing the testimony. They just said, these are the cases that we rely upon in establishing the legal precedent for purposes of explaining how we go about the rate of return study. And -- and then once I was given those cases, yeah, there were highlighted portions.
Q. And you testified back in 2001 that you had not read those cases in their entirety prior to submitting your testimony, right?
A. That's correct.
Q. And when you were in college, is it safe to say that the professors weren't handing you out cases and

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asking you to go shepherdize those cases since you don't know what shepherdizing is as of today, right?
A. I'd say that's safe to say.
Q. And the Pennsylvania case, does the Pennsylvania court have any jurisdictional bearing on Missouri?
A. Not that I'm aware of.
Q. And shepherdizing is, so you understand, is a means of checking cases to see whether they've been distinguished, reversed, remanded, whether it's followed. It'll give you questions of a lot of different information about them.
Have you ever asked counsel at the Staff to say, can you check whether or not the Pennsylvania case -- actually it's going to be a good objection. I'll withdraw that question. I'll withdraw that objection. That's a good question.
All right. Has anybody ever handed you cases and said, these are follow-ups or things that have been distinguished, on any of the cases that you've cited?
A. I don't believe I've been given anything that indicates it's a follow-up on cases that have been cited, no.
Q. Now, you mentioned in your testimony the Munn case, Bluefield, Natural Gas Pipeline and Hope

decisions, and this is the same testimony that has, in essence, been lifted and put back into each one of your testimonies, right?

A. Yes.

Q. And then on page 6 of your testimony, you say, through these and other court decisions. Can you identify for us what other court decisions are you talking about and where did you get them from?

A. I don't recall the specific court decisions I'm referring to there.

Q. Generally, where would you have gotten other court decisions?

A. It could be court decisions -- I mean, as far as any specifics, I don't recall. There could be court decisions within Missouri or there could be court decisions within other states that -- that address the issue that public utilities operate more efficiently as monopolies. I mean, it's fairly -- it appears to me to be a pretty longstanding principle that that's how we view the best operation of regulated utilities.

Q. I'll move to strike that answer as nonresponsive.

The question was, where would you have gotten these other court decisions?

A. There's citations of court decisions

within, mainly in Parcell's book, in Roger Morin's book. I don't recall the specific cases. Those are not cited in my testimony. There's -- quite often in any cost of capital textbook there's citations to many court cases that more or less provide the timeline of how things have evolved within rate of return regulation and what the standards are.

Q. Tell me how you would go about, if you're reading Morin's book for argument sake and he had a case citation, how would you obtain a copy of that case?

A. Well, sometimes I do my own research, but I would more than likely, if I didn't know where to go for sure, I would check with an attorney.

Q. Do you recall in submitting your testimony checking with any attorney saying, I just read Morin's book, he references this case in this jurisdiction and I want to see what it says?

A. No.

Q. Do you recall ever doing that?

A. I believe I just -- I recall asking about the Permian Basin case, which is a case that is cited within Mr. Parcell's book, to get an idea of what's in that case to see if there's any cases I can substitute for -- for, say, the Pennsylvania case. But I didn't feel like it was going to suit the needs that I -- that I

thought were appropriate.

Q. Did someone tell you you should use the Pennsylvania case in your testimony?

A. Like I said, that case was within the testimony before I started with the department, and it just -- I agree with the principle behind it, and I feel it's appropriate to discuss that principle.

Q. Well, the first time you decided to use the Pennsylvania case, you didn't know it related to the Three Mile Island, right?

A. I believe there was some ignorance on my part within that case.

Q. I mean, the question, and I'll read from page 33 of your testimony, 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? Answer: No.

Is that truthful testimony then?

A. Yes, it was.

Q. And now you know that it did have to do with Three Mile Island, right?

A. Yes, I do.

Q. And a little different than the current circumstances with MGE, Three Mile Island and how MGE operates?

A. I'd say there's some differences there.

Q. Pretty drastic ones, right?

A. I don't think they have any nuclear regulation -- or nuclear generation within their operations.

Q. Is there anything more drastic besides not having nuclear generation in the operations?

A. Within a utility framework, I'd say, yes.

Q. It was Three Mile Island. I mean, a pretty monumental event, I mean, as relates to a shutting down of a nuclear reactor and stuff?

A. I think we just hit the 25-year anniversary of that and it caught the attention of the media. Yes, it is.

Q. And that's nothing remotely near MGE, right?

A. No, they do not have nuclear generation.

Q. And you understand that the Pennsylvania Supreme Court discussed the fact that the property would not -- was no longer used or useful for the Pennsylvania customers, right?

A. I understand that.

Q. Any property that's sitting here that MGE uses that's not being used for the customers of MGE?

A. Not that I'm aware of, but I don't evaluate

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the rate base issues.
Q. What do you mean by that?
A. I'm not looking at -- that's not part of my testimony to review what should be included in rate base, what's used and useful for -- for MGE. That's not the subject of my testimony.
Q. Well, when you recommend an authorized rate of return, do you think it's something that MGE should be able to at some point meet?
A. Can you please -- I don't understand your question.
Q. Sure. When you talk about making a recommendation for an authorized rate of return, should it be a realistic number?
A. It should be a fair and reasonable authorized rate of return.
Q. And it should be something that Southern Union -- or withdrawn.
It should be something that MGE has the opportunity to earn, right?
A. I don't control whether or not they have the opportunity to earn it. I recommend a fair and reasonable rate of return. Now, whether or not they can earn that return is something that maybe is subject to the operations of the company. That's not within my control.

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Q. Well, you told us beforehand that there's no claim of mismanagement by Southern Union, right?
A. Not that I'm aware of.
Q. No complaints have been filed, right, between -- as of now, sitting here today?
A. I don't know. I don't review the complaints. There may have been complaints filed with our consumer services division on MGE. I don't review that.
Q. As you are sitting here today, you're unaware of any complaints that are pending, right?
A. I'm ignorant of whether or not there's any complaints filed.
Q. And you're telling us that you make a recommendation as to an authorized rate of return without factoring in whether or not that number is realistic for MGE ever to earn it? That's just not your job?
A. No. I recommend a fair and reasonable authorized rate of return. Whether or not they're able to earn that return is not within my control.
Q. And you don't factor in whether or not -- for argument's sake, you've never looked to see whether or not MGE has ever earned its authorized rate of return, right?
A. I think there's dispute on that in this case. I think from Staff's overall revenue requirement,

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they -- they can't be that far off from what we think they're earning on their authorized rate of return. Obviously there's disputes amongst the various expert witnesses within this case that -- that are going to argue that certain things should be included and not included.
Q. But you've never looked at that issue, right?
A. No.
Q. Did you read the other witnesses' testimony in this case when it was first submitted?
A. Portions of some of the other witnesses.
Q. How did you select which portions to read?
A. I think some Staff, you know, attorneys or personnel, and I don't recall exactly who, alerted me that there are some witnesses addressing issues about return on equity and rate of return. So I reviewed that just to see what -- what their testimony was regarding that.
Q. Can you list for us the testimony -- or the portions of the testimony that you read, which witnesses?
A. Of course I read John Dunn, obviously, and also reviewed some of John Quain's testimony. Looked at small portions of Oglesby's, small portions of Mike Nowack's. I think that's the extent of it.
Q. Anyone from the Staff's testimony that you reviewed?

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A. No, I didn't review anybody specifically from the Staff.
Q. Did you, prior to submitting your testimony, have any conversations with anyone on the Staff about what generally the authorized rate of return recommendation would be?
A. Can you repeat the question, please?
MR. HERSCHMANN: Can you read that back, please?
THE REPORTER: "Question: Did you, prior to submitting your testimony, have any conversations with anyone on the Staff about what generally the authorized rate of return recommendation would be?"
THE WITNESS: I had individuals on Staff review my testimony as far as what they feel the rate of return would or should be. I hate to use the term would be. I don't think that, you know, within our analysis we're trying to determine what it would be. We're trying to determine what we think it should be based on an analysis of the capital and economic environment.
But I do have -- my boss, Ron Bible, used to be the person that would review my testimony. He has been since mobilized, so I don't have him to review it. I did discuss some of my initial conclusions with him before he was mobilized. I didn't have all my testimony written.

Usually he's the one that I bounce off a lot of my ideas on what I'm looking at as far as my recommendation.
I did have other Staff personnel and attorneys review my testimony, and I don't recall that they specifically asked me, you know, do you think this rate of return should be higher or lower, what have you.
BY MR. HERSCHMANN:
Q. Which Staff members did you discuss this with?
A. The testimony?
Q. You said you discussed it with some Staff members. Was Mr. Schallenberg one of them?
A. The testimony. As far as the testimony, not the recommendation itself. There was nobody that asked me to change my recommendation. The testimony was reviewed by -- by Bob Berlin, Mr. Robert Franson. Bob Schallenberg later reviewed it. There's also -- John Kiebel gave me some -- some information on what he thought I could change on just some basically cleanup language.
Q. Who's John Kiebel?
A. He's an individual that's filling in in our department since my boss has been mobilized, helping out.
Q. Okay. Where did he come from?
A. Engineering and management services.
Q. And is that another part of the Missouri

Staff?
A. It's another department with the Staff.
Q. And what knowledge did he have as related to ROR?
A. He -- before I came on board with the Staff, he helped out with our department another time when we were short-staffed. So his experience, you know, that was under Ron Bible, when he was helping us with, you know, some -- some of the more minor projects in order to help ease the workload that we were experiencing. Now he's, like I said, once again he's helping out with our situation.
Q. What does the engineering management services do?
A. Mainly the quality service, customer service-type issues.
Q. Now, what experience did Ron Bible have as related to regulated utilities or the regulatory industry prior to joining the Missouri Commission?
A. Well, I'm not Ron Bible, but I will tell you what I know about his experience. He worked for a credit rating agen-- or not a credit rating agency, but a credit card company, and he also did some statistical analysis with the Air Force.
As far as rate of return, I don't know.

He's not here, and I can't tell you that his -- he's a little older than I am. He has a lot of experience. He's 50 years old. I'm sure he's done a lot of things, and I'm sure there's probably something in his testimony that may give you more insight on that.
Q. Well, is it safe to say that the person who gave you primary guidance as to how things are done at the Commission when you first arrived was Mr. Bible?
A. Yes.
Q. And he was your boss, right?
A. Yes.
Q. He's the one that handed you this canned testimony, right?
A. He handed me some of the testimony that he had done in the previous MGE rate case.
Q. And he's the one that explained to you how the Staff generally dealt with rate cases, right?
A. Yes.
Q. And did he tell you at that time that, prior to joining the Missouri Commission, he had no experience with the regulated industries?
A. No.
Q. Did he tell you that he had no regulatory experience at all prior to joining the Missouri Commission?

A. No.
Q. Let me read to you a portion of Mr. Bible's testimony from November 3rd of 2000.
Question: Prior to joining the Missouri Commission in August of 1997, did you have any regulatory experience?
Answer: No.
Had you worked for any companies that had been regulated by the Missouri Commission prior to '97?
Answer: No.
Did Mr. Bible ever explain to you how he came to obtain the canned testimony that's been submitted by the Staff for several years?
A. I don't recall if he did or not.
Q. You ever talk to Mr. Schallenberg about it?
A. No, I haven't.
Q. Do you have any drafts of your testimony in this case?
A. I believe I may have some drafts from review.
Q. And where are those drafts now?
A. At my office.
Q. And did you run different schedules than what's attached to your testimony here today?
A. I don't believe I ran any different

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schedules. I may have made some corrections to the schedules, as I pointed -- as I found some things as far as maybe a mistran-- a transposed number, something of that nature. Nothing really material as far as I can recall, except for the corrections I just pointed out today.
Q. Just so we're clear, is it your testimony that you never discussed with anyone prior to preparing your testimony what the general range of your recommendation should be as relates to the authorized rate of return in this case?
A. No. I think I had indicated that before Ron Bible was mobilized, that I talked about the range that I was looking at for my recommended return on equity. I think I made that pretty clear in my previous answer that I did talk to him specifically about that.
I thought that I could at least get to that point, and maybe not necessarily write the testimony and prepare all the schedules, but get an idea as to what I was seeing after I did my study as to what I think a reasonable return on equity recommendation would be for MGE in this case, because I knew that I only had limited time to bounce that off of him.
Q. And what did Mr. Bible tell you after you bounced it off of him?

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A. He said it appeared to be reasonable.
Q. Did Mr. Bible review any of the financial information that you used?
A. I believe he -- actually, let's make this clear, because he was being -- it wasn't announced that he was being mobilized 'til probably sometime in March. He was initially assigned to this case. So he was working with my colleague, Matt Barnes, there with preparing the schedules. So he -- he was actually initially assigned to the case, and because of situations with being mobilized with the military, I had to take this case on.
Q. And did Mr. Bible provide you with a draft of the information that he already calculated prior to being mobilized?
A. I believe some of the schedules were -- were currently in process.
Q. So who actually made the mistake, then, using the June 30th numbers, you or Mr. Bible?
A. I'll take responsibility for that. I think it's my mistake. I should have caught that before it was submitted.
Q. And in the documents that he gave you, was he using the June 30th numbers as well?
A. I think the initial -- the initial start of the schedules was the June 30th data. Once we determined

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that we were going to be able to have December 31st, 2003 updated information, it just seemed to make sense to go ahead and let's give the picture of what's going to happen with the update period now, instead of waiting until rebuttal.
Q. Did you ever go back and look at what you had calculated out as being return on equities for comparable companies to see whether or not your prior testimony was accurate?
A. I don't understand your question.
Q. Did you ever -- well, previously you've used comparable companies to come up with a recommendation, right?
A. Yes.
Q. Did you ever go back and look at what your recommendation had been based on what the reality was?
A. Once again, I don't understand. Are you -- the reality of my recommendation versus what actually occurred?
Q. Right. You used a proxy group, right?
A. Yes.
Q. You did some calculations, right?
A. Yes.
Q. And you assumed certain things in doing your calculations, right?

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A. Yes.
Q. And then you made a recommendation as to what you thought would happen in the future, right?
A. The recommendation I made is not necessarily what -- and I -- I think I understand your question here, but if I don't understand it, please correct me. That you're asking me if the return on equity that's actually achieved by a company actually is consistent with what I came up with the cost of equity. Is that your question?
Q. Yes.
A. Well, I think that's -- that's the important thing to understand here. The cost of equity that I arrive at is not necessarily going to be an indication of what the return on equity is going to be. A company can earn more than its cost of equity. It can earn less than its cost of equity.
Just because a company earns a return on equity of 18 or 19 percent in one year because the weather was extremely cold doesn't mean that that makes my cost of equity recommendation of 9 percent inaccurate.
Q. And when -- tell us, how do you believe that you comply with the Daubert standard in submitting your testimony?
A. Can you explain what the Daubert standard

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is?

Q. Have you ever heard of Daubert?

A. No.

Q. Do you know whether Missouri's a Daubert state or not?

A. No.

MR. FRANSON: Objection. That calls for a legal conclusion. That is not in his testimony. Therefore, it's --

MR. HERSCHMANN: Well, he's got a section on legal. Let me see.

MR. FRANSON: Daubert is not mentioned. If it is, point it out and go from there.

MR. HERSCHMANN: Doesn't make a difference if it's mentioned or not. You can answer the question.

BY MR. HERSCHMANN:

Q. You have a section in your testimony for every case that you've submitted testimony on behalf of the Missouri Commission dealing with legal issues, right, legal criteria?

A. Yes. Excuse me. Not every testimony. Every major rate case, rate of return testimony.

Q. I'm sorry. Have you ever heard of Daubert?

A. No, I haven't.

Q. Have you ever reviewed the Federal Rules of

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Evidence?

A. No, I haven't.

Q. Have you ever looked at any cases dealing with qualifications or basis for submitting expert testimony?

A. No, I haven't.

Q. Have you ever tested the methodologies that you are using to make sure that they comply with the Supreme Court precedents as it relates to expert testimony?

A. No, I haven't.

Q. The canned testimony that you've continued to use as to the parameters for selecting proxy groups, what methodology did you use to verify that that is an accepted methodology in this industry?

A. The methodology of the discounted cash flow model?

Q. Not the discounted cash flow. The issue of the criteria you used to select the proxy group. What methodology did you use to test whether or not that's accepted in this industry?

A. You're referring to the criteria that I used to select my comparable companies?

Q. Right.

A. It's fairly widely recognized that

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selecting companies that were operating within the same industries, that's why they call it a pure play analysis, is probably the most critical aspect of picking companies that are comparable to the company you're trying to compare them to.

Q. Move to strike that as nonresponsive.

The question is, what methodology did you use to determine that that is an accepted procedure, the criteria that you used? You list certain criteria, right?

A. (Witness nodded.)

Q. Is that correct? You have to answer verbally.

A. Yes.

Q. What methodology did you use under the Supreme Court standard to determine whether or not that's acceptable?

A. The methodology is a commonly recognized way to come up with a comparable group is through looking at companies within the same industry. I don't know that you have a scientific methodology for that. It's -- I recall specifically seeing something from a mergers and acquisitions conference where they indicated the No. 1 issue to look at when choosing comparable companies is whether a company's in the same industry, because that's the way you determine whether or not they're in an

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industry that has equivalent business risk and other sorts of risk that are involved with that, such as regulation and things of that nature.

I don't think that there's -- there's any scientific issue there as far as understanding that -- that that will give you a comparable group of companies.

MR. HERSCHMANN: Move to strike that again as nonresponsive. Let me --

MR. FRANSON: Well --

MR. HERSCHMANN: You can say objection and it's preserved. I mean --

MR. FRANSON: Well, hold on. There's also going to be a response here. You have a --

MR. HERSCHMANN: If you're going to give a speaking objection, I'm going to ask the witness to step out, or we can take a break and we can make a record and then go forward. I mean, I'm going to get the answer to these questions. We can go about it different ways.

MR. FRANSON: That's not what we're talking about.

MR. HERSCHMANN: All right.

MR. FRANSON: Why don't I --

MR. HERSCHMANN: Well, let me -- we'll go on for a second, and then we'll take a break and make a record.

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MR. FRANSON: No, we aren't going to move on. The problem is --
MR. HERSCHMANN: Hold it. Hold it. Let's do this. Let's take a break. You can step out, stop the video, then we can make a record. We don't have to have speaking objections with the witness here. All right? So --
MR. FRANSON: Now, wait a minute. Why do you want the witness out? You made all your objections in front of the witness. Why do you want the witness out? What's the purpose of that?
MR. HERSCHMANN: Because the rules require that you either make an objection, you can move to strike the testimony, you can state the basis for the objection.
MR. FRANSON: That's what I'm trying to do, and that's what you're not allowing me to do.
MR. HERSCHMANN: You can say objection form, which is really all you need to do to preserve it. Right? After that, there are no other objections. And if you're going to make a speech as to -- and I don't know what you're going to say yet.
MR. FRANSON: That's the problem, you don't.
MR. HERSCHMANN: That -- that's why if it's going to be any type of speaking objection, all right,

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then I'm going to excuse the witness. If you want to say objection and want to address it during a break, I'm more than happy to do that.
MR. FRANSON: Okay. Is it my turn now?
MR. HERSCHMANN: Well, I don't know what you're going to do. If you're going to tell me --
MR. FRANSON: That's right.
MR. HERSCHMANN: Then let's do this. Let's take a break. We can discuss it off the record and then come back on.
MR. FRANSON: No, I don't want to discuss it off the record. I want to discuss it on the record.
MR. HERSCHMANN: Well, we can do it on the record. I'm not going to let you make --
MR. FRANSON: Then let's do it on the record.
MR. HERSCHMANN: Then let's go off the video. We're going to take a break off the video. You can leave the transcript. Can you step out of the room, please?
MR. FRANSON: No, he is not going to step out. You seem to have this desire --
MR. NIEHAUS: Still on the record?
MR. FRANSON: Yeah, I want still on the record.

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MR. HERSCHMANN: We're doing this pursuant to the federal rules, which are applicable, or to the Missouri rules, which are applicable in depositions. I can pull out the statutes that tells you it's applicable. I'm sure you know that. So we're taking the deposition in compliance with the rules. The rules specifically say what type of objection you can make.
MR. FRANSON: Which Missouri rule says that?
MR. HERSCHMANN: I think I can get them. Just a minute.
MR. FRANSON: What I'm trying --
MR. HERSCHMANN: Wait a minute. I'll get them. I have no problem getting the book out.
MR. FRANSON: What I'm trying to do is state my objection. I'm not in any way suggesting you can't ask your questions and get answers.
MR. HERSCHMANN: Right. Right. If you --
MR. FRANSON: But if you would let me finish --
MR. HERSCHMANN: Well, I don't -- well, my only concern is I don't know what you're going to say, and normally the objection is to form. Everything else is preserved. Right? So if you want me to, you know, pull out the rules that apply, all right, then I'll pull out

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the rules that apply.
MR. FRANSON: Okay. At some point is it my turn?
MR. HERSCHMANN: Sure. As long as it's not a speaking objection, it's always your turn.
MR. FRANSON: Okay. You have made repeated motions to strike based on nonresponsive. The problem I'm having with that is, just because you don't like his answer, that does not mean it's nonresponsive. So what I'm asking is, each time you do that, we can do it one of two ways. one, we can respond at that point, or two, later on we can take it up with the RLJ if you ever offer any or all of this into evidence or anyone else does.
But I want it clear that just because you don't like his answer, that does not mean he's not being responsive.
MR. HERSCHMANN: Oh, I completely agree with you. I'm doing this solely to preserve the record so if we go to court one day, the court's going to rule upon, whether it be the RLJ level or in -- at the courthouse, we're going to get a ruling from a judge as to whether or not the question I asked and the answer he gave is responsive.
It's my subjective view, but I need to preserve the record that way. That's the only way to do

it.

MR. FRANSON: That's fine.

MR. HERSCHMANN: If I had the ability to strike the testimony, I'd strike it left and right. No one's provided me with that authority. So --

MR. FRANSON: Okay.

MR. HERSCHMANN: I apologize, then, because I didn't understand where you were going. All right. Let me just -- a couple questions, and then we'll take a break. Okay?

BY MR. HERSCHMANN:

Q. Have you read -- well, let's start with Professor Morin. You said there were two textbooks that you primarily rely upon. Do you remember giving testimony in the 2001 case, you said Professor Morin's testimony and -- I'm sorry -- Professor Morin's book and there was another book. Do you remember the name of that?

A. Yes. It was David Parcell's book, The Cost of Capital, A Regulatory Practitioner's Guide.

Q. Do either one of those primary sources use the criteria that you list in your testimony as to how to select comparable companies?

A. I don't recall if there's any as far as the specifics. I do believe that within those textbooks it refers to selecting companies within the same industry.

That is one thing I recall that's extensively throughout both of those textbooks, whether or not it's -- if it's a natural gas company, whether or not it's in the natural gas industry; if it's an electric company, whether or not it's within the electric industry. I think you'll find that within that textbook there's quite a few references to using, you know, those type of companies as comparable companies.

Q. You repeated several times that it'd be in the natural gas industry, and I know that you've been deposed previously as to whether or not these criteria have anything to do with comparable risks. Do you remember that?

A. Yes.

Q. And I think it's three times now that you've said that they're in the natural gas industry. Other than being in the natural gas industry, are there any other criteria that you used that have been accepted by either Parcell or Professor Morin?

A. I don't recall. They may -- they may have a couple of them as far as the capitalization less than 5 billion; of course, not that specific amount. They may have something in there. Whether or not there's enough information available, obviously that's something that any analyst has to -- you have to have enough information in

order to be able to review and determine what's appropriate within a growth rate. If you have a new company, then the information that you have is fairly limited.

Now, as far as how they specifically address that in the textbook, I don't recall.

Q. Have you ever seen any textbook that have used the criteria that you've used in your testimony here to select the comparable companies?

A. All these criteria?

Q. Yes.

A. In their entirety? I don't recall specifically anything where it sets out the specific criteria I have here.

Q. And is it accurate that you just adopted this criteria from what was given to you in the prior prepared testimony, or at least most of the criteria?

A. Part of it. I believe I added something as far as the capitalization. This is adopted from testimony that I wrote in the last MGE rate case. I don't see that it's inappropriate. I think it's very appropriate criteria and continues to be pertinent to the case at hand.

Q. I understand that's your opinion. What I'm trying to understand is whether or not you made any effort

to validate the criteria that you've used based on accepted methodologies in the regulatory finance by either using Professor Morin, Professor Parcell or any other recognized expert in the industry?

A. I think this might help with the --

Q. I'm sorry.

A. -- with the iss-- well, could you define methodology? You keep on saying regulatory methodology. Please define methodology. What do you mean by methodology?

Q. Did you use -- well, withdrawn.

Did you use any type of methodology in your testimony in this case?

A. Yes, I did.

Q. Okay. What methodology did you use?

A. The methodology I used incorporates many things as far as all the cost of capital models that I used, the criteria I used to select comparable companies, the various ways of estimating growth rates within the discounted cash flow model, the evaluation of the current interest rate environment.

There are many things. This is not something you can narrow down to one specific thing that is a methodology that encompasses the entire cost of capital analysis. There are many things that come into

play.
And picking comparable companies based on the fact that they're in the same industries is entirely appropriate and probably the most important criteria to use, which I'd like to add that the subset of my comparable companies is within Mr. Dunn's comparable companies.
Q. Did you consult with Mr. Dunn before you gave your testimony?
A. No. I read his testimony.
Q. And the criteria that you've used you used over and over again -- withdrawn.
You said when you wrote the testimony in 2001 you used this criteria, and previously you told us that you got the testimony from someone else and the criteria were already there, right?
A. Yes.
Q. So you didn't create these criteria out of the blue yourself, someone else handed it to you, meaning Mr. Bible, right?
A. I confirmed that they were appropriate. I don't -- I don't write testimony unless I'm comfortable with the criteria that's used.
Q. Now, you've said now I think it's five times that the companies in the same industry, and

Mr. Dunn actually used all the companies that are in the natural gas LDC industry, right?
A. I'd say he used companies that are actually not just natural gas distribution, they're -- they have some nonregulated, more so -- more nonregulated in his comparable companies than are in my comparable companies. That would explain why the business risk profile in some of his companies is higher than what a typical natural gas distribution company is.
Q. Do you recall submitting testimony in relationship to Southern Union's acquiring Panhandle?
A. Yes.
Q. Were you truthful in that testimony?
A. Yes.
Q. Did you review that testimony with other members of the Missouri Staff prior to submitting it?
A. Yes, I did.
Q. Anything in that testimony that you now realize was completely incorrect?
A. I don't know if there's anything in there that was completely incorrect. Not that I recall.
Q. Was there anything that you've changed your testimony saying, I've looked at it now and I was wrong when I said these things?
A. Well, I was surprised to find that the --

the debt at Panhandle was -- was less costly than actually the debt at the gas distribution level. I believe one of the concerns within the Panhandle acquisition was whether or not there was going to be any increased cost of capital that's going to result from that acquisition being attempted to be passed on to the MGE ratepayers.
Q. And you didn't want that to happen, right?
A. No. I think it's inappropriate for that to happen.
Q. You wanted Panhandle to be segregated, right?
A. We attempted to have Panhandle segregated.
Q. And eventually Staff signed a stipulation, right?
A. I don't think we agreed that it was segregated.
Q. Are you saying that Staff signed a stipulation reaching an agreement with Southern Union that was then so ordered by the Missouri Commission and you didn't agree with the terms that were part of it?
A. I submitted testimony and there was a Stipulation & Agreement that was achieved. Obviously there's individuals that are in charge that decide what's appropriate for a Stipulation & Agreement. There are many times there are things that are in Stipulation & Agreement

that -- that I don't necessarily -- you know, that aren't part of my issues. So, I mean, there's been confirmation that there's not separation of Panhandle and Southern Union.
Q. Make sure we're clear. Do you disagree with the terms of the stipulation that was signed by the Staff and Southern Union and then ordered by the Commission? Are there terms of that stipulation that you disagree with?
A. There were compromises made. I'm not saying that I disagree with them. I'm saying there's compromises that are made in any type of Stipulation & Agreement.
Q. And you told us previously that there is no claim that Southern Union or MGE have violated any agreements or orders with the Missouri Commission or Staff, right?
A. Not as of this point in time, no.
Q. Is Panhandle's debt nonrecourse to Southern Union?
A. Yes, it is.
Q. Do you have any reason to believe that that's been changed, that the debt that is now passed on to Southern Union can affect MGE customers?
A. The -- the debt is rec-- nonrecourse. That

doesn't mean that there isn't any possibility of impact on MGE's customers in the future.
Q. Do you have a reason to believe that nonrecourse debt is going to impact MGE's customers in the future?
A. If -- the debt itself being nonrecourse is really not the issue. As I explained in my testimony, at one time Southern Union had a business risk profile of three. Panhandle on a stand-alone basis had a business risk profile of five. Now on a consolidated basis, the business profile of Southern Union on a consolidated basis is now a four.
Now, if that's happened, then because of the fact that Southern Union consolidated, which includes MGE, has a higher business risk profile, the credit rating agencies are going to require more stringent financial ratios in order for Southern Union, which includes MGE, to maintain any specific credit rating.
So yes, it is having an impact on the way Southern Union is going to be able to finance MGE's operations.
Q. What's the basis for that statement?
A. Standard & Poor -- my review of Standard & Poor's analysis.
Q. How often do you personally consult with

anyone at Standard & Poor's?
A. It depends. It's just if there's specific questions on maybe a research report or -- or maybe some issues we have going on with a case. Once every few months.
Q. Who do you talk to at Standard & Poor's?
A. I don't talk to any one consistent analyst, because obviously there's various analysts that follow companies. I believe I've talked to Judith Waite at one time. I've talked to -- some of these names, I'm just -- are not coming to mind. I know there's one that I talk to more often than not, and for whatever reason, his name's not coming to mind.
Q. Has anyone from Standard & Poor's told you testimony that you just gave us or is that your interpretation of their change in risk profile?
A. It's documented within Standard & Poor's reports.
Q. So this is not your opinion, you're just telling us what you think Standard & Poor's says?
A. I'm telling you what I know what Standard & Poor's says.
Q. But you didn't write any commentary on that, you're reading someone else's stuff and you're --
A. Yes. I'm relying on their commentary,

that's correct.
Q. What is your definition of nonrecourse?
A. If Panhandle should go bankrupt, then the debtholders of -- of the Panhandle debt cannot go after Southern Union's assets if bankruptcy should occur.
Q. What are the priorities that you understand to exist in a bankruptcy proceeding as it relates to debt, common equity, preferred stock, bondholders? What's your general understanding?
A. Obviously the common stockholders are last in line. Then comes preferred, depending on what type of preferred. There's some hybrids out there nowadays. I believe Southern Union had some TOPrS, which is a -- it's a hybrid. So that would be more or less classified as debt, and more subord-- that would be subordinate to the senior debt. And then comes debt, as far as within the context of a bankruptcy proceeding.
Q. You mentioned TOPrS. What do you understand TOPrS to be? What does the acronym stand for?
A. Trust obligated preferred securities. It's something that I believe Enron initiated back in the early '90s. They were one of the first ones to use the security, and it was a way to issue a security that had the characteristics of debt, the tax deductibility of debt, but at the same time it was receiving some weight as

equity with credit rating agencies.
Q. You understand that TOPrS is trust originated preferred securities?
A. Trust originated preferred securities, correct. And it goes by quite a few different names, just like some of these other trade-type financings, there's -- sometimes it's hard to narrow down because there's all sorts of names for them.
Q. Do you understand that Merrill Lynch created TOPrS, not Enron?
A. Enron used it. I don't know that Merrill Lynch -- I mean, if they created it, I don't know.
Q. Do you know if the Missouri Commission ever considered whether TOPrS are debt or equity?
A. I believe they did.
Q. What did they determine?
A. They determined it was equity.
Q. You said that Southern Union and Panhandle were not segregated. What do you mean by that? In what way are they not segregated?
A. For all intents and purposes, their operations are, you know, considered part of the corporate family. I've seen some comments with Standard & Poor's that indicates that cash is going to flow freely between Panhandle and Southern Union because it is an integral

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part of the business. There really isn't anything specifically separating the two, which is evidenced by the fact that they have the same credit rating and Standard & Poor's have said that they will continue to have the same credit rating because they view it as a consolidated enterprise and the credit risk of one is the same as the credit risk of another, and because of the fact that they feel that management will pay the debt service at Southern Union or Panhandle in however way it can, regardless where the money comes from.
Q. Can Southern Union guarantee any of Panhandle's obligations?
A. I believe that was a condition in the merger case where it was said that we would not allow them to.
Q. And did Southern Union agree to that condition?
A. It's in the Stipulation & Agreement, so I believe that's the case.
Q. So are you now saying that Southern Union -- it's your testimony that Southern Union intends to violate that agreement?
A. I'm indicating what Standard & Poor's says, that if there's -- if the management needs to do it, they will -- cash will go to pay the debt service at -- at

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Panhandle or Southern Union.
Q. I want to make sure I'm very clear on this. Are you now saying that Standard & Poor's says that if Panhandle goes into bankruptcy, Southern Union is going to violate an Order of this Missouri Commission to which the Staff had stipulated and signed an agreement with Southern Union based on what S&P says?
A. I'm not saying that they will violate. I'm just indicating that this is what Standard & Poor's sees as far as when they evaluate the creditworthiness of the company.
Q. Did you ever contact S&P and tell them, by the way, while I'm talking to you, you said this, but are you aware of the order and the stipulation that says Southern Union is prohibited from doing it and has agreed not to do it?
A. No, I haven't talked to them specifically about that.
Q. Do you recall that the Supreme Court talks about balancing the interests of customers and investors?
A. Yes.
Q. What do you understand investors to be?
A. Investors can be the whole range, your debt investors, your equity investors, your preferred stock investors, the whole gambit.

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MR. FRANSON: At some point here in the next few minutes, could we take a break?
MR. HERSCHMANN: Sure. Literally I'm almost there.
THE WITNESS: Let me back up. You wanted to know one other -- one other person I talked to at Standard & Poor's, Todd Shipman. I don't know why I just thought about that, but I did.
BY MR. HERSCHMANN:
Q. Not a problem. Thank you. Todd Shipman?
A. Todd Shipman.
Q. So -- we're almost at a break. I apologize we've gone this long.
Now, you said the investors are the whole range. You mean shareholders, bondholders, preferred stock, the full range of investors, right?
A. Anybody that invests capital into the company, that's correct.
Q. And when S&P gives a credit rating, what are they taking about?
A. They're talking about the creditworthiness of the company as far as its ability to meet the interest expense on the debt outstanding.
Q. And when you have a credit rating, they rate your debt, right?

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A. They can rate specific debt issuances. They also have a corporate credit rating which evaluates the overall creditworthiness of the company.
Q. And Southern Union's BBB credit rating -- withdrawn.
What is the rating on Southern Union's debt?
A. Right now it's BBB with S&P.
Q. And do you agree that the stipulation and order from the Missouri Commission forbids the flowing of cash freely between the Panhandle and Southern Union entities?
A. I believe there was a condition that referred to restrictions on cash down to Panhandle, not necessarily cash up from Panhandle.
Q. And you have no reason to believe, sitting here today, that Southern Union has or will violate that agreement, right?
A. I don't have any evidence that they violated.
Q. Or that they will do it, right?
A. I don't know if they will violate it.
Q. Do you have any evidence?
A. I don't have any evidence. I mean, obviously if it is violated in the future, that would have

to be determined at that point in time.
Q. Right. I'm asking you, sitting here today, do you have any evidence that Southern Union intends to violate any provisions of the agreement?
A. No, I don't have any evidence that Southern Union intends to violate that provision.
MR. HERSCHMANN: Why don't we take a break?
MR. NIEHAUS: We're going off the record at 10:30 a.m. Off the record.
(A BREAK WAS TAKEN.)
MR. NIEHAUS: We're back on the record at 11:04 a.m.
BY MR. HERSCHMANN:
Q. Before we broke -- and, again, I apologize for the exchanges that counsel and I have had, and we've agreed not to talk over each other -- you mentioned seeing Professor Morin's book that I had sitting here, and you told us earlier that you had read his book; is that right?
A. Yes.
MR. HERSCHMANN: Can you mark this, please, as Exhibit 2?
(MURRAY EXHIBIT NO. 2 WAS MARKED FOR IDENTIFICATION BY THE REPORTER.)
BY MR. HERSCHMANN:
Q. Can you take a look, just take a moment to

read Murray Exhibit 2 to yourself.
MR. FRANSON: Mr. Herschmann, this Murray Exhibit 2, besides having some information about Dr. Morin, has other things in the background, various equations and things like that.
MR. HERSCHMANN: I'll show you the book. That's what --
MR. FRANSON: Oh, okay. So it is actually the back cover of the book. Okay. Thank you.
MR. HERSCHMANN: So the record is clear --
MR. FRANSON: That's what I needed to know.
MR. HERSCHMANN: -- what Murray Exhibit 2 is is a photocopy of the back portion of this book that was published in 1994.
THE WITNESS: It's fun rate of return type of equations. That's what's on the back, for purposes of the record. Yes, I've read it.
BY MR. HERSCHMANN:
Q. And would you agree that Dr. Mor-- I'm sorry -- Professor Morin is an expert on regulatory finance?
A. I believe he's an authoritative figure, that's correct.
Q. And do you believe Professor Morin to be one of the leading authoritative figures in the country on

regulatory finance?
A. He's one of the most widely quoted, that's correct.
Q. And you've testified previously that you read his book and relied upon it, right?
A. I've read his book and relied on portions of his book.
Q. Anything in Professor Morin's book that you deem to be incorrect?
A. I've had disputes with some of his judgments on the discounted cash flow model and whether or not it deserves an upward or a downward adjustment because of some contradictions I found within his book.
Q. You're not a professor of finance, right?
A. No, I'm not.
Q. You don't lecture at any universities, right?
A. No, I don't.
Q. You're not -- you've never lectured on finance for the regulatory industry at the Center for the Study of Regulatory Industry, right?
A. No, I haven't.
Q. Do you have a bachelor's degree in electrical engineering?
A. No, I don't.

Q. Do you have a Ph.D. in finance?
A. No, I don't.
Q. You haven't lectured at Wharton, right?
A. No, I haven't.
Q. You haven't lectured at Dartmouth College, right?
A. No.
Q. You don't give any seminars on regulatory finance, right?
A. No.
Q. You haven't written any articles about it, right?
A. No.
Q. Have you been quoted in any regulatory finance periodicals or books as being an authoritative figure?
A. Not that I'm aware of.
Q. Have you ever been qualified as an expert in any court in the country?
A. I've been qualified as an expert in front of the Missouri Public Service Commission, but not -- I haven't testified in court.
Q. Okay. Let me -- please listen to my question carefully, then. With all due respect, I move to strike the last part -- the last answer as not responsive.

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Has any court, any judge sitting in a courtroom, either state or federal level, designated you, admitted you as an expert witness?
A. Not in court, no.
Q. Did you ever read Dr. Morin's earlier treatise on the cost of capital that was published in 1984?
A. Maybe portions of it.
Q. Where did you obtain that version of the book?
A. We had that in our department as well.
Q. Have you ever acted as an -- withdrawn.
Have you ever submitted any testimony on behalf of any companies previously?
A. No, I have not.
Q. Have you ever appeared before any other commissions other than the Missouri Commission?
A. No, I have not.
Q. Do you ever receive any calls for any consultation from any regulatory agencies asking for your opinion on rates of return?
A. Not specifically on rates of return, no.
Q. And it's your testimony that things that are contained in Dr. Morin's book that you've acknowledged as one of the leading cited treatises in the country you

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disagree with?
A. There's a contradiction, yes, there is.
Q. Did you ever contact Dr. Morin to inform him that you disagree with what he says?
A. No.
Q. Did you ever send any letters to the publishers to say that Dr. Morin is wrong?
A. No.
Q. Have you ever heard any court rule that Dr. Morin's application of the information as contained in his book is inaccurate?
A. I'm not aware of such.
Q. Did you determine that Dr. Morin was wrong back in 2001 when you submitted your testimony in this case?
A. No.
Q. Now, you told us previously that in preparing your testimony you consulted with the two attorneys that were here, right?
A. Yes.
Q. And you spoke to Mr. Schwarz, right?
A. Yes.
Q. And can you tell us what you discussed with each of the attorneys about your testimony?
MR. FRANSON: Objection as to

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attorney/client.
MR. HERSCHMANN: Are you instructing him not to answer?
MR. FRANSON: On that question, yes, I am.
BY MR. HERSCHMANN:
Q. Let me see if I can break it down. What did you discuss with Mr. Schwarz -- withdrawn.
Mr. Schwarz is one of the attorneys at the Commission, right?
A. Yes, he is.
Q. What did you discuss with Mr. Schwarz as it relates to the submission of your testimony in this matter?
MR. FRANSON: Objection, and the witness is directed not to answer on the basis of attorney/client privilege.
BY MR. HERSCHMANN:
Q. Did you discuss -- well, withdrawn.
Did you provide drafts of your submitted prepared testimony to any attorneys for review prior to submission?
A. Yes, I did.
Q. And which attorneys did you provide it to?
A. Mr. Bob Berlin, Mr. Robert Schallenberg, Mr. Tim Schwarz.

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Q. Is Mr. Schallenberg an attorney?
A. Did I say Mr. Schallenberg?
Q. Yes.
A. I'm sorry. I meant Mr. Robert Franson.
Q. And did you receive comments back from any of the attorneys on your testimony?
A. Yes, I did.
Q. Did you adopt those comments into your testimony?
MR. FRANSON: Objection as to attorney/client, and the witness is directed not to answer that question.
BY MR. HERSCHMANN:
Q. You mentioned previously that in relationship to Panhandle, there's the potential that it could affect MGE customers. Do you remember that testimony?
A. Yes.
Q. And did you mean that it could affect MGE customers in relationship to rates?
A. Yes.
Q. How do rates get imposed in the state of Missouri?
A. I don't understand your question.
Q. Well, can MGE just increase their rates if

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they wanted to?
A. Unilaterally?
Q. Right.
A. No.
Q. Do they actually have to file an application with the Missouri Commission?
A. Yes, they do.
Q. And then do Staff become a party to that proceeding?
A. Yes, we do.
Q. Does the Office of the Public Counsel become a party to the proceeding?
A. Typically they do. Yes, they do.
Q. Is there potential for other parties to intervene and join the matter?
A. Yes.
Q. And then after that occurs, does the Missouri Commission make a decision whether or not to authorize an increase in rates?
A. If it proceeds to hearing and goes through the full litigation process, that's correct.
Q. So if, for argument's sake, you were right that S&P's statement that cash will flow freely between Panhandle and Southern Union and it would impact Missouri ratepayers, Southern Union would have to go back to the

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Missouri Commission to get approval, right?
Let me withdraw that question. That wasn't clear. I apologize.
You told us that S&P has said that cash will flow freely between Panhandle and Southern Union, right?
A. Yes.
Q. And you told us you had a concern that Missouri ratepayers may be impacted negatively by Southern Union's investment of Panhandle, right?
A. That's a possibility, yes.
Q. And the only way that the ratepayers can be impacted negatively is if the rates go up, right?
A. I disagree with that.
Q. Well, let's talk about on a financial basis. If Southern Union -- withdrawn.
If MGE wants to charge more money to Missouri ratepayers, they have to get permission, right?
A. Yes.
Q. And the Missouri Commission can say no, right?
A. Yes.
Q. And they can get no increase, right?
A. It's a possibility, yes.
Q. Do you have any reason to believe that the

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Commissioners themselves are going to allow Southern Union to disregard the Commission's order as it relates to Southern Union's acquisition of Panhandle?
A. No, I do not.
Q. Now, when you selected your proxy group, you pulled information from 2002; is that right?
A. For the -- yeah, for selection of the criteria. Let me just refer to my testimony here.
Q. Sure.
A. Actually, the information in order to -- to determine the comparable group was based on the natural gas industry summary from Edward Jones as of December 31st, 2003. So that, you know, is not necessarily 2002 calendar year information.
Q. When you took the five-year averages, and if you look at Schedule 15-2, you selected that from 1997 and 2002, right?
A. Yes.
Q. And were the 2003 financial numbers available to you as of April 15th of 2004?
A. I didn't do my study as April 15, 2004. That's the date the testimony was filed. The time the study was being performed, the only information that we had at our disposal was ValueLine's rating reports as of December 19, 2003.

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Q. Do you know whether or not -- or how many weeks before your testimony was submitted that 2003 numbers came out?
A. I don't recall.
Q. If the 2003 numbers were available several weeks before you submitted your testimony, was there a reason you didn't use 1998 to 2003?
A. The study had already been performed. I didn't see any reason to -- I don't know if it was available or not. A lot of times the information that is available is estimates because the annual reports that are filed by the companies can be fairly late in the game and when we're already doing our analysis.
Q. If the 2003 information was available and that would drastically change the numbers contained on Schedule 15.2 and forward, would that cause you any pause in changing your recommendations?
A. No.
Q. When you did the 1997 to 2002, did you take the numbers in 1997 and the numbers in 2002, or did you use the data for all the preceding -- succeeding years?
Do you understand my question?
A. I don't understand your question.
Q. Sure. When you took the annualized compound growth rates, did you take the numbers in 1997

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and the numbers in 2002 and then determine what the growth rate is, or did you take 1997, 1998, 1999, 2000, 2001 and then 2002?
A. What you're referring to is -- and I'm going to kind of add some words to what you -- the question you asked. What you're referring to is an arithmetic average, I believe, of 1997, 1998, 1999, 2000, 2001, 2002. If you're doing an arithmetic average, you would be looking at all those specific dates.
I'm using a compound average which looks at the beginning and the ending point, which determines a compound growth rate for that period of time. So I don't know if you understand exactly what I just explained to you, but I believe that gets to the heart of your question.
Q. So the answer would be, you looked at the information in 1997 and 2002 and then made your calculations, right?
A. That's how you calculate a compound growth rate, yes.
Q. And did you ever look at the information in '98 or '99 or one of the intervening years to see whether there were any anomalies during those years that may impact your calculations?
A. No. And let me just clarify something.

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You said any information within 1998 through 2001. If there were anomalies within that data, that's not going to affect that compound growth rate. That compound growth rate is based on 1997 and 2002, as you just indicated.
Q. And is it then accurate that you looked at five years and ten year datas and then averaged the five year and ten year datas together?
A. Yes.
Q. In some portion of your testimony you talk about attempting to back out Panhandle from Southern Union. Do you recall that?
A. I recall that. I don't recall the specific page.
Q. I think it's going to be page 22.
A. Starts at 21.
Q. Start at 21, exactly right. Thank you.
A. I recall that, and I see it now.
Q. Can you tell us what methodology you used to back out Panhandle from Southern Union?
A. Quite simple. I just looked at the Southern Union's balance sheet as of December 31st, 2003, which could be an annual report or a response to a Data Request from us, the Staff. And then I just looked at Panhandle's 10K, which was filed at the SEC as of December 1st, 2003.

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And when I reviewed that, I realized that Southern Union was attributing 646,818,000 common equity to Panhandle's operations, along with the assumed debt of 1.205 billion -- that's a round figure -- of long-term debt, which includes current maturities on that debt.
And then in order to determine what the capital structure may be if you excluded Panhandle, you would have to take both of these items out. And that was, like I said, specifically within the 10K filed with the SEC by Panhandle itself. So I have no reason to dispute the accuracy of those numbers.
Q. Are you a CPA?
A. No, I'm not.
Q. The methodology that you just described, does that conform to Generally Accepted Accounting Principles?
A. I don't know.
Q. Did you consult with anyone at the Missouri Commission to find out whether your proposed methodology had anything to do with GAAP?
A. Not specifically with GAAP. I talked about the process that I did with a couple of people.
Q. Who did you discuss it with?
A. Bob Schallenberg.
Q. What did Mr. Schallenberg tell you?

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A. He seemed to think it was appropriate, being that it was SEC financial statements and that's the equity that Panhandle would -- associates with -- or excuse me -- Southern Union associates with Panhandle, which is very close to the purchase price above and beyond the assumed debt. So it's only reasonable to assume that that's the equity that is associated with Panhandle.
Q. When you say it's only reasonable to assume, you're saying that as a layperson, right, not as an accountant?
A. No, I'm not an accountant.
Q. So you don't have any expertise to provide in relationship to whether or not that is in conformity with the Generally Accepted Accounting Principles, right?
A. I don't have accounting expertise, but it's just something that, if you're going to exclude Panhandle's operations, there's obviously equity associated with that, with its -- you know, with the financing of that -- of that operation, which is proven by the fact that Southern Union paid cash above and beyond the assumed debt. I mean, what else would you call that?
Q. Well, obviously I'm not an accountant. So what I'm trying to get at, this is your layperson's opinion as to how you should go about doing that?
A. This is my financial analysis expert

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opinion.
Q. Did you just become an accountant in the last question?
A. No. I said this is my financial analysis expert opinion. I'm a financial analyst.
Q. Are you telling us that, as a financial analyst, you have the expertise to determine the proper way under accounting principles to back out Panhandle from Southern Union's consolidated capital structure?
A. I'm saying from a financial analyst perspective, I realize that any time an acquisition is made, some of that includes debt, some of that includes equity. And this 646,818,000 of common equity closely approximate the cash price paid for Panhandle of 662 million. So just from analyzing the numbers, which is what financial analysts do, this seems quite appropriate, and it's also -- the equity is filed with the SEC in the 10K.
Q. If it turns out that your process is completely wrong under accounting principles, does that change your opinion at all?
A. I'd have to see what -- what you think is wrong with it.
Q. It wouldn't be from me, sir. I'm asking if it turns out that GAAP says your process is completely

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wrong, would that change your opinion?
A. No, because I think this is the equity associated with Panhandle.
Q. And you're as sure of that answer as everything else you've put in your testimony, right?
A. Yes.
Q. Can you tell us for each of the attorneys that reviewed your testimony exactly what changes they suggested to you? First question.
MR. FRANSON: Objection, attorney/client privilege, and the witness is directed not to answer that question.
BY MR. HERSCHMANN:
Q. Can you tell us, did you adopt any of the attorneys' changes in your testimony prior to submitting it in this case?
MR. FRANSON: Same objection. And again, the witness is directed not to answer that question.
BY MR. HERSCHMANN:
Q. Did you ever have any meetings with the attorneys that you've mentioned and any other Staff members at the Commission in relationship to this case?
A. Yes, I did.
Q. Tell us what was discussed in those meetings.

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MR. FRANSON: Objection, because again attorney/client privilege.
MR. HERSCHMANN: You're going to again instruct him not to answer that?
MR. FRANSON: He's again instructed not to answer.
BY MR. HERSCHMANN:
Q. Do you recall making an adjustment in your testimony of 32 basis points in relationship to MGE?
A. Yes, I did.
Q. What were you trying to adjust for when you made that calculation?
A. The risk differential between MGE and the comparable companies.
MR. HERSCHMANN: Can we just take a one-minute break?
MR. NIEHAUS: We're going off the record at 11:28 a.m. Off the record.
(A BREAK WAS TAKEN.)
MR. NIEHAUS: We're back on the record at 11:39 on Tape 2.
BY MR. HERSCHMANN:
Q. Mr. Murray, when we were talking about you using the 2002 data and I asked you if the 2003 information was available, would you update your

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calculations if there were some significant changes, the question is, would you make those adjustments?
A. No.
Q. What is the reason that you would not make adjustments if the information was available to you prior to submitting your testimony?
A. Because I reviewed the information I have as far as growth rates and I noticed that the historical and projected were fairly close. And I don't know that, especially when you're doing a proxy group analysis, that there's going to be that much of a difference if you update a few of the historical numbers.
I'm not just looking at the historical numbers when I determine what is an appropriate growth rate. And so just because there may be some updated historical information or what have you, I don't know that the -- the growth prospects have fundamentally changed that much.
Q. Did you even look at the 2003 numbers prior to preparing your testimony in this case?
A. No.
Q. Did you discuss with anyone the changes in the economy between 2001, 2002 and 2003?
A. We discuss the changes in the economy on a frequent basis within our department as far as the

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financial and the capital markets.
Q. Do you think that stocks generally increased between 2002 and 2003 or not?
A. They did.
Q. Have you discussed the increase in the price of stocks and the overall economy with anyone at the Commission in relationship to your testimony?
A. In relation to the testimony, I don't believe so.
Q. Did you discuss with Mr. Schallenberg the fact that, hey, if we use the 2003 numbers, all the calculations are going to go up?
A. No, I did not.
Q. You agree this case is important to MGE, right?
A. Yes, I do.
Q. It's important to the ratepayers, right?
A. Yes, it is.
Q. It's important to the Staff of the Commission, right?
A. Yes, it is.
Q. It's important to the Commissioners themselves, right?
A. Yes, it is.
Q. And yet you quote information that's from

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as recently as 2004 in your testimony, right?
A. I do.
Q. And yet when it comes to the actual financial numbers that would impact your total recommendations, you didn't make the effort to use the most available financial information, right?
A. I used the most available information I had at the time I did the study.
Q. ValueLine cut you off in April of 2004?
A. ValueLine never cut us off. It was the information we had when we were doing the study.
Q. You have access to ValueLine whenever you want, right?
A. Yes.
Q. You could have access to ValueLine up until the day you submitted your testimony, right?
A. Yes, we do.
Q. And if ValueLine had come out with more recent numbers prior to your submitting and preparing your testimony, you still didn't make the effort to use those calculations, right?
A. No.
Q. You're still telling us you complied with Hope and Bluefield, right?
A. Yes, I am.

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MR. HERSCHMANN: Take a lunch break.
MR. NIEHAUS: Going off the record at 11:43 a.m.
(AN OFF-THE-RECORD DISCUSSION WAS HELD.)
MR. NIEHAUS: We're back on the record at 11:43 a.m.
BY MR. HERSCHMANN:
Q. I'm sorry. I forgot to ask you this. During the breaks, did you have the occasion to talk to anybody?
A. Just talked to them within the room.
Q. Okay. Did you talk to anybody about your testimony?
A. No.
Q. Did you talk to anyone from the Public Counsel's office during the breaks?
A. No.
MR. HERSCHMANN: Okay. Why don't we take our break?
MR. NIEHAUS: We're going off the record at 11:44 a.m.
(A BREAK WAS TAKEN.)
MR. SWEARENGEN: We are finished for today.
MR. FRANSON: And does that mean you don't plan to resume this any time soon without notice and

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things like that?
MR. SWEARENGEN: Of course not.
MR. FRANSON: Okay. That's what I thought. Staff will -- Mr. Murray will waive presentment, but not signature on the written transcript.
And I also note Mr. Micheel didn't make it back, but Staff had no redirect. I have no idea whether Mr. Micheel had any questions or not, but that's all I have to say.
(PRESENTMENT WAIVED; SIGNATURE REQUESTED.)

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CERTIFICATE OF REPORTER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, KELLENE K. FEDDERSEN, RPR, CSR, CCR, and Notary Public within and for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action to which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

____
KELLENE K. FEDDERSEN, RPR, CCR
Notary Public, State of Missouri
(Commissioned in Cole County)
My commission expires 3/28/05.

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SIGNATURE PAGE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, David Murray, do hereby certify:

That I have read the foregoing deposition;

That I have made such changes in form and/or substance to the deposition as might be necessary to render the same true and correct;

That having made such changes thereon, I hereby subscribe my name to the deposition.

I declare under penalty of perjury that the foregoing is true and correct.

Executed the ____ day of________, 2004, at
_______________________________________.

____
DAVID MURRAY

Notary Public:
____
My commission expires:
____

KF/DAVID MURRAY
MGE Tariffs/GR-2004-0209

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ERRATA SHEET

Witness: David Murray
In Re: MGE Tariffs/GR-2004-0209

Upon reading the deposition and before subscribing thereto, the deponent indicated the following changes should be made:

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Phone (573)636-7551 * Fax (573)636-9055

May 4, 2004

Robert Franson
Missouri Public Service Commission
200 Madison Street, Suite 800
P.O. Box 360
Jefferson City, MO 65102

In Re: MGE/GR-2004-0209

Dear Mr. Franson:

Please find enclosed your copy of the deposition of David Murray taken on May 4, 2004, in the above-referenced case. Also enclosed is the original signature page and errata sheet.

Please have the witness read your copy of the transcript, indicate any changes and/or corrections desired on the errata sheet and sign the signature page before a notary public.

Please return the errata sheet and notarized signature page to Mr. Herschmann for filing prior to trial date.

Thank you for your attention to this matter.

Sincerely,

Kellene K. Feddersen, RPR, CSR, CCR
Enclosure
cc: Eric Herschmann

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KELLENE K. FEDDERSEN
1511 Vieth Drive, Jefferson City, MO 65109
kf65109@aol.com

In Re: MGE Tariffs
Cause No. GR-2004-0209
Date of Job: May 4, 2004

Depositions of: David Murray, 97 pages, behalf MGE

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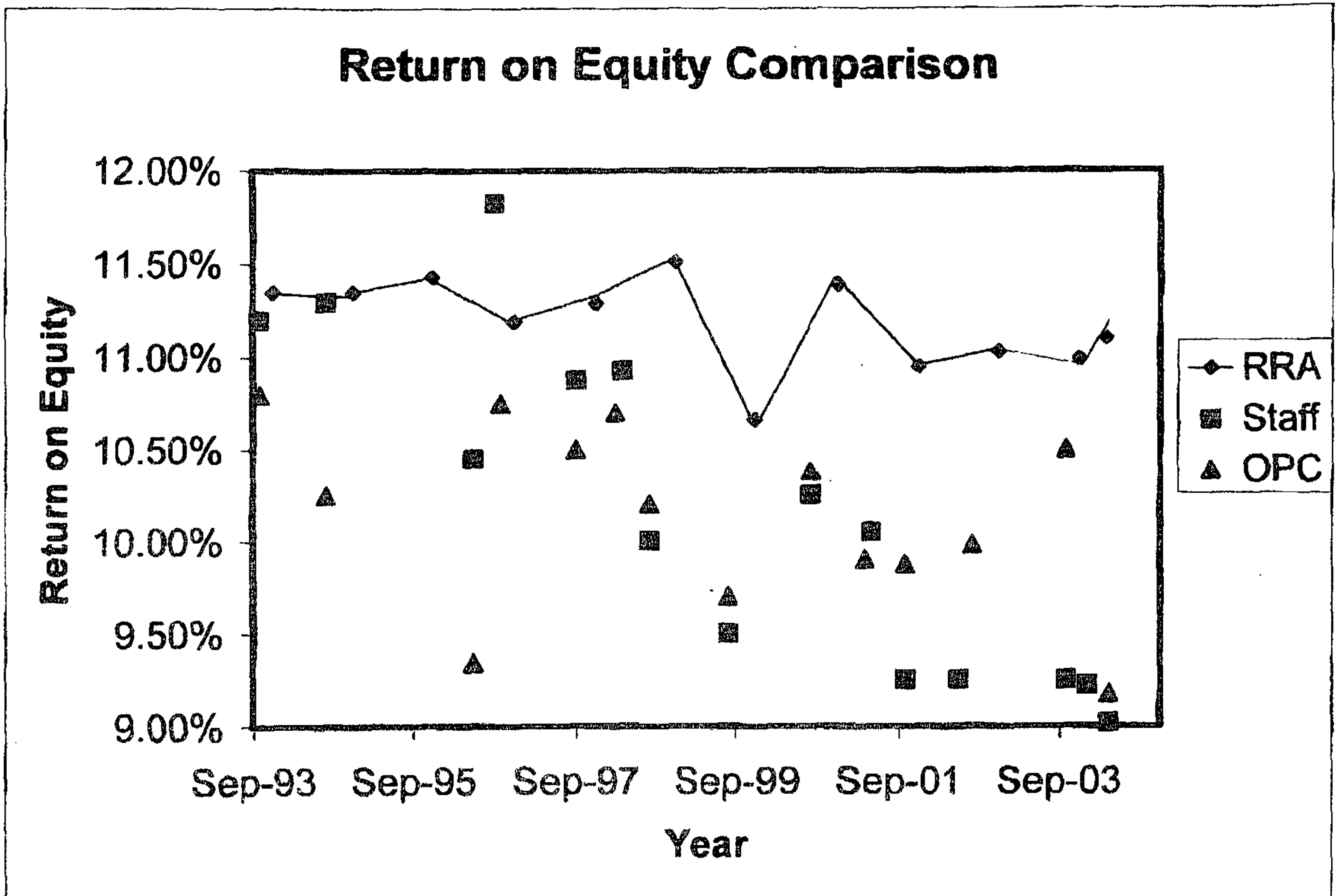

Surrebuttal Schedule JCD-7

exhibits at this time.

JUDGE JONES: Is that 88, 89, 90?

MR. MEYER: And associated HC for 90.

JUDGE JONES: And is there also 1088, 1089, 1090?

MR. MEYER: Yes.

JUDGE JONES: Are there any objections?

MR. SWEARENGEN: Company has none.

MS. O'NEILL: No objection.

JUDGE JONES: Exhibits 87, 88, 89 -- I'm sorry 88, 89, and 90 and 1088, 1089 and 1090 are admitted into the record.

(Exhibit Nos. 88, 89, 90, 1088, 1089 and 1090 were received into evidence.)

MR. MEYER: I will tender the witness for cross examination.

JUDGE JONES: Is there cross-examination from the Office of Public Counsel?

MS. O'NEILL: No questions, your Honor.

JUDGE JONES: And any questions from Aquila?

MR. SWEARENGEN: I have a few, Judge.

JUDGE JONES: Please proceed.

CROSS-EXAMINATION BY MR. SWEARENGEN:

Q. Good morning, Mr. Murray.

A. Morning.

Q. How are you today?
A. Pretty good. How are you doing?
Q. Fine. Thank you.
Let me just try with you to frame up the issue in this case, if I can. Is it fair to say that one part of this cost of capital issue is how much equity should be considered in a capital structure for rate-making purposes?
A. Capital structure is an issue.
Q. Okay. And how much equity --
A. Is a part of that capital structure, that's correct.
Q. -- is part of that capital structure?
And then another piece of that, along the lines of the equity side, is how much should that equity cost, how much return on common equity should be authorized; is that fair?
A. That's correct.
Q. And you, for the Staff, have used Aquila -- the Aquila, Inc. corporate capital structure as of December 31, 2002; is that not correct?
A. That's correct. As the test year.
Q. That's the test year of capital structure of the parent corporation, Aquila, Inc.?
A. That's correct.
Q. And what is the equity ratio of that capital

structure?

A. The equity ratio for purpose of rate making as of test year December 31st, 2002 for Aquila, Inc. is 35.31 percent.

Q. And that's the equity ratio you think the Commission should adopt in this case for rate-making purposes?

A. That's correct.

Q. And what is your understanding of what the company thinks the equity ratio should be?

A. They base it -- they base their equity ratio on what they term allocated capital structure, which comprises of what they claim is 47.5 percent equity ratio.

Q. Now, is it fair to say that you have done a discounted cash flow or DCF analysis of a group of companies to determine what you think the authorized return on equity ought to be as a result of this case?

A. Yes.

Q. And that's a range -- you've calculated a range of 8.64 to 9.64 percent; is that true?

A. That's correct.

Q. And what's the midpoint, 9.1?

A. 9.14, that's correct.

Q. And what is your understanding of the company's position as to the appropriate return on equity in this case?

A. The company's position is the 12 to 12.5, which I believe is a midpoint of 12.25.

Q. Thank you.

Would you agree that equity is the highest cost of capital, generally speaking?

A. Generally speaking in the capital structure, that's correct.

Q. And so the more equity that is determined to be in the capital structure for rate-making purposes, the greater the revenue requirement?

A. Well, it depends on, like I said, the capital -- if the capital structure is optimal, you could have actually less equity in a capital structure and -- and it -- assuming that business risk is held constant, you could have a high rate of return if you have a very leveraged company then one that is -- you know, is at the optimal capital structure. So it's the ultimate rate of return that determines the revenue requirement is my point.

Q. Well, if equity is the highest cost of capital, if you have more equity in that capital structure, the revenue requirement associated with that would be greater, would it not?

A. Like I said, the rate of return is the ultimate number. If you have more equity in the capital structure, assuming all risk is held constant such as business risk, then that return on equity, because there would be less financial risk, would be -- you know, could be lower and also the cost of the debt could be lower.

So, therefore, it's -- it's -- your overall rate of return, it's really hard to determine exactly what is the optimal point where you'll have the lowest cost of capital. So it -- you could have a high cost of capital at 100 percent debt level that's higher than if you had some equity in your capital structure.

Q. Let's bring it back then to this case and the recommendations of the parties here. You're arguing for a 35 percent equity ratio and the company's arguing for a 47 percent equity ratio. Given that difference, in your mind, isn't there a significant revenue requirement difference between the two proposals?

A. I believe so.

Q. And what would that be? Can you quantify that?

A. I don't -- I think the two issues combined in the last reconcilement I saw was 20 million, but that's with capital structure and return on equity.

Q. So together, capital structure and return on equity results in about a $20 million difference, in your judgment?

A. That's based on some accounting records that I've been told about as far as the reconcilement.

Q. Would you agree that all other things being equal, a lower equity ratio should be accompanied by a higher cost of equity, all other things being equal?

A. All other being equal such as business risk, that's correct.

Q. And a lower equity ratio should be accompanied by a higher cost of debt as a general proposition. Is that a fair statement?

A. Assuming you hold everything constant, it's the same company and the same business risk, same -- which includes -- business risk includes all sorts of risk such as regulatory --

Q. All other things being equal.

A. Everything being equal, that would be a logical -- that's financial theory.

Q. Thank you.

And for a given firm, would you agree the cost of equity should always be higher than cost of debt because equity returns are subordinated to interest payments?

A. I agree with that.

Q. Do you have your Direct Testimony there in front of you?

A. Yes, I do.

Q. If you'd turn to page 5 and there I believe -- are you there?

A. Yes, I am.

Q. Beginning on line 33 you set out part of the decision in what is commonly referred to as the Hope Natural Gas case; is that true?

A. Yes.

Q. And part of that Hope decision discusses the rate-making process; is that true?

A. Yes.

Q. And that's the process that we're in before the Commission in connection with this case. Would you agree?

A. Yes.

Q. And in connection with that, would you agree that, as you've indicated at line 33 of your testimony, that the United States Supreme Court held in that case that the return to the equity owner should be commensurate with returns on investments and other enterprises having corresponding risks?

A. I believe that's what was stated in that case in 1944, that's correct.

Q. And then as you note on line 35, that decision goes on to state, That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and attract capital?

A. That's correct.

Q. And over at the top of page 6 of your Direct Testimony at lines 1 and 2, you indicate by I think paraphrasing the Hope case that the Hope case restates the concept of comparable returns to include those achieved by any other enterprises having corresponding risks. Correct?

A. That's correct.

Q. Then over on page 7 of your Direct Testimony, referring to lines 3 through 5, you state, The courts today still believe that a fair return on common equity should be similar to the return for a business with similar risks.

A. Yes.

Q. But not as high as a highly profitable or speculative venture. Correct?

A. Yes.

Q. And I assume that continues to be your testimony today as it was in your Direct Testimony that was filed earlier in this case?

A. That's my testimony. I just wanted to clarify that there has been a transition in rate of return analysis where rate of return witnesses recommend the cost of capital -- cost of common equity capital.

When making recommendations, I think

Dr. Murray earlier had indicated that the DCF model is his primary model and that is a cost of capital model. And so -- and actually this is quite consistent with the cost of service principle of rate of return rate base regulation where the objective of the rate of return analysis is to determine what the -- you know, the cost of capital is to the utility.

Q. Right. I'll ask you about that in a minute. I'm just focusing on what the Supreme Court has said about that.

My question is, would you agree that what the courts have said with respect to a fair return is the standard that this Commission should follow?

A. Like I said, there are other things that have to be taken into consideration. We are looking at cost of capital. Like I said, there's been that transition.

Yes, there's a court case there, but as far as I am aware, there's been no challenge on using a cost of capital analysis which is the primary analysis used by many commissions in this country to determine what is a fair recommended rate of return, not a comparable earnings analysis, which this Staff has not done since I've been here.

Q. Okay. Let me make sure I understand then. Are you saying that what the court has said in the Hope case and the related cases do not have to be followed by this Commission in determining what the fair rate of return is?

A. I'm not a lawyer. I just know that what has occurred has been a transition to a cost of capital analysis.

Q. So you would think then that perhaps maybe the Commission isn't following what the court has said. Would that be your testimony?

A. I would say if you look at page 4 of my Direct Testimony under the Bluefield there's references to returns generally being made at the same time, part of the country as, you know, another company return achieved by other companies, and then item three where it says, Return -- a return sufficient to assure confidence in the financial soundness of the utility, item three being one of the significant items.

And then within the Hope case, as you pointed out, that a return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and attract capital. I feel that, you know, the Commission needs to adhere to that and a cost of capital recommendation that is reasonable will allow that.

Q. Okay. Thank you.

I take it you wrote that portion of your testimony starting with your discussion of the Bluefield case on page 4 over through I guess page 7 we just talked about?

A. Yes.

Q. I think what you just said in response to two questions ago, that you think what the Commission is doing does comport to those cases?

A. Yes, I do.

Q. Okay. And would you agree then that the standard for a fair return, which has been cited in your testimony and has been cited by the courts and regulatory bodies, speaks in terms of returns being earned by companies of comparable risk?

A. That may be one of the standards that is considered.

Q. You have some doubt about that? You say it may be?

A. I just cited that there were three items, and one of those is the financial soundness and ability to attract capital. There are several items that are mentioned. That's both in the Hope and Bluefield case.

Q. Look over at page 5 of your Direct Testimony, if you would. And down in line -- beginning on line 33 where you quote the Hope case.

A. Yes.

Q. And does it not say that, By that standard, the return to the equity owners should be commensurate with returns on investments and other enterprises having corresponding risks?
A. Yes. And then it says, That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and attract capital.
Q. Fine. Thank you.
Would you agree that risk is extremely important to what we are doing here today?
A. Yes.
Q. Is it possible for you to determine through publications what returns utilities are actually earning? Is that possible to determine?
A. There is -- obviously Mr. John Reed referred to Regulatory Research Associates. I, myself, do not regularly look at that -- you know, that information.
Whenever I do my analysis to recommend a cost of capital, I'm looking at economic models, cost of capital models which are the discounted cash flow model, the capital asset pricing model and the risk premium model.
But if I were so inclined to want to review that, such as seeing an S&P report -- basically when I was reviewing some comments from S&P to find out what type of

allowed ROEs are being -- are being ruled on in other states commissions I can -- you know, I can come across that obviously.

Q. Okay. That wasn't really my question. My question wasn't what was being allowed. My question was, can you determine in some instances what companies are actually earning?

A. I can review Value Line information, but those -- you have to take that with a grain of salt because obviously with the companies that are followed by Value Line, they're just like much -- you know, any other utility company out there. They have other operations within -- within their consolidated operations that are not just utility -- a regulated utility.

Q. Well, let me ask you this. If I'm an investor and I want to invest in a utility company and I want to know what return that company is earning, is there some way for me to find that out?

A. If you're investing in a consolidated utility and you're going to invest in a stock that comprises all the operations of that utility, yes, you can use Value Line to determine what the earned ROE was in any given past year for the last 15 years maybe.

Q. What about Empire District Electric Company? How would you characterize that company?

A. It's predominantly a regulated electric distribution utility and -- well, integrated utility, I'm sorry. But they do have -- you know, they get involved in some nonregulated investments as well.

Q. And can you go to some publication or some source and find out what they're actually earning?

A. Are you referring to Empire and the consolidated operations or are you referring to Empire Missouri jurisdictional utility operations?

Q. I'm talking about Empire.

A. Consolidated operations, like I said, Value Line -- you could refer to Value Line and find out exactly what they're earning.

Q. And would you believe that information to be accurate?

A. For consolidated operations, I would.

Q. Would that be true with any other figures that Value Line might publish for any other utility companies?

A. They're usually accurate. Sometimes they're revised a year or two later because of certain accounting changes.

Q. You mentioned authorized returns. Is there some way for you to determine or verify what regulatory agencies are authorizing for utility companies?

A. Mr. John Reed, he cited Regulatory Research

Associates. I believe that to be the -- you know, one of the main research organizations out there that, quote, allowed ROEs in various jurisdictions.

Q. Is there another way to determine that information other than referring to that source?

A. I believe C.A. Turner Utility Reports may have some allowed ROE indications, but I don't believe they have the dates of those allowed ROEs. So that information, especially if it's going back you know 10 years from now, would be of limited use because that obviously reflects a different economic and capital market environment than we have now.

Q. Can you access in some fashion, electronically or otherwise, the decisions issued by other state agencies, for example, the Kansas Corporation Commission?

A. If I was inclined to -- to look at their website, I'm sure I could.

Q. Have you ever done that?

A. Maybe in context of the last Aquila case to see what the witness Mr. John Dunn was doing in the Westar Energy Case I looked at their website. But as far as looking at their allowed ROEs, I don't know that I gave that much consideration.

Q. Have you ever looked at any decisions of other Public Utility Commissions or Public Service Commissions and read those decisions where they discussed the authorized returns that they were allowing for the companies under their jurisdiction?

A. No.

Q. You never have?

A. No. I -- there's many things that go on -- I have -- I have enough stuff to do here as far as doing my economic analysis using the DCF model and the capital asset pricing model. As far as what goes on in the specifics of cases throughout this country, I would be working 24/7 to be able to keep up with that.

Q. Turning to page 1 of your Direct Testimony, you state there that you're currently employed as a financial analyst for the Missouri Public Service Commission?

A. Yes.

Q. And is that your present position today?

A. Actually, I've been reclassified. I'm an auditor.

Q. And what does that mean?

A. It just means I have a different title.

Q. Okay. Your job functions are still the same?

A. I'm identified as a financial analyst, just to let you know.

Q. And am I correct that you're the only Staff witness who's testifying in this case with respect to cost of capital issues?

A. Yes.

Q. Over at page 2 of your Direct Testimony at line 16 you state, My testimony is presented to recommend to the Commission a fair and reasonable rate of return for Aquila, Inc., d/b/a Aquila Networks MPS and Aquila Networks L&P. Correct?

A. Correct.

Q. Then there's a following question on that page which is, Have you prepared any schedules to your analysis of the cost of capital for MPS and L&P? And your answer is, Yes; is that correct?

A. That's correct.

Q. And MPS and L&P are the Missouri operating divisions of Aquila; is that true?

A. That's correct.

Q. And would you agree with me that those operating divisions have hard assets in the ground here in Missouri?

A. Yes.

Q. And what would those assets consist of, to your knowledge?

A. Generation and distribution facilities, transmission facilities.

Q. Anything else that just comes to find?

A. Those are the main assets that I know are associated with the regulated electric utility. They may have some obviously natural gas distribution as well and storage maybe.

Q. And would you agree that those assets have been financed in some fashion?

A. Yes.

Q. And that would be with some amount of debt and some amount of equity?

A. Yes.

Q. And would you agree that those assets that you have described generally are the assets that are subject to this Commission's jurisdiction?

A. That's correct.

Q. I think you mentioned this earlier in response to one of my questions. Turning to the bottom of page 5 you mention that the -- what the Hope case stands for, in your opinion, and you noted that these returns that are authorized by regulatory agencies should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital. Correct?

A. That's correct.

Q. Given that, would you agree with me that one of your responsibilities as the Staff's chief financial witness in this case is to make sure that the Staff's recommendation in this proceeding did not impair the financial health of Aquila's MPS and L&P operations?

A. My duty is to recommend a fair and reasonable rate of return for MoPub and St. Joe operations, which a fair and reasonable rate of return would not impair the financial health of MPS and L&P.

Q. So your answer would be yes, that you would consider that to be one of your responsibilities?

A. Yes.

Q. And in connection with that, would you agree with me that as the Staff's chief financial witness in this case, you can't make your recommendation in a vacuum?

A. No.

Q. You don't agree with that?

A. Repeat the question. I'm sorry.

Q. Would you agree with me that as the Staff's chief financial witness, you can't simply make a cost of capital recommendation in a vacuum?

A. That's true, I can't make it in a vacuum. There's many things you have to look at, economic market, capital market environment, correct.

Q. And would one of the things you would have to look at would be the ramifications of your recommendation with respect to the financial integrity of Aquila's operating divisions. Wouldn't you agree with that?

A. Yes. I would test the reasonableness of my recommendation, that's correct.

Q. You would test it with respect to the financial integrity of the operating divisions?

A. When you refer to "financial integrity," I assume you've referring to my pre-tax interest coverage calculation that is --

Q. Well, let me ask you this. What is your definition of financial integrity?

A. Financial integrity would -- we would like to see utility companies with a triple B investment grade credit rating. Of course, that's not possible with some companies because of the fact that they're associated with other operations.

Q. If you would, please, turn back to page 5 of your testimony.

A. Yes.

Q. At the bottom, The return should be sufficient to assure confidence in the financial integrity of the enterprise.

And in this case the enterprise is MPS and L&P. Correct?

A. That's correct.

Q. So as to maintain its credit and to attract capital.
Do you agree with that?
A. Yes.
Q. Okay. And, therefore, do I understand you to say that you would test your recommendation in this case against L&P and MPS's ability to maintain this credit and attract capital?
A. Unfortunately, this is -- I'm just going to get into what is difficult about when you're evaluating or trying to determine what -- you know, what rate of return is going to attract -- be able to attract capital, maintain the credit rating of MoPub and St. Joe.
Q. Well, let me ask you this. Can you answer that question yes or no and then give an explanation? Can you do that?
A. Repeat the question, please.
Q. Well, the question is, you've come up with a recommendation and you said you've tested that against something. And my question is, have you tested that, in accordance with the Hope case, against it should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and attract capital? Have you tested your recommendation with that standard in mind?

A. Yes.

Q. Okay. Let me ask you, earlier you indicated that you agreed that the legal precedent for a fair rate of return speaks in terms of returns being earned by companies of comparable risk. And you said that risk was important in this process; is that true?

A. Yes.

Q. And is it your belief that you've tried to apply that legal principle in this case in your testimony?

A. I took all the considerations that were indicated in the Hope and Bluefield case as far as things that should be weighed to determine what is reasonable.

Q. In connection with that, you have proceeded to select a group of six companies which you believe to be of comparable risk to Aquila; is that true?

A. Comparable to MoPub and St. Joe, that's correct.

Q. And those companies are set out in your testimony in various schedules; is that true?

A. That's correct.

Q. And what are those companies? Can you just rattle off the names for us, please?

A. Cleco, DPL, DQE Hawaiian Electric, IDACORP, NSTAR.

Q. And, once again, would it be your testimony that your goal here is to be consistent with the Hope case and find a group of other enterprises having corresponding risks to Aquila's MPS and L&P operations?

A. That's correct.

Q. Now, with respect to risk, would you agree with me that what we're talking about basically are two types of risk, one being business risk and the other financial risk?

A. That's correct.

Q. And would you agree that business risk is the risk which reflects items that could impact the business operations of a company?

A. All sorts of items, that's correct.

Q. Can you give us some examples for electric utilities?

A. Regulatory economic management, which competition doesn't play as much a part with a regulated utility, but just certain environmental factors, etc.

Q. Weather is that --

A. Weather exactly.

Q. -- a business risk?

How about rate of economic growth in the service area? Is that a business risk?

A. That's a risk. That's part of economic risk.

Q. Whether or not the company would have nuclear generation in its generation mix, would that be a business risk?

A. That's correct.

Q. And then would you agree there's another type of risk called financial risk?

A.. Yes.

Q. And I think looking at your Surrebuttal Testimony at pages 7 and 8, if you could turn to that, please.

A. Yes.

Q. There in your Surrebuttal Testimony at the bottom you talk about financial risk and you offer a definition of -- or a generally accepted definition of financial risk; is that true?

A. That's correct.

Q. And that definition appears at the top of page 8?

A. Yes.

Q. And according to you, that generally accepted definition of financial risk is the ability of a company to meet its debt obligations; is that true?

A. That's true.

Q. What is the source of your generally accepted definition of financial risk as you have defined it there on page 8?

A. General knowledge.

Q. General knowledge?

A. I mean, I've went to college and had a finance curriculum, I've been working here for some time. I couldn't tell you exactly if I -- I didn't have a specific textbook where I came up with this definition, if that's what you're asking.

Q. That was going to be my next question. Did you have a textbook in college that had that definition of financial risk in it that you recall?

A. It may not have had this specific wording. Obviously that would be plagiarism.

Q. Looking again at your definition, the ability of a company to meet its debt obligations, isn't that really interest coverage?

A. Yes. Cash coverage of their debt service.

Q. And so it's really not an accepted definition of financial risk?

A. No. It's one of the things that the credit agencies look at as far as determining -- as far as your -- you could have a large amount of debt in a capital structure at a very -- at a lower interest rate and the ability of the company to meet that debt service is going to be determined by, you know, the cash flow coverage.

And I know that S&P, when they discuss

financial risk indicators, these are the exact ratios they're talking about. It's the coverage of the interest payments that they -- otherwise, if they can't cover it, you know, they're at risk of a default.

Q. Have you ever heard anyone say that a definition of financial risk is a measure of a degree of debt leverage in a company's capital structure?

A. I'd say that's the textbook definition.

Q. You have textbooks at college that had that definition in them?

A. And I think there's other textbooks I've seen that have different definitions. Just as there are many different regulatory textbooks that have different ideas on them.

Q. I think you hit on this earlier talking about risk and you may have thrown it in the category of business risk, but in your mind is there such a thing as regulatory risk?

A. Yes.

Q. And what is that?

A. Just the risk of outcome of proceedings once a rate case starts. Obviously investors are very concerned, as with Aquila in this case, Aquila's investors, as to the outcome of the proceeding as far as, you know, the decisions that are going to be made.

Q. And all of these risks that we've talked about here this morning, would you agree that they should be considered in the selection of comparable or proxy companies for a cost of capital analysis?

A. Yes.

Q. And these are items that are critically important, are they not, to a cost of capital analysis?

A. Risk is important, yes.

Q. Out of curiosity, I know you talk about your definition of financial risk in your Surrebuttal Testimony on pages 7 and 8. Anywhere in your Direct or Rebuttal Testimony did you discuss your definitions of business risk or financial risk, do you recall?

A. Do you want me to review that right now? Because I don't recall offhand.

Q. You don't recall offhand?

A. There's a lot of testimony here obviously.

Q. I'm not going to ask you to do that, but maybe while we're on a break you could just glance through that and we can come back to that later.

A. Sure.

Q. Turn, if you would, please, to page 26 of your Direct Testimony.

A. Excuse me. I'm taking a note here. Okay. Sorry.

Q. Yeah. That's fine. Page 26 of your Direct Testimony, please.
A. Yes.
Q. I would refer you there to line 8 where you indicate that your Schedule 11 to your Direct Testimony presents a list of market traded electric utility companies --
A. Yes.
Q. -- monitored by Value Line?
And how many companies were on that list, just approximately, do you know?
A. Quite a few. Anywhere from --
Q. Order of magnitude.
A. It's a -- I mean, if you take a look at Schedule 11, obviously I don't have time to count up all the rows, but there's probably 50 to 80, somewhere in there.
Q. And it's from that list that you selected your six proxy companies. Is that a fair statement?
A. That's correct.
Q. And then starting on line 9 you state, The criteria that I used to select the comparable companies are as follows. And you list eight items there; is that true?
A. That's correct.
Q. Now, looking at the first criteria that you use to select your proxy companies, stock publicly traded,

would you agree with me that this criteria really has nothing to do with risk as you have defined risk?

A. Well, if a stock's not publicly traded, it may have liquidity risk issues. If it's not publicly traded, then there's not a market -- a recognized market where that stock could be traded, so liquidity risk would be an issue.

Q. What kind of risk is liquidity risk? Is that a business or a financial risk?

A. It's just -- I'm using an analogy. Before ebay, it might have been hard to sell some fairly unique items, but now that that market's been created, people that have unique interests, there's a market there now to buy and sell, so -- that they normally wouldn't be able to sell that and they may have had to offer a hire premium in order to be able to sell something that there really wasn't a market. So if a stock's not publicly traded, obviously you won't have somewhere to go to just offer that -- that stock.

Q. And there's a risk that you can assign to that?

A. Well, a general -- a general conceptual risk, yes.

Q. And then refer to item No. 2, Information printed in Value Line. That's your second criteria?

A. Yes.

Q. Would you agree that that has nothing to do with risk, whether or not information is published in Value Line?

A. Well, obviously investors -- if they're trying to get information on investments that they want to -- that they're considering investing in, it's important to have as much information as possible.

And with Value Line being an independent research service, if -- you know, if they have that information available to them by a recognized research service, that may minimize the risk of them, say, having to make a private equity investment in a company that's not followed by Value Line where they have to rely specifically on a company.

Q. Well, I thought you indicated earlier that a financial risk -- and you said the textbook definition was the amount of leverage in the capital structure; is that true?

A. Yes. But I think you just said general risk and I --

Q. All we're talking -- we're talking about business and financial risk. And my question is, do you define financial risk to mean the amount of leverage in the capital structure; is that true?

A. Yes.

Q. Now, what does whether or not information is printed in Value Line have to do with the amount of leverage in the capital structure?

A. It has nothing to do with the amount of leverage.

Q. Okay. And look at your criteria No. 5, Ten years of data available. Would you agree with me that that has nothing to do with business or financial risk, whether or not 10 years of data is available?

A. Okay. Let's just clarify. When you're referring to business and financial risk, obviously you're referring to the risk of the company. Does not necessarily mean that this is the risk the investor may be taking by investing in a stock when 10 years of data is not available.

Q. I'm talking about the definitions that you gave us earlier. You said what business risk was and you defined that and you gave us some examples and you said what financial risk was, the amount of leverage in the capital structure.

So my question is, with those definitions in mind, what does the fact that whether or not 10 years of data is available have to do with either of those risks?

A. Well, if you have 10 years of data to evaluate the trends in capital structure within any given company, you can evaluate the financial risk over time.

Q. But what does the fact of whether or not that data is available have to do with the actual business or financial risk of the company?

A. Well, if the data is not available, you don't have any trends to look at as far as what type of financial risk that the company, you know, typically incurred as far as its leverage.

Q. You don't have anything to look at, but what does that fact have to do with the actual business or financial risk of the company?

A. As far as whether that's available has nothing to do with the company specifically.

Q. Okay. And look at No. 8, No Missouri operations. Would you agree with me that whether or not a particular company has utility operations in Missouri has nothing to do with business or financial risk?

A. Obviously every jurisdiction has its own regulatory risk as you referred to, so there could be some risk factors there.

Q. There could be some regulatory risk?

A. Exactly.

Q. But not business or financial risk?

A. No, regulatory is part of business risk.

Q. Would it be fair to say that these items I've focused on, Items 1, 2, 5 and 8, those criteria really don't relate to risk but if they do, it's only in a very remote sense and you just simply used those to help narrow down your sample of companies?

A. If you're going to just pick out those specific items, I'll agree with that.

Q. Turn to your Rebuttal Testimony, if you would, please, page 25.

A. Yes.

Q. There on lines 12 and 13 of page 25 of your Rebuttal Testimony you say, Because smaller utilities operate in a regulated environment just as large utilities do, making an adjustment for firm size is not appropriate?

A. Yes.

Q. And then at the bottom I think of page 24 and the top of page 25 you cite a study that you believe supports that proposition; is that true?

A. That's correct.

Q. Do you know whether or not this Commission has ever made an upward adjustment in rate of return to reflect and recognize the small size of a utility company?

A. I don't believe they have, but -- not as far as my personal experience.

Q. Okay. If they had, would you think that the Commission had made a mistake?

A. That would not have been my recommendation. The Commission obviously weighs the evidence of any case.

Q. That's fair. I understand.

In any event, that wouldn't have been your recommendation and you would testify today that an adjustment for size, in your judgment's, not appropriate; is that true?

A. That's correct.

Q. Then turning back to your Direct Testimony again, please, at page 26 where you listed your criteria there your third criteria states, Total capitalization less than 5 billion; is that true?

A. That's correct.

Q. And that's a criteria related to size. Would you agree?

A. Yes, it is.

Q. But you also testified that an adjustment for size should not be considered; is that true?

A. Yes.

Q. So wouldn't you agree that that criteria, No. 3, really isn't a valid selection metric for measuring risk?

A. No. I wouldn't say that's necessarily the case. Obviously, you know, size is something that analysts think -- think about. But as far as what I'm rebutting is whether or not a specific size premium adjustment should be made especially when it's a division of a larger utility.

I don't think there's anything wrong with trying to limit the size of -- for purpose of selecting your comparable companies initially, but as far as -- you know, if you don't choose comparable companies, if you just choose to eliminate the -- you know, the size requirement, then you want to make a size adjustment, my point is you -- if you want to avoid that, make sure you use a -- you know, use a selection criteria that takes that into consideration if there is a chance.

My point is there's nothing conclusive on a size premium adjustment -- excuse me, a size premium adjustment being made.

Q. If size is a valid selection metric -- which is what you're saying, isn't it?

A. I'm saying it's a metric that I used and it just -- it brings -- it eliminates -- it tries to eliminate that possible argument coming from the company because I know it's used every time.

Q. What is that?

A. That a size premium adjustment should be made. So it just heads off that possibility.

Q. And what companies have made that?

A. Just about every company that comes in here, I believe.

Q. And do you know how has the Commission reacted

to that? Do you know?
A. I think I just indicated I didn't know whether they made a size premium adjustment.
Q. And if your knowledge on that subject was incorrect and, in fact, there is a case or cases where the Commission has made an upward adjustment and return because of the small size of a company, would that change your view on this topic?
A. No.
Q. What companies did you eliminate through the use of your third criteria, the size criteria?
A. Okay. We're going to have a lengthy list here.
Q. How many were there? Are they set out in your testimony?
A. Yeah. They're set out on Schedule 11.
Q. And how can I identify those looking at your Schedule 11?
A. Look at column 3, total capitalization less than 5 billion. And then every -- every company where the answer is no was eliminated.
Q. So if size doesn't matter, then those should all be put back in; is that true?
A. I'm saying size can be -- I'm arguing against any size premium adjustment. I'm not indicating that it's

not something that should be considered when you're narrowing down your comparable companies.

Q. Well, we're not talking here about the return on equity or premium adjustment though. We're talking about your selection of comparable companies here. You ended up with 6 companies out of maybe 80 you indicated, and I'm trying to figure out how you utilized the Hope standard of risk in selecting those 6 companies.

And your item No. 3, total capitalization less than $5 billion, appears to be inconsistent with later testimony that suggests no adjustment should be made for size.

A. I don't agree it's inconsistent. I -- once again, I'm trying to come up with comparable companies and head off -- basically I realize companies make this argument for a size premium adjustment, you know, over and over. As far as quantifying this specific adjustment, I don't agree with that. And if you want to try to head that off, which I did, you put in a total capitalization less than a certain amount to try to head off that argument.

Q. Let's go in that direction. Let's assume that argument has some validity and this Commission may make such an adjustment and allow a return to a small company. Shouldn't those companies be put back in the pool?

A. No. Because, once again, I would not agree with the size premium adjustment.

Q. Okay. And if the Commission has found otherwise, your opinion would differ from what the Commission has found; is that true?

A. Sure.

Q. Okay. Take a look at your No. 4 criteria there on page 26, Greater than 70 percent of revenues received from electric utility operations.

A. Yes.

Q. And I think you indicated that the application of that criteria eliminated 20 additional companies?

A. Yes.

Q. Were any of those companies what we would refer to as combination companies?

A. You refer to combination. Can you define what you mean by --

Q. Well, what's your understanding of a combination company?

A. I think there was a definition given earlier that a combination company would be a electric and natural gas company. I'm just wanting to make sure you're not referring to diversified company, which diversified companies get into much of the nonregulated energy market trading, etc., etc.

Q. Would you except as a definition of a combination company one that was in both regulated natural gas and regulated electric operations?

A. That may be a portion of their operations, that's correct.

Q. Is Ameren a combination company, for example?

A. Ameren has natural gas and electric operations, that's correct.

Q. And how about Aquila?

A. Aquila has natural gas, electric operations.

Q. Would the fact that the combination company might not have more than 70 percent of its revenues from electric utility operations simply reflect the sale of its -- of natural gas by its natural gas distribution operations?

A. I don't know. I relied on C.A. Turner Utility Reports for this. I don't know what they look at as far as to determine their percent of revenues -- electric revenues as far as the specific details.

Q. Well, let me ask you just -- let's talk about AmerenUE, for example. Do you know whether or not they get more than 70 percent of their revenues from electric operations?

A. AmerenUE, I believe they do. Obviously that's the largest part of their operations.

Q. Let's assume that they got 65 percent of their revenues from electric operations and the remainder 35 percent from natural gas operations. Applying your criteria No. 4, you would eliminate them, is that true, because they don't have more than 70 percent -- 70 percent or greater?

A. Assuming that's the case, that's correct.

Q. Yeah. Just assuming that with me.

A. That would be Ameren Corps, the consolidated Ameren Corporation.

Q. Just pick X company.

A. Any company, yes.

Q. It doesn't matter what company it is. If 65 percent of its revenue is from regulated electric operations, 35 percent of natural gas regulated operations, you would eliminate them; isn't that true?

A. And let's clarify. With C.A. Turner it does, in --

Q. Well, forget about C.A. Turner. Just the hypothetical question, some company, any company, The Jim Swearengen Utility.

A. Well, I still need to clarify. Just electric operations, in general, not regulated electric operations. It's very hard to find any -- you know, any type of source out there, unfortunately, that really breaks down the regulated electric and nonregulated electric. It's a very real problem.

Q. I understand that. What I'm trying to get your rationale here for that 70 percent cut-off point. And my question to you is, 65 percent come from regulated electric operations, 35 from regulated gas. Just assume that to be the case. You would eliminate that company?

A. Exactly.

Q. That's right.

And let me ask you this. Just because 35 percent of that company's revenues came from regulated gas operations, that would not necessarily reflect a higher operating risk for that company, would it?

A. When you refer to "operating," are you referring to business risk?

Q. Sure.

A. I mean, with any given company it's not necessarily going to -- as far as the percent of revenues, there are all sorts of things that come into play that are going to determine the overall risk level of a company such as management and what have you.

This is just something to -- in order to try to achieve electric utilities, which is what MoPub and St. Joe are. And that's what's -- the subject of this case, I should say, is what MoPub and St. Joe are because obviously they have gas operations and steam operations, but the subject of this case is their electric operations.

Q. Is it your view that gas operations are more risky than electric operations?

A. I think there is a general view that gas operations used to be riskier than electric operations, but obviously with deregulation and many electric utility companies being involved with nonregulated activities, there's probably been some shift in that. And -- and that's something that may change that.

Q. So you wouldn't subscribe to the belief that gas operations are necessarily more risky than electric operations?

A. I'm saying it's very hard to tell at this point in time.

Q. Would you agree that as a general proposition, there's little difference in risk between a regulated electric utility and a regulated gas distribution utility?

A. No. Because with vertically integrated regulated electric utility, you have generation and purchased power. Obviously with natural gas you have distribution and they have to purchase that gas. So, no, I wouldn't say they're the same risk. And that's why I -- with the gas case I selected natural gas utility companies.

Q. Would you say there's little difference in

that risk?
A. I haven't quantified that.
Q. So you don't know?
A. I don't know.
Q. Would you agree with me that your criteria No. 4 is not really a measure of risk?
A. No. I'd say it is -- it's a very big measure of risk. The predominant criteria when choosing comparable companies is to make sure that those comparable companies are in the same general type of business operations, which is a very big reflection of risk, which is the business risk the company operates in.
Q. The same type of business operations?
A. Yes. I say that's -- that's probably the number one in selecting comparable companies.
Q. And I think you indicated that Aquila is a combination company; is that right?
A. Yes.
Q. And that perhaps some of the companies that you eliminated by applying your criteria No. 4 is a direct result of the fact that those are combination companies and derive significant revenues from their natural gas operations; is that true?
A. But we're looking at the electric operations of MoPub and St. Joe. I'm trying to evaluate the electric

operations of MoPub and St. Joe, not the gas operations. That was evaluated in a gas case.

Q. I understand that. But are you not, through your selection criteria, attempting to find companies of comparable risk?

A. Of comparable risks to electric operations, correct.

Q. And what does the greater than 70 percent of revenues received from electric utility operations have to do with risk given the fact that you testified you didn't think there was a difference between the risk for an electric utility and the risk for a natural gas company?

A. Let me clarify. I didn't say I didn't think there was a difference between the risk of natural gas and electric utility. I said as far as quantifying that, I do not know at this point in time, especially because of the fact that electric utilities have become involved in nonregulated activities.

Q. But you're convinced there is a difference in risk?

A. I'm sure there is some difference and it depends on the comparable groups you pick out.

Q. What is more risky, a natural gas company or an electric company? Just that -- a pure natural gas company and a pure electric utility company, just assume that hypothetically. Which one is -- all other things being equal, which one is riskier?

A. Can you please define pure gas?

Q. That's all they're in, just a pure play regulated electric utility company.

A. Vertically integrated?

Q. Yeah. They don't do anything else.

A. They generate --

Q. Right.

A. -- electricity?

Q. Sure.

A. Nuclear generation?

Q. You make the assumption.

A. There are a lot of assumptions. You pointed out already there's a lot of different business risks that may come into play for an electric utility versus a natural gas utility.

In -- the general understanding before a lot of electric companies got into nonregulated activities was that electric utilities were less risky than natural gas utilities. However, with electric utilities veering off into many nonregulated activities and still being classified as electric utility companies, I would venture to say that, you know, you cannot make that general classification. And -- and I'm not trying to make that general classification here in this case.

Q. Let me ask you, you mentioned no nuclear operations. That's item No. 6 in your selection criteria?

A. Yes.

Q. And item No. 7, At least investment grade credit rating?

A. Yes. That's very important.

Q. And why is that important?

A. Because that entails all business and financial risk.

Q. If you just focused on those two items, six and seven, as screening criteria, would you agree that your sample group would be much larger than the six companies that you selected?

A. I don't know. I didn't do that analysis.

Q. You didn't do what analysis?

A. To determine if my sample group would be larger if I just used those.

Q. Do you have any idea at all?

A. No. I didn't look at that.

Q. So are you then saying that you did not eliminate from your sample group any companies based on items 1 through 5 and item 8?

A. Oh, I eliminated those, but there's many companies there that I -- obviously when the lines become blank, I didn't even bother to look at whether or not it's an investment grade credit rating or if there's nuclear operations. So it's really hard for me to tell.

Q. If you eliminated companies by applying criteria 1 through 5 and 8, wouldn't it stand to reason that if you didn't apply those criterias, those companies would have not been eliminated?

A. You would think so.

Q. But you don't have any idea how many that --

A. No. I have no idea.

Q. Now, one of your proxy companies is DPL, Inc.; is that true?

A. That's correct.

Q. And what is DPL, Inc.?

A. Dayton Power & Light.

Q. And where is it located?

A. Ohio.

Q. And what kind of business is it in?

A. It's obviously an electric utility.

Q. You say it's located in Ohio. Do you know what --

A. I mean, that's -- I think of Dayton Power & Light. Obviously my geography's not great, but yeah, that's my general understanding.

MR. SWEARENGEN: Could we take a brief recess?

Maybe we want to break for lunch and come back early.

JUDGE JONES: Why do you need to take a recess now?

MR. SWEARENGEN: I just need to check some materials and maybe I can shorten this.

JUDGE JONES: Does anyone have any objection to that?

Well, let's go ahead and break for lunch then. It's a quarter till noon and why don't we come back at one o'clock.

MR. SWEARENGEN: Thank you.

JUDGE JONES: Actually go ahead and make it 15 after 1:00 so we can catch the stragglers. We're adjourned until 1:15.

(A recess was taken.)

JUDGE JONES: We're back on the record with Case No. ER-2004-0034 and we're continuing with the cross-examination of Staff's witness David Murray.

Mr. Swearengen, you may proceed.

MR. SWEARENGEN: Thank you, Judge.

BY MR. SWEARENGEN:

Q. Before lunch, Mr. Murray, we were talking about the proxy companies that you had selected which are set out in various schedules attached to your testimony. And I asked you about Dayton -- or DPL and I believe you

were describing what DPL is. What was your answer?
A. It's a holding company for Dayton Power & Light, which is their main electric utility for DPL, which I think you asked where they are located and I indicated in -- I said that was in Dayton, it was Dayton, Ohio.
Q. Dayton, Ohio. And it's a regulated subsidiary of DPL, Inc. Is that your understanding?
A. Yes.
Q. And have you read any of the financial literature in connection with DPL?
A. The information I may have read on DPL is from Value Line and maybe some Standard and Poor's credit rating research reports.
Q. Are you aware then that on December 10 of 2003 Standard and Poor's rating services announced that it had lowered DPL's corporate credit rating, including the credit rating of its regulated subsidiary from triple B to double B?
A. I believe that was pointed out actually in Dr. Murry's testimony.
Q. And were you aware of that fact when you put together your testimony in this proceeding?
A. No, I was not.
Q. Would you agree that by lowering the credit rating from triple B to double B, that DPL is no longer

investment grade?

A. I would agree with that.

Q. And, therefore, as a result, DPL would not meet your criteria No. 7, At least an investment grade rating?

A. If I were to update my study, that's correct.

Q. So based on that, would you agree with me that DPL should be removed from your proxy group by your own definition?

A. If I updated the study, I would agree with that. But, no, since when I did the study they were investment grade, they met that criteria at that time.

Q. And when did you do that study?

A. Probably shortly before -- I believe a lot of the -- a lot of the research, Value Line reports that I used were dated October 3rd, 2003, testimony was filed December 9th. So within that time frame. I'm sure it was whenever I was looking at that. Maybe -- to be honest with you, as far as specific dates that I was preparing the study, I can't tell you.

Q. Let me ask you this. You're not disputing the fact that the credit rating has been lowered from triple B to double B for that company?

A. No.

Q. And you would agree that it, therefore, would not meet one of your screening criteria; is that true?

A. If the study was updated, that's correct.

Q. And your testimony here on the stand, would you consider that to be an update to your study?

A. No. I'm standing by the testimony that was -- that's been filed. We're discussing some of the things that may have occurred since my testimony was filed, but I haven't changed my recommended return on equity nor has any other witness in this case.

Q. I'm not asking you about that. I'm asking you about your selection of that particular company as one of the six companies in your proxy group. And I think -- where do you set out the criteria that you used to select the companies for your proxy group? Where do I find that?

A. Schedule 11, I believe.

Q. Is it anywhere in your Direct Testimony?

A. Oh, as far as the Direct Testimony? I believe we talked about that earlier when we were talking about risk.

Q. What page is that on?

A. I'll have to -- page 26.

Q. Page 26. And if I look there and I look at criteria No. 7, it says, At least investment grade rating?

A. Yes.

Q. And you used that criteria to eliminate six additional companies from the pool of companies that you were looking at that; is that true?

A. At that time, that's correct.

Q. And now you're saying that you recognize or you will admit or concede that DPL does not meet that criteria; is that true?

A. Yes.

Q. But, nonetheless, it's your testimony that in representing to this Commission what they ought to do in terms of appropriate capital structure and return for this company, based on your own testimony, they ought to use the results of a company that no longer meet your criteria. Is that what you're saying?

A. The analysis I did at the time contemplated a triple B credit rating, so the data I was looking at at the time reflected that triple B credit rating. I have not bothered to look at any additional information as far as the financial information for -- for the discounted cash flow analysis of DPL since they've been downgraded.

Q. So the fact that that company no longer meets your own criteria doesn't concern you at all?

A. I wouldn't say it doesn't concern me, but it doesn't change my recommendation.

Q. And why is that?

A. Because I evaluated all of my comparable companies when I arrived at my recommendation of the 9.6-- excuse me, 8.64 to 9.64. And all the -- I mean, there were more than -- there are more than just -- there's more than just one company in that comparable group.

Q. Let me ask you this. All other things being equal, if you were to do this study today, all other things being equal except DPL is no longer investment grade credit rating, wouldn't you agree that you would eliminate them from your proxy group?

A. I would eliminate them, but I'm not saying that my recommendation would change.

Q. Okay. And that being the case, you'd be left in your proxy group with just five companies, all other things being equal; is that true?

A. Well, who knows what might happen with some of the other companies.

Q. No. I understand that. I said all other things being equal, nothing else changes, assuming all other facts being equal.

A. If you want to make that assumption, that would be the case.

Q. Okay. Now, DQE, Inc. is in your proxy group; is that correct?

A. That's correct.

Q. And what is that company?

A. It's a predominantly electric utility. I believe that they operate I believe mainly in the state of Pennsylvania, electric distribution. I know they had some other operations they just sold. Obviously we're familiar with the fact that they had AquaSource, they sold that to Philadelphia Suburban, but they're an electric utility.

Q. Have you reviewed any financial literature with respect to that company?

A. Value Line and Standard and Poor's information, once again.

Q. Are you aware of a Value Line report dated December 5, 2003, which indicates that potential investors should exercise caution before taking a stake here, meaning making an investment in this company?

A. I didn't review the December Value Line sheet.

MR. SWEARENGEN: May I approach the witness, your Honor?

JUDGE JONES: Yes, you may.

BY MR. SWEARENGEN:

Q. Mr. Murray, I just handed you a document, a Value Line document. Can you tell the Commission what that is, please?

A. Yes. It's a Value Line -- what they refer to as tariff sheet for Dukane Light. For whatever reason, they've changed it to Dukane Light. It used to be DQE on my tariff sheet. And it's a report issued by Value Line as of December 5th, 2003 with financial information and some written analysis.

Q. Now, the statement that I indicated was contained in that document appears at the very end of it; is that not true?

A. Yes. It reads that through 2008, I believe -- it's hard to read, I think it is a fax copy -- potential investors should exercise caution before taking a stake here, which would actually drive the dividend yield up.

Q. And why would it drive the dividend yield up?

A. If there's commentary from analysts within the investment community to use caution when investing in stock, then obviously the stock price of that company may depreciate because there's a caution.

It's just -- obviously the -- as we know, there's very few sell orders put out there by Wall Street analysts, but as far as some more independent analysts, if they're telling investors to exercise some caution, they may, you know, choose to, you know, either decrease their position or may choose not to buy the stock. And when that price goes down, the dividend yield would go up. And the cost of -- therefore, the cost of capital to that company goes up.

Q. Is that because it's becoming riskier?

A. Obviously they believe there's some risk; otherwise, they wouldn't say use some caution.

Q. Have you done any detailed study of this company at all?

A. Just what's in my schedules and my general knowledge through Value Line, Standard and Poor's.

Q. Are you aware then that DQE is trying to divest itself of past investments and financial energy services as well as telecommunications operations?

A. Yes. They're divesting about three units. We're very familiar with AquaSource because they operate in the state of Missouri.

Q. And are you aware that the company has an ongoing Internal Revenue Service investigation involving its tax returns for the period 1994 through 1997?

A. I believe I saw something to that extent. I believe it was in the S&P report.

Q. And isn't it true that the company cut its dividend by 25 percent in 2003?

A. I'll take your word for the percentage, but I do know they cut their dividend.

Q. Am I correct in understanding your testimony and schedules that you use DQE's 25.5 percent equity ratio, which was its equity ratio at the end of 2002, in the calculation of your proxy equity ratio average of

36.8 percent?
A. That's correct.
Q. Would you agree that all other things being equal, the financial risk for that company, for DQE, exceeds that of the other companies in your proxy group?
A. All other things being equal, correct.
Q. So then, in summary, assuming that your proxy group has some validity, one of those companies, DPL, fails to meet one of your own criteria No. 7, At least investment grade credit rating. Correct?
A. Not at the time.
Q. It does as we speak here today though, does it not?
A. If I were to update the study, you would be correct.
Q. And a second company, DQE, would it be fair to say that company has so much uncertainty surrounding it that -- especially given its low equity ratio, that it was forced to reduce its dividend in 2003 and there's a warning from Value Line to investors about investing in that company?
A. Yes. I took all those things into consideration when I came up with my overall recommendation in this case.
Q. Let me ask you this. If you eliminated those

two companies from your group of six proxy companies, would you agree then that the average equity ratio of your proxy group would be raised from 36.8 percent to about 43 percent?

A. I'll take your word for the average.

Q. Then do you have any reason to dispute that?

A. No. I don't have --

Q. Is that a difficult calculation to make?

A. Well, I'd have to average four --

Q. How long would it take you to do that?

A. I could do it right now.

Q. Okay.

A. What was the number you indicated?

Q. 43 percent.

A. 42.6 to be exact, but you're right.

Q. Okay. Thank you.

Now, before lunch we had a discussion about financial integrity. Do you recall that discussion?

A. Yes.

Q. And you indicated that based on the United States Supreme Court Hope decision, the return that this Commission authorizes should be sufficient to assure a confidence in the financial integrity of MPS and L&P; is that true?

A. Yes.

Q. So to maintain the credit of those entities

and to attract capital; is that true?
A. Yes.
Q. And that's still your testimony this afternoon?
A. That's correct.
Q. Thanks.
Turn to page 31 of your Direct Testimony, if you would.
A. Yes.
Q. There at the bottom of page 31, beginning on line 18 and continuing over on the top of page 32, you discuss the calculation on the pre-tax interest coverage ratio; is that correct?
A. Yes.
Q. First of all, what is a pre-tax interest coverage ratio?
A. It's just earnings before interest and taxes divided by interest. Just done -- trying to give an idea what the coverage of the interest expense might be.
Q. On page 32 at line 6 and 7 you say, This range of pre-tax interest coverage ratios falls between the lower quartile and median quartile for a triple B related electric utility. Correct?
A. Yes. And actually, I'm sorry, I didn't make this correction, but it shouldn't indicate median quartile.

It should just indicate median.

Q. So I should strike quartile?

A. Yes. I apologize.

Q. And I think you testified earlier that a triple B rating is the minimum rating for an electric utility to be considered investment grade?

A. That's correct.

Q. And then you go on from that point and discuss on page 32 and later a rate of return for Aquila's MPS and L&P operations; is that true?

A. Yes.

Q. And, once again, let me ask you to make sure that we're clear. Would you agree in order for a return to assure confidence in the financial integrity of the enterprise, which is the words the Supreme Court uses but in this case that would be MPS and L&P, would it be your intention that your recommendation in this case will result in MPS and L&P as stand-alone entities existing at an investment grade level?

A. I'm -- I never tried to give the impression that I knew exactly what their credit rating would be on a stand-alone basis, because that's a very hard thing to determine. I -- my recommended rate of return is fair and reasonable.

Now, if -- if the -- if that were to want to be determined, I am aware that S&P and Moody's both have services that the company could pursue. I think Moody's refers to it as rating assessment service. S&P refers to it as a rating evaluation service.

That indicates that if you -- if they were wanting -- if a company was wanting to try to assess the creditworthiness of a stand-alone company or stand-alone entity which could be a division, the company could pursue such a -- such an endeavor with Moody's and S&P.

And that would give -- that would be the only true way to give an independent and full-fledged, detailed analysis of what MoPub and St. Joe would be rated on a stand-alone basis. You can't just look at the quantitative ratios that's published by S&P for their targets because obviously, as we pointed out earlier, a lot of times those ratios are not falling within those targets.

And I'm aware from my conversations with Standard and Poor's and Moody's, that they compare the actual ratios that occur to companies -- other companies in the same industry, their actual ratios.

And that's why the financial medians are important to look at because they look at those in conjunction with those -- with those benchmarks. And -- but I am aware that Moody's and Standard and Poor's has indicated that they wouldn't be, you know, surprised if --

with this current environment where there are companies that have a lot of nonregulated activities and that there's proceedings going on in commissions where there's a dispute as to what the credit rating might be if the division were stand-alone, you know, that they -- you know, that they would possibly entertain the possibility of a company -- the commission would have to work with the company, but the company could request such an analysis to be done, which would be about as detailed and objective as you can get in determining what the -- what the integrity of the company would be.

Q. Well, you're the chief financial witness testifying in this case for the Staff of the Public Service Commission; isn't that true?

A. Yes.

Q. And I think you said this morning that you agreed -- and, once again, taking you back to the Hope case, that the return that this Commission authorizes -- and they're going to look at your recommendation in doing that -- should be sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and to attract capital?

A. Yes.

Q. And given that standard, what have you done to test whether or not your recommendation in this case, if