Exhibit No.:

Rate of Return/Capital Structure Issues:

Witness: David Murray MoPSC Staff

Sponsoring Party: Type of Exhibit: Surrebuttal Testimony

GR-2004-0209

Case Nos.: Date Testimony Prepared: June 14, 2004

MISSOURI PUBLIC SERVICE COMMISSION **UTILITY SERVICES DIVISION**

SURREBUTTAL TESTIMONY

OF

DAVID MURRAY

MISSOURI GAS ENERGY CASE NO. GR-2004-0209

> Jefferson City, Missouri June 2004

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's Tariffs to Implement a General Rate Increase for Natural Gas Service) Case No. GR-2004-0209			
AFFIDAVIT OF DAVID MURRAY				
STATE OF MISSOURI) COUNTY OF COLE)				
David Murray, being of lawful age, on his oath states: that he has participated in the preparation of the following surrebuttal testimony in question and answer form, consisting of				
	David Murray			
Subscribed and sworn to before me this Aug of June 2004.				
O CTARY SEA				

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

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1	SURREBUTTAL TESTIMONY
2	OF
3	DAVID MURRAY
4	MISSOURI GAS ENERGY
5	CASE NO. GR-2004-0209
6	Q. Please state your name.
7	A. My name is David Murray.
8	Q. Are you the same David Murray who filed direct and rebuttal testimony in
9	this proceeding for the Staff of the Missouri Public Service Commission (Staff)?
10	A. Yes, I am.
11	Q. In your direct testimony, did you recommend a fair and reasonable rate of
12	return for the Missouri jurisdictional natural gas utility rate base for Southern Union
13	Company's (Southern Union) Missouri Gas Energy (MGE) division?
14	A. Yes, I did.
15	Q. What is the purpose of your surrebuttal testimony?
16	A. The purpose of my surrebuttal testimony is to respond to the rebuttal
17	testimony of Mr. John C. Dunn, Dr. Roger A. Morin, Mr. John J. Gillen and Mr. Travis
18	Allen. Mr. Dunn sponsored rate-of-return direct and rebuttal testimony on behalf of
19	Southern Union. Dr. Morin sponsored rate-of-return rebuttal testimony on behalf of
20	Southern Union. His testimony dealt with a general critique of my direct testimony in
21	this proceeding. Mr. Gillen sponsored capital structure rebuttal testimony on behalf of
22	Southern Union concerning my calculation of a "stand-alone" Southern Union capital
23	structure in my direct testimony. Staff witness Mark L. Oligschlaeger of the Auditing

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- Q. Dr. Morin criticizes your heavy reliance on the Discounted Cash Flow (DCF) model in your analysis. Did you use any other models to check the reasonableness of your DCF recommendation?
- A. Yes. I used the Capital Asset Pricing Model (CAPM) and the Risk Premium model to test the reasonableness of my DCF recommendation.
- Q. What models did Mr. Dunn use in his analysis to arrive at his recommendation in this case?
- A. Mr. Dunn relied on the DCF model to make his recommendation in this case.
 - Q. Did Mr. Dunn use any other models in his analysis in this case?
- A. No. Mr. Dunn only used the DCF model. Mr. Dunn did not use any other models to test the reasonableness of his recommendation.
- Q. Do you believe Dr. Morin would have made downward adjustments to Mr. Dunn's recommended cost of common equity?

A. Yes. On page 48, lines 14 through 22, of his deposition, Dr. Morin indicated that he would make downward adjustments to a proxy group's estimated cost of common equity if the proxy group contains companies that have riskier, non-regulated operations. I addressed the riskier aspects of Mr. Dunn's comparable companies on page 18, line 5 through page 21, line 5 of my rebuttal testimony. However, Mr. Dunn did not make any downward adjustments to consider this.

- Q. If the implication of Dr. Morin's criticism of your heavy reliance on the DCF is that this renders your results as not being credible, then what are the implications of this criticism on Mr. Dunn's testimony?
 - A. It would render his recommendation as not being credible as well.
- Q. Do you believe that Mr. Dunn's analysis should be dismissed because of his sole reliance on the DCF model?
- A. No. However, as discussed in my rebuttal testimony, I have concerns with how Mr. Dunn determined the inputs for his DCF recommendation. Therefore, it is not the use of the DCF model that makes Mr. Dunn's recommendation unreasonable, but rather the inputs that Mr. Dunn used that make his recommendation unreasonable. I will also provide some "real world" observations that support the reasonableness of my recommendation versus Mr. Dunn's.
- Q. On page 6, lines 2 through 4, Dr. Morin criticizes your recommendation because it is "outside the zone of currently allowed rates of return for natural gas utilities in the United States and for his own sample of companies." How do you respond to this criticism?

A. Dr. Morin is aware that allowed rates of return are not necessarily synonymous with the cost of capital to a utility. For reasons that may be specific to each case in which allowed rates of return are reported, it is possible that an allowed rate of return was set at some level that is above the cost of capital. I have recommended what I believe is the current cost of common equity for MGE in this proceeding based on the current capital and economic environment.

- Q. Dr. Morin listed allowed returns on equity (ROEs) for your comparable companies on page 10 and 11 of his rebuttal testimony. Do you think that this list of ROEs should have been qualified by Dr. Morin?
- A. Yes. The Commission's Financial Analysis Department subscribes to C.A. Turner Utility Reports. I have reviewed the May 2004 survey that Dr. Morin referenced to determine the allowed ROEs for these companies. Dr. Morin should have qualified his list with a statement that only one of the allowed ROEs had an indicated Commission Order date. The date of the order is important because it would provide context as to the capital and economic environment at the time of the order. The only allowed ROE with an indicated order date was New Jersey Resources' allowed ROE on January 1994, which is hardly relevant to today's low cost of capital environment. All of the other allowed ROEs do not indicate the date of the order (see attached Schedule 1). Dr. Morin's use of allowed ROEs without the order does not provide full context for the Commission. The Commission should make its decision in this case based on the facts provided to it about the current low cost of capital environment. Mr. Dunn freely admitted as much in his deposition. Quite frankly, we are in such a low cost of capital environment that without understanding the context of current interest rate levels as they

they were below their current level before 1966.

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now?

Have long-term treasury yields ever been below the levels they are at right

Yes. It has been a while, but based on the 20-year U.S. Treasury yields,

- Q. On page 11 through 13 of his rebuttal testimony, Dr. Morin argues for an adjustment to the recommended cost of common equity for flotation costs due to the issuance of common stock. Does Dr. Morin provide support that the issuances of common stock that Southern Union has made and will make in the future are a result of MGE's capital needs?
- A. No. Dr. Morin's flotation cost adjustment argument is a standard argument that he makes in every case for investor-owned utilities, as verified in his deposition at page 30, lines 10 through 13. The reason that Southern Union has had to issue and will continue to issue common stock is because of its leveraged situation resulting from the acquisition of Panhandle Eastern Pipe Line Company, LLC (Panhandle).
- Q. Did Dr. Morin admit during his deposition on page 31, line 13 through 16, that the Panhandle acquisition affected Southern Union's capital structure?
 - A. Yes.
- Q. Dr. Morin indicates that you used a spot dividend yield in your dividend yield estimation. Is Dr. Morin correct in his assessment of how you determined the dividend yield in your analysis?
- A. No. A review of Schedule 18 shows that I averaged the expected dividend for 2003 and 2004 to determine an appropriate dividend yield to use in my cost of common equity recommendation. This dividend yield includes the 2004 projected dividend. Even if I applied a growth rate factor to a spot dividend yield, I would not agree that a 6 percent growth in the dividend would be reasonable to expect for my comparable companies.

- Q. Does Dr. Morin contradict anything in his textbook, <u>Regulatory Finance</u>: <u>Utilities' Cost of Capital</u>, 1994, when he indicates on page 14, line 4 through 6 of his rebuttal testimony that "the appropriate dividend to use in the plain vanilla annual DCF model is the prospective dividend one year from now, rather than the current dividend yield...?"
- A. Yes. On page 139 of his textbook, Dr. Morin states that "...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..." This is important to note this because I criticized Mr. Dunn for adjusting a dividend that had already been adjusted to take into consideration the dividend that is expected to be received over the next 12 months.
- Q. Did Dr. Morin confirm in his deposition that Value Line's dividend yield already contemplates the estimated cash dividends to be paid over the next 12 months?
 - A. Yes. On page 43, lines 21 through 25 he confirms that this is the case.
- Q. Is this the dividend yield that Mr. Dunn made a further adjustment to in order to estimate next year's dividend in his direct testimony?
 - A. Yes.
- Q. Dr. Morin indicates that you should have used the quarterly DCF model. What DCF model did Mr. Dunn use in his analysis?
- A. Mr. Dunn used the annual DCF model just as I did. However, his results are already adjusted upward because of the high growth rate he recommends and because of all of his upward adjustments. It is not the form of the model that concerns Dr. Morin, it is the results achieved from the application of the model. As Dr. Morin knows, it is the

end result that is judged as reasonable and neither Dr. Morin nor Mr. Dunn provided anything that gives insight as to what investors are requiring on their investments.

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Q. Dr. Morin criticized your use of four months of stock prices in order to determine your recommended dividend yield because it is "stale" and "violates the efficient market hypothesis." How do you respond?

A. It is interesting to note that the original intent of the DCF model (sometimes referred to as the "dividend growth model" in college finance textbooks) was to determine a reasonable price to pay for a stock at a specific point in time. It appears that, based on the original intent of the DCF model, the use of a spot price is appropriate. When setting rates for a utility, which may be applied over an extended period, it would appear to be appropriate to determine the cost of common equity based on a company's stock prices over some longer period. This lends support to my use of four months of stock prices, instead of determining the cost of common equity based on the current price of the security at the time of estimating the cost of common equity. The current price of the security may reflect either a temporary decreased or increased cost of common equity. Furthermore, statistically speaking, it is better to have a larger sample size when calculating an average.

- Q. On page 18, line 10 through page 19, line 5, of his rebuttal testimony, Dr. Morin explains why you shouldn't have considered negative growth rates in estimating your projected growth rates. Do you agree that you shouldn't consider negative growth rates?
- A. No. Dr. Morin states that negative growth rates should be excluded from any DCF analysis. While I agree that investors will not expect energy utilities to grow at

a negative growth rate forever, I do not agree that investors, and hence rate-of-return witnesses, should not take such growth rates into consideration. To do otherwise would be irresponsible. An investor should not pretend negative growth rates have not occurred and will not occur again. An investor should take into consideration these negative growth rates when estimating a reasonable sustainable growth rate for that investment. If a rate-of-return witness disregards negative growth rates, then that witness will recommend a higher dividend yield without considering that the reason for that higher dividend yield is because of lower growth rate expectations. The exclusion of negative growth rates results in a recommendation that not only has a higher growth rate, but a higher dividend yield because previous growth rates did not meet expectations so investors drove the price of the stock down.

It should be noted that I also included higher growth rates as well as lower growth rates in my averages in order to fully evaluate all of the growth rates. Dr. Morin's logic that investors do not expect energy utilities to grow at a negative growth rate forever also applies to the higher growth rates in my averages. However, because I included the negative growth rates, I also included the higher growth rates.

- Q. How do you respond to Dr. Morin's allegation on page 19, lines 10 through 11 that you used historical growth rates ending in 2002 with the intent of achieving certain results?
- A. This is an incorrect allegation. In order for a growth rate to be classified as an historical growth rate, it would have to have an ending point that has actually occurred. At the time I filed my testimony on April 15, 2004, the Financial Analysis Department had not received the April 2004 Value Line CD-ROM that contained a

majority of the actual 2003 dividends per share (DPS), earnings per share (EPS) and book
value per share (BVPS) information. The only information that was available to our
Department at the time of the study was the estimated 2003 information. In order for the
growth rates that I calculated to be considered historical, they would have to have
actually occurred. I have attached an email from Value Line as Schedule 2 that indicates
the exact date Value Line sent the April CD-ROM to our Department that contained
actual rather than estimated information for 2003. As shown on the attached email, the
April Value Line CD was mailed on April 20, 2004, which was after Staff's filing date of
April 15, 2004. Also attached are the Value Line tear sheets, Schedules 3-1 through 3-8,
from the March 2004 Value Line CD, which shows that a majority of the 2003
information from this CD was estimated information, which is in bold font. The Value
Line tear sheets, Schedules 4-1 through 4-8, from the April 2004 Value Line CD are also
attached to show that a majority of the information on this CD was actual information.
Q. Did this issue come up in your deposition on May 4, 2004 as well?
A Vos On page 01 line 0 through 22 of my denocition the following

- A. Yes. On page 91, line 9 through 22 of my deposition, the following exchange occurred between Mr. Eric D. Herschmann and myself:
 - 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 whenever you want, right?
 - A. Yes, we do.

growth rates?

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- A. All of my projected growth rates are from sources published either in late 2003 or early 2004.
- Q. Why do you believe it is important to specify what data you reviewed to calculate the historical growth rates?
- Because in the Memorandum of Law of Missouri Gas Energy, A Division A. of Southern Union Company, In Support of Its Motion To Exclude Certain Testimony And Opinions of David Murray filed on May 18, 2004 there is an assertion that the techniques used in my analysis are "driven by the result-oriented desire to keep MGE's rate of return as low as possible." The memorandum discusses my calculation of historical growth based on 2002 actual historical data as one such example. Dr. Morin reiterates the same accusation on page 19, lines 10 through 11 of his rebuttal testimony.
- Q. Do you agree with Dr. Morin's position that dividend growth is an inappropriate proxy to use for estimating future growth for purposes of the DCF model?
- No. I agree that using dividend growth as the only proxy for future A. growth would be inappropriate, but I do not agree that the use of dividend growth along with book value growth and earnings growth is inappropriate. Many times historical dividend growth and future dividend growth can be used as a "check" on the reasonableness of earnings growth projections. If a company's management does not believe that some of the earnings forecasts for its company are sustainable, then they will not recommend that the dividends be grown at the same rate as earnings. This provides some insight as to the long-term sustainable growth rate of the company. Dividends also can give some indication as to whether the earnings of the company are "real." This has been an issue recently where many companies have either, fraudulently or through

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accounting manipulations, inflated earnings. Therefore, dividends are still pertinent to investors in estimating the future growth of the company. This is especially true for traditional regulated utilities, in which dividends are one of the main investor attractions to such companies.

- Q. Did Dr. Morin analyze the recent historical dividend payout ratios of your comparable companies, which would have been more relevant then just making general comments about the "energy utility" industry, which could include a wide array of companies?
- A. No. In his deposition on June 10, 2004, page 28, line 17 through page 27, line 16, Dr. Morin explains how he came to the conclusion that the dividend payout is decreasing for my comparable companies. He did not look at the specific payout ratio trends for my comparable companies. He relied on EPS and DPS growth rates to arrive at his conclusion. My review of the payout ratios of my comparable companies showed that the payout ratios have increased for some of the companies, decreased for some of the companies and increased and decreased for some of the companies. Companies in the broad "energy utility" industry could include companies that have reduced their dividends to pursue non-regulated businesses. I believe if a witness is using companies that are experiencing this trend, then the companies chosen may not be appropriate to estimate the cost of common equity for a regulated natural gas distribution utility.
- Q. On page 23, lines 7 through 10 of his rebuttal testimony, Dr. Morin claims that "[h]istorical growth rates have little relevance as proxies for future long-term growth. They are downward-biased by the sluggish earnings performance in the last five years, due to the structural transformation of the energy utility industry from a regulated

monopoly to a competitive environment." Does the five-year historical EPS growth rate that Mr. Dunn relied on for his recommended growth rate of 6 to 7 percent confirm this statement?

- A. No. When referring to his calculated 5-year historical EPS growth rate of 7.18 percent, Mr. Dunn states the following: "[t]he data for the five year term is distinctly different from the ten year data. The earnings growth rate has increased significantly." Mr. Dunn appears to rely on this 5-year historical growth rate for the upper end of his recommended growth rate range along with Value Line's projected EPS growth rate of 6.93 percent.
- Q. Did Dr. Morin indicate anything in his deposition about Value Line's forecasts that raise some concern about Mr. Dunn's heavy reliance on these growth rate projections?
 - A. Yes. Dr. Morin indicated the following:

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.

- Q. How do you respond to Dr. Morin's proposal on page 27, lines 8 through 9, that historical growth rates and dividend forecasts should be dismissed?
- A. Much the same way I do to just blindly dismissing negative growth rates. All of these growth proxies can be useful if critically analyzed by the analyst. I would not indicate that Mr. Dunn should just blindly dismiss the 7.18 percent 5-year historical EPS figure that he calculated on Schedule JCD-4. However, I think that he would want to critically analyze this growth rate to determine if the growth rate is reasonable when considering all of the other growth proxies that he reviewed. To rely on proxies that only

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support the highest growth rates possible is not how prudent investors would evaluate a potential investment.

- Q. Dr. Morin indicates that you have a fundamental problem with your risk premium model estimates because your cost of common equity developed from your DCF model does not match investors' expected return on equity used in your risk premium analysis. How do you respond to this criticism?
- A. I believe Dr. Morin's criticism shows why Staff does not give much weight to the risk premium model when recommending a return on equity for a Missouri utility. The DCF model estimates the cost of common equity to the company. The cost of common equity is the investors' required rate of return, which may or may not be equivalent to the expected return on common equity of the investor. If an investor continues to expect a return on equity that is higher than the cost of common equity, then this may mean that the utility is in an overearnings situation. I have explained this before by using Staff's 2002 earnings complaint against AmerenUE as an example. Investors in AmerenUE may have expected that AmerenUE would continue to earn a certain return on common equity over AmerenUE's cost of common equity, but it wasn't until the Commission recognized AmerenUE's lower cost of common equity that investors' expected returns on common equity were ratcheted down. The same analogy can apply to the use of the Risk Premium model. This is why Staff only uses this model to check the reasonableness of its DCF results.
- Q. What are the consequences of Dr. Morin's comment on page 29, lines 18 through 19, about the return on common equity being set equivalent to the expected return on common equity?

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A. Dr. Morin's proposition is that commissions' allowed returns should be driven by what investors have come to expect and not based on the capital and economic environment which reflects a lower cost of capital. This would be as circular as recommending a cost of common equity based on past allowed returns in other jurisdictions. If a situation like this were to hold true in the real world, then investors would continue to expect the high returns on their investments that they received in the late 1990s and early 2000. As all real world investors know, this is not how investing works. It would only be natural that investors should expect that eventually regulatory commissions are going to start to recognize the lower cost of capital in the returns they allow their utilities.

- Q. Dr. Morin indicates that the risk-free rate you used in your study is "stale." When did you prepare the study that is the subject of this criticism?
- A. The study that I performed to recommend a cost of common equity was completed some time during March 2004. The only average monthly risk-free rate that I had available at the time of the study was February 2004. Because rates can fluctuate up or down from month-to-month, it is only appropriate for the analyst to choose some ending point in order to arrive at his recommendation. Just as the company witnesses had the advantage of knowing what happened to interest rates since the direct testimony was filed by Staff, I had the advantage of knowing what had happened to interest rates since Mr. Dunn filed direct testimony because he filed testimony five months before I did. However, in my rebuttal of Mr. Dunn, I tried to be mindful of this.
- Q. On page 32, line 19 through page 33, line 15 of his rebuttal testimony, Dr. Morin indicates that you used the wrong historical risk premium because you used

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the total return for long-term government bonds rather than just the income return on the government bonds. Is an investor in government bonds only going to receive a return based on the coupon of the bond, which is the income from the interest rate stated on the bond?

- A. Only if the investor holds the bond until maturity and bought the bond at par value. Otherwise investors will receive a total return, which is based on changes in the price of the bond and reinvestment returns. Therefore, it is appropriate to measure the market risk premium by comparing total returns on stocks versus total returns on risk-free treasuries because this is what investors will expect to receive.
- Q. Dr. Morin indicates that Ibbotson Associates recommends the use of the income return rather than the total return because the "income component of total bond return (i.e. coupon rate) is a far better estimate of expected return than the total return (i.e. coupon rate + capital gain), as realized capital gains/losses are largely unanticipated by investors." Is this your understanding as to why Ibbotson Associates recommends the use of the income return rather than the total return?
- A. No. My understanding of Ibbotson Associates' justification for the use of the income return rather than the total return is that they consider this to be the true "riskless portion of the return."
- Q. Dr. Morin criticizes your CAPM analysis that uses a short-term historical period because "historical risk premiums are only reflective of prospective risk premiums if measured over long periods." Do you agree with this statement?
- Yes. I did not give the short-term risk premium CAPM results any weight A. in arriving at my recommended cost of common equity. I stated that the long-term risk

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premium CAPM results supported the upper end of my DCF analysis and, therefore, I gave this CAPM result more weight in my analysis. However, as I indicated in my direct testimony, the results from the short-term risk premium CAPM should not be ignored because it provides insight as to what has actually occurred in the equity markets and treasury bond markets. This short-term risk premium CAPM shows that stock market returns from 1993 through 2002 were actually lower than the returns on long-term U.S. Treasury bonds.

- Does Dr. Morin's criticisms about the use of the short-term risk premium Q. period for the application of the CAPM contradict some of his other criticisms of your analysis?
- Yes. Dr. Morin indicated that I should have used a current stock price A. rather than a four-month average of stock prices in my application of the DCF model because it reflects the most current investors expectations. As Dr. Morin pointed out in his criticism of my use of a short-term risk premium period in my application of the CAPM, investors expected returns over a longer period of time are going to be different than over a shorter period of time. This is exactly why it is important to look at an average of stock prices over some longer period of time so the rate of return witness can estimated investors' required rates of return over some longer period.
- Q. Does Dr. Morin's criticism of your analysis of a short-term risk premium CAPM contradict any other part of his criticisms of your analysis?
- A. Yes. Beginning on page 35 of his rebuttal testimony, Dr. Morin discusses his thirteenth criticism of my analysis. Dr. Morin claims that instead of looking at a longer period (nine years) to determine the risk premium investors require to invest in

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Moody's Baa-rated utility bonds versus Moody's A-rated utility bonds, he believes I should have used the current spread between these ratings for my risk premium adjustment. If Dr. Morin believes it is appropriate to look at a longer period to evaluate the risk premium required when executing the CAPM, then one would believe that he would have the same position when measuring the risk premium investors require to invest in Moody's Baa-rated bonds rather than Moody's A-rated bonds.

- Dr. Morin indicates that the historical market risk premium that you used is not current based on the up-to-date 2004 edition of the Ibbotson Yearbook. Is this an
- Yes. At the time Staff produced its study it only had a copy of the 2003 edition of the Ibbotson Yearbook. The 2004 Yearbook is currently on order from
- When did Ibbotson start sending the new edition of the Yearbook out to
 - It would have been sent sometime towards the end of March.
 - When were you completing the study on the cost of capital for MGE?
- It would have been toward the end of March to early April in order to have time for review by assigned attorneys and case coordinators.
- Q. If you had received the 2004 Yearbook when you did your analysis, would this have changed your recommendation?
- A. No. I was comfortable with my DCF recommendation that included historical growth rates and recent projected growth rates from various analysts. I decided to give more weight to the projected growth rates in my recommendation as can be

derived from the fact that the upper end of my recommendation falls above the higher end of a couple of the average projected growth rates indicated on Schedule 16 attached to my direct testimony. It is clear that I did not give the historical growth rates as much weight because the lower end of my projected growth rate range is over a 100 basis points higher than the average historical growth rates that I calculated in column (1).

- Q. On page 34, line 22 through page 18, line 18 of his rebuttal testimony, Dr. Morin claims that you should have used the empirical CAPM. Do all financial texts suggest that it is appropriate to used the empirical CAPM?
- A. No. The textbook by Aswath Damodaran, <u>INVESTMENT</u>

 VALUATION: Tools and Techniques for Determining the Value of *Any* Asset, 1996, which is a textbook used in the curriculum for students seeking the Chartered Financial Analyst (CFA) designation, does not recommend any adjustment to beta for the CAPM. This textbook follows the traditional execution of the CAPM throughout the text. Many individuals that are pursuing their CFA designation may either work in the investment field or intend to work in the investment field. Consequently, CFAs that are or will be making real world investment decisions have been taught the traditional CAPM.
- Q. In his fourteenth criticism of your analysis starting on page 36 of his rebuttal testimony, Dr. Morin maintains that you didn't allow an adjustment to consider the riskier capital structure that you attribute to MGE. Is this correct?
- A. No. I explained my upward adjustment of 32 basis points that I made to my recommendation in my direct testimony. This upward adjustment of 32 basis points takes into consideration the entire risk differential, both financial and business risk, between MGE and the proxy group that I used. The upward adjustment of 32 basis

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points was based on the credit rating difference between Southern Union (BBB) and the proxy group (A). When evaluating the creditworthiness of a company, credit rating agencies perform a comprehensive evaluation of all of the risks to the company, which includes the financial risk and the business risk. The financial risk is the component of risk that is a function of the capital structure of the company. Therefore, by relying on a third party that performs this comprehensive analysis, I believe that I have adequately considered the increased risk due to my recommended capital structure.

- Do you have any evidence that supports the reasonableness of your Q. recommended cost of common equity as it relates to the required risk premium because of Southern Union's leverage capital structure?
- Yes. I have been tracking the yield on Southern Union's preferred stock, A. which is listed in the Wall Street Journal, since I filed direct testimony in this case. Southern Union issued this preferred stock in October 2003 at a coupon of 7.55 percent. Because of the attractiveness of this coupon, investors have bid the price up of the \$25 stated par value preferred stock. This results in a lower required yield to investors that purchase Southern Union's preferred stock at the higher price. Since I have been tracking the yield on Southern Union's preferred stock, it has ranged between 7.1 percent to 7.3 percent.
- Why is it important to consider the required yield on Southern Union's Q. preferred stock?
- A. Because investors in Southern Union's preferred stock are subordinate to Southern Union's debt holders. Southern Union's preferred stock holders do not receive dividends on their preferred stock investment until the interest has been paid on Southern

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Union's debt. This is of course if the Board of Directors declares such a dividend to be paid. The preferred stock holders would also be "next in line" to Southern Union's debt holders if Southern Union were to ever file for bankruptcy.

Consequently, the yield on Southern Union's preferred stock indicates the risk premium that the preferred stock investors are requiring because of Southern Union's leveraged capital structure. While I do not know precisely how much additional risk premium Southern Union common stock holders will require over the required yield on Southern Union's preferred stock, I do believe that my recommended cost of common equity of 8.52 percent to 9.52 percent is much closer to this required risk premium than Mr. Dunn's recommended cost of common equity of 12 percent. The midpoint of my recommendation represents approximately a 180 basis point risk premium over the required yield on Southern Union's preferred stock, whereas Mr. Dunn's recommended cost of common equity represents approximately a 480 basis point risk premium. As I will explain in more detail later in my surrebuttal testimony, when considering the fact that well known academicians and investors believe that the equity risk premium that the market requires over the Ten-Year U.S. Treasury is only 300 basis points, I believe this provides a tremendous amount of insight as to the reasonableness of my recommendation even in light of the leveraged capital structure that I am recommending for MGE.

- Q. Did Dr. Morin consider the current yield on Southern Union's preferred stock when considering the reasonableness of your recommendation in this case?
- A. No. He indicated he did not know the currently yield on Southern Union's preferred stock in his deposition, on page 35, line 3.

Q. Do you think it is important to consider this type of information when determining the reasonableness of a recommended cost of common equity?

believe the current yield on Southern Union's preferred stock provides insight as to the

Yes. As Dr. Morin recognized during his deposition when he stated that

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the End Result Doctrine of the *Hope* case indicates that the "methodology is really sort of 5 immaterial if the end result is reasonable to both the consumer and the investor." I

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Response to Mr. Dunn's Rebuttal Testimony

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reasonableness of my recommendation in this case.

On page 6, line 20 through 21, Mr. Dunn refers to your recommended

common equity ratio as an "artificially" low equity ratio. Is your recommended common

No. My recommended common equity ratio in this proceeding is the

equity ratio in this case artificial?

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equity ratio that investors and credit rating agencies analyze when evaluating Southern Union's operations. Credit rating agencies and investors do not evaluate the contrived equity ratio that Mr. Dunn is recommending in this case. Although Staff witness Mark L. Oligschlaeger is addressing the technical accounting aspects of Mr. Gillen's rebuttal testimony in this case, there is one key sentence in Mr. Gillen's rebuttal testimony that demonstrates the fact that a certain amount of common equity is associated with the Panhandle operations. On page 7, line 10 through 12 of his rebuttal testimony, Mr. Gillen states that Southern Union's stand-alone equity represents all of Southern Union's shareholder value, which includes Panhandle, because he indicates that Panhandle's stand-alone equity was eliminated when Southern Union acquired

Panhandle. Therefore, it is only logical to conclude that a certain amount of that equity

should be assigned to the Panhandle operations, regardless if Southern Union's witnesses believe that the process that I employed on page 21, line 18 through page 22, line 9 of my direct testimony is not the proper amount of equity to exclude. Mr. Dunn's capital structure recommendation is based on the premise that when an investor purchases a share of Southern Union common stock, this only represents an ownership interest in Southern Union's natural gas distribution operations. Mr. Gillen's statement about the fact that a share of Southern Union represents a share in all of its operations completely discredits Mr. Dunn's capital structure recommendation. In fact, I believe that Mr. Dunn's failure to specify in his direct testimony the type of Panhandle capital that he excluded from his recommended capital structure illustrates Mr. Dunn's own realization of the weakness of his position.

- Q. Why do you believe Mr. Dunn chose to use the process he did to arrive at his recommend capital structure for MGE?
- A. Because in the last case, Case No. GR-2001-292, Mr. Dunn recommended a hypothetical capital structure for MGE. In that case Staff demonstrated in its rebuttal testimony how such a capital structure recommendation indirectly resulted in a higher cost of capital recommendation because of Southern Union's increased leverage due to its acquisition of the New England properties. Staff deemed this to be in violation of Condition 6 placed on Southern Union in its applications to acquire these properties in Case Nos. GM-2000-500, GM-2000-502, GM-2000-503 and GF-2000-504. The condition was as follows:

Southern Union will not seek an increase in Cost of Capital for MGE as a result of this transaction. Any increases in the Cost of Capital Southern Union seeks for MGE will be supported by documented proof: that the increases are a result of factors not

associated with this transaction; that the increases are not a result of changes in business, market, economic, or other conditions for MGE caused by this transaction; or that the increases are not a result of changes in the risk profile of MGE caused by this transaction. Southern Union will ensure that the rates for MGE ratepayers will not increase as a result of this transaction.

This same condition, with some modifications, was placed on Southern Union in the Stipulation and Agreement filed in the Panhandle acquisition case, Case No. GM-2003-0238, as well. The exact condition was as follows:

Southern Union will not recommend an increase or claim Staff should make an adjustment to increase the cost of capital for MGE as a result of the Transaction. Any increases in cost of capital Southern Union seeks for MGE will be supported by documented proof: (1) that the increases are a result of factors not associated with the Transaction; (2) that the increases are not a result of changes in business, market, economic or other conditions for MGE caused by the Transaction; or (3) that the increases are not a result of changes in the risk profile of MGE caused by the Transaction. Southern Union will ensure that the retail distribution rates for MGE ratepayers will not increase as a result of the Transaction.

- Q. What was Mr. Dunn's justification for proposing a hypothetical capital structure in the last rate case, Case No. GR-2001-292?
- A. In his direct testimony in that case on page 17, line 28, through page 18, line 11, Mr. Dunn provided the following justification for using a hypothetical capital structure:
 - Q. Why is the Southern Union consolidated capital structure inappropriate for use in determining the revenue requirement for MGE?
 - A. A consolidated capital structure is only the summation of the financing of all of the individual division and subsidiary activities of a company, plus or minus accounting eliminations. With a diversified company such as Southern Union, the consolidated capital structure bears no particular relationship to any one of the individual lines of business.

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Southern Union operates several natural gas distribution divisions. It also has investments in the non-utility business. It is these investments which diversify the capital arrangements of the company and combined with the appropriateness of adequate divisional accounting require the implementation of a division capital structure system. These non-utility investments are relatively recent commitments of the company in terms of their significance.

What is Mr. Dunn's assessment of Southern Union's operations in this

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case?

A. On page 18, lines 1 through 14 of his rebuttal testimony, Mr. Dunn provides the following description of Southern Union:

> Southern Union is a complicated company with different capital demands by different divisions and subsidiaries. It is comprised of two major business activities. The first is the distribution business, which in turn is comprised of a series of divisions operating in different states and jurisdictions. The second major business of Southern Union, the Panhandle Eastern pipeline operation, is entirely different. The Panhandle Eastern operations have different risks and, consequently, different capital mix requirements. The consolidated capital structure approach assumes that those responsible for financial decisions at Southern Union do not use contemporary financial theories and do not approach the matter seriously, a view which is beyond a doubt inappropriate and incorrect.

Therefore, it appears that Mr. Dunn now recognizes that the main business segment of Southern Union before its acquisition of Panhandle was natural gas distribution.

Mr. Dunn claims that the Panhandle operation is "entirely different" than Q. Southern Union's natural gas distribution operations. Does this contradict Southern Union's position regarding tax treatment of the sale of its Texas natural gas distribution operations to fund its purchase of the Panhandle operations?

- A. Yes. In its 2003 Annual Report, Southern Union indicated that it structured the "...Panhandle Energy acquisition and the sale of its Texas operations to qualify as a like-kind exchange under Section 1031 of the Internal Revenue Code of 1986." The Internal Revenue Service defines properties of like-kind as: "[p]roperties are of like-kind, if they are of the same nature or character, even if they differ in grade or quality." Therefore, for purposes of justifying the use of different capital structures for ratemaking, Southern Union argues that its operations should be considered different, but for purposes of tax treatment, it argues the operations should be considered the same.
- Q. How does S&P currently view the business position of Southern Union on a consolidated basis and Panhandle on a stand-alone basis?
- A. In a recent research report issued by S&P on June 2, 2004, "New Business Profile Scores Assigned for U.S. Utility and Power Companies; Financial Guidelines Revised," S&P assigned a business profile of a "3" to both Southern Union on a consolidated basis and to Panhandle on a stand-alone basis. This essentially indicates that S&P now views the Panhandle operations and Southern Union's natural gas distribution divisions as having equivalent business risk. Before S&P's release of the research report on June 2, 2004, S&P had assigned a business position of a "4" to Southern Union. Before Southern Union had acquired Panhandle they were assigned a business position of "3," implying that the acquisition of Panhandle caused additional business risk for Southern Union on a consolidated basis.
- Q. What is the implication of S&P's assignment of a business profile of "3" to both Southern Union on a consolidated basis and Panhandle on a stand-alone basis?

- A. The implication is that the use of the consolidated capital structure for cost of capital purposes is appropriate. S&P's business profile assignment indicates that they don't view Southern Union's natural gas distribution divisions and Panhandle as being "entirely different." In fact the implication of each operation being assigned the same business profile is that the benchmark capital structures that S&P would compare Southern Union and Panhandle to would be the same.
- Q. What was the implication of S&P's previous decision to raise the business profile of Southern Union to a "4" from a "3" after it acquired Panhandle?
- A. Financial theory indicates that the higher the business risk of the operation, the less financial risk, i.e. increased leverage, the operation can endure. This is why S&P requires more stringent financial ratios for companies that have a higher business profile. Therefore, based on S&P's previous position on the business profile of Southern Union and Panhandle, if Southern Union had been adhering to financial theory regarding the assignment of capital, then Southern Union would have been allocating a larger percentage of it consolidated common equity balance to the Panhandle operations. However, because S&P now views each operation as having similar business risk, the use of the consolidated capital structure is even more appropriate. This refutes Mr. Dunn's claim that this is a "complicated" company.
- Q. Did Mr. Dunn indicate anything in his deposition on May 6, 2004 that validates the use of the consolidated capital structure if the business risks of all of the company's operations are fairly similar?
 - A. Yes. On page 21, beginning on lines 6, Mr. Dunn indicates the following:

 In a simple day, companies many years ago were relatively simple, single lines of business and have maybe a tiny little subsidiary.

Water company has a water testing subsidiary, no problem. Or even somebody like American Waterworks, which has a number of water company subsidiaries, consolidated might work simply because they're comprised of 15 companies that are virtually identical and all probably capitalized at least similarly. The same for AT&T when it was the dominant telephone company.

- Q. Has Mr. Dunn been consistent before with his position described above?
- A. Yes. When Mr. Dunn represented the Platte County Intervenors in Case No. WR-95-205, In the matter of Missouri-American Water Company's tariff revisions designed to increase rates for water service provided to customers in the Missouri service area of the company and Case No. SR-95-206, In the matter of Missouri-American Water Company's tariff revisions designed to increase rates for sewer service provided to customers in the Missouri service area of the company, Mr. Dunn recommended American Water's consolidated capital structure because he maintained that the subsidiary capital structure contained "phantom equity."
 - Q. Is Mr. Dunn being consistent with this position now?
- A. No. Because S&P now views Southern Union's pipeline operations and distribution operations as being equivalent in business risk, it would seem that if Mr. Dunn were to be consistent with his view expressed in his deposition and with the position he took in a previous case with this Commission, he would recommend the consolidated capital structure.
- Q. Considering all of the discussion about what Southern Union's capital structure would be without the Panhandle operations, what do you conclude about recommending a capital structure other than the consolidated capital structure when recommending a rate of return for a utility that is a division of an operating company?

- A. The only capital structure that is truly known, measurable and identifiable is the consolidated capital structure. This is the only capital structure, other than a hypothetical capital structure, that the Commission should consider. If a hypothetical capital structure were to be considered by the Commission, then the Commission would have to consider adjustments to the various costs of capital that are applied to the hypothetical capital structure. For example, because Southern Union has always been an aggressively leveraged company, if one were to use some type of hypothetical capital structure for one of its natural gas distribution utilities, then one would need to adjust the cost of debt and common equity downward.
- Q. Do you consider Mr. Dunn's proposed capital structure in this case as a hypothetical one?
- A. Yes, because this capital structure bears no relationship to the capital structure that credit rating agencies evaluate to determine the creditworthiness of Southern Union. It also bears no relationship as to how MGE is actually capitalized.
- Q. Do you agree with Mr. Dunn that there was an attempt to insulate MGE from the Panhandle operations when it applied for approval to acquire Panhandle?
- A. Yes. I agree there was an attempt to insulate MGE from the Panhandle operations, but I do not believe that this attempt was successful.
- Q. What evidence did you rely on to conclude that MGE is not insulated from the Panhandle operations?
- A. As I stated previously, S&P is applying an equal credit rating on senior debt to Southern Union and its Panhandle subsidiary.

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- Q. Would it have been possible for the Panhandle debt to be refinanced at such attractive interest rates if Mr. Dunn's assertion that Panhandle doesn't have any equity to support it were true?
- No. If Panhandle had only debt and no equity to support its operations, I A. don't believe creditors would have viewed Panhandle as a good credit risk.
- Q. Mr. Dunn claims that you didn't make an adjustment for the lower common equity ratio that you recommended for MGE versus the average common equity ratios for your comparable companies. Is this correct?
- A. No. I addressed this when I responded to Dr. Morin's rebuttal testimony about the same criticism. I made an upward adjustment of 32 basis points to consider the credit rating differential between my comparable companies and Southern Union. Southern Union's credit rating already contemplates the financial risk, i.e. a lower common equity ratio, when assigning a credit rating to Southern Union.
- Q. On page 13 of his rebuttal testimony, Mr. Dunn refers to S&P's Utility Group Financial Target benchmark ratios for companies with business profile of a "4" to test the reasonableness of your recommended capital structure in this case. Is it reasonable for Mr. Dunn to use a business profile of a "4" to test the reasonableness?
- A. No. I have already discussed that S&P has assigned a business profile of a "3" to all of Southern Union's operations as of June 2, 2004. In fairness to Mr. Dunn, this did not occur until after he wrote his rebuttal testimony. However, he should not have been reviewing the benchmarks for companies with a business risk profile of "4" because, previously, S&P had increased Southern Union's business profile to a "4" because of the Panhandle acquisition. Before the Panhandle acquisition when Southern

	David Murra	y
1	Union only	had natural gas distribution operations, Southern Union was assigned a
2	business prof	île of a "3."
3	Q.	What is the current total debt to total capital benchmark for a company
4	with a business position of a "3"?	
5	A.	It is from 55 to 65 percent total debt to total capital.
6	Q.	Does your recommended capital structure fall within this benchmark?
7	A.	No.
8	Q.	How many times in the last ten years has Southern Union's capital
9	structure fall	en within this guideline when TOPrS is included as debt (see attached
10	Schedule 5)?	
11	A.	Four times.
12	Q.	What was S&P's previous benchmark for a company with a business
13	profile of "3"	before it changed the targets on June 2, 2004?
14	A.	It was from 53 to 61 percent total debt to total capital.
15	Q.	How many times in the last ten years has Southern Union's capital
16	structure fallen within the old guideline when TOPrS is included as debt?	
17	A.	Once.
18	Q.	Why did you include TOPrS as debt in your calculation of total debt to
19	total capital?	
20	A.	Because that is how S&P treats TOPrS. Please see the attached email
21	labeled as Schedule 6.	
22	Q.	What do you conclude from your analysis of Southern Union's capital
23	structures over	er the last ten years?

Surrebuttal Testimony of

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- S&P has decided that Southern Union's capital structure, although it A. doesn't meet the benchmark, is appropriate for a BBB-rating when evaluated with other
- factors.
- Q. Are the financial benchmarks mentioned by Mr. Dunn intended to be rigid guidelines to use to determine if a capital structure is appropriate for a given credit
- rating?
 - No. The S&P financial benchmarks indicated in Mr. Dunn's testimony A.
- are designed for purposes of assisting utilities, utility affiliates, and the investment 8
 - community in assessing the relative financial strength of issuers. By no means are these
 - benchmarks concrete numbers. As I have already discussed, Southern Union has only
- met the old benchmark one year in the last ten.
 - Q. On page 15, lines 20 through 26 of his rebuttal testimony, Mr. Dunn
- indicates that the proceeds from Southern Union's planned common equity offering will
- 14 not be used to invest in Panhandle Eastern. Even if this is true, isn't the reason that
- 15 Southern Union has such a leveraged capital structure at this time is because of its
 - acquisition of Panhandle?
 - A. Yes. Although the proceeds from this issuance of common equity may not
 - be used to invest in Panhandle, it is the effects of the Panhandle acquisition that has put
 - Southern Union in a situation which requires it to issue additional common equity in
 - order to improve its capital structure. Consequently, although the proceeds from this
 - specific issuance may not be directly used to invest in Panhandle, it is the Panhandle
- 22 acquisition that has caused the need for this issuance.

Q. On page 41, lines 8 through 15 of his rebuttal testimony, Mr. Dunn explains how the issuance of this additional common equity will benefit MGE customers when he argues for an adjustment for flotation costs. Are you convinced by his explanation?

A. No. Mr. Dunn indicates that the customers of MGE will benefit because "the bond rating of Southern Union will be preserved and because lower bond ratings lead to higher costs of debt, a savings will be realized." Based on all of the information I have reviewed, which includes Southern Union's 2003 Annual Report, and based on admissions from Mr. Dunn during his deposition, the reason Southern Union is having to issue additional common equity to preserve its bond rating is because of the leverage caused by the Panhandle acquisition. Of course, if Mr. Dunn's position on Southern Union's capital structure and the insulation of its natural gas distribution operations were true, then Southern Union wouldn't have to issue additional common equity because of the Panhandle debt assumed by Southern Union.

Mr. Dunn indicates that MGE customers will benefit from this offering because the "proceeds of the sale represent new capital available to Southern Union, some of which **may** by used to add facilities to MGE's infrastructure to provide services to customers." (emphasis added). As I indicated in my rebuttal testimony, Mr. Dunn has not provided any documented proof that any of these proceeds are because of MGE's capital needs.

Q. On page 17 of his rebuttal testimony, Mr. Dunn shows the capital structure that Mr. Gillen provided in his rebuttal testimony that removed the "impact of Panhandle

Eastern from the consolidated capital structure..." What impact of Panhandle Eastern was removed from the consolidated capital structure?

- A. The only type of capital that was removed from the consolidated capital structure was the debt that supports Panhandle Eastern. Mr. Dunn indicated in his deposition testimony on page 29, line 13, "[t]he equity is essentially nonexistent." He indicates on page 29, lines 20 through 21 of his deposition that "...the Panhandle equity is in the ground somewhere." Mr. Dunn apparently believes this is justification for his position that no equity should be excluded from Southern Union's capital structure to eliminate the capital that supports Panhandle because the equity is "nonexistent."
- Q. If Mr. Dunn's position is that there is no Southern Union equity that supports the Panhandle operations that should be excluded from his recommended capital structure, then does this contradict one of his data request responses?
- A. Yes. Staff Data Request No. 0345 asked the following question of Mr. Dunn:

On page 22, lines 19 through 22 of his rebuttal testimony Mr. Dunn indicates that Panhandle Eastern has a mix of capital that "stands behind" it. What are the various ratios, in percentage terms, for each type of capital in the mix that supports Panhandle Eastern?

- Mr. Dunn's response was "[n]o such study was performed." I find it hard to reconcile that Mr. Dunn indicates in his direct testimony and his deposition that there is no Panhandle equity, but then he indicates that there is a "mix of capital" that supports all of Southern Union's operations, but he did not perform a study to determine what that mix was for Panhandle.
- Q. On page 19 through 21 of his rebuttal testimony, Mr. Dunn cites from a couple of sources to support his contention that the consolidated capital structure is

Surrebuttal Testimony of David Murray			
inappropriate. Are there any sources that you are familiar with that give some guidance			
as to when one might recommend the consolidated capital structure?			
A. Yes. In David C. Parcell's book <u>The Cost of Capital – A Practitioner's</u>			
Guide the following guidance is given to help determine if a consolidated capital			
structure is appropriate or if a subsidiary capital structure is appropriate:			
Subsidiary vs Consolidated Capital Structure			
Many utilities are subsidiaries of other companies, which can be holding companies, other utilities, or diversified companies. When a utility is a subsidiary of another firm, the question frequently arises as to whether the proper ratemaking capital structure is represented by the utility or its parent.			
Among the considerations which help determine whether the utility vs. parent capital structure is appropriate are:			
 Whether subsidiary utility obtains all of its capital from its parent, or issues its own debt and preferred stock. 			
2. Whether parent guarantees any of the securities issued by the subsidiary.			
3. Whether subsidiary's capital structure is independent of its parent (i.e., existence of double leverage, absence of proper relationship between risk and leverage of utility and non-utility subsidiaries).			
4. Whether parent (or consolidated enterprise) is diversified into non-utility operations.			
Q. Isn't the above reference addressing whether to use a subsidiary capital			

- Q. Isn't the above reference addressing whether to use a subsidiary capital structure or a consolidated capital structure rather than a capital structure for a division, such as MGE?
- A. Yes. However, I believe this provides even stronger support for the use of the consolidated capital structure because divisions, unlike subsidiaries, aren't even separate legal entities that issue their own capital. This supports why Staff has applied

the consolidated capital structure when recommending a rate of return for the divisions of operating companies – as Staff has done for Aquila's Missouri operating divisions in the past. The Commission adopted this approach in the Aquila case, Case No. ER-97-394, in which Mr. Stephen G. Hill was the Staff witness proposing such approach.

- Q. Did Dr. Morin qualify Mr. Hill as an expert in his deposition on June 10, 2004?
- A. Yes. On page 45, lines 6 through 9, Dr. Morin qualified Mr. Hill as an expert.
- Q. On page 24, lines 14 through 21 of his rebuttal testimony, Mr. Dunn indicates that you included the embedded cost of long-term debt held at Panhandle in your overall embedded cost of long-term debt for no other reason than to reduce the cost of debt. Is this a proper assessment?
- A. No. Although I was surprised that the embedded cost of long-term debt held at Panhandle was lower than the embedded cost of long-term debt held at Southern Union, I later discovered that Southern Union refinanced much of the debt at Panhandle shortly after it acquired the operation from CMS Energy. Right before Southern Union acquired Panhandle from CMS Energy it had a credit rating that was below investment grade. Once Panhandle became a part of Southern Union it was able to take advantage of the better credit rating assigned to Southern Union's consolidated operations and the low interest rate environment to refinance approximately \$512,757,000 of debt according to Southern Union's Form 10-Q for the quarterly period ended, March 31, 2004. However, this is not why I included the Panhandle debt. I have explained in my rebuttal testimony why it is appropriate to include the Panhandle debt and costs in my recommended rate of

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- Q. On page 25, line 16 through 26 of his rebuttal testimony, Mr. Dunn indicates a situation in which you indicated that you would recommend the capital structure of the utility for ratemaking purposes if the company raised its own long-term debt. Does this situation apply in this circumstance?
 - A. No. MGE is not a subsidiary and, therefore, cannot issue its own debt.
- Q. Starting on page 26, line 10, Mr. Dunn presents his argument for excluding short-term debt from the capital structure. How do you respond?
- A. Short-term debt in excess of construction work in progress (CWIP) is a source of capital that has been used by Southern Union consistently for at least the 18 months leading up to the update period in this case. The average level of short-term debt in excess of CWIP for the twelve months leading up to the updated period can be seen in Travis Allen's Schedule TA-4 attached to his direct testimony. This source of capital has a cost and this cost should be reflected in the weighted-average-cost-of-capital

recommendation for purposes of this case. If Southern Union is able to realize a lower cost of capital by its consistent use of lower-cost, short-term debt that is in excess of CWIP, then this lower cost of capital should be reflected in the rate-of-return recommendation through its inclusion in the recommended capital structure.

- Q. What has happened to the level of short-term interest rates that may make the use of more short-term debt appealing?
- A. The interest rates on short-term debt have come down considerably. This is evident from the 1.89 percent average cost of short-term debt that Southern Union incurred for the 12 months ending December 31, 2003. This compares to the average cost of short-term debt of 7.31 percent incurred for the 12 months ending December 31, 2000, in MGE's last rate case, Case No. GR-2001-292
- Q. Starting on page 27 of his rebuttal testimony, Mr. Dunn criticizes your analysis as being "contrived and mechanical." Do you have any authoritative support for your review of the growth rates of historical dividends per share, historical book values per share, historical earnings per share and projected earnings per share to recommend a proxy growth rate to use in your DCF recommendation?
 - A. Yes. The authoritative support is as follows:

In <u>The Cost of Capital – A Practitioner's Guide</u>, by David C. Parcell, pages 8-18 through 8-20 indicate the following:

Financial Indicators of Growth

There are a wide variety of acceptable methods for using historical growth to estimate future growth in the DCF model (Gordon, Gordon and Gould, 1989 50). The three most commonly-used financial indicators of growth are dividends per share (DPS), earnings per share (EPS), and book value per share (BVPS) (Howe & Rasmussen, 1982, 1333). Actually, DPS, EPS and BVPS can be defined in terms of each other, as DPS = EPS - Δ BVPS (Patterson,

Surrebuttal Testimony of David Murray

1971). Viewed this way, any of the three terms is dependent upon the others and each can be viewed as the investors' perceived growth rate.

Dividends Per Share

Past growth of DPS is the most direct link between historic dividend growth and projected dividend growth. However, in the long-run, dividends can grow at a rate no greater than that of earnings. If the dividends out-paced earnings for an extended period of time the company would deplete its equity capital. In the short-run, the two growth rates can diverge without causing financial harm to the company. The average of these growth rates may provide a better forecast of the long-run dividend growth rate than any of the individual forecasts, because in the long-run the dividend growth rate should equal the growth rate of the earnings since it is primarily earnings that are used to support the dividends.

Earnings Per Share

An investor's expectations concerning a company's cash flows include both dividends plus the eventual proceeds from the sale of the stock. Earnings provide the source of both the dividends paid to stockholders and the retained earnings, which increase the book value and ultimately the market price of the stock. As a result, EPS is often used as a substitute for DPS.

Book Value Per Share

The growth of BVPS is used as a proxy for DPS growth since BVPS growth principally reflects (in the absence of large stock sales at prices well above or below book value) the retention (i.e., not paying out all of earnings as dividends) of earnings. The purpose of earnings retention is to enhance the level of future EPS and DPS. In addition, a company's EPS is equal to the BVPS times return on equity (ROE). As a result, any factor that causes the BVPS to increase (decrease) will tend to cause the EPS to increase (decrease).

Relationship Among Growth Rates

Even though the DCF model assumes that EPS, DPS, BVPS and the market price all grow at the same rate, it is generally recognized that in practice this does not normally occur. However, what is important to recognize in using the simplified version of the DCF model is that the analyst has no basis to forecast different future rates of growth for each of these items.

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Therefore, it is appropriate for the rate of return witness to evaluate a variety of possible

2 indicators of future growth.

Q. Is it important to consider historical growth rates as well as analysts projected growth rates?

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is indicated that "investors, as a group, do not utilize a single growth estimate when they price a utility's stock. Thus rate of return analysts should consider multiple growth

Yes. In Mr. Parcell's book, The Cost of Capital - A Practitioner's Guide, it

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important to note that Mr. Parcell emphasizes that analysts should consider multiple

estimates in order to better capture the growth embodied in a utility's stock price." It is

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growth estimates. This applies to projected as well as historical growth rates.

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Additionally, Mr. Parcell states: "Analysts should recognize that individual investors

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have different expectations regarding growth and therefore no single indicator captures

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the growth expectations of all investors." Therefore, it is important to not only give

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weight to multiple projected growth rates, but to also give weight to historical growth

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rates because that is in fact what investors as a group will do.

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Q. Do you have authoritative support for averaging the five and ten year historical growth rates that are indicated in column (1) of Schedule 16 attached to your

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direct testimony?

A. Yes in Dr. Roger A. Morin's book, <u>Regulatory Finance Utilities' Cost of Capital</u>, 1994 the following is indicated:

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Historical growth rates are customarily computed over the last 5 and 10 years. An average of the 5-year and 10-year growth rates is a reasonable compromise between the conflicting requirements of representativity and statistical adequacy.

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numbers through a set of schedules, with no apparent comprehension of the meaning of the numbers or the implications of the data," are you aware of any sources that provide some context to test the reasonableness of your recommendation in this case?

In considering Mr. Dunn's criticism that you "processed a series of

The experts include Warren Buffett, Jeremy Siegel and Cliff Asness. A. Warren Buffett is CEO of Berkshire Hathaway and is probably the most respected investor in the United States. On December 20, 2001, in an interview on CNBC, Mr. Warren Buffett indicated that "returns in the stock market should come in around an average 7-8 percent over the next ten years." He also said that he's "not finding" undervalued companies in this market, indicating that he remains watchful of valuation levels for stocks. As recently as the release of Berkshire Hathaway's 2003 Annual Report, Mr. Buffett stated that he still wasn't finding attractively-priced stocks, meaning that he believes that the price of stocks in general are higher translating into a lower cost of common equity for the market.

The other two, Cliff Asness, University of Chicago Ph.D., who writes influential studies in academic journals while running the \$5 billion hedge fund AQR Capital Management, and Jeremy Siegel of The Wharton School of the University of Pennsylvania, whose book, Stocks for the Long Run, helped mold academic thinking on how equities perform over long periods, were featured in a recent June 16, 2003 article in Fortune magazine, "Can Stocks Defy Gravity? That's what Wall Street wants you to believe. Don't buy it. The best minds say the market will rise, but it won't soar." Although these are the two main academicians featured in the article, Kenneth French of Dartmouth also urges caution when investing in today's market. Kenneth French and

Surrebuttal Testimony of David Murray

Eugene Fama have published many influential stock market studies in the past two decades.

All of the influential individuals featured in this article have come to the conclusion that the equity risk premium, which is the additional return that investors demand over risk-free government securities, is now lower. As a result of the lower equity risk premium, they predict that the stock market as a whole can only provide 6 percent to 8 percent returns for the foreseeable future. Jeremy Siegel, when speaking about total market returns, specifically states: "Better-than-average earnings, if they happen, could get us perhaps 8%. But 10% assumes earnings growth that is just too big." It is obvious that well-respected investors and academicians are not predicting very high returns for the near future because of current stock valuation levels. This translates into a low cost of common equity environment.

Comparing my recommended cost of common equity of 8.52 percent to 9.52 percent to the predictions of anywhere from 6 to 10 percent for the entire market by these well respected individuals offers a barometer to the reasonableness of my recommendation in this case. In light of the fact that regulated utilities are less risky than the market, and therefore investors would normally require less return than the market, my recommendation is generous considering the current stock market environment.

- Q. Does Dr. Morin believe that Jeremy Siegel and Warren Buffett are influential individuals in the world of investing?
 - A. Yes. Dr. Morin indicated the following:

I certainly would consider Mr. Siegel very I 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.

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- Q. Did Dr. Morin indicate that required returns in the broader market had an influence on required returns for utilities in his deposition?
 - A. Yes. Dr. Morin indicated the following:
 - 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.
- Have vou observed any information specific to the Company's securities Q. that provides insight to the reasonableness of your recommendation?
- Yes. As I discussed on page 14, line 3 through 10 of my rebuttal A. testimony, Southern Union recently issued traditional, non-cumulative preferred securities to refinance the Trust Originated Preferred Securities (TOPrS). I also discussed that, holding all else equal, the traditional preferred securities are riskier because preferred dividends are not guaranteed and are non-cumulative, whereas the preferred dividends were backed by the coupon on the debt that was issued by Southern Union to pay the dividends on the TOPrS. The stated coupon on the TOPrS issued back in 1995 was 9.48 percent. The stated dividend rate on the non-cumulative preferred stock was 7.55 percent when it was issued and as of June 8, 2004 was trading at a yield of 7.10 percent. The spread between the current yield on Southern Union's non-cumulative preferred stock and the stated coupon rate on the TOPrS that was issued in 1995 is 238 basis points. It is logical to conclude that because, holding all else equal, TOPrS carries less risk than traditional, non-cumulative preferred stock, that if Southern Union had issued TOPrS again that the yield would have been lower than the stated dividend rate for the traditional preferred stock recently issued. This would translate into a lower cost of

What was the yield on BBB utility bonds in May 1995, which is the month

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Q.

25 basis points.

that Southern Union issued its TOPrS?

1	A.	It was 8.30 percent.	
2	Q.	What was the yield on BBB utility bonds for the most recent month	
3	available in the Mergent Bond Record?		
4	A.	It was 6.46 percent as of April 2004.	
5	Q.	What is the difference in these yields?	
6	A.	184 basis points.	
7	Q.	What conclusion do you draw from the information above?	
8	A.	Staff's recommendation clearly is consistent with the current low cost of	
9	capital environment. Southern Union's recommendation has barely changed to reflect the		
10	low cost of capital environment. In addition to not recognizing the lower cost of capital		
11	available to MGE, Mr. Dunn wants to pretend that Southern Union has stand-alone		
12	common equity ratio of 43.34 percent.		
13	Q.	What capital structure did Dr. Bruce H. Fairchild use in his recommended	
14	rate of return in Case No. GR-96-285?		
15	A.	He based his capital structure recommendation on the actual consolidated	
16	capital structure of Southern Union at the time.		
17	Q.	What was Dr. Fairchild's rationale for using the actual consolidated	
18	capital structure?		
19	A.	Dr. Fairchild cited the following reasons for his use of Southern Union's	
20	actual capital s	structure to determine MGE's cost of capital:	
21		• These ratios reflect the mix of capital currently employed to	
22		finance MGE's investment in assets used to provide gas service in	
23		Missouri;	

- Although this capital structure deviates from industry standards for local gas distribution companies (LDCs), it is consistent with Southern Union's entrepreneurial spirit, acquisition orientation, and earnings retention practices; and
- While Southern Union's higher debt ratio, and lower common equity ratio, impart additional financial risks, these are offset by the greater use of cheaper debt and preferred stock capital, and less use of significantly more expensive common equity capital.

Although not verbatim, Mr. Fairchild states essentially the same reasons for the use of Southern Union's capital structure in Case No. GR-98-140. It should be noted that Mr. Fairchild felt that Southern Union was more risky than his comparable group because of the bond rating of Southern Union compared to the comparable group. Therefore, in both cases he recommended an additional 60 basis points be added to his cost of common equity recommendation to take this risk into consideration. In Case No. GR-98-140 the Commission determined that Southern Union's capital structure did not merit a risk premium adjustment because "MGE's risk level decreased in April 1998 when its ratings improved to BBB+. Further, management determines the capital structure." Based on that determination, the Commission adopted Staff's midpoint of 10.93 percent in the last MGE rate case.

- Q. Did Dr. Morin qualify Dr. Fairchild as an expert in his deposition on page 46, line 24 through page 47, line 1?
 - A. Yes.

comparable group?

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- O. However, didn't vou recommend an adjustment to your cost of common equity to consider the bond rating differential between Southern Union and your
 - Yes. I believe it was the appropriate thing to do in this case. A.
- Q. Mr. Dunn indicates that you disregarded your CAPM and Risk Premium analysis. Did Mr. Dunn use any other models other than the DCF model in his recommendation?
 - A. No.
- Q. Beginning on page 35, line 13 of his rebuttal testimony, Mr. Dunn indicates that you used the wrong form of the DCF Model. Do you agree?
- No, while I indicated in my direct testimony that I used the continuous A. growth form of the DCF model, this is not how I executed the model. I executed the model based on the assumption of annual compounding of the dividend and on the constant growth of that dividend. This model is consistent with the model contained in the textbook used in the Investments class that I took while attending the University of Missouri, Columbia in which I graduated with a B.S.B.A. with an emphasis in Finance and Banking, and Real Estate with a GPA of 3.5. The textbook was the Essentials of Investments, Bodie, Zvi; Kane, Alex; Marcus, Alan J. (1992). This form of the DCF model is also consistent with the annual compounding model shown in Mr. Dunn's Schedule JCD-2, which is the same model that Mr. Dunn used.
- Q. Beginning on page 42, line 4 of his rebuttal testimony, Mr. Dunn criticizes your criteria as not being true risk criteria. How do you respond?

A. The most important aspect of any comparable company analysis to evaluate the cost of capital is to select companies whose operations are as confined to the subject company's operations as much as possible. This is exactly why this type of analysis is often referred to as a "pure play" analysis. As I demonstrated in my rebuttal testimony, Mr. Dunn has a few comparable companies in his proxy group that don't meet this criterion. In order to select companies that have comparable business risks to the natural gas distribution business, it is essential to pick companies that are predominately in the natural gas distribution business.

- Q. Starting on page 43, line 10 of his rebuttal testimony, Mr. Dunn compares certain DCF cost of common equity results produced by Staff and OPC. How do you respond?
- A. This is the one area where I agree with Mr. Dunn that these are "mechanical" calculations. The results for each individual company indicated in column (5) of Schedule 18 attached to my direct testimony are not intended to be refined estimates of the cost of common equity for my final estimated cost of common equity. As shown in my final estimated cost of common equity for my proxy group of 8.20 percent to 9.20 percent with a midpoint of 8.70 percent, I did not recommend the average of 8.35 percent indicated at the bottom of column (5). After reviewing all of the growth rates, I determined that some additional weight should be given to the projected growth rates indicated on Schedule 16 of my direct testimony. It is not the individual DCF results that should be compared to test the reasonableness of Staff's and OPC's recommendation, it is the overall recommendation that should be compared and this validates Staff's recommendation in this case.

Response to Mr. Allen's Rebuttal Testimony

- Q. Do you agree with Mr. Allen's position that because the debt held at Panhandle is non-recourse it should not be included in the recommended embedded cost of long-term debt for MGE?
- A. No. Whether debt is recourse or not does not drive the availability of funds for general corporate use. A corporation can assign certain debt issuances to its divisions and claim that this is the proper embedded cost of long-term debt to apply to those divisions and at the same time refinance other debt issuances within the corporation. The refinancing of other debt will drive the cost of capital down for the company, but because a division has specific debt issuances assigned to it at some higher historical embedded cost, it would not recognize the lower cost of debt that the company has achieved. This is the reason why all of Southern Union's debt should be considered in the embedded cost of long-term debt recommendation.
- Q. How do you respond to Mr. Allen's criticism about your approach to determining the short-term debt balance to include in the capital structure?
- A. I believe that the fact that our short-term debt balances are fairly similar shows that, in this case, both approaches are representative of Southern Union's recent utilization of short-term debt.

Summary and Conclusions

- Q. Please summarize the conclusions of your surrebuttal testimony.
- A. My conclusions regarding the capital structure, embedded cost of longterm debt and cost of common equity are listed below:

- 1. The use of the capital structure proposed by MGE is inappropriate.

 Although he eliminated debt held at Panhandle, Mr. Dunn did not subtract any equity that is associated with Panhandle from his capital structure. Regardless, it is more appropriate to use the consolidated capital structure of Southern Union. OPC used this capital structure with some minor differences from Staff. However, the calculation of the cost of capital for MGE should be based on Southern Union's actual consolidated capital structure as of December 31, 2003, as shown on my revised Schedule 9 attached to my rebuttal testimony;
- 2. Mr. Allen's use of the consolidated capital structure without the inclusion of the costs of debt associated with this capital structure is inappropriate and inconsistent with Commission precedent. My embedded cost of long-term debt which reflects all of Southern Union's debt is the appropriate cost of debt to use in the recommended rate of return;
- 3. My cost of common equity stated in revised Schedule 25 attached to my rebuttal testimony, which is 8.52 percent to 9.52 percent, would produce a fair and reasonable rate of return of 6.70 percent to 6.96 percent for the Missouri jurisdictional natural gas utility rate base for MGE.
- Q. Does this conclude your surrebuttal testimony?
- A. Yes, it does.