Exhibit No.:	
Issue:	Fair Rate of Return
Witness:	Frank J. Hanley
Sponsoring Party:	Missouri Gas Energy
Case No.:	GR-2006-0422
Date Testimony Prepared:	December 11, 2006

MISSOURI PUBLIC SERVICE COMMISSION

MISSOURI GAS ENERGY

CASE NO. GR-2006-0422

SURREBUTTAL TESTIMONY OF

FRANK J. HANLEY, PRESIDENT
AUS CONSULTANTS - UTILITY SERVICES

DECEMBER 11, 2006

TABLE OF CONTENTS

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Frank J. Hanley and I am President of AUS Consultants – Utility Services. My business address is 155 Gaither Drive, P.O. Box 1050, Moorestown, New Jersey 08057.

Q. ARE YOU THE SAME FRANK J. HANLEY WHO PREVIOUSLY SUBMITTED DIRECT AND REBUTTAL TESTIMONIES IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF THIS SURREBUTTAL TESTIMONY?

A. The purpose of this surrebuttal testimony is to respond to the rebuttal testimony of David Murray, witness for the Missouri Public Service Commission Staff (the Staff), concerning my direct testimony. Specifically, I will respond to certain comments contained in his executive summary and also specifically to his criticisms of my recommended capital structure ratios and common equity cost rate. In so doing, I will address the infirmities of his position. In addition, I address the implications of Staff's and Missouri Gas Energy's ("MGE") proposed rate design upon common equity cost rate.

I will also address the rebuttal testimony of the Office of the Public Counsel ("OPC") witness Russell Trippensee regarding his comments on the

proposed Staff and MGE rate design proposals insofar as those comments pertain to the cost rate of common equity capital.

Q. HAVE YOU PREPARED SCHEDULES IN SUPPORT OF THIS SURREBUTTAL TESTIMONY?

A. Yes, I have. They have been marked for identification as Schedules FJH-31 through FJH- 36.

II. SUMMARY

Q. PLEASE BRIEFLY SUMMARIZE YOUR TESTIMONY.

A. This testimony focuses upon Mr. Murray's erroneous, backward-looking position with regard to capital structure and related ratios. Supported by my revised rebuttal testimony beginning at page 5, line 16 through page 13, line 10, I will show that his emphasis upon Southern Union Company (SUG) is entirely inappropriate at this juncture in time because ratemaking is prospective and investors' perceptions of SUG make it clear that its capital structure is no longer representative of a gas distribution utility (LDC) such as MGE on a going-forward basis.

With regard to common equity cost rate, I will show that his criticisms of my methodologies are misplaced and result in a recommendation on his part which is contrary to regulatory consensus and common sense. The cost rate for common equity capital is not, and should not be, the result of a mechanical application of a cost of equity model(s).

I will show why Mr. Murray's reliance upon the geometric mean for estimating the cost rate of common equity capital is incorrect. I will also show why his criticism of my recommended small size adjustment for MGE is incorrect and why such an adjustment is essential.

I will explain why his contention that a utility company is earning more than its cost of equity when the market value of its common stock is above its book value is incorrect and contrary to market evidence. I will also respond to Mr. Murray's comments regarding my testimony in a 1980 Kentucky Power Company case. Finally, I will explain why his contention that the common equity cost rate derived from my proxy group should be reduced if MGE and the Staff's proposed rate design is implemented is absolutely incorrect.

In addition, I address OPC Witness Trippensee's comments regarding the implications on the cost rate for common equity capital if MGE and the Staff's proposed rate design is implemented. I will explain why his contention that such rate design will virtually guarantee earning the authorized common equity return is incorrect. In addition, I will explain why his assertion that a "delivery charge" as proposed by staff with a straight fixed variable (SFV) rate designed for MGE would eliminate all risk of earnings variability is also incorrect.

Finally, I explain that if the rate design ultimately adopted by the Commission in this case affords MGE's revenue streams substantial protection from the vagaries of the weather (i.e., either a weather normalization adjustment (WNA) mechanism or the SFV rate design proposed by MGE and endorsed by the Staff for

the residential customer class), my 15 basis points allowance should be deleted from my revised recommended common equity cost rate of 11.75%, reducing it to 11.60%. Moreover, if the SFV rate design proposal is approved in lieu of the WNA, I believe that a reduction of 25 basis points to my updated recommended common equity cost rate of 11.75% is appropriate because the SFV would tend to ameliorate the impact of weather as well as the risk of earnings variability. Thus, if the SFV rate design proposal is approved, my recommended common equity cost rate is 11.50% relative to my recommended hypothetical common equity ratio of 46.00%.

III. CAPITAL STRUCTURE

Q. AT PAGE 2, LINES 5-6, MR. MURRAY STATES, "I WILL SHOW THAT SOUTHERN UNION HAS ALWAYS USED A LIBERAL AMOUNT OF LEVERAGE DATING BACK TO WHEN IT ACQUIRED THE MGE PROPERTIES." PLEASE COMMENT.

A. The problem with Mr. Murray's statement and analysis is that they are entirely retrospective. As discussed in my rebuttal testimony, ratemaking is prospective as is the process of estimating the cost of capital. Investors' perceptions and expectations as reflected in market prices are what is important. The fact of the matter is that SUG is a dramatically changing corporation. As shown in Schedule FJH-31, there is a significant shifting underway in the makeup of the business segments of SUG. Between fiscal year-end June of 1994 and fiscal year-end December 2005, distribution sales declined from 100% (SIC Code 4924) to only 74%. Moreover, that

information does not reflect the impact of the recent acquisition of Sid Richardson Energy Services nor the sales of SUG's significant gas distribution businesses in Pennsylvania and Rhode Island in 2006. Moreover, SUG recently had its corporate credit ratings lowered from BBB to BBB- by Standard & Poor's (S&P) on November 29, 2006. Despite prior knowledge of the negative implications of the shifting to a midstream natural gas company indicated in correspondence between Mr. Murray and S&P analyst, Plana Lee, Mr. Murray continues to ignore the obvious. In the S&P downgrading the rationale identified as Schedule FJH-32, S&P states:

> The rating action reflects our assessment of the company's movement toward riskier business segments, coupled with an aggressive financial policy that liberally uses debt leverage. Together, these traits embody credit quality at the lower end of the 'BBB' category.

Moreover on page 2 of Schedule FJH-32 S&P also states:

> Given Southern Union's movement away from natural gas utilities and toward the midstream industry, cash flows have become less predictable … the company's credit protection measures have been stretched and its financial policy has been aggressive …

In view of the foregoing and combined with my rebuttal testimony at pages 5-13 discussed supra, it is clear that Mr. Murray's misplaced emphasis upon the past and reliance upon the SUG capital structure, which is not reflective of gas distribution operations, is entirely inappropriate.

Q. PLEASE COMMENT ON MR. MURRAY'S REBUTTAL TESTIMONY BEGINNING AT PAGE 5, LINE 4 THROUGH PAGE 6, LINE 7.

A. In view of the recent and dramatic changes in SUG's business segments and emphasis upon midstream operations as recognized by S&P and reflected in the November 29, 2006 downgrading of SUG's corporate credit rating, Mr. Murray's emphasis upon average historical common equity ratios over past years since the acquisition of MGE is completely irrelevant.

Q. ON PAGES 8 AND 9 OF HIS REBUTTAL TESTIMONY, MR. MURRAY DISCUSSES THE TESTIMONIES OFBRUCE H. FAIRCHILD IN PRIOR CASES ON BEHALF OF MGE. PLEASE COMMENT.

A. As discussed supra, both ratemaking and the cost of capital are prospective. On a going-forward basis, SUG is now clearly viewed as a midstream company and not a natural gas distribution company. Moreover, Mr. Murray cites Mr. Fairchild's discussion about Southern Union's entrepreneurial spirit. Indeed, it is this "entrepreneurial spirit" which has led to the transition from a primarily natural gas distribution operation to a midstream company. Moreover, such "entrepreneurial spirit" is clearly what has led to S&P's recent downgrading of SUG's credit rating. In this regard, I believe that it would be inappropriate for this Commission to rely upon the capitalization ratios of a company whose "entrepreneurial spirit" is very aggressive and whose financial policies have resulted in the current BBB- credit rating. The point is both a BBB- credit rating and/or Mr. Murray's recommended 36.31% common equity ratio are not representative of an LDC. Moreover, as indicated at pages 9–10 of my rebuttal testimony, it is clear that Mr. Murray has

recognized that SUG transitioning into a diversified natural gas energy company (midstream) yet he has totally ignored the implications. In fact those implications have now become increasingly clear in view of the November 29, 2006 downgrading of SUG's credit ratings as discussed supra. As a consequence, Mr. Murray's recommendations on capital structure should be disregarded in favor of my recommended hypothetical capital structure consisting of 54% debt capital and 46% common equity capital.

IV. COMMON EQUITY COST RATE

Q. AT PAGE 2, LINES 9-19 OF HIS REBUTTAL TESTIMONY MR. MURRAY CRITICIZES YOUR COST OF COMMON EQUITY CALCULATIONS AS HE CLAIMS THEY ARE UPWARDLY BIASED DUE TO YOUR REMOVAL OF RESULTS THAT FALL BELOW THE LOWEST AUTHORIZED RETURN ON COMMON EQUITY FOR ANATURAL GAS DISTRIBUTION COMPANY. PLEASE COMMENT.

A. Rate of return analysis is not simply the mechanical application of mathematical models. It must be combined with the proper exercise of informed expert judgment. The resultant cost rates from the applications of models must pass reality checks as well. Mr. Murray's recommendations do not pass such reality checks. As discussed in my rebuttal testimony at pages 3-4, the average recently awarded return on common equity in litigated cases of gas distribution companies during the two-year period ending September 2006 was 10.58% relative to a 48.61% common equity

ratio. The average spread between the authorized return on common equity over Moody's A-rated public utility bonds was 4.71%. With an indicated prospective yield on A-rated public utility bonds of 6.39%, an 11.10% common equity cost rate is indicated, thereby confirming that Mr. Murray's contention as well his 8.65%-9.25% ROE recommendation fail a common sense reality check. Even the lowest award in 2006 of 9.60% is related to a 45.00% common equity ratio. Moreover, it was a settlement (as opposed to a fully litigated rate case) for the gas operations of Central Hudson Gas & Electric Company and was based upon a future rate year. The settlement also provided for earnings between a 10.6% and 11.6% ROE to be shared equally between ratepayers and shareholders, and between 11.6% and 14.0% to be shared 65% to ratepayers and 35% to shareholders while all incremental earnings above 14% are to be deferred for the future benefit of ratepayers. In view of the foregoing, it is clear that Mr. Murray's recommendations do not pass a common sense reality check.

Q. AT PAGE 11, LINE 9 TO PAGE 13, LINE 25 OF HIS REBUTTAL TESTIMONY MR. MURRAY DISCUSSES THE PROPOSTION THAT IF THE MARKET-TO-BOOK RATIO OF A COMPANY IS ABOVE 1.00 TIME, THIS MEANS THAT A COMPANY IS EARNING MORE THAN ITS COST OF CAPITAL. DO YOU AGREE?

A. No. Regulation is a substitute for the competition of the marketplace. That being the case, one should be able to look at non-price regulated entities operating in the

marketplace to determine if this proposition is true. Accordingly, I performed an analysis to determine whether or not there exists such a relationship between market-to-book ratios and earned rates of return on book common equity. That is, if Mr. Murray's contention is valid, non-price regulated companies operating freely in the marketplace should sell at the approximate book values of their common stocks, consistently, over time. As indicated by the analysis shown Schedule FJH-33, there is no validity to such presumption. Schedule FJH-33 contains the market-to-book ratios and earned rates of return on book common equity for the S&P Industrial Index and its successor, the S&P 500 Composite Index (which does not include public utilities) over a long period of time. On Schedule FJH-32, I have shown the market-to-book ratios, rates of return on book common equity (earnings/book ratios), annual inflation rates, and the earnings/book ratios net of inflation (real rates of earnings) annually for the years 1947 through 2005. In each and every year, the market-to-book ratios equal or exceeded 1.00 times. In 1949, the only year in which the market-to-book ratio was 1.00, the real rate of earnings on book equity, adjusted for deflation, was 18.1% (16.3% + 1.8%). In contrast, in 1961, when the S&P Industrial Index experienced a market-to-book ratio of 2.01 times, the real rate of earnings on book equity for the Index was only 9.1% (9.8% - 0.7%). In 2005 the preliminary market-to-book ratio for the Index was 3.35 times, while the average real rate of earnings on book equity was 16.5% (19.9% - 3.4%).

This analysis clearly demonstrates that competitive, non-priced regulated companies have never sold below book value, on average, and have sold at book

value in only one year since 1947. Thus, it is clear that there is no relationship between the rates of earnings on book equity and market-to-book ratios. Moreover, as indicated at pages 33-34 of my direct testimony, Phillips and Bonbright confirm that the earnings of utilities should be sufficiently high to achieve market-to-book ratios which are consistent with those prevailing for stocks of unregulated companies (Phillips) and that market prices are beyond the control, but not beyond the influence of rate regulation (Bonbright).

Mr. Murray's contention is without merit and should be disregarded.

Q. AT PAGE 14, LINE 1 THROUGH PAGE 17, LINE 12 OF HIS REBUTTAL, MR. MURRAY CONTINUES HIS DISCUSSION ABOUT MARKET-TO-BOOK RATIOS. HE CRITICIZES YOUR USE, ALBEIT AS A CHECK ONLY, OF THE FINANCIAL RISK ADJUSTMENT AS UTILIZED BY THE PENNSYLVANIA PUBLIC UTILITY COMMISSION, AND MENTIONS A 1980 CASE IN WHICH YOU TESTIFIED ON BEHALF OF KENTUCKY POWER COMPANY. HOW DO YOU RESPOND TO HIS COMMENTS?

A. I have demonstrated, as discussed supra, that his contention about market-to-book ratios is incorrect. Moreover, the financial risk adjustment I utilized in 2006 has been utilized only as a check on my primary findings of common equity cost rate, simply because it is a technique which has been used by another state regulatory commission, i.e., Pennsylvania.

Mr. Murray's discussion of my 1980 testimony, totally takes out of context, the Kentucky Power testimony cited by Mr. Murray at page 16, lines 5 through 12 of his rebuttal testimony.

Q. PLEASE EXPLAIN HOW YOUR 1980 TESTIMONY CITED BY MR. MURRAY IS TAKEN OUT OF CONTEXT.

A. The late 1970s and early 1980s were a period of extraordinarily high interest rate levels. This caused market-to-book ratios to decline substantially, especially for capital-intensive public utilities. Because public utilities are extremely capital-intensive and their need to attract additional capital so important, the very high level of interest rates during that period of time had such an extraordinarily adverse impact on their market-to-book ratios, that their common stocks sold well below their book values. My 1980 comment about the achieved rates of earnings on the book equity of electric utilities being too low was simply a statement of fact. The residual of a cost of service analysis, and hence in an income statement, is the earnings available for common equity. Those earnings provide the margin for the coverage of fixed charges, including interest on debt capital. It is because the levels of fixed charges declined to such a great extent that bond ratings were adversely impacted and, in turn, market-to-book ratios. Thus, the achieved rates of earnings on book equity did adversely affect public utilities, especially the electric utilities, resulting in bond downgradings and market-to-book ratios of less than 1.00 time. Moreover, Mr. Murray's citation of my testimony is misleading in that it fails to

reveal that in 1980, as now, I never relied upon a single methodology in order to formulate my recommended common equity cost rate. My recommendations then were lower than indicated by use of the DCF model. Now, exclusive reliance upon the DCF model usually understates the true cost of common equity capital. By consistently using multiple cost of common equity models to formulate my recommendations of common equity cost rate over the years, my testimonies have been consistent.

Q. ON PAGE 20, LINE 7 THROUGH PAGE 21, LINE 1 OF HIS REBUTTAL, MR. MURRAY ADDRESSES YOUR RISK PREMIUM ANALYSIS AND SUGGESTS THAT IT IS MORE APPROPRIATE TO USE A RECENT AVERAGE YIELD ON Baa UTILITY BONDS AS A STARTING POINT IN THE RISK PREMIUM ANALYSIS. PLEASE COMMENT.

A. As indicated previously, the cost of capital and the ratemaking paradigm are both prospective. Investor expectations are reflected in the market prices they pay both for equity securities as well as debt securities. Indeed, the DCF model upon which Mr. Murray relies so heavily is designed to reflect investors' expectations of the future. Consequently, it is most appropriate to reflect investor expectations with regard to interest rate levels, including yields on long-term debt capital in a risk premium analysis. While those expectations may not prove to be a reality, they are what influences the market prices investors pay, and therefore, should be reflected. When long-term interest rates started to decline rapidly in the early 1980s as inflation

was brought under control, there was little question about using expected lower interest rate levels in such analyses rather than "recent" higher interest rate levels on utility bonds. Mr. Murray's view is another case of mismatching as discussed in my rebuttal testimony at pages 7-9. It is most appropriate to reflect investors' expectations in the application of the DCF model as well as in the risk premium model because in estimating the cost of capital the analyst must attempt to reflect what investors expect to achieve in the future. It is not a current computation of an actual return over some past period of time.

Q. ON PAGE 21, LINE 4 THROUGH PAGE 24, LINE 15 OF HIS REBUTTAL TESTIMONY, MR. MURRAY CRITICIZES YOUR USE OF THE ARITHMETIC MEAN IN ESTIMATING THE COST OF EQUITY CAPITAL. HE SUGGESTS THAT THE GEOMETRIC MEAN IS THE APPROPRIATE MEAN TO UTILIZE. HOW DO YOU RESPOND TO HIS CRITICISM?

A. In my rebuttal testimony at page 19, line 15 through page 20, line 17, I explain why the arithmetic mean is the only correct mean to use when estimating the cost of capital. In addition to the charts presented in Schedule FJH-24, Schedule FJH-22, particularly at page 4, contains the Ibbotson Associates' explanation why the arithmetic average equity risk premium is most appropriate when discounting cash flows. They state at page 4 of Schedule FJH-22 as follows:

> The equity risk premium data presented in this book are arithmetic average risk premia as opposed to geometric average risk premia. The

> arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return.

In addition, the quote set forth from Reilley & Brown at the top of page 22 of Mr. Murray's testimony actually confirms that the arithmetic means is the correct mean to use when estimating the cost of capital. Reilley and Brown state:

> The geometric mean is appropriate for long-run asset class comparisons, whereas the arithmetic mean is what you would use to estimate the premium for a given year (e.g., the *expected* performance next year). (underlining added for emphasis)

It is precisely because we are estimating the cost of capital that the arithmetic mean should be utilized. In addition, the risk premium and CAPM models are single period models which is confirmed in the quote from a text by Stowe, Robinson, Pinto, and McLeavey as shown at the bottom of page 22 of Mr. Murray's testimony. Those authors state the following as contained in Mr. Murray's excerpt:

> The arithmetic mean more accurately measures average one-period returns; the geometric mean more accurately measures multiperiod growth.

The information from Ibbotson Associates, as discussed at pages 19-20 of my rebuttal testimony, mentioned supra, explains precisely why the arithmetic mean is most appropriate. The use of the geometric mean smooths the rate of change to a single constant rate of growth which provides no insight, or counsel, to investors of

the potential volatility related to the investment they intend to make. Mr. Murray's criticism of the arithmetic mean is incorrect and should be disregarded.

Q. AT PAGE 26, LINES 1-15 OF HIS REBUTTAL, MR. MURRAY CRITICIZES YOUR USE OF THE INCOME RETURN ON LONG-TERM U. S. GOVERNMENT SECURITIES WHEN CALCULATING AN HISTORICAL EARNED RISK PREMIUM DIFFERENCE BETWEEN EQUITIES AND RISK-FREE SECURITIES. HOW DO YOU RESPOND?

A. His criticism is completely incorrect. The information contained at pages 2 and 3 of Schedule FJH-22 accompanying my rebuttal testimony provide a very detailed explanation of why it is incorrect. Beginning at page 2 of Schedule FJH-22 Ibbotson Associates state, regarding Income Return, the following:

> Another point to keep in mind when calculating the equity risk premium is that the income return on the appropriate-horizon Treasury security, rather than the total return, is used in the calculation. The total return is comprised of three return components: the income return, the capital appreciation return, and the reinvestment return. The income return is defined as the portion of total return that results from a periodic cash flow or, in this case, the bond coupon payment. The capital appreciation return results from the price change of a bond over a specific period. Bond prices generally change in reaction to unexpected fluctuations in yield. Reinvestment return is the return on a given month's investment income when reinvested into the same asset class in the subsequent months of the year. <u>The income return is best used in the estimation of the equity risk premium because it represents the truly riskless portion of the return</u>. (underlining added for emphasis).

Since the CAPM requires the use of a risk-free rate of return, it is quite clear from

the foregoing that the income return is the only appropriate return to utilize. Mr. Murray is incorrect.

Q. PLEASE ADDRESS MR. MURRAY'S REASONING FOR NOT UTILIZING THE ECAPM AS SET FORTH AT PAGE 27, LINES 7 THROUGH 14 OF HIS REBUTTAL.

A. His reasoning is really a non-reason. The fact of the matter is that the financial world utilizes and relies upon adjusted betas. That is why the major beta publishing agencies, such as Value Line, publish adjusted betas which account for regression bias, i.e., the tendency of low beta stocks to drift up towards a beta of one and high beta stocks to drift down towards a beta of one. Since utilities' betas, generally, are well below 1.0, they need to be adjusted so that such built-in regression bias is accounted for. Moreover, the ECAPM is well established in the financial literature, for example, see my direct testimony at pages 58-59 as well as my rebuttal testimony at pages 22-23, and Schedule FJH-25.

Q. AT PAGES 27-29 OF HIS REBUTTAL TESTIMONY, MR. MURRAY CRITIZES YOUR USE OF THE CEM. HE STATES AT PAGE 28, LINES 3-4, "IF THE ALLOWED RETURNS ARE SET BASED ON EXPECTED RETURNS, THEN IT IS POSSIBLE THAT THESE RETURNS WILL REMAIN ABOVE THE COST OF CAPITAL." PLEASE COMMENT.

A. This statement by Mr. Murray indicates a lack of understanding of the market prices paid by investors. The model upon which he relies, the DCF, is based entirely upon investor expectations. Sometimes those expectations are met; sometimes they are exceeded and returns are greater than expected; and sometimes, perhaps all too often, they are disappointing and the returns are far less than those expected. However, it is the expectations that influence the market prices that investors pay.

Moreover, the CEM has a long, well-established history in utility ratemaking.

Q. AT PAGES 30-31 OF HIS REBUTTAL TESTIMONY, MR. MURRAY TAKES ISSUE WITH YOUR SIZE ADJUSTMENT OF 30 BASIS POINTS TO TAKE INTO ACCOUNT MGE'S SMALLER SIZE VIS-À-VIS THE PROXY COMPANIES. HE SAYS THE STUDY DID NOT SPECIFICALLY APPLY TO REGULATED UTILITIES. HE ALSO CITES A STUDY BY PROFESSOR ANNIE WONG, WHO SUGGESTS THAT SIZE PREMIUMS DO NOT APPLY TO PUBLIC UTILITIES. PLEASE COMMENT.

A. Mr. Murray and Professor Wong are incorrect. The financial literature is quite clear about the small size effect. See, for example, the quotes from Professor Eugene Brigham and Ibbotson Associates at pages 13-14 of my direct testimony. Moreover, as noted by Ibbotson Associates, the size relationship "cuts across the entire size spectrum but is most evident among smaller companies."

Let me first address Mr. Murray's comment. It is true that the study upon which I rely was based upon all stocks in the New York Stock Exchange, the

American Stock Exchange and the NASDAQ. I have prepared Schedule FJH-34 which shows that all the companies in my proxy groups of gas distribution companies, as well as SUG and all of the companies in Mr. Murray's proxy group as well as the two companies he identified as having operations in Missouri all are traded on the New York Stock Exchange. Schedule FJH-35 which consists of three pages, compares the size effect within industries of the Ibbotson study upon which I relied. Page 3 of Schedule FJH-35 shows that for the utility grouping S.I.C. Code 49, Electric, Gas & Sanitary Services, there was indeed a size premium for small companies of 3.08% based upon current data contained in the Ibbotson Associates Valuation Edition, 2006 Yearbook. This means that there was an average size premium of 308 basis points in absolute terms, which was 28.19% greater than the arithmetic mean return of 10.89% for the large Electric, Gas & Sanitary Services company group (or 13.96% for the small Electric, Gas & Sanitary Services company group) over the same period, 1926 through 2005.

In addition, Professor Wong's study is flawed because she attempted to relate a change in size to beta, and beta accounts for only a small percentage of diversifiable company-specific risk. Size is company-specific and it is a diversifiable risk. For example, the average R^2, or coefficient of determination, for Mr. Murray's proxy companies are as follows:

	R^2
AGL Resources, Inc.	0.4225
New Jersey Resources Corp.	0.3648

Northwest Natural Gas Co.	0.2927
Piedmont Natural Gas Co., Inc.	0.3538
South Jersey Industries, Inc.	0.2021
WGL Holdings, Inc.	0.3889
Average for the Six Company Proxy Group	0.3375
Atmos Energy Corp.	0.2954
The Laclede Group, Inc.	0.3315
Average	0.3135

As shown above, the beta for Mr. Murray's six company proxy group accounts for only 33.75% of diversifiable company risk and only 31.35% for the two companies with operations in Missouri. This means that 66.25% (1.00 – 0.3375) of total risk is unexplained by beta for Mr. Murray's group of six companies; and 68.65% (1.00 – 0.3135) of total risk is unexplained by beta for the two companies having operations in Missouri. Mr. Murray's contention is incorrect as are the conclusions drawn by Professor Wong and they should be disregarded.

Q. AT PAGE 3, LINES 8-9 OF HIS REBUTTAL TESTIMONY, MR. MURRAY, IN ATTEMPTING TO DENIGRATE THE SMALL SIZE ADJUSTMENT WHICH YOU MADE FOR MGE STATES: "ADDITIONALLY, MGE IS NOT A STAND-ALONE COMPANY, SO IT IS NOT APPROPRIATE TO PRETEND THAT IT IS A SMALL PUBLICLY-TRADED COMPANY." PLEASE COMMENT.

A. By relying upon the proxy LDCs that he utilized to formulate a recommended range of common equity cost rate, that is precisely what Mr. Murray has done. He has assigned cost rates, albeit incorrect, derived from stand-alone proxy companies whose common stocks are actively traded in the marketplace. Moreover, as discussed in my rebuttal testimony at pages 9-11, Mr. Murray exacerbates the problem by utilizing a common equity cost rate derived from these proxy companies and applying it to SUG's capital structure. This approach is incorrect for the reasons set forth by Morin as well as Brealey and Myers as shown at pages 10-11 of my rebuttal testimony.

Q. AT PAGE 31 OF HIS REBUTTAL TESTIMONY, LINES 16 THROUGH 27, MR. MURRAY DISCUSSES STAFF'S PROPOSED RATE DESIGN AND ITS IMPLICATIONS, AS WELL AS MGE'S PROPOSED RATE DESIGN ON COMMON EQUITY COST RATE. HE SUGGESTS AT LINE 26 THAT THE COMMON EQUITY COST RATE DERIVED FROM YOUR PROXY GROUP SHOULD BE REDUCED RATHER THAN INCREASED. IS HE CORRECT?

A. No. As explained in my direct testimony, at page 73, a substantial proportion of the companies in each of my proxy groups had protection from the vagaries of weather. My 15 basis point upward adjustment to the common equity cost rate derived therefrom was to reflect the proportional upward adjustment of cost rate which would apply to MGE if no such protection is afforded it. There should not be any reduction from the cost rate derived from my proxy companies as they reflect

investors' knowledge of such protection. My adjustment upwards of 15 basis points is applicable only if such protection is not afforded to MGE. However, if such protection is afforded to MGE, I concur that my recommended common equity cost rate should be reduced by 15 basis points. This means that, if, and only if, such protection is afforded to MGE in this proceeding, my updated common equity cost rate recommendation of 11.75% (from my rebuttal testimony) would then be reduced to 11.60% relative to my recommended hypothetical common equity ratio of 46.00%.

Alternatively, should the straight-fixed variable rate design proposal be adopted in lieu of the WNA, a reduction in common equity cost rate of 25 basis points is warranted due to the mitigating impact such a rate design would have on the impact of weather as well as MGE's declining average use per customer phenomenon, which would reduce my updated recommended 11.75% common equity cost rate to 11.50% relative to my recommended hypothetical common equity ratio of 46.00%.

Finally, in an effort to clarify the record, relative to Mr. Murray's uncertainty as to whether I was aware, at the time I drafted my direct testimony, of the proposed rate design supported by MGE Witness Russell A. Feingold, I was not.

Q. AT PAGE 6 OF HIS REBUTTAL TESTIMONY, OPC WITNESS TRIPPENSEE SUGGESTS THAT IF THE FIXED DELIVERY CHARGE PROPOSED BY STAFF WITNESS ROSS IS PUT INTO PLACE, MGE

"WOULD EFFECTIVELY BE GUARANTEED TO EARN THE AUTHORIZED RATE OF RETURN FOR SERVING THESE CUSTOMER CLASSES." PLEASE COMMENT.

A. If Mr. Trippensee were correct, every LDC that has some type of similar revenue decoupling mechanism in place would be consistently achieving their authorized rates of return. Such is not the case. If it were the case, rate cases would be virtually eliminated. The implementation of such rate design does enhance the opportunity to earn a fair rate of return, but does nothing of the sort of guaranteeing such return.

Q. HAS MR. TRIPPENSEE INTRODUCED ANY EMPIRICAL STUDIES WHICH SUBSTANTIATE HIS PROPOSITION THAT A GUARANTEED RETURN IS A CERTAINTY GIVEN THE IMPLEMENTATION OF STAFF'S AND MGE'S RATE PROPOSALS?

A. No. If he has such studies, he has not produced them in this case. As a matter of fact, the proxy companies utilized by Staff Witness Murray and myself substantially enjoy protections from the vagaries of the weather and two of the companies in my proxy group of four gas distribution companies and five of the companies in my proxy group of eight gas distribution companies also have protections in the form of revenue decoupling mechanisms as shown on Schedule FJH-36. Consequently, under the Efficient Market Hypothesis, those facts are reflected in their market prices and, hence, in the market-determined common equity cost rates which I calculated and upon which I base my recommendation. That is why, as discusses supra, my

updated recommended common equity cost rate of 11.75% would be reduced to 11.60% if the WNA is approved, and alternatively, to 11.50% if the SFV rate design proposal is approved in lieu of the WNA.

Q. AT PAGE 12 OF HIS REBUTTAL TESTIMONY, MR. TRIPPENSEE REFERS TO A SUPPOSED DOWNWARD TREND IN AUTHORIZED RETURNS FOR NATURAL GAS COMPANIES DETERMINED FROM AN OCTOBER 5, 2006 REPORT PUBLISHED BY REGULATORY RESEARCH ASSOCIATES ENTITLED REGULATORY FOCUS. HAVE YOU HAD AN OPPORTUNITY TO REVIEW THAT REPORT?

A. Yes, I have. AUS Consultants is a subscriber to Regulatory Focus. As a matter of fact, it is the source of much of the information shown on Schedule FJH-18. Reference to Schedule FJH-18, which accompanied my rebuttal testimony, reveals that there is only one decision during the third quarter of 2006 and it was for Central Hudson Gas & Electric. That hardly indicates a trend because it is but a single order from but a single Commission (the New York Public Service Commission). I observe several important aspects of this decision as discussed supra. First of all, this was the result of a settlement and not a fully litigated rate decision. Moreover, New York utilizes a future rate year. In this instance, the historic test year-end was March 31, 2006, but the rate year upon which the revenue requirement for the first year of a three-year rate plan was for the period ending June 30, 2007. The Commission approved a settlement of a three-year rate plan authorizing rate

increases on July 1, 2006 and July 1, 2007. Moreover, the authorization provides for a sharing of earnings between 10.6% and 11.6% return on common equity, i.e., equal sharing between ratepayers and shareholders. Clearly, such a plan, with a ceiling of 10.6% return on common equity before any sharing with ratepayers, actually affirms the average rate of return on litigated decisions of 10.58% relative to a 48.61% common equity ratio as shown on Schedule FJH-18. Moreover, such data also confirm that Mr. Trippensee's conclusion, as well as Mr. Murray's recommendation fail such a reality check.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri Gas Energy's Tariff Sheets Designed to Increase Rates for Gas Service in the Company's Missouri Service Area.	))))	Case No. GR-2006-0422

AFFIDAVIT OF FRANK J. HANLEY

STATE OF New Jersey)
) ss.
COUNTY OF Burlington)

Frank J. Hanley, 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.

Frank J. Hanley
FRANK J. HANLEY

Subscribed and sworn to before me this 6th day of December 2006.

Sharon M Keefe
Notary Public

My Commission Expires: 7-9-2011

SHARON M. KEEFE
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES JULY 9, 2011