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BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

MISSOURI GAS ENERGY
CASE NO. GR-2004-0209

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

May 2004

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INDEX TO TESTIMONY

	Page <u>Number</u>
ORGANIZATION OF REBUTTAL	1
PRELIMINARY MATTERS	2
PROPER CAPITAL STRUCTURE	7
• Capital Structure proposed by the Staff and Public Counsel Is Unusual and Arbitrary	9
• The Consolidated Capital Structure is Wrong in any Event ..	17
ACTUAL COST OF LONG TERM DEBT	23
SHORT TERM DEBT IN THE CAPITAL STRUCTURE	26
REQUIRED RETURN ON EQUITY	27
• Contrived and Mechanical DCF Calculations	27
• Dividend Per Share Growth Should not be used in the DCF Calculations	28
• Age of Data	32
• Disregard of CAPM/Risk-Premium	34
• Wrong Form of DCF Model	35
• Problems with Comparable Group	36
• Equity Ratio Adjustment	37
• Economic Environment	39
• Failure to Adjust DCF Appropriately	39
• Mr. Murray's Selection of Companies	42
• Comparison of Public Counsel and Staff End Results	43
• Data Problems in the Analysis	45
• Business Risk Adjustment	47
COMMENTS ON THE PUBLIC COUNSEL TESTIMONY	48
• Dividend Growth Rate Included in Analysis	49
• Use of the Sustainable Growth Rate	51
• Unexplained Adjustments	52
• Use of an Inappropriate Source	52

**REBUTTAL TESTIMONY OF JOHN C. DUNN
ON BEHALF OF
MISSOURI GAS ENERGY**

Q. Please state your name and business address.

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

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

A. Yes sir, I am.

Q. What is the purpose of your rebuttal testimony?

A. To respond to the direct testimony of Mr. David Murray, a witness for the Commission Staff ("Staff"), and the direct testimony of Mr. Travis Allen, a witness for the Office of the Public Counsel ("Public Counsel"). Both filed testimony in this case recommending a return on equity, a regulatory capital structure and an overall cost of capital for MGE in this proceeding.

ORGANIZATION OF REBUTTAL

Q. How is your rebuttal testimony organized?

A. The testimony is organized into three major areas, each of which has sub-topics. The three major areas are:

1. The selection of the proper capital structure for the MGE cost of capital calculation, including the proper equity ratio.

1 2. The actual cost of debt for the MGE cost of capital
2 calculation.

3 3. The required return on equity for MGE, including the
4 proper discounted cash flow ("DCF") calculations.

5 Both the Staff and Public Counsel witnesses have performed
6 arbitrary and contrived calculations in the above three
7 areas, producing an artificially low recommended cost of
8 capital. These unreasonably low recommendations are not the
9 product of genuine analytical effort because both witnesses
10 lack the required expertise. Rather they are improper,
11 strategic efforts designed to produce a specific desired
12 result. Consequently, neither recommendation is helpful to
13 the Commission in reaching a decision.

14 PRELIMINARY MATTERS

15 Q. Are there any preliminary matters to be addressed at this
16 point?

17 A. Yes. Staff witness Murray's direct testimony contains a
18 substantial amount of meaningless boilerplate. Mr. Murray
19 admitted during depositions in both Case No. GR-2001-292 and
20 Case No. GR-2004-0209 that his testimony is essentially a
21 "canned" document modeled in excruciating detail after
22 other testimonies previously filed by the Staff.

23 In both depositions, Mr. Murray confirmed that much of
24 his testimony in this case contains the same language and
25 supposed "analysis" as his testimony in 2001 regarding MGE
26 in Case No. GR-2001-292 and as used by Staff witness Ronald

1 L. Bible submitted in 1998 in Case No. GR-98-140. Indeed,
2 some parts of Mr. Bible's testimony were simply copied into
3 Mr. Murray's testimony in this proceeding, even though there
4 is no apparent relevance of the copied material to this
5 case. (See Murray direct testimony, p. 5, lns. 28-34 and p.
6 6, lns. 1-11.)

7 The same is true of the direct testimony of Public
8 Counsel witness Allen. Like Mr. Murray's use of "utility
9 division testimony," Mr. Allen has substantially adopted
10 the prior testimony of Mr. Mark Burdette, formerly with the
11 Public Counsel.

12 Both Mr. Murray's calculations and Mr. Allen's
13 calculations are mechanistic and have simply been carried
14 forward from previous rate proceedings with no meaningful
15 analysis. In the case of Mr. Allen, the adoption of the
16 testimony took place only weeks after his employment by the
17 Public Counsel.

18 Q. If the policy portion of the testimony of these witnesses is
19 on point and relevant in this proceeding, is it appropriate
20 for the Commission to consider that testimony in this case?

21 A. If the testimony and the analysis is thoughtful, prepared by
22 a qualified expert and based on a careful analysis and
23 relevant, it is certainly appropriate to consider it in this
24 proceeding.

25 Q. Do these testimonies meet this standard?

26 A. No. Neither Mr. Murray's testimony nor Mr. Allen's
27 testimony meets this standard. Instead, their "canned"

1 testimony from prior cases has been simply ``dumped into the
2 record'' in this proceeding. As a result, there is no
3 meaningful determination of the return on equity for MGE
4 presented by the Staff or Public Counsel.

5 Further, the superficial analysis sponsored by both Mr.
6 Allen and Mr. Murray demonstrates clearly that neither
7 analysis is appropriate for determining a cost of capital
8 recommendation for MGE in this case. Both are arbitrary,
9 and both are designed to produce a recommendation which is
10 low by any standards and extremely low by current standards
11 of reasonableness.

12 Q. Are there objective criteria which can be used to determine
13 whether the Staff and the Public Counsel return on equity
14 and cost of capital recommendations in this case are outside
15 the bounds of reasonableness such that they should not be
16 accorded any weight by the Commission?

17 A. Yes. The recommendations of both witnesses can be compared
18 to the findings of other regulatory bodies in similar rate
19 proceedings around the country. These decisions bring
20 together not only the recommendation of numerous parties,
21 but also the wisdom of various commissions in reaching their
22 decisions. It certainly is appropriate to compare such
23 decisions of other commissions to recommendations being made
24 in Missouri. This Commission cannot reasonably make
25 decisions in a vacuum without any sense of context as to
26 what other organizations are doing.

27 Q. Do you have any information concerning such decisions?

1 A. Yes. The table below the data for which came from
2 Regulatory Research Associates, contains decisions made by
3 regulatory authorities for natural gas utilities for the
4 period from January 1, 2003 through the first quarter 2004:

<u>Period</u>	<u>Return Equity</u>	<u>Equity Ratio</u>	<u>Cost of Capital</u>
2002	11.03%	48.28%	8.80%
2003	10.99%	49.03%	8.75%
2004 Q 1	11.10%	45.51%	8.52%

10
11 Q. What does this information reveal?

12 A. Clearly, decisions made recently by other commissions are
13 substantially higher in terms of return on equity and cost
14 of capital than the recommendations made to this Commission
15 by both its own Staff and the Public Counsel in this case.
16 Here the Staff is recommending only a 9.02% return on equity
17 on a 25.38% equity ratio resulting in a cost of capital of
18 6.68% to 6.94% and the Public Counsel is recommending a
19 9.34% return on equity on a 25.98% equity ratio resulting in
20 a cost of capital of 7.38%. Furthermore, the decisions of
21 the other commissions also have much higher equity ratios.

22 Q. What does this tell you?

23 A. This brings into sharp focus the fact that the
24 recommendations of both the Public Counsel and the Staff in
25 this proceeding are significantly out of step with decisions
26 of other regulatory authorities, and should be rejected by
27 the Commission on this basis alone.

28 Q. Public Counsel witness Allen argues at page 16, lines 12-17
29 of his direct testimony that his recommendation to use the
30 upper limit of his range is adequate compensation to the

1 shareholders for the significant difference in the equity
2 ratio between the comparative companies and the equity ratio
3 which he recommends for MGE. How do you respond?

4 A. His assertion is unreasonable.

5 Q. Please explain.

6 A. The equity ratio proposed by witness Allen is 40% for his
7 comparative companies and only 26% for MGE. As I will show
8 later, the 40% equity ratio for the Allen comparative group
9 may even be too low. The equity ratio he attributes to MGE
10 is only two-thirds of the equity ratio of his comparative
11 group before correction. His total adjustment to the return
12 on equity to compensate for that differential is to move
13 from the mid-point of his range of returns on equity to the
14 upper limit, or from 9.17% return on equity to 9.34% return
15 on equity, or 17 basis points (Allen direct testimony, p.
16 16, lns. 9-17).

17 Even with this adjustment, Mr. Allen's return on equity
18 recommendation is significantly "out of line" with the
19 findings of other commissions.

20 Q. Did the Staff witness make any such adjustment for the
21 artificially low equity ratio he is recommending for MGE?

22 A. No. The Staff witness apparently made no such adjustment
23 nor in any way recognized the huge difference in financial
24 risk associated with the artificially contrived and
25 arbitrarily low common equity ratio he recommends for MGE in
26 comparison to the equity ratio of the comparative group.

27

1 PROPER CAPITAL STRUCTURE

2 Q. The first major area of your rebuttal is capital structure.
3 How does capital structure fit into the regulatory
4 determination?

5 A. The capital structure represents the mix of capital used in
6 financing the assets of the utility. In other words, in the
7 case of MGE, it is the capital used by the utility to
8 finance the pipes, meters and service trucks used to provide
9 natural gas distribution service to the customers. Each of
10 the components of the capital structure has a different cost
11 and some of the components' costs are taxable; therefore, it
12 is necessary to determine the mix of capital so that the
13 individual costs and related income tax can be applied in
14 calculating the overall cost of capital.

15 Q. Does the capital structure play any other role in the
16 determination of cost of capital?

17 A. Yes it does. The amount of debt employed in the capital
18 structure is a key factor in determining the amount of
19 financial risk which will be experienced by the common
20 equity shareholder. Risk is a primary determinant of the
21 required return on equity. Thus, the establishment of the
22 mix of capital and the risk which results from that mix is
23 extremely important.

24 Q. How does risk fit into the investor calculation?

25 A. As risk increases for individual investments, investors
26 require a higher return. Conversely, if the risk is lower,

1 the return demanded by investors is lower. This concept is
2 not subject to debate and it is not controversial. This is
3 absolutely fundamental to financial analysis.

4 Q. What are the risks caused by the capital structure?

5 A. The capital structure specifically is associated with
6 financial risk. In the analysis of total investor risk,
7 there are two types of risk, financial risk and business
8 risk. Financial risk refers to the amount of risk created
9 by adding leverage or debt to the capital structure of the
10 company. The more debt or leverage added to the capital
11 structure, the greater the financial risk. Financing with
12 100% equity means there is no financial risk. As debt is
13 added to the capital structure, financial risk is created
14 and increases with the percentage of debt.

15 Q. What about business risk?

16 A. Business risk is entirely different than financial risk.
17 Business risk is the risk associated with the operation of
18 the entity. It is risk which rises up from the operation of
19 the assets and it is related to weather, customer mix, the
20 fact that revenues - for any number of reasons - may be
21 lower than planned, returns may be different than expected,
22 and overall operating results may be different than
23 reasonably anticipated. Business risk also encompasses the
24 risk of regulation, the risk of service obligations and the
25 risk of general legal liability. These business risks are
26 substantially unrelated to financial risk but add to the

1 total risk of the company. Total risk or shareholder risk
2 is the sum of business risk and financial risk.

3 Capital Structure proposed by the Staff and Public Counsel is
4 Unusual and Arbitrary

5
6 Q. What capital structure did the Staff and Public Counsel
7 witnesses use in their calculations of rate of return for
8 MGE?

9 A. Both used the consolidated capital structure of Southern
10 Union, including the impact of its Panhandle Eastern
11 Pipeline Company ("Panhandle Eastern") subsidiary.

12 Q. What equity ratio did the Staff witness use in his
13 calculation of rate of return?

14 A. As shown on Schedule 25 to Mr. Murray's testimony, the
15 equity ratio is 25.38%.

16 Q. What was the equity ratio used by the Public Counsel witness
17 in his calculation of rate of return?

18 A. The equity ratio was 25.98%.

19 Q. Is the consolidated capital structure the proper capital
20 structure to use in calculating the rate of return for MGE?

21 A. Absolutely not.

22 Q. What is the proper capital structure to be used in this
23 analysis?

24 A. The proper capital structure is the stand alone capital
25 structure of Southern Union after removing short-term debt
26 and the impact of its Panhandle Eastern subsidiary.

27 Q. Why?

1 A. There are three overriding reasons. One is specific to the
2 circumstances of MGE. The second is financial and practical
3 and a matter of the proper application of finance theory.
4 The third is simply the application of basic reasonableness
5 analysis.

6 Q. Please explain.

7 A. MGE is a division of Southern Union. Southern Union is a
8 New York Stock Exchange publicly traded company which, until
9 it acquired Panhandle Eastern, was primarily a natural gas
10 distribution company with several individual divisions
11 providing natural gas distribution service in multiple
12 states and jurisdictions.

13 In 2003, Southern Union entered into an agreement to
14 acquire Panhandle Eastern. To make that acquisition,
15 Southern Union applied to the Commission for approval. To
16 obtain that approval, Southern Union entered into a
17 stipulation and agreement with the Staff, Public Counsel and
18 other parties which was subsequently approved and so ordered
19 by the Commission. This stipulation and agreement contained
20 a number of conditions which were required by the Staff,
21 Public Counsel and other parties and were designed to
22 insulate MGE from the impact of Panhandle Eastern's
23 operations.

24 Q. What do you mean by the use of the term "insulate"?

25 A. As is plain from reading the stipulation and agreement,
26 "insulation" relates to isolating financially,
27 operationally and in every other possible way a subsidiary

1 from other entities within the corporation, including the
2 parent corporation. An essential ingredient of this
3 "insulation" is that the parent corporation not guarantee
4 or recourse the subsidiary's debt, or stand behind the
5 subsidiary in any financial matter.

6 Q. Please continue.

7 A. The stipulation and agreement required the insulation of the
8 MGE operation from Panhandle Eastern. It expressly
9 prohibited funds flowing from Southern Union, the parent,
10 into its Panhandle Eastern subsidiary.

11 Q. How have the Staff and Public Counsel applied that
12 stipulation and agreement in this case?

13 A. The Staff and Public Counsel's use of the consolidated
14 capital structure completely violates this fundamental tenet
15 of the stipulation and agreement. It brings the Southern
16 Union distribution properties, including MGE, together with
17 the pipeline into a single entity.

18 Q. Why did the Staff and Public Counsel witnesses do this?

19 A. The Staff and Public Counsel witnesses do so in this case,
20 in my opinion, to take advantage of a lower equity ratio and
21 Panhandle Eastern's lower cost of debt.

22 Q. How do you respond?

23 A. For the Staff and Public Counsel to demand insulation of MGE
24 from Panhandle Eastern prior to the acquisition and then
25 little more than a year later to propose that rates be set
26 for MGE using a consolidated capital structure, including
27 the impact of Panhandle Eastern, is the height of

1 inconsistency and arbitrariness that should not be
2 sanctioned by the Commission.

3 Q. Did the Panhandle Eastern acquisition make Southern Union's
4 consolidated capital structure unusual and temporarily
5 distorted?

6 A. Yes. The acquisition made the consolidated capital
7 structure appear to have a lower equity ratio for all of the
8 investments of Southern Union rather than only for the
9 pipeline investment. The acquisition of Panhandle Eastern
10 was a major event for Southern Union. It has caused the
11 equity ratio on a consolidated basis to be lower than had
12 been the case prior to the acquisition. Even the Public
13 Counsel witness admits that the current capital structure is
14 unusual.

15 This anomalous capital structure will be changed and
16 Southern Union is working diligently to cause the equity
17 ratio to return to a normal range. However, a normal range
18 for the consolidated company may not be a normal capital
19 structure for the distribution properties.

20 Q. Why is that?

21 A. The consolidated capital structure is an accounting artifact
22 created by adding together the individual capital structures
23 of the individual entities in Southern Union. Thus, the
24 consolidated capital structure would be a proper fit for the
25 distribution properties only by accident.

26 Q. Is the consolidated capital structure in any way appropriate
27 for the determination of rate of return in this proceeding?

1 A. It is not because, in addition to the two factors just
2 discussed, attributing the consolidated capital structure
3 including Panhandle Eastern to MGE fails to pass a basic
4 reasonableness test when compared to capital structures
5 maintained, on average, by other companies within the
6 distribution industry and when compared to Standard & Poor's
7 ("S&P") utility financial target ratios of total debt to
8 total capital. Southern Union's consolidated capital
9 structure ratios at December 31, 2003 are not consistent
10 with S&P's financial targets for a utility with bonds in the
11 BBB bond rating category and which is assigned a business
12 position of "4", such as Southern Union. S&P's Utility
13 Group Financial Target benchmark ratios, revised June 21,
14 1999, indicate that the total debt to total capital ratio
15 required by S&P of a public utility with bonds rated in the
16 BBB bond rating category and a business position of "4"
17 ranges from 49.5% to 57%, implying a total equity to total
18 capital ratio of 43.0% to 50.5%. Mr. Murray's recommended
19 capital structure contains a total debt ratio of 68.45% and
20 a total equity ratio of 31.55% which fall far above and far
21 below S&P's ranges of total debt to total capital and
22 implied total equity to total capital ratios for public
23 utilities, such as Southern Union, with bonds rated in the
24 BBB bond rating category and which are assigned a business
25 position of "4".

1 Q. Is the capital structure recommended by Mr. Murray
2 representative of the anticipated capital structure of the
3 company in question and investor expectations of same?
4 A. No. In an April 6, 2004, research summary for Southern
5 Union, S&P, which is investor influencing, expects that
6 Southern Union will significantly decrease the leverage in
7 its capital structure, recognizing that its current level of
8 debt is not appropriate for the BBB bond rating. S&P
9 states: ``By the end of 2005, Standard & Poor's expects that
10 the total debt to total capitalization ratio will be
11 appropriate for the `BBB' rating target benchmark of 56%.
12 Moreover, in 2006, the conversion of \$125 million of debt to
13 equity will lower that ratio to around 50%.''
14 Q. Is there another MGE witness who will discuss the capital
15 structure and explain how, consistent with generally
16 accepted accounting principles, to properly exclude the
17 impact of Panhandle Eastern from Southern Union's
18 capitalization?
19 A. Yes, Mr. John Gillen.
20 Q. When you said that the capital structure was proposed by the
21 Staff and Public Counsel was designed to reduce the equity
22 ratio, what specifically did you mean?
23 A. The equity ratio of the consolidated capital structure is
24 lower than the equity ratio of the capital involved in
25 supporting the natural gas distribution properties of MGE.
26 This is primarily because the consolidated capital

1 structure includes approximately \$1.2 billion in Panhandle
2 Eastern long term debt.

3 Q. What are the specific steps that Southern Union has taken to
4 improve its equity ratio?

5 A. Southern Union pays no common stock dividend. This means
6 that 100% of the earnings of Southern Union are retained by
7 Southern Union and are available to repay indebtedness and
8 improve the equity ratio.

9 Q. What other steps has Southern Union taken?

10 A. Southern Union has publicly announced that it will achieve a
11 55% debt ratio as quickly as possible. This most likely
12 will involve a further issuance of common equity. In fact,
13 Southern Union currently has an outstanding petition with
14 the Massachusetts Department of Telecommunications and
15 Energy seeking approval to issue up to \$130 million of
16 common equity. Approval is expected during the week of May
17 24, 2004. Southern Union has already received approval to
18 issue up to \$150 million of common equity from the
19 Pennsylvania Public Utility Commission, the only other
20 regulatory body from which approval is required. It should
21 also be noted that none of the proceeds from Southern
22 Union's planned common equity offering will be used to
23 invest in Panhandle Eastern, which is consistent with the
24 terms and conditions of the aforementioned stipulation and
25 agreement among Southern Union, the Staff, Public Counsel
26 and other parties.

1 In addition, Southern Union issued a hybrid security in
2 2003, that currently appears in its long term debt balance
3 but will convert to common equity in 2006. This will also
4 contribute to a higher equity ratio.

5 Q. Mr. Dunn, what are the capital structures proposed by the
6 Staff and Public Counsel witnesses?

7 A. The capital structures proposed by the Staff and Public
8 Counsel witnesses are as follows:

<u>Component</u>	<u>Recommended Capital Ratios</u>	
	<u>Staff</u>	<u>Public Counsel</u>
Common Stock Equity	25.38%	25.98%
Preferred Stock	6.17	6.14
Long Term Debt	61.10	59.42
Short Term Debt	<u>7.35</u>	<u>7.35</u>
Total	<u>100.00%</u>	<u>100.00%</u>

18
19 Q. What do you believe is the appropriate capital structure for
20 MGE in this case?

21 A. The appropriate capital structure for MGE in this case, as I
22 proposed in my direct testimony, is the use of the Southern
23 Union capital structure excluding the impact of Panhandle
24 Eastern. This is consistent with the Commission's Order
25 approving the Panhandle Eastern acquisition. At June 30,
26 2003, that capital structure was simply the consolidated
27 capital structure reduced by the Panhandle Eastern long term
28 debt. I also made adjustments to the capital structure for
29 a new issue of preferred stock. Since that time, Panhandle
30 Eastern has produced approximately \$49 million in retained
31 earnings. Those retained earnings are a part of the
32 Panhandle capital structure and should be eliminated from

1 the consolidated capital structure at December 31, 2003. A
 2 similar adjustment should be made at the true up date for
 3 the then accrued and recorded pipeline retained earnings.
 4 As was the case with the capital structure at June 30, 2003,
 5 the Panhandle Eastern debt should be eliminated from the
 6 consolidated capital structure in calculating the capital
 7 ratios for the MGE distribution properties at the true up
 8 date. As shown in the rebuttal testimony of MGE witness
 9 John Gillen, removing the impact of Panhandle Eastern from
 10 the consolidated capital structure-in a manner consistent
 11 with generally accepted accounting principles - results in a
 12 capital structure as follows:

Rate of Return December 31, 2003				
	Amount (000)	Ratio	Cost	Weighted Cost
Common Equity	\$900,247	42.1%	12.00%	5.05%
Preferred Stock	230,000	10.7	7.860	.84
Long Term Debt	<u>1,008,635</u>	<u>47.2</u>	<u>7.2895</u>	<u>3.44</u>
Total	\$2,138,882	100.0%		9.33%

23 This is the appropriate capital and rate of return structure
 24 to use to set rates for MGE in this case.

25 **The Consolidated Capital Structure is Wrong in Any Event**

26 Q. You said there was a second reason why the consolidated
 27 capital structure should not be used in this proceeding.
 28 What is that reason?

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

15 Q. Please explain.

16 A. It is simply wrong to say that companies do not allocate
17 different types of capital to their various enterprises,
18 divisions, subsidiaries and investments based upon
19 management's appraisal of the risk of the various entities.
20 In reality, companies do make this allocation, which results
21 in different capital structures and different capital costs
22 for different activities. As a consequence of the
23 allocation, each of the activities of a complicated company
24 would have a unique and specific operation for its capital
25 structure.

26 Q. What does all of this mean for this case?

1 A. In this case, Southern Union management allocates capital to
2 MGE and makes its investment decisions for MGE based on
3 Missouri risk and opportunity. Southern Union makes similar
4 decisions for its other distribution operations and its
5 pipeline operations based on their risks and opportunities.
6 The risks and opportunities are clearly different. To say
7 that all entities are financed with simply the average
8 capital mix of the parent company is inaccurate, and in no
9 way reflects the reality of the company.

10 Q. Would the allocation of different capital mixes to the
11 various distribution operations and to the Panhandle Eastern
12 entities be consistent with the current theory of finance?

13 A. Yes it would.

14 Q. Can you provide a reference to an accepted financial text
15 that demonstrates this process?

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

19 "Because of the vast differences in business
20 and financial risk among various lines of
21 business and because of the growth of
22 conglomerates and other diversified firms,
23 many companies have begun to use risk
24 adjusted divisional costs of capital. By
25 division, we mean some sub-unit of the firm
26 whether it is an actual division, a
27 subsidiary, a project or a line of business.
28 If the capital expenditure projects
29 undertaken by the division are essentially
30 similar with respect to risk (but differ in
31 general risk level from projects of other
32 divisions), the use of divisional screening
33 rates which are the division-specific MCCs
34 (marginal costs of capital) should be used.

1 Those divisions with greater risk than that
2 of the firm as a whole will have higher MCCs,
3 whereas those with below average risk will
4 have lower costs of capital than the firm-
5 wide MCC.

6
7 The concepts discussed earlier in the chapter
8 apply as well to divisional screening rates;
9 that is, we must concern ourselves with the
10 appropriate target capital structure for each
11 division, and then calculate the explicit
12 costs for each source of financing. The
13 explicit cost of debt and preferred stock
14 should be adjusted from those for the firm as
15 a whole, but typically they are not.
16 However, the cost of common equity, which
17 reflects economic conditions in the exposure
18 to business risk for a firm with no debt or
19 preferred stock must be determined for each
20 division. In calculating divisional costs of
21 capital, the important elements are the
22 division's target capital structure
23 (reflecting primarily financial risk) and its
24 cost of equity capital (reflecting primarily
25 business risk." *Managerial Finance*,
26 Lawrence J. Gittman, Michael D. Joehnk and
27 George E. Pinches, Harper and Lowe
28 Publishers, New York 1985. (Emphasis
29 supplied.)

30
31 Clearly, this is not a new concept since it appears in
32 an introductory text book in 1985.

33 Q. Are there other academic references that support this
34 concept?

35 A. Yes. Roger A. Morin, in his book Regulatory Finance
36 Utilities Cost of Capital, states a widely accepted
37 principle of finance which parallels that which was stated
38 by Professor Gittman. At page 344, Dr. Morin says:

39 Incidentally, Figure 14-4 bears a
40 crucial message: The cost of capital for
41 a division investment project or
42 specific asset investment depends on the
43 riskiness of that investment and not the
44 identity of the company undertaking the

1 project. The cost of capital depends on
2 the use of funds and not the source of
3 funds. This is because the cost of
4 capital is fundamentally the opportunity
5 cost of the industry. That is, the
6 foregone return on comparable risk
7 investments.

8
9 Q. Are the theories described in these two books actually
10 applied in the practice of finance?

11 A. Yes, they are. In the spring-summer 1998 issue of the
12 Journal of Financial Practice and Education ("FPE"), a
13 survey is reported in an article by Robert F. Bruner, Keith
14 M. Eades, Robert S. Harris, and Robert C. Higgins on "Best
15 Practices in Estimating the Cost of Capital: Survey and
16 Synthesis." In this article, the authors report on a
17 survey which they conducted concerning the cost of capital
18 of 27 highly regarded corporations, 10 leading financial
19 advisors, and 7 best-selling text and trade books. One of
20 the survey questions bears directly on the issue of capital
21 structure and the determination of which capital structure
22 is appropriate.

23 Q. What was that survey question?

24 A. The authors asked the financial advisors and reviewed the
25 textbooks trade books to determine an answer to the
26 following question:

27 In valuing a multi-divisional company,
28 do you aggregate the values of the individual
29 divisions or just value the firm as a whole?
30 If you value each division separately, do you
31 use a different cost of capital for each one?

32
33 Q. What was the response to this survey question?

1 A. Of the financial advisors surveyed, 100 percent indicated
2 that they valued the different parts of a corporation
3 separately, and, that they used a different weighted average
4 cost of capital for each of the valuations.

5 In addition, 100 percent of the textbooks/trade books
6 reviewed by the authors indicated the use of a distinct
7 weighted average cost of capital for each division was
8 appropriate.

9 Q. What does this demonstrate?

10 A. It demonstrates that the consolidated capital structure is
11 not used in either theoretical finance or the practice of
12 finance.

13 Q. Is it possible that the consolidated capital structure is
14 appropriate to determine the rate of return for MGE in this
15 proceeding?

16 A. No. It is not even a possibility.

17 Q. Why not?

18 A. We know at this point exactly the mix of capital used by
19 Southern Union to acquire Panhandle Eastern. That mix of
20 capital is the capital which currently stands behind
21 Southern Union's investment in Panhandle Eastern. It is
22 reasonable to exclude that mix of capital from the
23 consolidated capital structure and treat the residual
24 Southern Union as the capital structure of the distribution
25 entities, and the capital structure I have recommended
26 follows this approach. This approach also complies with the
27 order of the Commission in approving the acquisition of

1 Panhandle Eastern while the use of the consolidated capital
2 structure, including the impact of Panhandle Eastern, does
3 not.

4 Q. Have you followed this approach in your initial
5 recommendation to the Commission in this case?

6 A. Yes I have. As I indicated, minor refinements have been
7 made as a consequence of retained earnings in the pipeline
8 operation, but the concept has not changed.

9 ACTUAL COST OF LONG TERM DEBT

10 Q. Mr. Dunn, how did the Staff witness calculate the cost of
11 long term debt for MGE?

12 A. The Staff witness used the average cost of long term debt
13 for the entire corporation, including the impact of
14 Panhandle Eastern long term debt.

15 Q. How would you characterize this calculation?

16 A. It is not appropriate.

17 Q. Why not?

18 A. As indicated previously, Southern Union entered into a
19 stipulation and agreement with the Staff, Public Counsel and
20 other parties in connection with the acquisition of
21 Panhandle Eastern by Southern Union in Case No. GM-2003-
22 0238. That stipulation and agreement was subsequently
23 approved by the Commission and currently is in force.

24 The main thrust of that stipulation and agreement is to
25 insulate the Southern Union or MGE cost of service in
26 Missouri from the impact of that acquisition. The Staff

1 approach violates both the spirit and the letter of that
2 stipulation and agreement.

3 Q. Please explain.

4 A. Panhandle Eastern has approximately \$1.2 billion in long
5 term debt. This long term debt was raised by Panhandle
6 Eastern prior to its acquisition by Southern Union in 2003.
7 In fact, some of the Panhandle Eastern long-term debt was
8 raised as early as 1994. Those funds could not have been
9 used in the development or financing of facilities to serve
10 MGE's customers.

11 Furthermore, the insulation sought by the Staff, Public
12 Counsel and other parties in the acquisition proceeding and
13 ordered by the Commission means that MGE is to be insulated
14 from the impact of Panhandle Eastern. The Staff, however,
15 adds the Panhandle Eastern long term debt in the calculation
16 of the imbedded cost of debt and in the determination of the
17 capital structure of MGE for no purpose other than to reduce
18 the equity ratio and to reduce the cost of debt. This of
19 course decreases the overall cost of capital for MGE. I
20 believe the Staff's action is arbitrary and capricious,
21 contrived, transparent, and wrong.

22 Q. Where do these calculations appear in Mr. Murray's
23 schedules?

24 A. Schedule 10 of Mr. Murray's direct testimony shows the
25 calculation of the cost of long term debt.

26 Q. Please describe the calculation.

1 A. The Southern Union cost of long term debt is 7.17% as shown
2 on the top half of the schedule. That cost is related to
3 One Billion, Fifty-nine Million of long term debt. The
4 additional One Billion, One Hundred Eighty-five Million of
5 long term debt associated with Panhandle Eastern has an
6 average cost of 5.698%. That cost, when combined with the
7 Southern Union cost, reduces the Southern Union imbedded
8 cost of debt from 7.17% to 6.38%.

9 Q. Is Panhandle Eastern a corporation?

10 A. Yes it is.

11 Q. Was the Panhandle Eastern debt raised by that corporation?

12 A. Yes it was.

13 Q. Is Panhandle Eastern debt rated separately by the rating
14 agencies?

15 A. Yes it is.

16 Q. Has the Staff ever said that it would use the capital
17 structure of the company for ratemaking purposes if the
18 company raised its own long term debt?

19 A. Yes. In the past, the Staff has said that in its view an
20 important criteria in deciding whether or not to use the
21 ``company only'' capital structure rather than the
22 consolidated capital structure is whether the company or
23 division raised its own debt from the public. See for
24 example the direct testimony of David Murray in Aquila,
25 Inc., Case Nos. ER-2004-0034 and HR-2004-0024, page 20,
26 lines 16-20, attached hereto as Rebuttal Schedule JCD-1.

27 Q. How does that apply here?

1 A. Panhandle Eastern raises its own long term debt, which is
2 separately rated and non-recourse to Southern Union. That
3 debt should be isolated from Southern Union's MGE
4 distribution operations, together with the appropriate
5 amount of Panhandle Eastern common equity. When that is
6 done, a Southern Union only capital structure (with the
7 impact of Panhandle Eastern removed) is the result, which is
8 the only appropriate capital structure to use for purposes
9 of this case.

10 SHORT TERM DEBT IN THE CAPITAL STRUCTURE

11 Q. Did Staff witness Murray include short term debt in the
12 capital structure?

13 A. Yes he did.

14 Q. Did Public Counsel witness Allen include short term debt in
15 the capital structure?

16 A. Yes he did.

17 Q. Is that appropriate?

18 A. It is not.

19 Q. Why not?

20 A. Short term debt is just what the name implies - short term.
21 Southern Union typically uses short term debt to finance
22 utility plant additions and other capital requirements for
23 short periods of time until permanent, long term financing
24 is put in place in conformity with the principle of finance
25 which suggests that assets should be financed with
26 obligations that have a maturity which is similar to the

1 life of the asset being financed. As such, it is
2 inappropriate to include short-term debt balances in the
3 capital structure for permanent rates.

4
5 Furthermore, Southern Union, including MGE, utilized short-
6 term debt over the past year to finance temporary working
7 capital needs such as under-collected gas costs and high
8 levels of customer receivables caused by increasing purchase
9 gas costs. Southern Union has repaid a significant portion
10 of its short-term debt over the past several months with (i)
11 proceeds from the sale of its 7.55% preferred stock in
12 October 2003, (ii) free cash flow generated as a result of
13 the continuance of its stock dividend policy, which allows
14 the Company to retain its earnings for such purposes, and
15 (iii) proceeds from the collection of receivables and
16 previously under-recovered gas costs. As of April 30, 2004,
17 Southern Union had no outstanding short-term debt.

18
19 REQUIRED RETURN ON EQUITY

20 Contrived and Mechanical DCF Calculations

21 Q. Your third major criticism was the fact that both the Staff
22 and the Public Counsel witnesses used arbitrary, contrived
23 and mechanistic DCF calculations. Please describe this
24 criticism in greater detail.

25 A. For at least the last three testimonies sponsored by
26 different members of the Staff in connection with the

1 determination of MGE's cost of capital, including this case,
2 the Staff witness has processed a series of numbers through
3 a set of schedules, with no apparent comprehension of the
4 meaning of the numbers or the implications of the data.
5 This processing of numbers is not an analytical
6 determination of the return on equity for MGE. It is simply
7 an arithmetic exercise which produces anomalies that are
8 averaged and subsequently disguised in further averaging
9 calculations.

10 Dividend Per Share Growth Should not be used in the DCF
11 Calculations
12

13 Q. Please explain.

14 A. One of the major problems associated with the mechanistic
15 analysis that begins on Schedule 15 of Staff witness
16 Murray's direct testimony is the fact that there has been a
17 change in dividend policy in the utility industry. That
18 change in dividend policy means that a somewhat different
19 approach to the determination of the DCF return on equity is
20 required. It appears that the Staff witness either so
21 mechanistically calculates and processes the numbers that he
22 does not recognize the problem with the data and the
23 distortion the bad data causes in the end result, or he
24 recognizes the problem and ignores it. It should also be
25 noted that to a lesser degree, the same is true with respect
26 to book value per share growth. As many companies work to
27 clear extraneous items from their balance sheets charges are

1 made directly to book value which distorts the growth
2 calculation.

3 Q. Please explain.

4 A. The historic policy of utility companies was to pay high
5 dividends (as a percent of earnings) and increase the
6 underlying dividends frequently, usually every year.
7 Recently, utility companies in general and gas distribution
8 companies in particular have been striving to improve equity
9 ratios and decrease the need for repeated equity offerings
10 by reducing the increases in dividends while improving the
11 tax efficiency of their return to shareholders.
12 Consequently, dividend payments per share have not been
13 increasing as rapidly as either earnings per share or book
14 value per share.

15 Since the unadjusted older form of the DCF model
16 focused on dividend growth as the driving force behind the
17 shareholders' return, some modification is required because
18 dividends are not now growing apace with earnings.

19 Q. Is this obvious from Mr. Murray's schedules?

20 A. It is. For example, Schedule 15-1 to Mr. Murray's direct
21 testimony contains a calculation of dividend per share
22 growth and earnings per share growth for the period 1992
23 through 2002. The dividend per share growth is 1.66% and
24 the earnings per share growth is 4.38%, or two and one-half
25 times as great. His Schedule 15-2 shows that the dividend
26 growth has remained about the same in the five-year period

1 as in the ten-year period at 1.69%, but a corrected earnings
2 per share growth rate is much higher.

3 Q. What do you mean ``corrected''?

4 A. The Staff witness calculates on his Schedule 15-2 earnings
5 per share growth at 1.72%. This number is substantially
6 influenced by two factors. The first factor is the fact
7 that the data is terminated artificially in 2002, it is
8 simply old data. Secondly, of the eight companies, three
9 have negative growth in earnings per share, one in the
10 amount of negative 9.23%. This negative growth should not
11 be included in the calculations of average historic growth
12 since it is not a factor that would influence a potential
13 investor making a calculation of this type. Put simply,
14 investors do not seek to invest in a company that has a
15 negative growth future. In fact, even the Public Counsel
16 witness has rejected including negative growth rates in the
17 DCF calculation.

18 Q. Is there any further evidence that the dividend per share
19 growth is much lower than the earnings per share growth?

20 A. Yes. The Staff witness has included three projected growth
21 rates in earnings developed by professional analysts for his
22 comparative group on his Schedule 16. Those three projected
23 growth rates in earnings range from 4.81% to 5.75%. This
24 compares to the dividend growth rate of 1.69% and 1.66%
25 calculated on Mr. Murray's Schedules 15-1 and 15-2.
26 Clearly, the dividend growth rate is out of line and a
27 proper analysis would seek the explanation as to why it is

1 out of line and adjust the calculations appropriately. The
2 Staff witness has not done so and consequently he has
3 grossly understated the cost of common equity.

4 Q. Do the assumptions of the DCF model have anything to say
5 about this difference?

6 A. Yes. The DCF model assumes that earnings, dividends and
7 book value grow in tandem. Clearly, that is no longer the
8 case. Staff witness Murray's continuous use of dividends,
9 when their growth rate is out of step with earnings and book
10 value, is a poor analytic technique and, in this case,
11 apparently is done for no reason other than to reduce the
12 recommended return on equity.

13 Q. How much does the use of this historic data in Mr. Murray's
14 calculations affect his growth calculation?

15 A. The projected growth rates, which are the most relevant
16 growth rates, range from 4.8 to 5.75% on his Schedule 16.
17 After including in that calculation the historic growth
18 rates, the growth used in the DCF analysis is lowered to
19 3.93%. The effect is between 1 and 1.75 percentage points.
20 Adjusting Mr. Murray's DCF result for this change alone
21 would produce an indicated return on equity of 9.52 to
22 10.22.

23 Q. Why in the face of this information would Mr. Murray
24 continue to include the historic dividend per share growth
25 in his calculation?

26 A. Mr. Murray continues to include this dividend growth either
27 because the calculation is an unthinking, mechanistic

1 processing of numbers, or because he intentionally desires
2 to reduce the number to produce the lowest possible return
3 on equity. The evidence is abundant that including
4 dividends per share growth in the calculation, at least on
5 the historic basis, is wrong. To do so obviously is the
6 result of ignoring reality or attempting to produce a
7 desired end result.

8 Age of Data

9 Q. What is your comment with respect to the age of the data?

10 A. Mr. Murray used 2002 as an end point for the growth rates in
11 his analysis even though his direct testimony was not filed
12 until April, 2004, after publication of the March 2004 issue
13 of the Value Line Survey on the natural gas distribution
14 industry which included 2003 data. He indicated in his
15 deposition that even if there were significant differences
16 as a result of updating his data, he would not make the
17 adjustments for this case. (Deposition, p.89, ln.2.)

18 Q. Have you compared Mr. Murray's 2002 data to newer 2003 data
19 available from the Value Line Investment Service?

20 A. Yes I have.

21 Q. And what is the result of that analysis?

22 A. The way Mr. Murray's schedules work is that on Schedule 15-
23 1, he derives the ten-year dividends, earnings and book
24 value per share growth, and on Schedule 15-2, he derives the
25 five-year dividends, earnings and book value per share
26 growth. Then on Schedule 15-3, he takes the three ten-year

1 data points, adds them together and averages them, and the
2 three five-year data points, again adds them together and
3 averages them, and then averages those averages to produce a
4 growth rate of 2.76%. That 2.76% is then carried forward to
5 Schedule 16 and averaged with the analyst's forecasts.

6 Q. What would the result have been if he used new data?

7 A. The calculation which I have made shows that had he used the
8 new data available to him at the time his testimony was
9 filed, rather than the old data actually used, the growth
10 rate which he would have included in the calculation on
11 Schedule 16 is 3.85% rather than 2.76%. That derivation is
12 as follows:

	Murray	Murray
	<u>Old Data</u>	<u>New Data</u>
<u>Growth</u>		
DPS		
5 yr.	1.69%	1.79%
10 yr.	1.66	1.72
EPS		
5 yr.	1.72%	7.69%
10 yr.	4.38	3.96
BYPs		
5 yr.	3.75%	4.45%
10 yr.	3.38	3.54
Average	<u>2.76%</u>	<u>3.85%</u>

28
29 Q. Mr. Dunn, you indicated that you believe that the dividend
30 per share growth should not be included in this calculation
31 under the current circumstances and policies being employed
32 by natural gas distribution companies. What would have been
33 the effect if the dividend per share growth is not included
34 in the calculation?

1 A. Simply substituting the current data would have increased
2 the result of the calculation by more than one percentage
3 point. Similarly, eliminating the dividend per share growth
4 - - which is clearly an anomaly - - results in an increase
5 from the original 2.76% employed by Mr. Murray to 4.16% --
6 for an increase of 1.40 percentage points. In summary, if
7 Mr. Murray used new data and did not include the dividends
8 per share historic growths, he would have calculated a value
9 line growth of 6.07% rather than 2.76%. This is a huge
10 difference. Reflecting this change in Mr. Murray's analysis
11 would produce a DCF indicated return on equity of 11.09.

12 Disregard of CAPM/Risk-Premium

13 Q. Are there any other examples of the improper application of
14 a mechanistic calculation process to reach a desired result?

15 A. Yes. The Staff witness in his analysis has made three
16 separate calculations of the required return on equity, a
17 DCF calculation, a CAPM calculation, and a Risk Premium
18 calculation. The results of the DCF calculation ranged from
19 8.2% to 9.2%. The CAPM calculation result was 9.29%, and
20 the Risk Premium calculation result was 10.41%.

21 There is a significant difference between the
22 indication of the DCF model and the indication of the other
23 two calculations. The Staff witness, however, made no
24 comment or change as a consequence of this dramatic
25 difference in results. It would appear that the Staff

1 witness had an end result in mind and was not in any way
2 swayed by the facts related to the analysis.

3 Q. Why do you say this?

4 A. The Staff witness simply ignored the results of the other
5 calculations and used the DCF as the sole basis for his
6 recommendation. If the other analyses were of no value in
7 the calculations or in the determination of the required
8 return, they should not have been included in the testimony.
9 Staff's failure to utilize these alternative analyses merely
10 emphasizes that Mr. Murray's calculations are arbitrary,
11 contrived and end-result oriented, as opposed to the best
12 estimate of the return on equity.

13 Wrong Form of DCF Model

14 Q. How is the wrong form of the DCF model used in the Staff
15 analysis?

16 A. On page 24, commencing at line 9 and carrying on for several
17 pages, the DCF model is discussed in Mr. Murray's testimony.
18 At line 17 of page 24, Mr. Murray states that he will use
19 the continuous growth form of the DCF model. This
20 continuous growth form assumes that the dividends are paid
21 continuously rather than periodically. The use of this
22 assumption causes the DCF result to be lower than it would
23 have been had an appropriate form of the model been used.

24 Later in the testimony he uses the annual form of the
25 model (P25L1-20), and finally in his calculations he uses a
26 mix of data.

1 Q. Do you have a reference describing the different forms of
2 the DCF model?

3 A. Yes, I do. In The Cost of Capital - Practitioner's Guide,
4 by David C. Parcell, the various forms of the DCF model are
5 shown commencing at page 8-7 and carrying through 8-17. I
6 have included as Rebuttal Schedule JCD-2 those pages and the
7 cover of the 1997 edition.

8 Problems with Comparable Group

9 Q. Are there any other problems with the data and calculations
10 which appear on Mr. Murray's Schedules 15-1, 15-2 and 15-3?

11 A. Yes. I believe they demonstrate that Mr. Murray has not
12 selected a comparable group.

13 Q. Please explain.

14 A. In order to develop an indication of an appropriate
15 statistical standard by analyzing some data and using
16 averages as the statistical standard, the data should have a
17 central tendency. This means that the data should tend to
18 cluster around a number, in this case, the average. Mr.
19 Murray's data does not do that.

20 Q. Can you demonstrate that fact from the schedules?

21 A. Yes. Schedule 15-2 contains Mr. Murray's calculation of
22 annual compound growth rates for the five-year period 1997
23 through 2002. In the dividend per share column where his
24 calculations have been made, you will note that the
25 percentages vary from zero in two cases, to 5.75% in a third
26 case. The average of the series - - which is supposed to be

1 the central tendency - - is 1.69% but the standard deviation
2 is greater than the average at 1.73%.

3 Moving to the next column to the right, earnings per
4 share growth, the results of the calculations vary from a
5 minus 9.23% to a plus 7.28% and average 1.72%. Clearly
6 there is no central tendency among this group of numbers as
7 the standard deviation is 5.23%, or about three times the
8 average.

9 Q. What do you conclude from this review?

10 A. The averages that Mr. Murray uses are not statistics from
11 which valid conclusions can be drawn.

12 Equity Ratio Adjustment

13 Q. What is the problem related to the equity ratio adjustment?

14 A. As risk increases, investor demand for return increases, all
15 other things equal. The theory of economic finance says
16 that investors are rational and that they are risk averse.
17 As investors' levels of risk increases, the required return
18 on equity increases.

19 It is also well established that shareholder risk is
20 comprised of two separate risks, business risk and financial
21 risk. Finally, it is absolutely non-controversial to say
22 that as the equity ratio decreases, all other things equal,
23 the amount of financial risk increases and, therefore, the
24 requirement for return on equity also increases.

25 Q. How does this relate to Mr. Murray's testimony?

1 A. Mr. Murray did an analysis of a "comparative group of
2 companies which had an equity ratio of 49.68%" (Murray
3 Schedule 22). His contrived capital structure for MGE has
4 an equity ratio of only 25.38%. This substantial difference
5 in the equity ratio between the comparative group and the
6 capital structure attributed to MGE by Mr. Murray requires a
7 substantial adjustment in the return on equity to compensate
8 for the much higher financial risk associated with the lower
9 equity ratio of his proposed capital structure. In other
10 words, it is necessary to increase the return on equity from
11 the results of his analysis based on his comparative group
12 to a new and higher level that reflects the difference in
13 risk between the MGE capital structure he has calculated and
14 the capital structure of his comparative group.

15 Q. What is the magnitude of that adjustment?

16 A. Mr. Murray's recommended return on equity mid-point is
17 9.02%. If that return were properly adjusted for the
18 significant difference in leverage between his proposed
19 capital structure and his comparative group, the correct
20 return on equity would be 13.94%.

21 Q. Would increasing the return on equity from 9% to 13.94%
22 result in an increase in the cost of capital because of the
23 lower leverage?

24 A. No it would not. The cost of capital or rate of return
25 would be exactly the same on a before tax basis for the
26 9.02% return on the 49.68% equity ratio and the 13.94%

1 return on the 25.38% equity ratio. In other words, the
2 before tax cost of capital is precisely the same.

3 Q. Do you believe that this is in conformity with the
4 stipulation and agreement approved by the Commission in
5 connection with the acquisition of Panhandle Eastern?

6 A. I do.

7 Economic Environment

8 Q. What use did Mr. Murray make of the economic data which he
9 discusses in his testimony?

10 A. None, although there is a great deal of his testimony
11 directed to general economic circumstances.

12 Q. Please explain.

13 A. Most of Mr. Murray's testimony and schedules relate to
14 economic environment. Clearly, the economic environment is
15 presently at a transition point with the next likely move in
16 the cycle being up as opposed to down from an interest rate
17 and capital cost perspective. This suggests that during the
18 period the rates authorized in this proceeding will be in
19 effect, capital costs will be higher than those indicated by
20 an historic analysis such as Mr. Murray's. Nonetheless, Mr.
21 Murray has not considered this factor nor has he adjusted
22 his result to account for the likely change in the
23 environment from the older data that he used in making his
24 analysis to the probable new environment.

25 Failure to Adjust DCF Appropriately

1 Q. Did Mr. Murray leave out of his DCF analysis any
2 adjustments?

3 A. Yes. There are two customary adjustments that should have
4 been included in his analysis. One of those adjustments is
5 for preoffering pressure and flotation expense, and the
6 second adjustment is to annualize the dividend to the first
7 full year of ownership after the date of the analysis.

8 Q. What is the adjustment for preoffering pressure and
9 flotation expense?

10 A. Common stock, when sold to the public, has expenses
11 associated with the sale which are not collected from the
12 customers. It is appropriate and customary that those
13 expenses be included in a calculation of the cost of common
14 equity. Failure to do so means that the company cannot, if
15 common stock is issued, earn the authorized return.

16 In addition to the expenses associated with the sale,
17 there is often preoffering pressure related to the sale of
18 new securities that results in a decline in the stock price.
19 This pressure causes the realization of proceeds by the
20 company to be less than that which would have been generated
21 by the stock price before the offering was announced and the
22 volume or supply of securities increased.

23 Essentially, preoffering pressure is a supply/demand
24 phenomena. As the supply of the common stock increases at
25 any point in time, an equilibrium market price will respond
26 to that increase in supply by declining.

1 Q. Is it appropriate to make these two adjustments to the cost
2 of common equity for this case?

3 A. Yes it is, because Southern Union has indicated that there
4 will be a sale of common stock in the relatively near future
5 in order to maintain its bond rating.

6 Q. Will MGE customers benefit from this offering?

7 A. Yes, they will.

8 Q. How will MGE customers benefit from this offering?

9 A. They will benefit in two ways. First, the bond rating of
10 Southern Union will be preserved and because lower bond
11 ratings lead to higher costs of debt, a savings will be
12 realized. Second, the proceeds of the sale represent new
13 capital available to Southern Union, some of which may be
14 used to add facilities to MGE's infrastructure to provide
15 service to its customers.

16 Q. Will Panhandle Eastern customers benefit from this offering?

17 A. No.

18 Q. Why not?

19 A. Because Southern Union under the terms of the approval
20 granted by MPSC to acquire the Panhandle Eastern corporation
21 is prohibited from investing new capital in Panhandle either
22 directly or indirectly.

23 Q. What is the adjustment for growth in dividends?

24 A. The DCF model anticipates that during the first year of
25 ownership, investors will expect to receive not the historic
26 dividend but rather the historic dividend plus any increases
27 in dividend which they anticipate will take place during the

1 course of the year. Mr. Murray has not adjusted for that
2 circumstance in his continuous DCF model and consequently
3 has understated the cost of common equity.

4 Mr. Murray's Selection of Companies

5 Q. Mr. Dunn, are there any problems with Mr. Murray's selection
6 criteria for his so-called comparable companies?

7 A. Yes. Mr. Murray's selection criteria are laid out on
8 Schedule 13 to his testimony. The criteria are as follows:

- 9 1. Publicly traded stock.
- 10 2. Distribution revenues greater than 90% of total
11 revenues.
- 12 3. Information printed in Value Line.
- 13 4. Positive dividend per share annualized compound
14 growth rate 1992-2002.
- 15 5. No Missouri operations.
- 16 6. Ten years of data available.
- 17 7. Total capitalization less than Five Billion
18 Dollars.

19 The majority of these criteria, as Mr. Murray has
20 previously admitted, are not true risk criteria. For
21 example, the fact that the information is printed in Value
22 Line is not a risk criteria. Furthermore, the first
23 criteria, the fact that the stock is publicly traded, is
24 redundant with the third criteria, the Value Line
25 appearance. Value Line only reports on publicly traded
26 stocks.

1 In addition, it is clear that having ten years of data
2 available is not a risk criteria, but rather a criteria that
3 has to do with analyst convenience. Also, there is no
4 special risk criteria that I am aware of related to the fact
5 that a company may have Missouri operations. MGE is a
6 Missouri company and, if the DCF model is being used, it is
7 appropriate to use Missouri companies if they are in fact
8 comparable. The DCF model will eliminate any possibility of
9 circularity.

10 Comparison of Public Counsel and Staff End Results

11 Q. Is there an end result problem with Mr. Murray's analysis?

12 A. Yes.

13 Q. Please explain.

14 A. I compared the DCF result produced by Mr. Murray with the
15 DCF result produced by the Public Counsel's witness as a
16 result of his analysis. The differences between the two end
17 results for the same companies are striking.

18 Q. What is unusual about the fact that there are differences in
19 the end result of the two analyses?

20 A. Both parties, the Public Counsel witness and the Staff
21 witness, are trying to develop an estimate of the return on
22 common equity for MGE. Both used many of the same
23 "comparable" companies and both used data specific to
24 those companies. Both claimed to have the same objective,
25 i.e. analyze a risk similar group of companies to estimate
26 the return on equity for MGE.

1 Q. What would this similarity of objective and process lead you
2 to believe?

3 A. If a risk similar group of companies were selected, it is
4 reasonable to expect that the return on equity for each of
5 the companies in the group would be very similar to the
6 return on equity for all of the companies, i.e. that the
7 return on equity for each member of the group would be very
8 tightly clustered since they are all expected to be similar
9 in risk. Also each company return should be close to the
10 average. Moreover, it is reasonable to expect that since
11 both analysts had the same objective and both used similar
12 procedures, their cost of equity would be similar and for
13 the same company should be virtually identical. For
14 example, both calculated a DCF return on equity requirement
15 for AGL Resources. Under the circumstances, it is
16 reasonable to expect both indications would be similar.

17 Q. Was that the result of the two separate analyses?

18 A. No.

19 Q. Please explain.

20 A. For example, both witnesses analyzed AGL Resources and
21 estimated by way of the DCF model the required return on
22 common equity for the company. It is reasonable to expect
23 that the analysis of the same company using the same data,
24 using the same time period and the same methodology for the
25 same target company would produce a reasonably similar
26 result. In fact, there is 29% difference in the two
27 results, with the Staff indicated return on equity at 8.03%

1 and the Public Counsel indicated return on common equity at
2 10.34%.

3 Q. Is the difference between the two results unique for AGL
4 Resources?

5 A. No. All of the results are substantially different. In the
6 attached Rebuttal Schedule JCD-3 I have compared the Staff
7 DCF indicated return on common equity and the Public Counsel
8 estimated equity using the DCF model, and calculated the
9 percent difference between the two.

10 The reasonable correspondence or similarity in end
11 result which one should expect is clearly not present.
12 Since these differences are not explained or explainable, I
13 believe both studies should be rejected. It is simply not
14 reasonable for two analyst to make the same calculation with
15 the same formula and the same data and produce radically
16 different answers.

17 Data Problems in the Analysis

18 Q. What is the data problem that you refer to with respect to
19 the Staff analysis?

20 A. Frankly, I am not sure if the data problem is one of the
21 Staff's making or related to the Public Counsel's analysis.

22 Q. What is the nature of the problem?

23 A. An example of the problem is the equity ratio reported by
24 the Staff witness for his comparative company group as
25 compared to the equity ratio reported by the Public Counsel
26 witness for its comparative group. Mr. Murray derives his

1 equity ratios on Schedule 22 to his testimony, whereas the
2 Public Counsel witness derives his equity ratios on
3 Schedules TA-2. In some cases, there is a significant
4 difference between the equity ratio reported by the Staff
5 witness and that reported by the Public Counsel witness.

6 Q. How substantial is the difference?

7 A. In the case of AGL Resources, for example, the difference
8 amounts to almost 15 percentage points with the Staff
9 witness reporting an equity ratio of 41.7% and the Public
10 Counsel witness reporting an equity ratio of 27.0%.

11 Q. Have you compared all of the equity ratios reported by the
12 Staff and the Public Counsel witnesses?

13 A. Yes I have. My Rebuttal Schedule JCD-4 compares the equity
14 ratios from Mr. Murray's Schedule 22, with the equity ratios
15 for the comparative companies from Mr. Allen's Schedule TA-
16 2.

17 Q. Are all of the differences as extreme as the AGL equity
18 ratio differences?

19 A. No. There are substantial differences such as AGL and South
20 Jersey Resources and some reasonably close correspondence
21 such as Northwest Natural where Staff witness Murray reports
22 51.5 and Public Counsel witness Allen reports 48.0.

23 Q. What do you conclude from these differences?

24 A. I would conclude that one or the other is incorrect or that
25 the data reported are not the same.

26 Q. Did you attempt to verify the AGL Resources data?

1 A. I did, and I was unable to confirm the 27 percent equity
2 ratio produced by the Public Counsel witness calculations.
3 The results of my calculations were more similar to the
4 calculations of the Staff witness.

5 Q. What was the basis for your calculation of the AGL equity
6 ratio?

7 A. I used data taken from the AGL 10Q as of December 31, 2002,
8 and December 31, 2003.

9 Q. Does short term debt explain the difference?

10 A. It may explain part of the difference but not all of the
11 difference.

12 Q. What is the cumulative effect of these differences?

13 A. The Staff calculated the comparative group equity ratio at
14 almost 50% and the Public Counsel calculated the comparative
15 group capital structure at 40%.

16 Business Risk Adjustment

17 Q. Please explain how both the Public Counsel and the Staff
18 witnesses failed to adjust their recommendations for the
19 business risk of MGE.

20 A. We have established that the financial risk of MGE or
21 Southern Union is much greater than the financial risk of
22 the comparative companies used by the Staff and Public
23 Counsel witnesses. The business risk is also different and,
24 in my opinion, it is higher for MGE than it is for the Staff
25 and Public Counsel comparative companies. Neither the Staff
26 nor the Public Counsel witnesses adjusted for that

1 difference in business risk and, as a consequence, neither
2 has made a recommendation which is relevant for either
3 Southern Union or MGE. I believe that the Staff and the
4 Public Counsel witnesses both have incomplete analyses and
5 those analyses, since they lack this required risk
6 adjustment, should not be used by the Commission in reaching
7 a decision as to the appropriate rate of return in this
8 case.

9 COMMENTS ON THE PUBLIC COUNSEL TESTIMONY

10 Q. Have you reviewed the Public Counsel rate of return
11 testimony in this proceeding?

12 A. Yes, I have.

13 Q. Do you have any comments with respect to that testimony?

14 A. Yes, I do. There are four major comments which I believe
15 require discussion. In addition to these four comments, the
16 testimony does suffer from the problems previously
17 enumerated with respect to both the Staff testimony filed in
18 this proceeding in connection with the use of the
19 consolidated capital structure and the mechanistic analysis
20 associated with the calculation of an estimated return on
21 equity requirement and failure to include appropriate DCF
22 adjustments. Specifically, however, the testimony of the
23 Public Counsel witness has the following deficiencies:

- 24 • It includes dividend per share growth in the
25 calculation even though the way the data is presented,

1 the dividend per share growth is clearly an anomaly
2 which makes the inclusion arbitrary.

- 3 • It calculates the growth rate for the primary thrust
4 of its analysis based entirely on a retention rate
5 calculation which is both circular and could lead to a
6 death spiral in indicated returns on equity.
- 7 • There is an unexplained adjustment in the rate of
8 growth for four companies in the analysis.
- 9 • The Public Counsel witness used an inappropriate
10 source for selection of companies and capital
11 structure comparison.

12 Dividend Growth Rate Included in Analysis

13 Q. How did the Public Counsel witness incorporate dividend per
14 share growth in his analysis?

15 A. In determining the growth rate for the comparable companies,
16 the Public Counsel witness established three cases, a low
17 growth case, a midpoint and a high growth case. For the low
18 growth case, the witness averaged together a series of
19 growth rates which included three individual dividend per
20 share growth calculations. These averaged rates are
21 summarized on page 13 beginning at line 10 of his testimony.
22 It is clear from the tabular array of historic growth rates,
23 projected growth rates, and the averages of those rates that
24 the dividend per share growth rate is totally anomalous, and
25 completely different from the other growth rates. Its
26 inclusion in the calculation is entirely arbitrary and

1 wrong. It clearly does nothing other than significantly
2 reduce the average and offset the true earnings per share
3 growth.

4 Q. How does this differ from the Staff approach?

5 A. The primary difference is the fact that this tabular array
6 clearly, and beyond any doubt, cries out for explanation and
7 yet the Public Counsel witness, because of the mechanistic
8 approach of processing the data through a series of
9 schedules, disregards the anomaly and rolls it through the
10 calculation thus arbitrarily reducing the indicated return
11 on equity. Both did in fact include dividend growth which
12 is inappropriate. Incidentally, the reason the matter is so
13 clear from the Public Counsel's schedules is that the Public
14 Counsel did not include negatives in the average growth rate
15 calculation.

16 Q. How much difference is there between the dividend per share
17 growth rate and the earnings per share growth rate?

18 A. From the table on page 13, the average earnings per share
19 growth rate can be calculated at 5.32%. The dividend per
20 share growth per share growth rate can be calculated from
21 the data on the table at 1.46%. The earnings per share
22 growth rate is 3.5 times the dividend per share growth rate
23 and that substantial difference to a true analysis would
24 cause either rejection or real efforts to explain and
25 understand the difference. Since the difference is as I
26 have indicated a result of the industry changing its
27 dividend payout policies, these low numbers should be

1 excluded from the calculation because they serve no purpose
2 other than to arbitrarily reduce the growth rate in the DCF
3 calculation, thus arbitrarily reducing the indicated
4 required return on common equity.

5 Use of the Sustainable Growth Rate

6 Q. What is the sustainable growth rate method?

7 A. The sustainable growth rate method is based on the notion
8 that future growth in a company's earnings is dependent upon
9 retained earnings and the rate earned on those retained
10 earnings. If the retained earnings in the calculation are
11 usually stated as a percentage and if the retained earnings
12 are relatively low in the calculation, then the future
13 growth derived from the calculation is likewise relatively
14 low. It is widely understood in the analysis of cost of
15 capital that the use of the sustainable growth rate
16 methodology is both circular and can lead to a death spiral
17 if a company has a bad year and that bad year is rolled
18 through a sustainable growth rate calculation two or three
19 times.

20 Q. How important is the sustainable growth rate calculation to
21 the Public Counsel's determination of the required return on
22 common equity?

23 A. The Public Counsel witness produced three separate estimates
24 of growth. For the first or low expected growth rate, the
25 witness used the overall average of all calculated growth
26 rates for the company, including the incorrect dividend per

1 share growth rate. This means that the dividend per share
2 growth rate was included in the calculation of the low
3 expected growth rate at least three times. Next, the Public
4 Counsel witness came up with a mid-point growth rate by
5 using the sustainable or retention growth rate method.
6 Finally, he developed a high range growth rate where he used
7 the sustainable growth rate result again unless there was
8 some reason to use a different rate.

9 Unexplained Adjustments

10 Q. Did the Public Counsel witness use a different growth rate
11 in any calculation?

12 A. Yes, he substituted his judgment for the calculations for
13 four of the eight companies in his comparative group.

14 Q. What is the explanation for the substitution?

15 A. There is none given.

16 Use of an Inappropriate Sources

17 Q. What source did the Public Counsel witness use for selection
18 of companies and equity rates?

19 A. The C.W. Turner Reports.

20 Q. Do you believe that this is an appropriate source?

21 A. No.

22 Q. Why?

23 A. First, it is not recognized as a data source for this type
24 of analysis. Second, all of the necessary data for the
25 analysis was available in Value Line. In fact, the Public
26 Counsel witness used Value Line for most of his data.

- 1 Q. Was the information taken from the Turner Reports available
2 from Value Line?
3 A. Yes.
4 Q. Does this conclude your testimony at this time?
5 A. Yes.

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.

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) GR-2004-0209
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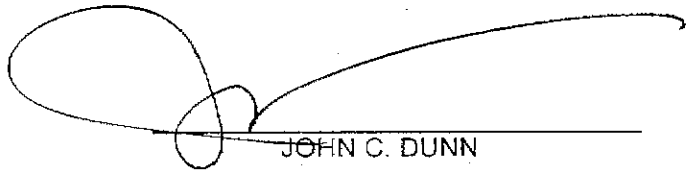
AFFIDAVIT OF JOHN C. DUNN

STATE OF KANSAS)

COUNTY OF JOHNSON)

) ss.

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



JOHN C. DUNN

Subscribed and sworn to before me this 21st day of May, 2004.



Notary Public

My ^{APPOINTMENT} Commission Expires: April 21, 2008

