

1 changes here and there, some additions to my testimony,  
2 but as far as an explanation of the legal issues, some of  
3 the economic and projections for economic conditions and  
4 the explanation of the DCF, CAPM, risk premium are similar  
5 to that, to his testimony.

6 BY MR. SWEARENGEN:

7 Q. Would you agree that the lines in Mr. Bible's  
8 testimony, which is Deposition Exhibit 1, which I have  
9 highlighted in yellow and underlined in black, appear  
10 verbatim in your direct testimony in this case?

11 A. I would not say verbatim. I said there were  
12 some changes. But a lot of the concepts and the meanings  
13 and the intention is the same.

14 Q. Do the words that I highlighted in yellow and  
15 have underlined in Mr. Bible's testimony, Deposition  
16 Exhibit 1, appear word for word verbatim in your direct  
17 testimony in this case?

18 A. No. I detected a few things that were not.

19 Q. Would you please tell us those changes that you  
20 detected?

21 A. And I -- just to clarify, I only marked one  
22 because of the fact that I thought some of it was just a  
23 writing style.

24 If you want me to go through it again, I can  
25 pick out each and every word.

1 Q. I want you to do that.

2 A. Okay. I'm going to have to review it again,  
3 because I only picked out one substantial --

4 Q. That was -- the question was before you and --

5 A. I'm going to have to review it again.

6 Q. That's fine.

7 A. Okay.

8 THE WITNESS: Do I have a highlighter?

9 MS. SHEMWELL: Let's take a break.

10 MR. SWEARENGEN: The question couldn't have  
11 been any clearer.

12 MR. SCHWARTZ: Not the question. It's the  
13 timing. It doesn't need to be done in a deposition,  
14 taking up the time of all of these people.

15 MR. SWEARENGEN: I made it as easy for him as I  
16 could.

17 (A RECESS WAS TAKEN.)

18 BY MR. SWEARENGEN:

19 Q. Mr. Murray, we're back on the record.

20 We're just going to leave this exhibit with you  
21 for the rest of the day, Exhibit 1, with the understanding  
22 that by the close of business today, you will get back to  
23 us with an indication on that document of any -- let me  
24 put it to you this way: any testimony in Mr. Bible's --  
25 any statements in Mr. Bible's testimony that I have

1 indicated by highlighting in yellow and underlining in  
2 black that do not show up word for word verbatim in your  
3 testimony.

4 And you'll also indicate any statements in his  
5 testimony that I have omitted to reflect that they should  
6 also appear in your testimony. Is that understood?

7 A. Can you please repeat that?

8 And I think -- I'm not going to be -- can I  
9 write this down?

10 MS. SHEMWELL: Sure.

11 BY MR. SWEARENGEN:

12 Q. You're going to take Exhibit 1 and you're going  
13 to go through it like you have been for the last  
14 45 minutes or so, and you're going to indicate on it any  
15 of those statements which appear in that testimony that I  
16 have indicated by the highlighting and underlining also  
17 appear in your direct testimony, you're going to indicate  
18 two things: one, whether those statements do not appear,  
19 and to that extent the exhibit would be -- as I've given  
20 it to you would be inaccurate and will need to be  
21 corrected, and you're also going to show and indicate any  
22 statements which I neglected to mark which also appear in  
23 your direct testimony.

24 Do you understand that?

25 A. I understand that.

1 MR. SWEARENGEN: And is that agreeable with  
2 counsel?

3 THE WITNESS: I don't know that -- I'll do my  
4 best to have it finished.

5 MS. SHEMWELL: Okay. That will be fine.

6 If there is any difficulty getting that back to  
7 you by the end of the day, I will certainly let you know  
8 before the end of the day.

9 And I guess we'll return the original to the  
10 reporter after we've made copies for ourselves after he's  
11 responded. So that's fine.

12 THE WITNESS: And can I have a second, please?  
13 Okay.

14 MR. SWEARENGEN: So when we finish, presumably  
15 we will have a document, Exhibit 1, which will correctly  
16 reflect what material in that document also appears in  
17 Mr. Murray's testimony word for word. Is that right?

18 MS. SHEMWELL: Yes.

19 MR. SWEARENGEN: Okay. Thank you.

20 BY MR. SWEARENGEN:

21 Q. Mr. Murray, prior to putting together your  
22 testimony for purposes of this case, what experience have  
23 you had with respect to the discounted cash flow or DCF  
24 model?

25 A. With the telephone cases, with the assistance

1 on the St. Louis County Water case.

2 Q. What telephone cases specifically, again, are  
3 you referring to?

4 A. Ozark and Northeast Missouri Rural.

5 Q. And do you know whether or not either of those  
6 telephone companies is a cooperative-type organization?

7 A. I believe the Northeast Missouri Rural was a  
8 coop.

9 Q. What about Ozark?

10 A. I don't believe that is.

11 Q. And what was the other one you mentioned, the  
12 other company you mentioned?

13 A. I assisted on a rate case for St. Louis County  
14 Water.

15 Q. And what was your work -- what did your work in  
16 that case consist of?

17 A. Assisted in the preparation of schedules.

18 Q. And in connection with the preparation of those  
19 schedules, did you work at all with the DCF model?

20 A. Yes.

21 Q. And what schedules were those, do you recall  
22 offhand, just -- I know you won't know them by number  
23 necessarily, but can you just describe them generally?

24 A. I just presented a DCF analysis for American  
25 Waterworks and comparable companies for basically a

1 crosscheck on CAPM and risk premium, and, basically,  
2 essentially, the same models that I have in my testimony.

3 Q. In this case?

4 A. Yes.

5 Q. So you cited three cases, and that would be the  
6 extent of your experience with respect to the DCF model.  
7 Is that right?

8 A. With the Commission, that's correct.

9 Q. And have you had any experience with the DCF  
10 model prior to your employment with the Commission?

11 A. With my degree, yes. I had a degree in finance  
12 and we -- that was part of the curriculum.

13 Q. Did you use it at all in connection with your  
14 employment with the Division of Insurance?

15 A. No.

16 Q. Are there different forms or types of DCF  
17 models?

18 A. The formula is the same. There are different  
19 assumptions, maybe.

20 Q. So you would say there are not -- what would  
21 your answer be? There are different forms and types or  
22 there are not different forms and types?

23 A. There are different types.

24 Q. And what are the differences between the  
25 different types?

1 A. I believe some analysts may use a two-tiered  
2 DCF model. I believe there is --

3 Q. What is a two-tiered DCF model?

4 A. Two different growth rates.

5 Usually the formula is essentially the same,  
6 but as far as some of the -- some of the ways to apply the  
7 DCF model, they can vary.

8 Q. On page 22 of your testimony, at line 4, you  
9 say the continuous growth form of the DCF model was used  
10 in this analysis. Do you see that testimony?

11 A. Would you refer me to the page again? Page 22  
12 you said?

13 Q. Page 22, line 4.

14 A. Yes.

15 Q. Is that a two-tier form?

16 A. No.

17 Q. And what would the difference be between the  
18 two-tier form and what you use?

19 A. I use one growth rate.

20 Q. And why did you select this particular form of  
21 the DCF model?

22 A. It's been what our department has used for  
23 quite some time.

24 Q. So would I be correct in understanding that you  
25 consulted with someone in your department about the use of

1 that particular form or the model?

2 A. Yes.

3 Q. Is that the same form of the model that you  
4 used in the two telephone cases and the St. Louis County  
5 Water case you talked about earlier?

6 A. Yes.

7 Q. Have you ever used any other DCF form or types?

8 A. No.

9 Q. Are there various ways to make a DCF  
10 calculation?

11 A. No.

12 Q. There are not?

13 A. No.

14 Q. There is only one way to make one?

15 A. As far as the formula.

16 Q. Would it be your testimony that it is very well  
17 defined as to what factors go into the DCF calculation?

18 A. Yes.

19 Q. And what are those factors?

20 A. Your dividend yield, which is the expected  
21 dividends divided by the stock price, which can be  
22 calculated various ways. And, of course, the growth  
23 component.

24 Q. That's your answer?

25 A. Yes.



1 Q. Are there judgments involved in the DCF  
2 process?

3 A. Yes.

4 Q. And can you give me some examples of those  
5 judgments?

6 A. For the dividend yield, obviously, the expected  
7 dividend for the next year is a judgment call, the price,  
8 the stock price to use.

9 Some may use the spot price; some may use an  
10 averaging technique. There is some judgment there.

11 Obviously, with growth rates, historical can be  
12 used, projected can be used. Different sources can be  
13 used. That pretty well sums it up.

14 Q. Would you agree that the DCF calculation is  
15 sensitive to these judgments or inputs that you just  
16 described?

17 A. Yes.

18 Q. At what point in going through the DCF process  
19 in this case did you make those judgments?

20 At what point or points, I should say?

21 A. I make those judgments when I -- with the  
22 dividend yield and the growth component.

23 Q. Those two -- with respect to the dividend yield  
24 and with respect to the growth component, those were the  
25 only two places in this case where you exercised some

1 judgment. Is that what you're saying?

2 A. As far as the DCF, yes.

3 Q. Okay. Before exercising your judgment with  
4 respect to those two items, did you consult with anyone  
5 else?

6 A. Yes.

7 Q. And who did you consult with?

8 A. Ron Bible.

9 Q. Did you consult with anybody else?

10 A. No.

11 Q. How many times did you run the DCF model or  
12 make a DCF calculation for purposes of this case?

13 A. Maybe two or three times. It just depended  
14 on -- I made some judgments as to growth rates. And  
15 that's my answer.

16 Q. Were the results of these other two or three  
17 runs or calculations any different than as reflected in  
18 your prepared direct testimony?

19 A. I think they were, but fairly minor.

20 Q. Can you give me a little more explanation other  
21 than that, fairly minor? What do you mean by "fairly  
22 minor"?

23 A. I think I looked at maybe having less projected  
24 growth references, and decided to go ahead and include  
25 more references because I thought that was appropriate.

1 I think the overall average of the projected  
2 growth rates didn't -- didn't change much.

3 Q. What about the ultimate result, the  
4 projected -- excuse me -- the recommended ROE range in  
5 this case, did those --

6 A. Like I say, because the average, there wasn't  
7 much difference with including them or excluding the two  
8 sources. It didn't change much.

9 Q. When you say it didn't change it much, what is  
10 "it"?

11 A. The resulting return on equity.

12 Q. And when you say it didn't change it much, can  
13 you kind of give me a better understanding of what you  
14 mean by that?

15 A. I -- I don't recall the exact numbers. I could  
16 probably run it for you, but I don't know the exact  
17 numbers.

18 Q. Do you have those runs available if we ask for  
19 them?

20 A. I can make them available.

21 Q. Why did you make more than one DCF run or  
22 calculation in this case?

23 A. Like I said, as far as the growth rates, it  
24 appeared that there was a high and a low, and so I thought  
25 that that may just go ahead and they might cancel each

1 other out.

2 So that's why I considered just using two  
3 references for the growth rates. But since the high and  
4 low really did not make much of a difference, as far as  
5 from a statistical standpoint, it's better to include more  
6 sources than less.

7 Q. Were you -- and I'm going to use the word  
8 uncomfortable or not satisfied with the results of any of  
9 the other DCF runs or calculations that you made in this  
10 case but didn't use?

11 A. I would say that I thought the results weren't  
12 as sound because of the less reference material.

13 Q. And when you supply those other runs to us,  
14 you'll indicate which ones you felt were not sound as a  
15 result of less reference material?

16 We'll be able to tell that?

17 A. I'll provide the run with the two projected  
18 growth rates.

19 Q. All right. Thank you.

20 Now, I think you said there are several forms  
21 of the DCF model. Is it fair to say that you have used  
22 what somebody might call the annual form, meaning the  
23 dividends are paid once per year?

24 A. Yes.

25 Q. Now, would you agree with me, however, that in

1 reality, dividends are paid quarterly?

2 A. It depends on the company. I'm not sure  
3 whether dividend policies -- I think dividend policies can  
4 vary.

5 Q. If dividends are, in fact, paid quarterly, does  
6 that change your results in any way at all?

7 A. No. I haven't done a study as far as that is  
8 concerned anyway.

9 Q. You have done a study?

10 A. No, I have not.

11 Q. So you wouldn't know whether it would change  
12 it?

13 A. No.

14 Q. Turning to page 23 of your direct testimony,  
15 there you list nine assumptions related to DCF3. Is that  
16 correct?

17 A. That's correct.

18 Q. And would you agree with me that the  
19 assumptions which go into the model are extremely  
20 important? I think you indicated that earlier.

21 A. Yes, they're important.

22 Q. And would you also agree that when you put  
23 together any kind of a model, it is important for those  
24 assumptions to more or less reflect or mirror reality?

25 A. I think it's important to have assumptions

1 that -- I believe it's been pointed out that some of these  
2 assumptions may be simplified, but the results are more  
3 important than the assumptions.

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

5 Let me ask this question: Do the nine  
6 assumptions that you have listed there on page 23 mirror  
7 or match or reflect the real world reality?

8 A. I'd say it represents possibilities. I don't  
9 know what is going to occur at any specific point in time.

10 Q. So your answer is you don't know?

11 A. I don't know what the situation would be at any  
12 specific point in time.

13 Q. So with respect to those nine assumptions, you  
14 don't know whether they would prove to be true or would  
15 reflect reality or mirror what really goes on?

16 MS. SHEMWELL: I think he's answered that  
17 question. I think you're putting words in his mouth. So  
18 I'm going to object to the form of the question.

19 If you understand, you may answer. If you  
20 understand what he's saying, I guess you can answer.

21 THE WITNESS: Well, the assumptions are  
22 important for the DCF model itself. Obviously, it's a  
23 theory, and theories are just that. It's not always going  
24 to be true in reality.

25 BY MR. SWEARENGEN:

1 Q. Okay.

2 A. A theory is exactly that, a theory.

3 Q. Are each of the nine assumptions that you have

4 listed there on lines 12 through 20 on page 23 true for

5 Southern Union or Missouri Gas Energy?

6 A. I don't know.

7 Q. So based on your answer, could I conclude that

8 none of those nine assumptions are true for Missouri Gas

9 Energy or Southern Union?

10 A. I don't know what you -- I mean, I don't have a

11 conclusion. I don't know what you would conclude.

12 Q. Well, I'm asking you what you would conclude.

13 MS. SHEMWELL: I'm going to object to this. He

14 said he doesn't know.

15 MR. SWEARENGEN: Okay. That's fine.

16 MS. SHEMWELL: And I'll instruct him not to

17 answer anymore.

18 MR. SWEARENGEN: That's fine.

19 BY MR. SWEARENGEN:

20 Q. Let me ask you about Schedule 14. Turn to

21 that, if you would, please.

22 That's where you, I believe, list your eight

23 comparable companies. Is that true?

24 A. That's correct.

25 Q. Are each of the assumptions, the nine

1 assumptions set out on page 23 of your direct testimony,  
2 true for each of the comparable companies under  
3 Schedule 14?

4 A. I don't know.

5 Q. Back on page 23, at lines 21 and 22, do I  
6 understand that you have set out there or created a tenth  
7 assumption, that is, that the growth horizon is unlimited  
8 and book values and market prices and earnings all go hand  
9 in hand?

10 A. Yes.

11 Q. Is it your testimony that an investor has an  
12 unlimited growth horizon?

13 A. It's an assumption.

14 Q. Is that an assumption that you believe in?

15 A. It's an assumption for the DCF model.

16 Obviously, people may have different growth horizons.

17 Q. Is it an assumption that mirrors reality?

18 A. I said it's an assumption for the theory. All  
19 of these assumptions of the DCF model may not be reality.

20 Q. Including this tenth one that you have created?

21 A. Yes.

22 Q. And it might not be reality for investors in  
23 Southern Union Company. Is that a fair statement?

24 A. Yes.

25 Q. And it might not be reality for investors in



1 the eight companies under Schedule 14. Is that true?

2 A. That's true.

3 Q. Is it your testimony that book values, earnings

4 and market prices grow hand in hand?

5 A. They may; they may not.

6 Q. And would that be your answer with respect to

7 Southern Union Company?

8 A. It may; it may not, yes.

9 Q. And would that be your answer with respect to

10 the eight companies on Schedule 14?

11 A. Yes.

12 Q. Where in this tenth assumption do you deal with

13 dividends?

14 MS. SHEMWELL: Excuse me. I don't see a tenth

15 assumption.

16 THE WITNESS: Well -- go ahead.

17 MR. SWEARENGEN: It's on lines 21 and 22 of his

18 testimony.

19 THE WITNESS: There is no indication of

20 dividends.

21 BY MR. SWEARENGEN:

22 Q. There is no indication of dividends?

23 A. Exactly. But that could be an assumption.

24 Q. Now, what could be an assumption?

25 A. I believe an assumption that -- and I'm

1 speaking from memory, Parcell's -- is that dividends,  
2 earnings and book value per share can grow hand in hand.

3 But that's another assumption. I think there  
4 may be other assumptions in there in the DCF model, but  
5 these are what are specifically itemized for purposes of  
6 this testimony.

7 Q. So let me ask this question then: In what I  
8 call the tenth assumption on lines 21 and 22 at page 23,  
9 you don't really address or deal with dividends. Is that  
10 true?

11 A. It's not in my testimony there, no.

12 Q. And it's not in the assumption?

13 A. In this assumption, no.

14 Q. Now, the analysis that you have performed in  
15 this case is solely for Southern Union Company. Is that  
16 correct?

17 I mean, you made no effort to undertake a  
18 separate analysis with respect to Missouri Gas Energy?

19 A. No.

20 Excuse me. Clarify. The analysis I've done is  
21 for MGE.

22 Q. The analysis that you have done in this case is  
23 for Missouri Gas Energy?

24 A. Yes.

25 Q. Okay. And it's not for Southern Union Company?

1 Is that your testimony?

2 A. Yes.

3 Q. It's not for Southern Union Company?

4 A. Obviously, MGE is a division of Southern Union.  
5 MGE can be thought of as Southern Union.

6 But for purposes of revenue requirement, rate  
7 of return, it's to be applied to MGE.

8 Q. Okay. So once again, I want to make sure I  
9 understand.

10 The analysis -- your testimony is the analysis  
11 that you've done in this case is for Missouri Gas Energy,  
12 the operating division, which is subject to the  
13 jurisdiction of the Missouri Public Service Commission.  
14 Is that correct?

15 A. Yes.

16 Q. Let me ask you this question: As a general  
17 proposition, would it be your opinion that a gas utility  
18 is riskier than an electric utility?

19 A. I haven't done an analysis of that.

20 Q. Do you have an opinion on that, whether or not  
21 a gas utility is riskier than an electric utility?

22 A. No.

23 Q. Do you have an opinion as to whether or not a  
24 gas utility is riskier than a water utility?

25 A. No.

1 Q. Do you have any knowledge of any changes which  
2 are underway in the natural gas industry which would cause  
3 gas utilities to become more or less risky?

4 A. No.

5 Q. I believe you indicated earlier that you were  
6 involved in the -- was it the St. Louis Water Company  
7 case?

8 A. Yes.

9 Q. And would I be correct if I said that on  
10 May 3 of this year the Commission in that case -- I think  
11 WR-2000-844 -- found that a 10.75 percent return on equity  
12 was appropriate for St. Louis County Water Company?

13 A. I believe that's correct.

14 Q. I think you indicated earlier that it's your  
15 understanding that Southern Union Company operates several  
16 natural gas distribution divisions. Is that true?

17 A. Yes.

18 Q. And these divisions that I'm referring to  
19 operate in jurisdictions other than Missouri. Would you  
20 agree with me?

21 A. Yes.

22 Q. Are you familiar with the term "risk profile"?

23 A. Yes.

24 Q. And how would you define that term?

25 A. Risk profile of a company can be a number of

1 factors: business risks, financial risks, just all of the  
2 risks of a company.

3 Q. All of the risks of a company?

4 A. Yes.

5 Q. And you said business risks and financial  
6 risks. Are there any other general types of risks?

7 A. Economic risk, things of that nature. Maybe an  
8 opportunity -- alternative investment opportunities.

9 Q. How would you define economic risk, just  
10 generally?

11 A. Just interest rate risk.

12 Q. And financial risks, how would you define  
13 those?

14 A. Leverage of a company.

15 Q. And business risks, how would you define those?

16 A. Competition, management, competency, those  
17 types of risks.

18 Q. Regulatory environment, might that be one?

19 A. Yes.

20 Q. Would that be a business risk?

21 A. It would be a market-type risk.

22 Q. Would you say that the other Southern Union gas  
23 distribution divisions are similar in character in terms  
24 of their risk profile as is Missouri Gas Energy?

25 A. I don't know.

1 Q. Would you agree that Southern Union's  
2 nonutility investments would not be similar to Missouri  
3 Gas Energy in terms of its risk profile -- or their risk  
4 profiles?

5 A. I don't know.

6 Q. Would you characterize Southern Union Company  
7 as a diversified company?

8 A. No.

9 Q. And why not?

10 First of all, what is your understanding of the  
11 meaning of the term "diversified company"?

12 A. I used Edward Jones in some of my analysis, and  
13 they list diversified versus distribution companies.

14 And I believe their definition is a  
15 distribution company is a company that receives 90 percent  
16 or greater revenues from distribution. That's the  
17 definition according to Edward Jones, the publication.

18 Q. And that's a definition that you would agree to  
19 or agree with?

20 A. I agree with my analysis, yes.

21 Q. And so based on that definition, you would say  
22 that Southern Union is not a diversified company?

23 Is that your testimony?

24 A. Yes, I would classify them as a distribution  
25 company.

1 Q. When you say as a distribution company, what do  
2 you mean?

3 A. Natural gas distribution.

4 Q. And not a diversified company?

5 A. According to Edward Jones' definition, correct.

6 Q. And you would agree with that definition?

7 MR. SHEMWELL: He's answered that. Let's move  
8 on. I'm instructing him not to answer anymore.

9 BY MR. SWEARENGEN:

10 Q. You can go ahead and answer the question.

11 A. Yes.

12 Q. Let me ask this question: Would you agree that  
13 risk is a variation in what actually takes place versus  
14 what is expected?

15 A. Risk can be a variety of factors. That may be  
16 one of the factors. Of course, investor's expectations,  
17 if it's not -- if it varies, there is going to be some  
18 risk there.

19 Q. For example, if somebody expected a return of  
20 10 percent and got only 9 percent or got 12 percent, the  
21 difference would be risk; is that right?

22 One is a good result, perhaps, and the other  
23 bad?

24 A. Volatility in earnings can indicate risk.

25 Q. Would you agree that the extent to which the

1 expectation is not matched by reality is considered to be  
2 the level of risk? The extent to which the expectation is  
3 not matched by reality is considered to be the level of  
4 risk?

5 A. I'm not really sure as far as level of risk.

6 I don't understand the question, I guess.

7 Q. Well, let me ask it this way: Let's say that  
8 you expect a return of 10 percent and instead you get  
9 9 percent, on the one hand, and then on the other hand,  
10 let's say, you expect a return of 10 percent and you only  
11 get 8 percent.

12 Would you agree in that example that I just  
13 gave you that the level of risk differs?

14 A. Strictly looking at the volatility in earnings  
15 versus expectations in a vacuum, obviously less earnings  
16 are -- volatility in earnings will cause more risk.

17 Q. And if the return is 8 percent, for example, or  
18 9 percent and you expect 10, that is a way to measure the  
19 level of risk, the 8 versus 9 compared to the 10? Would  
20 you agree with that?

21 A. I don't know that I measure risk in that factor  
22 for my analysis, but maybe it's something investors look  
23 at. Investors look at many aspects of a company.

24 Q. Let me ask you this question with reference to  
25 your list of comparable companies.



1           On page 24, line 13, am I correct in  
2 understanding that you looked to Edward Jones to make the  
3 first cut, so to speak?

4           A.       I would say that the first cut was based on  
5 stock publicly trading. There were no companies cut.

6           Q.       Well, let me ask the question this way then:  
7 When you -- I'm looking at page 24, line 12.

8           You say Schedule 13, which is a list of your  
9 eight comparable companies, presents a list -- excuse  
10 me -- Schedule 13 presents a list of 17 market traded  
11 natural gas distribution companies monitored by Edward  
12 Jones, of which Southern Union is one. This list was  
13 reviewed for the following criteria.

14           So in the first instance you looked to a list  
15 of companies that Edward Jones monitored. Is that right?

16           A.       Yes, sir.

17           Q.       And then you reviewed that list for certain  
18 criteria. Is that right?

19           A.       That's correct.

20           Q.       And the criteria are set out at the bottom of  
21 page 24. Is that right? There are six of them?

22           A.       Yes.

23           Q.       Did you develop the six criteria set out on the  
24 bottom of page 24?

25           A.       Yes.

1 Q. And then the next step, as I understand it,  
2 based on your testimony, is you calculated a DCF cost of  
3 equity for each of the comparable companies. Is that  
4 right?

5 A. Yes.

6 Q. And then you used that to come up with a cost  
7 of equity for Southern Union Company?

8 A. For Missouri Gas Energy.

9 Q. For Missouri Gas Energy. Okay.

10 Now, if there is something wrong with your list  
11 of comparable companies, would this detract from the  
12 credibility of your cost of equity recommendation in this  
13 case?

14 A. I don't know what would be wrong, as far as  
15 what you mean by wrong.

16 Q. Well, just assume that there is something wrong  
17 with your list of comparables.

18 A. I think the idea behind doing a comparable  
19 analysis is to have objective criteria, which is listed on  
20 one of my schedules, and to take the subjectivity of  
21 making judgments out of the picture.

22 So the criteria used naturally picks companies  
23 that are based on specific objective criteria.

24 Q. So let me make sure I understand you.

25 You're saying that even if something is wrong

1 with your list of comparable companies, this would not  
2 detract from the credibility of your cost of equity  
3 recommendation in this case?

4 MS. SHEMWELL: I'm going to object to that  
5 question. You're putting words in his mouth. He didn't  
6 say there was anything wrong with --

7 BY MR. SWEARENGEN:

8 Q. Do you understand my question?

9 A. Well, I don't understand what you mean by  
10 "wrong." I mean --

11 Q. Well, why don't you define what you understand  
12 by the word "wrong."

13 MS. SHEMWELL: I'm going to object and instruct  
14 the witness not to answer. It's up to you to phrase your  
15 question so that he understands them, not up to him to  
16 define them.

17 So I'm going to instruct him not to answer.

18 BY MR. SWEARENGEN:

19 Q. How would you define the word "wrong"?

20 MS. SHEMWELL: I'm going to instruct the  
21 witness not to answer. It's up to you to define your  
22 questions and not the witness.

23 Don't answer.

24 BY MR. SWEARENGEN:

25 Q. You can go ahead and answer.

1 MS. SHEMWELL: Don't answer.

2 No, you may not answer the question.

3 BY MR. SWEARENGEN:

4 Q. You may go ahead and answer the question.

5 MS. SHEMWELL: I'm instructing him not to  
6 answer.

7 MR. SWEARENGEN: You're instructing him not to  
8 answer, and the question is, what is the definition of the  
9 word "wrong"?

10 MS. SHEMWELL: I'm saying that you need to  
11 define the question so that he can understand them. It's  
12 not up to him to clarify your questions.

13 BY MR. SWEARENGEN:

14 Q. Let me ask the question: Would you please  
15 define your understanding of the word "wrong"?

16 MS. SHEMWELL: I instructed the witness not to  
17 answer. I'm going to stick with that.

18 MR. SWEARENGEN: We can certify that up.

19 MS. SHEMWELL: That's fine.

20 BY MR. SWEARENGEN:

21 Q. Go ahead and answer the question.

22 MS. SHEMWELL: Don't answer the question. I'm  
23 instructing you not to answer. You need to move on.

24 MR. SWEARENGEN: Let me make sure I understand.  
25 I'm asking the witness to give his

1 understanding of the word "wrong," w-r-o-n-g, and you're  
2 refusing to allow him to answer that question?

3 MS. SHEMWELL: I am, because you're asking him  
4 to clarify your question and that's not his  
5 responsibility.

6 MR. SWEARENGEN: Why don't you state your  
7 objection on the record so we have it.

8 MS. SHEMWELL: I'm objecting because it's up to  
9 you to clarify the question if he doesn't understand it,  
10 and you're not doing that.

11 MR. SWEARENGEN: That's exactly what I'm doing.

12 MS. SHEMWELL: You need to ask a clear  
13 question. I'm instructing him not to answer. We need to  
14 move on.

15 BY MR. SWEARENGEN:

16 Q. Let me ask this question: Would you say that  
17 under no circumstances, no circumstances, that there could  
18 conceivably be any factor with respect to your list of  
19 comparable companies that would cause your cost of equity  
20 recommendation in this case to lose some of its  
21 credibility?

22 A. There is always possibilities, but that's the  
23 purpose of using a comparable group of companies, to have  
24 several companies that are considered the representative  
25 sample for cost of equity for MGE.

1 Q. And what are the possibilities that would cause  
2 that result that you just referred to?

3 A. I think one thing that some people may -- some  
4 analysts may look at are mergers. That is the only one  
5 that comes to mind.

6 But as far as I'm concerned, it's a  
7 representative sample from Missouri Gas Energy.

8 Q. So your testimony would be that there really  
9 isn't -- there are no factors with respect to those  
10 companies that would detract from your recommendation in  
11 this case?

12 A. No.

13 Q. There are no factors, no, or there are no  
14 factors, yes?

15 A. There are no factors that would detract.

16 MR. SWEARENGEN: Did you want to take a break?

17 MS. SHEMWELL: I'm just telling him that if he  
18 gets ready for lunch, he needs to take a break, to do  
19 that.

20 BY MR. SWEARENGEN:

21 Q. I think earlier, Mr. Murray, you testified that  
22 the concept of risk is extremely important in this process  
23 of determining a fair and reasonable return for Southern  
24 Union and Missouri Gas Energy. Is that correct?

25 A. Yes.

1 Q. And this is because this is the standard which  
2 has been established by the United States Supreme Court in  
3 the Bluefield and Hope cases which we talked about  
4 earlier. Is that true?

5 A. Yes.

6 Q. And the Pennsylvania State Supreme Court case  
7 which you also cite and which we discussed earlier has  
8 done nothing to dilute that standard, has it?

9 A. Not that I'm aware of.

10 Q. Now, returning back to the six criteria on  
11 page 24 of your direct testimony, would you agree with me  
12 that for the most part, these criteria really have nothing  
13 to do with risk?

14 A. No.

15 Q. No, the six criteria have nothing to do with  
16 risk or, yes, they have nothing to do with risk?

17 A. Can you rephrase the question, please?

18 Q. Do these six criteria on page 24 have anything  
19 to do with risk?

20 A. Yes, they do have something to do with risk.

21 Q. Which criteria --

22 A. 4.

23 Q. -- has something to do with risk?

24 A. Item 4.

25 Q. So your testimony would be that Items 1, 2, 3,

1 5 and 6 have nothing to do with risk. Is that right?

2 A. Let me back up on that also.

3 Distribution of revenues could be considered a  
4 level of risk, but whether or not it's printed in Value  
5 Line, obviously, that's not something that's -- investors  
6 may want to see certain information of a company, but as  
7 far as the risk itself in a company, whether or not it's  
8 printed in Value Line is not going to make a difference.

9 Q. Okay. I think I understand. Item 4 and  
10 possibly Item 2 could conceivably concern risks.

11 Would it be fair to say that to the extent that  
12 your criteria do not deal with risk, that you have ignored  
13 the Bluefield and Hope cases?

14 A. No.

15 Q. And why not?

16 A. Because I picked a representative sample of  
17 natural gas distribution companies which are considered a  
18 representative of the natural gas distribution industry.

19 Q. What does that have to do with the criteria?

20 A. Gas distribution is -- when you do a  
21 comparative analysis, you want to look to companies that  
22 are in the same business, essentially have the same core  
23 business, and companies within the same industry tend to  
24 have similar risks.

25 Q. So you would say that to the extent your



1 criteria does not deal with or concern risk, at least in  
2 your mind this does not -- this is not contrary to the  
3 standard established in the Bluefield and Hope cases. Is  
4 that right?

5 A. That's correct.

6 Q. Now, turning, again, to your list of companies,  
7 I think there is one on there called Energy South, Inc.  
8 Is that correct?

9 A. That's correct.

10 MS. SHEMWELL: What schedule was that?

11 MR. SWEARENGEN: Well, I just had him turn to  
12 Schedule 18. I think it's on several schedules.

13 BY MR. SWEARENGEN:

14 Q. Does this particular company -- it doesn't  
15 really meet your criteria, does it?

16 Isn't it in a separate publication called  
17 Value Line Expanded Edition?

18 Isn't it a different size of company, different  
19 characteristics and so forth than what is in Value Line  
20 Regular?

21 A. It met my criteria.

22 Q. Printed in Value Line?

23 A. Yes.

24 Q. That's your testimony?

25 A. Yes.

1 Q. Would you agree that People's Energy  
2 Corporation, which is on your list, is one of the largest  
3 gas companies in the country?

4 A. I don't know.

5 Q. You don't know?

6 A. I don't know.

7 Q. Do you know anything at all about its size?

8 A. No.

9 Q. What about Energy South, would you agree with  
10 me that it's one of the smallest in the country?

11 A. I don't know.

12 Q. Do you know anything about its size?

13 A. No.

14 Q. If you don't know anything about the size of  
15 those two companies, would you -- do I understand your  
16 testimony that you regard those companies as companies as  
17 comparable to each other?

18 A. They're -- they're comparable to the  
19 distribution -- natural gas distribution industry, yes.

20 Q. But you don't know anything about their size  
21 relative to the industry or to each other?

22 A. No.

23 Q. Would you say that Energy South, Inc., is  
24 comparable to Southern Union or Missouri Gas Energy?

25 A. Yes.

1 Q. And would it be your testimony that People's  
2 Energy Corporation is comparable to Southern Union or  
3 Missouri Gas Energy?

4 A. Yes.

5 Q. Do you anywhere in your direct testimony or in  
6 your schedules discuss the risk profile of each of your  
7 eight comparable companies on an individual basis?

8 A. In my direct testimony?

9 Q. Or your schedules.

10 A. I believe I referred to a variety of ratios on  
11 one of my schedules, which --

12 Q. Why don't you turn to that one and let me know  
13 which one you're talking about.

14 A. I believe Schedule 22.

15 Q. Now, where on Schedule 2 (sic) can I discern  
16 the risk profile of each of these companies on an  
17 individual basis?

18 A. On schedule 22, you could look at their capital  
19 structure, pre-tax interest coverage ratio. Those are  
20 risk type of ratios that an investor may look at.

21 Q. And tell me, for example, pre-tax interest  
22 coverage ratio, is that shown on your column 4?

23 A. Yes.

24 Q. Where else on that document can I find  
25 something that discusses the risk profile of those eight

1 companies?

2 A. That's it as far as the capital structure that  
3 may have an indication of the riskiness.

4 Q. Where do I see the capital structure on each of  
5 those companies on that schedule?

6 A. As far as the equity ratio and the long-term  
7 debt ratio, the preferred stock ratio, those are in  
8 Columns 1, 2 and 3.

9 Q. And those are all shown in percentages. Is  
10 that correct?

11 A. That's correct.

12 Q. Without specific dollar amounts for those  
13 particular items. Is that correct?

14 A. That's correct.

15 Q. Is there anywhere on that document that I can  
16 tell how large these companies are as compared to each  
17 other?

18 A. No.

19 Q. Where in your testimony or schedules do you  
20 discuss the risk profile of these eight companies as a  
21 group?

22 A. I believe as far as the discussion of the risk  
23 profile of the group, it's addressed when I discuss the  
24 criteria that was used to narrow it down.

25 Q. And where would I find that?

1       A.       Basically, I think, where we were at before,  
2       which is page 24, how did you determine which companies  
3       you would include to represent the comparable natural gas  
4       distribution companies.

5               And then I go on into the criteria to select  
6       what I feel is a comparable group of companies for purpose  
7       of calculating the cost of equity.

8       Q.       But I think earlier you said that with the  
9       exception of Item 4 and possibly Item 2, none of those  
10       criteria had anything to do with risk?

11       A.       The items specifically may not have anything to  
12       do with risk that you're referring to as far as whether or  
13       not they're printed on Value Line, but the fact that I --  
14       the fact that I extract a natural gas distribution  
15       comparable list and they're in the same type of business  
16       means that they are comparable.

17       Q.       Let's look at Item 6, for example, on page 24,  
18       ten years of data available.

19               What does the availability of data have to do  
20       with risk?

21       A.       Nothing.

22       Q.       Look at Item 3: Information printed in  
23       Value Line, what does that have to do with risk?

24       A.       Nothing.

25       Q.       What does Item 1, stock publicly traded, have

1 to do with risk?

2 A. Nothing.

3 Q. Is it your testimony that the risk profile for  
4 Southern Union or Missouri Gas Energy is the same as the  
5 risk profile for your group of eight companies?

6 A. I would say as far as the natural gas  
7 distribution business, they are the same.

8 Q. Let me make sure I understand.

9 Now, you're saying as far as the natural gas  
10 distribution business is concerned, the risk profile for  
11 Southern Union is the same as the risk profile for the  
12 group of eight companies?

13 A. There may be differences in the various  
14 companies, but as far as a representative sample of the  
15 natural gas distribution business, that is what I chose to  
16 represent Southern Union, and as a result, Missouri Gas  
17 Energy.

18 Q. When you say there may be differences, what do  
19 you mean by that?

20 A. Obviously, the ratios I just referred you to  
21 included financial, the capital structure of the companies  
22 and pre-tax interest coverage ratio.

23 Those are all factors that -- that are  
24 considered as part of the risk as far as the business  
25 operations and what have you, using a natural gas

1 distribution sample of eight comparable companies is  
2 assumed to be a reasonable comparison of risk.

3 Q. Now, you mentioned there may be differences  
4 between the various companies, the eight companies on your  
5 list of comparables.

6 Tell me again what you mean by that, what the  
7 differences could be.

8 A. Obviously, there may be differences in the  
9 geographic areas that they serve, weather patterns. There  
10 are many variations, but --

11 Q. I think earlier you talked about different  
12 general types of risk, and you talked about financial  
13 risks and business risks, and do you recall those,  
14 economic risks?

15 A. Yes.

16 Q. Would you agree that with respect to those  
17 eight companies, that all of those risks could be  
18 different for each of those companies?

19 A. It's possible.

20 Q. Have you made any study to determine whether or  
21 not they are?

22 A. No.

23 Q. You haven't made a study with respect to the  
24 various types of risks for each of those eight comparable  
25 companies; that's your testimony?

1       A.       I said as far as the criteria I used. I used  
2 the criteria to narrow down the companies which includes  
3 the natural gas distribution -- eight comparable natural  
4 distribution companies I used.

5               As far as any other specific analysis, no.

6       Q.       It's possible, I think you said, that the  
7 business risk, financial risk, economic risk or other  
8 risks for any of those companies could be different among  
9 themselves?

10      A.       Yes.

11      Q.       And they could also be different as compared to  
12 those risks which Southern Union and Missouri Gas Energy  
13 might experience. Is that true?

14      A.       It's possible.

15      Q.       Have you made any sort of adjustment or  
16 proposed any sort of adjustment in this proceeding that  
17 would account for the difference in risks that Missouri  
18 Gas Energy or Southern Union might experience as compared  
19 to your group of eight companies?

20      A.       I have not proposed any specific adjustments.

21      Q.       For risk?

22      A.       For anything.

23      Q.       Is it still your testimony that the concept of  
24 risk is extremely important in the process of determining  
25 a reasonable return for Southern Union or Missouri Gas



1 Energy?

2 A. It's a factor.

3 Q. Is it an important factor?

4 A. Yes.

5 Q. Would you say it's an extremely important  
6 factor?

7 A. I would say it's an important factor.

8 Q. Back on page 20, line 11, I believe, if you'd  
9 turn to that for a minute.

10 I think it is there that -- I said line 11. I  
11 think it's lines 14 and 15, where you indicate that you  
12 reject Missouri Gas Energy's proposed capital structure,  
13 and you devote five lines there, lines 11 through 15,  
14 explaining why. Is that correct?

15 A. Yes.

16 Q. Let me ask you this question: Is what you're  
17 saying there on lines 11 through 15 consistent with your  
18 understanding of contemporary and generally accepted  
19 finance theory?

20 A. Yes.

21 Q. Is it your understanding that it is a standard  
22 practice in the area of finance to use the consolidated  
23 capital structure, say, for example, for capital  
24 budgeting?

25 A. I don't know.

1 Q. Is it your testimony that it's standard  
2 practice for -- in the area of finance, for what I will  
3 refer to as larger companies, to use the consolidated  
4 capital structure for any purpose?

5 A. I don't know.

6 Q. You mentioned earlier that Southern Union  
7 Company has, I think what you referred to as, nonutility  
8 investments. Is that right? Do you recall that?

9 A. I may have. I don't recall.

10 Q. Do you know whether or not Southern Union has  
11 any nonutility investments?

12 A. I'm aware of some unregulated investments. As  
13 far as specifics, we talked about that.

14 Q. And what is your knowledge? What are those?

15 A. I believe I said before something about propane  
16 and maybe some other. I mean, I don't recall offhand.

17 Q. Okay. Do you know how Southern Union finances  
18 those investments?

19 A. No.

20 Q. Do you know how many customers -- how many  
21 residential customers Missouri Gas Energy has?

22 A. I want to say it's somewhere around 500,000,  
23 but I don't know. I don't recall.

24 Excuse me. Go ahead.

25 Q. Are you finished?

1 A. Yes. Go ahead.

2 Q. Do you know how many commercial customers MGE  
3 has?

4 A. No.

5 Q. How about industrial customers, do you know how  
6 many industrial customers Missouri Gas Energy has?

7 A. No.

8 Q. Back to the comparable companies that you show  
9 on your schedules -- and I'm looking now at Schedule 14,  
10 with respect to those eight companies --

11 A. Yes, sir.

12 Q. -- with respect to those eight companies under  
13 Schedule 14, do you know whether or not during the time  
14 represented by your study that went into your testimony in  
15 this case whether or not any of those companies were  
16 engaged in merger proceedings?

17 A. No.

18 Q. You do not know?

19 A. That's correct.

20 Q. And so based on that I could assume that all  
21 eight of those companies, perhaps, were involved in merger  
22 proceedings, or any number of them could have been?

23 You don't know?

24 A. I don't know.

25 Q. Did you make a study to determine if their

1     existed any special or unusual circumstances surrounding  
2     any of those eight companies under your Schedule 14?

3         A.     A specific study, no.

4         Q.     Did you make a general study?

5         A.     No.

6         Q.     Are you familiar with the State regulatory  
7     bodies which have jurisdiction over the operation of those  
8     eight companies shown on your Schedule 14?

9         A.     No.

10        Q.     Do you know whether or not those eight  
11    companies operate in eight different regulatory  
12    jurisdictions?

13        A.     No.

14        Q.     Do you know whether or not the practices of the  
15    regulatory commissions which do have jurisdiction over  
16    those eight companies influence the financial conditions  
17    of those companies in either a positive or a negative  
18    fashion relative to MGE or Southern Union?

19        A.     No.

20        Q.     Would you agree that the decisions of the  
21    Missouri Public Service Commission will influence the  
22    financial condition of Southern Union Company and/or  
23    Missouri Gas Energy?

24        A.     It's possible.

25        Q.     Would you agree that the commissions which

1 regulate your eight comparable companies shown on your  
2 Schedule 14 would likewise possibly influence the  
3 financial conditions of those companies?

4 A. It's possible.

5 Q. Let me ask you this: In your present position  
6 at the Public Service Commission, are you in a department  
7 or a division?

8 A. I believe they refer to it as departments  
9 there.

10 Q. Okay. And what department are you in?

11 A. Financial Analysis.

12 Q. Okay. And who else is in that department?

13 A. My boss Ron Bible and Roberta McKiddy.

14 Q. And I take it from your comment that you report  
15 to Ron Bible. Is that right?

16 A. That's correct.

17 Q. And who does he report to in turn, do you know?

18 A. Bob Schallenberg.

19 Q. To your knowledge did any other members of the  
20 staff of the Missouri Public Service Commission review any  
21 drafts of your direct testimony in this case before you  
22 filed it?

23 A. Yes.

24 Q. And who might that have been?

25 A. The attorneys involved.

1 Q. Specific attorneys?

2 A. Yes.

3 Q. Okay. Anybody else?

4 Did any nonattorneys review drafts of your

5 testimony?

6 A. The case coordinator, Steve Traxler.

7 Q. Did Mr. Traxler suggest any changes in your

8 testimony?

9 A. No.

10 Q. Did the attorneys suggest any changes in your

11 testimony?

12 A. Nothing substantial.

13 Q. Okay. Are you familiar with the term "market

14 return"?

15 A. Yes.

16 Q. Would you agree with me or accept as a

17 definition that a market return is a return that investors

18 could earn in other investments of equivalent risk?

19 A. Yes.

20 Q. Assuming that definition, then, would you agree

21 that market return is the return necessary to attract

22 capital?

23 A. Yes.

24 Q. And would you agree that this concept is a

25 sound economic principle?

1 A. Yes.

2 Q. If I use the term "indenture," would you know  
3 what that means?

4 A. Yes.

5 Q. Are you familiar with any indentures in the  
6 public utility area?

7 A. As far as specifically?

8 Q. Just generally.

9 A. Generally.

10 There is various indenture agreements with  
11 utilities as far as issuances of bonds.

12 Q. Would you agree with me that generally an  
13 indenture is an agreement between a utility company, on  
14 the one hand, and bond investors on the other hand?

15 A. Yes.

16 Q. Are you familiar with any indenture which  
17 Southern Union or Missouri Gas Energy might have?

18 A. I did request the specifics of their debt  
19 issuances.

20 Q. So the answer is, you are familiar with a  
21 Southern Union or Missouri Gas Energy indenture?

22 A. I'm familiar with some of the terms of those  
23 indentures.

24 Q. Would you agree with me that generally  
25 speaking, an indenture has no relation to market return or

1 the evaluation of a particular company's common stock?

2 A. Could you repeat the question?

3 Q. Yes.

4 Would you agree with me that generally speaking  
5 an indenture has no relation to market return or the  
6 evaluation of a particular company's common stock?

7 A. There may be specific things in the indenture  
8 that I'm not sure about, so I'm not sure I can answer that  
9 question.

10 Q. You don't know the answer to that one way or  
11 other?

12 A. No.

13 MS. SHEMWELL: I'm going to suggest we break  
14 briefly for lunch. It's getting to be quarter to one.

15 MR. SWEARENGEN: Let me ask one or two  
16 questions and then we'll do that. Okay?

17 MS. SHEMWELL: Okay.

18 BY MR. SWEARENGEN:

19 Q. Based on your knowledge that you do have of  
20 indentures, what is there that leads you to believe that  
21 an indenture might have some relation to market return or  
22 the evaluation of a particular company's common stock?

23 A. There may be provisions within an indenture  
24 that -- I mean, obviously bonds fall in place as far as  
25 the earnings.



1 As far as the indenture agreements, obviously,  
2 the bondholders are first in line before the stockholders.

3 So if there is anything specific in the  
4 agreement -- and I don't recall -- I don't know exactly  
5 what specifically would be in there, other than the fact  
6 that they would have first dibs, if you will, on the  
7 earnings.

8 Like I said, other than that I'm not aware.

9 Q. But that would be true, would it not, with  
10 respect to all indentures?

11 A. Yes.

12 Q. Okay. So, then, how could that in any way  
13 influence the evaluation of a particular company's common  
14 stock if all indentures are like that?

15 A. It would be a matter of how much they had.

16 Q. Yes.

17 A. As far as a specific indenture agreement, I  
18 don't know.

19 Q. Okay. So you can't point to anything specific  
20 in an indenture --

21 A. No.

22 Q. -- that would cause you to think that an  
23 indenture would have some relation to market return?

24 A. As I said, I don't know.

25 Q. You don't know?

1 A. I don't know.

2 MR. SWEARENGEN: We can stop there if you'd  
3 like.

4 MS. SHEMWELL: I think it's a good time.

5 (THE NOON RECESS WAS TAKEN.)

6 BY MR. SWEARENGEN:

7 Q. Mr. Murray, back on page 19 of your direct  
8 testimony, you say that for purposes of this case you are  
9 using Southern Union's consolidated capital structure. Is  
10 that correct?

11 A. That's correct.

12 Q. And as of December 31, 2000, that consolidated  
13 capital structure included 31 percent common stock and  
14 58 percent debt. Is that right?

15 A. That's correct.

16 Q. Now, let's assume for a minute if those ratios  
17 were reversed, say, they showed 31 percent debt and  
18 58 percent common, would your recommendation for the  
19 capital structure in this case be the same?

20 A. Well, it could since we use actual capital  
21 structure. If that was the actual capital structure,  
22 we -- the Commission and staff has predominantly used  
23 actual capital structure, except for various situations  
24 that -- as far as if it's determined unreasonable to have  
25 a high equity ratio compared -- compared to the rest of

1 the industry.

2 Q. So would your testimony be at least for the  
3 first cut, subject to what the Public Service Commission  
4 might ultimately decide, the staff would at least support  
5 or recommend that circumstance, a capital structure of  
6 31 percent debt and 58 percent common equity?

7 A. It's possible. I don't know for sure what we  
8 would do.

9 MS. SHEMWELL: Did you understand his question?

10 MR. SWEARENGEN: Well, I think he did. He said  
11 it's possible.

12 BY MR. SWEARENGEN:

13 Q. According to your testimony at page 17, from  
14 1996 to 2000, Southern Union's common equity ratio has  
15 ranged from 47 percent to 34 percent. Is that correct?

16 A. That's correct.

17 Q. And yet you're recommending for purposes of  
18 this case a 31.2 percent common equity ratio?

19 A. That's correct.

20 Q. But you admit that's significantly lower than  
21 the industry average. Is that true?

22 A. Let me refer to my language.

23 Yes, that's what I indicate in my testimony.

24 Q. Does the staff, at least to your knowledge,  
25 always recommend that the actual capital structure of the

1 company be used for purposes of setting rates?

2 A. Predominantly, but not always.

3 Q. When would the staff recommend using something  
4 other than the actual capital structure of a company for  
5 purposes of setting rates?

6 A. I believe there has been a couple of cases. I  
7 think St. Joe Light and Power is one that comes to mind  
8 where a hypothetical was proposed.

9 Q. And what were the circumstances in that case  
10 that caused the staff to propose a hypothetical capital  
11 structure?

12 A. Just from general knowledge of it. And this  
13 is -- I don't know the specifics of the case, but I think  
14 it had something to do with the equity ratio being not  
15 completely in line with -- with maybe the industry.

16 Q. Okay.

17 A. But that's just very general.

18 Q. Okay. So that would be a standard to use,  
19 whether or not the equity ratio is in line with the  
20 industry. Is that a fair statement?

21 A. No.

22 Q. It's not a fair statement?

23 A. No.

24 In that case it may have been, but we don't  
25 look at every case and treat them the same.

1 Q. Well, what was there about the St. Joe case  
2 that you know that would have caused the staff to say that  
3 a capital structure more in line with the industry should  
4 be used?

5 A. Like I said, I just spoke about it in general  
6 terms. I don't know the specifics of that case.

7 Q. Okay. That's fine.

8 Have you done a study to determine when in the  
9 past the staff has recommended and the Commission -- or  
10 the Commission -- the staff has recommended or the  
11 Commission has chosen to adopt for ratemaking purposes  
12 something other than the actual capital structure of the  
13 utility?

14 A. I haven't done a study.  
15 That was your question. Right?

16 Q. Right.

17 What knowledge do you have of that subject  
18 other than the St. Joseph Light and Power case which you  
19 referred to?

20 A. As far as hypotheticals?

21 Q. Yes.

22 A. I would say that I don't have more knowledge  
23 than that.

24 Q. Would you agree that Southern Union's capital  
25 structure changes over time?

1 A. Yes.

2 Q. And can you tell us why it is currently at  
3 31 percent common equity?

4 A. The chances are -- and this is -- just a  
5 possibility, but it appears that since it was at  
6 46 percent June 30th of 2000 and went all of the way to  
7 31.2 percent in less than six months and there was an  
8 acquisition of the New England Division in that time  
9 frame, that it probably acquired quite a bit of debt with  
10 that acquisition.

11 Q. So you're aware that it was -- the common  
12 equity ratio was considerably higher June 30, 1999. Is  
13 that what you said?

14 A. It was considerably higher than December 31st,  
15 2000, that's correct.

16 Q. What was the number you used?

17 Was it close to 50 percent? I can't remember  
18 what you said.

19 The common equity ratio at June 30, 1999. You  
20 had a percentage there, and I can't remember --

21 A. Let me refer to it.

22 As stated in the annual report of Southern  
23 Union Company, the common equity ratio as of June 30th,  
24 2000 was 46.82 percent.

25 Q. 46.82.

1           In your opinion is there more risk associated  
2 with a capital structure such as Southern Union which has  
3 a common equity ratio of 31 percent as compared to a  
4 utility with a higher equity ratio?

5           A.       I mean, there are many risk factors. I don't  
6 know that you can just narrow it down and say that the  
7 capital structure is the only risk factor.

8           Q.       Well, I understand that.

9                    But would there -- all of the things being  
10 equal, is there more risk associated with a capital  
11 structure where they lower equity ratio as opposed to the  
12 one with a higher common equity ratio?

13           A.       I would say if you have two companies that are  
14 in exactly the same industry, exactly the same amount of  
15 revenues, exactly the same everything on their financial  
16 statements, exactly the same exposure to business risks,  
17 regulatory risks, market risks, all risks held equal and  
18 exactly the same except for leverage, then I think that  
19 would be a reasonable conclusion.

20           Q.       Are any of your eight comparable companies, did  
21 they meet the standard or criteria that they're identical  
22 in all other respects?

23           A.       No, not that I know of.

24           Q.       Have you done a study to determine that?

25           A.       No.

1 Q. Have you done any study to determine what risk  
2 factors that each of those eight comparable companies  
3 might be different than comparable risk factors for  
4 Southern Union or Missouri Gas Energy?

5 A. The risk factors I mentioned before?

6 Q. Any risk factor.

7 A. Well, obviously as far as the financial risk  
8 factors that is in Schedule 20-- Schedule 22, but as far  
9 as --

10 Q. Go ahead.

11 A. But as far as general risk factors, no,  
12 It's -- a lot of those can be qualitative, and it's hard  
13 to measure.

14 Q. So you wouldn't know, then, for instance, with  
15 respect to any one of those companies whether a higher  
16 equity -- common equity ratio might be offset by some  
17 other factor that would be detrimental?

18 A. I don't know.

19 Q. What are the common equity ratios of each of  
20 the companies on your list of comparable companies?

21 A. AGL Resources, 47.5.

22 Q. Excuse me. What document are you referring to?

23 A. Schedule 22.

24 Okay. Are you ready?

25 Q. Yes.



1       A.       AGL Resources, 47.5; Cascade Natural Gas,  
2       50 percent; Energy South, 56 percent; New Jersey  
3       Resources, 53 percent; People's Energy, 64.9 percent;  
4       Piedmont Natural Gas, 57 percent; South Jersey Industries,  
5       45 percent; WGO Holdings, 56.5 percent.

6       Q.       And the average there is what?

7       A.       53.74 percent.

8       Q.       And what does that document show that the  
9       Southern Union Company common equity ratio is?

10      A.       This Schedule 22 shows 31.2 percent.

11      Q.       And I think earlier in your testimony -- I  
12      think it was on page 18 -- you said that Southern Union's  
13      common equity ratio is significantly lower than the  
14      industry average?

15      A.       Yes.

16      Q.       And that's what you would base that statement  
17      on?

18      A.       Yes.

19      Q.       And when you say "significantly," could you  
20      define that term for me?

21      A.       Well, obviously, it's not just a few basis  
22      points.

23               20 percent is significant in my mind.

24      Q.       I think earlier you said -- and correct me  
25      if I'm wrong -- that you had reviewed the rate of return

1 testimony of staff witness David Broadwater in

2 Case GR-96-285?

3 A. Yes.

4 Q. I've got that. I'm not going to ask you to go  
5 through it and make any kind of comparisons, but I do want  
6 to have marked an exhibit, please, which is a portion of  
7 that testimony.

8 (EXHIBIT NO. 2 WAS MARKED FOR IDENTIFICATION BY  
9 THE COURT REPORTER.)

10 BY MR. SWEARENGEN:

11 Q. Now, you said you read that testimony, or you  
12 reviewed it?

13 A. I reviewed it. I didn't review it in as much  
14 detail as Ron Bible's testimony.

15 Q. Is it your understanding that in that case that  
16 I'm referring, to Commission Case GR-96-285, that the  
17 Commission staff recommended a 50-basis point adjustment  
18 to return on equity for Southern Union -- to Southern  
19 Union's 33 percent common equity ratio?

20 A. Could you refer me specifically to --

21 Q. Well, do you have any independent recollection  
22 of that?

23 A. I think there were some adjustments, but I'd  
24 have to look specifically to verify that.

25 Q. Let me hand you what has been marked for

1 purposes of identification as Deposition Exhibit 2, which  
2 I will represent to you is the first page of  
3 Mr. Broadwater's testimony which you have in front of you,  
4 pages 44, 45 and 46 and Schedule 30, and you can take a  
5 minute and look at that and confirm that that's what I  
6 told you that that's what it is.

7 A. Yes, he does state that.

8 Q. What I want you to, first, was confirm that  
9 Exhibit 2 is a copy of --

10 A. Let me see.

11 Q. It's a correct copy of the pages from  
12 Mr. Broadwater's testimony, is that right, pages 44, 45  
13 and 46 and Schedule 30 --

14 A. That's correct.

15 Q. -- from Mr. Broadwater's testimony?

16 Take a look, then, at Schedule 30, which is the  
17 last page on the -- you can hand this back -- Schedule 30,  
18 which is the last page on the exhibit.

19 Am I correct that that schedule shows the  
20 average common equity ratio for the comparable companies  
21 as 52.6 percent?

22 A. That's correct.

23 Q. And that document shows that Southern Union's  
24 common equity ratio at that time was 32.74 percent. Is  
25 that right?

1 A. That's correct.

2 Q. And would you agree with me that the difference  
3 between those two is 19.86 percent?

4 A. That's correct.

5 Q. Okay. Now, take a look, if you would, for a  
6 minute at your Schedule 22 to your testimony which we were  
7 discussing earlier.

8 And I think you said that the average common  
9 equity ratio is reflected in that schedule for your group  
10 of comparable companies as 53.74 percent. Correct?

11 A. Yes.

12 Q. And the common equity ratio for Southern Union  
13 Company is 31.2 percent?

14 A. Yes, sir.

15 Q. And the difference is 22.54 percent. Is that  
16 correct?

17 A. It looks correct.

18 Q. So the difference in these ratios is somewhat  
19 greater now than it was back in Case GR-96-285. Would you  
20 agree with that?

21 A. Yes, sir.

22 Q. Have you made any adjustment in your case to  
23 account for this risk as did Staff Witness Broadwater in  
24 Case GR-96-285?

25 A. No.

1 Q. Take a look at Schedule 8, if you would,  
2 please, to your testimony.

3 Are you there --

4 A. Yes.

5 Q. -- on that schedule?

6 Now, there, I think, you state a number of  
7 selected financial ratios for Southern Union Company on a  
8 consolidated basis. Is that correct?

9 A. Yes.

10 Q. And one of those shows a triple B plus rating  
11 for senior debt -- senior debt rating of 2000?

12 A. Yes.

13 Q. And where does the triple B plus for senior  
14 debt rank in the scale of possible bond ratings, do you  
15 know?

16 A. It's investment grade.

17 Q. What is the range of possible bond ratings, do  
18 you know?

19 A. All of the way to -- basically default to  
20 double A.

21 Q. Okay. So what is in between there?

22 You have default on the one hand and double A  
23 on the other one. What are the ratings that fill that out  
24 in the middle?

25 A. Triple B, double B, B, single A, A minus,

1 triple B positive, double B plus, double B minus,  
2 et cetera, et cetera, C.

3 Q. Okay. Any more?

4 A. It's all I recall right now.

5 Q. And I think on page 30 of your direct testimony  
6 there, you indicate that a company that is rated  
7 investment greater or higher if it is triple B minus or  
8 higher. Is that right?

9 A. That's correct.

10 Q. And what does investment grade mean?

11 A. Basically that's the point where institutional  
12 investors may yank their money. They don't feel like it's  
13 a safe investment.

14 Q. Would you agree that a company with a double B  
15 rating would have a more difficult time issuing bonds than  
16 a company with a triple B rating?

17 A. I don't know if they'll have a more difficult  
18 time issuing bonds. Maybe at a higher cost. It's  
19 possible.

20 Q. It's possible that they would have a more  
21 difficult time?

22 A. It's possible. But if they get the higher cost  
23 and there is investors that want to invest in those  
24 lower-rated bonds, then that's the investor's decision.

25 Q. Would you say, in any event, the bonds of a

1 double rated B company would cost more than a triple B?

2 A. It's likely. It's possible.

3 Q. If a bond rating agency raises the bond ratings  
4 of a company from triple B to A, would you expect there to  
5 be a change in the cost of borrowing?

6 A. It could possibly be lower.

7 Q. The costs of borrowing could possibly be lower?

8 A. For a company, it's possible,

9 Q. Is that what you would expect?

10 A. I believe if you would review the -- and I'd  
11 have to check this out, but if you review the merging bond  
12 record and the average interest rates paid for a variety  
13 of bond ratings on the spectrum, that you would expect a  
14 better credit-worthy borrower may receive a lower interest  
15 rate.

16 Q. Are the rates which a utility company charges  
17 for the service it provides to its customers likely to  
18 increase or decrease over time if a bond rating agency  
19 increases a utility's bond rating?

20 A. I mean, it's pretty hard to answer that for  
21 sure because of the fact that there is the capital  
22 structure issue, what's -- an optimal capital structure is  
23 pretty well impossible to determine.

24 If somebody could determine that, then I think  
25 they would be one up on everybody else. But it's -- I

1 mean, you don't know a good -- it just falls on the  
2 overall cost of capital.

3 Q. So you wouldn't know whether rates would likely  
4 go up or down if over time a rating agency increased the  
5 utility's bond rating?

6 A. I don't know for sure.

7 Q. Do you have any opinion at all, less than  
8 certainty, what would be likely to happen?

9 A. No.

10 Q. You mentioned -- what was the word you used, an  
11 optimal -- or optimum capital structure?

12 A. Yes.

13 Q. What's that?

14 A. I don't know. It's -- it's a mix of debt to  
15 equity that is considered the lowest cost of capital for a  
16 company.

17 And, like I said, if somebody knew that, on a  
18 regular basis it adjusts over time, they would be at least  
19 the CFO.

20 Q. What is the significance of an optimal or  
21 optimum capital structure for purposes of what we're  
22 talking about today?

23 A. There is really not any significance for an  
24 analysis.

25 Q. Is that something that a regulatory staff might



1 recommend or suggest in a proceeding to be used for  
2 ratemaking purposes?

3 A. Not -- I mean, we don't know an optimal. So  
4 it's -- a hypothetical might be used, but as far as an  
5 optimal, like I said, it's very hard -- it's almost  
6 impossible to determine that.

7 Q. Would an optimal capital structure be a  
8 hypothetical capital structure?

9 A. Like I said, the hypothetical may not be  
10 optimal.

11 Q. Well, let me ask it the other way then.

12 You're saying you don't know what an optimal  
13 capital structure is for any particular company. Is that  
14 your testimony?

15 A. That's correct.

16 Q. Could someone make a reasonable argument that  
17 there is such a thing as an optimal capital structure for  
18 a particular company?

19 A. Anybody could make that argument.

20 Q. Okay. And if someone did make that type of  
21 argument, would you call that a hypothetical capital  
22 structure?

23 A. Not necessarily.

24 Q. And why not?

25 A. Because it would have to be used in some type

1 of proceeding for a hypothetical to be -- and, once again,  
2 for them to know whether it's optimal, they would have to  
3 have some type of way to verify that that's the lowest  
4 cost of capital, which, as far as I know, it's impossible  
5 to do.

6 Q. Turn to page 30, if you would, for a minute,  
7 please, of your testimony.

8 There on line 1 you discuss a pre-tax coverage  
9 of 2.10 times to 2.18 times?

10 A. Yes.

11 Q. And you state that that is slightly higher than  
12 Standard and Poors lower quartile for triple B rated  
13 natural gas distribution companies. Is that correct?

14 A. That's correct.

15 Q. Is a triple B rated bond rating an appropriate  
16 target for a regulated company?

17 A. I don't know.

18 Q. Did you do any study to determine whether or  
19 not a 2.10 coverage is sufficient?

20 A. No.

21 Q. Are you aware of or can you refer me to any  
22 citations by scholars or any regulatory decisions that  
23 recommend a triple B bond rating as a target for gas  
24 distribution companies?

25 A. No.

1 Q. Do you know if any State commissions -- State  
2 regulatory commissions use a triple B bond rating as a  
3 target for setting an allowed return for gas distribution  
4 companies?

5 A. I don't know.

6 Q. On line 3 of page 30 you indicate that the  
7 pre-tax coverage of 2.10 to 2.18 times is much higher than  
8 Southern Union's 1.13 times. Is that correct?

9 A. That's correct.

10 Q. Is it your testimony that a 1.13 times is an  
11 appropriate pre-tax coverage target for a gas distribution  
12 utility?

13 A. I don't know. I don't comment on that, and I  
14 don't determine what is appropriate.

15 Q. You don't have an opinion on that?

16 A. No opinion.

17 Q. Is there any reason that you can think of that  
18 the Missouri Public Service Commission should be concerned  
19 about a utility company with a 1.13 times pre-tax interest  
20 coverage operating in Missouri?

21 A. Obviously, anything might raise some red flags  
22 if there is some concern about the payment of debt, but as  
23 far as --

24 Q. Is there any reason you can think of that this  
25 Commission should be concerned about a utility company

1 with a 1.13 times pre-tax interest coverage operating in  
2 the state?

3 A. I would say if there is a problem with the  
4 company meeting its interest obligations, there may be a  
5 concern, but as to whether or not that indicates whether  
6 or not they're going to default on debt, I don't know.

7 Q. Do you know if 1.13 times pre-tax interest  
8 coverage meets the bond indenture requirements of Southern  
9 Union debt?

10 A. I don't believe there is any -- I'm  
11 recollecting from memory here.

12 I don't know if there is any active indenture  
13 requirements as far as the pre-tax interest coverage  
14 ratio. That's just from memory.

15 Q. So your answer is you wouldn't know or you  
16 don't know?

17 A. Exactly.

18 Q. In your financial experience, have you  
19 investigated what happens when a utility fails to meet its  
20 bond indenture requirements?

21 A. No.

22 Q. Have you made any adjustment in this case for  
23 any risk associated with pre-tax interest coverage?

24 A. No.

25 Q. Turn, if you would, to your Schedule 15.3, and

1 look at the line which says People's Energy Corporation.

2 A. Yes.

3 Q. Once again, do you have any knowledge about the  
4 size of that company as compared to the other companies in  
5 your Schedule 15.3?

6 A. No.

7 Q. Am I correct that you show that People's is  
8 shown to have a ten-year earnings growth of 2.51 percent?  
9 Is that right?

10 A. That's right.

11 Q. And a five-year earnings growth of  
12 4.85 percent?

13 A. That's correct.

14 Q. If you were purchasing the People's stock today  
15 for your own account, what earnings growth would you  
16 expect in the next few years based on these numbers?

17 A. I have no specific analysis on that.

18 Q. So you don't have an opinion on that?

19 A. I have not made any personal judgments as far  
20 as whether or not I would invest in any of these  
21 companies.

22 Q. Based on what you do know, would you expect the  
23 growth to be closer to the 2.51 percent than to the  
24 4.85 percent?

25 A. Obviously with People's Energy, the

1 projected -- the reason why I had a projected growth was  
2 to take into account what the analysts forecast.

3 I think the average of historical and projected  
4 growth was 3.96 percent on Schedule 16 and the average  
5 projected growth was 4.23 percent.

6 So I think for purposes of analysis, that would  
7 be reasonable to assume to fall somewhere within that  
8 range. I didn't use historical on its own, so --

9 Q. So is that closer to the 2.51 or closer to the  
10 4.85?

11 A. 4.85.

12 Q. Take a look at your Schedule 19, if you would,  
13 please.

14 There you've got a column numbered 3, market  
15 risk premium 1926 to 1999, and you've got 7.8 percent  
16 listed for each of the companies, each of your eight  
17 comparable companies. Is that correct?

18 A. That's correct.

19 Q. What is the origin of that number?

20 A. Under the sources, the Ibbotson Associates  
21 Stocks, Bonds, Bills and Inflation 2000 Yearbook.

22 Q. Okay. And is that the same number that you  
23 talk about, I think, on page 28, lines 7 and 8 from your  
24 testimony?

25 A. Yes.

1 Q. And what edition of that book are you talking  
2 about?

3 A. 2000.

4 Q. Is that the classic edition?

5 A. I'm not sure. I don't know the difference.  
6 You'd have to define "classic."

7 Q. Could you, after we're finished with this  
8 deposition, let us know exactly where precisely in that  
9 yearbook you got that number?

10 A. Yes.

11 Q. Could you do that?

12 A. Yes.

13 Q. Okay. Turn to page 7 of your direct testimony,  
14 please.

15 On page 7, on line 11, what is the source of  
16 your statement that one of the most commonly accepted  
17 indicators of economic condition is the discount rate?

18 A. Just general knowledge.

19 Q. Are there other commonly accepted indicators  
20 that you have based on your general knowledge?

21 A. Federal funds rate, unemployment, gross  
22 domestic product, interest rates.

23 Q. Inflation?

24 A. Inflation. Several factors.

25 Q. Filings for unemployment compensation?

1 A. Yes. I believe I said that.

2 Q. On page 8, you indicate, I think, at  
3 lines 7, 8 and 9, that NAFTA, the North American Free  
4 Trade Agreement, is the most important factor for the  
5 U. S. economy in 1993. Is that correct?

6 A. Perhaps the most important factor.

7 Q. How did the passage of NAFTA in 1993 impact  
8 Southern Union Company or Missouri Gas Energy?

9 A. I don't know directly.

10 Q. How does NAFTA impact Southern Union or  
11 Missouri Gas Energy today?

12 A. I don't know directly.

13 Q. On page 12 of your testimony you discuss  
14 interest rates. Is that correct?

15 A. Yes, sir.

16 Q. And you include the 30-year treasury bond to  
17 the extent that the spread changes through time and  
18 becomes wider. Is that correct?

19 A. Specifically where are you referring to?

20 Q. On page 12.

21 A. What lines?

22 Q. Well, lines 9 and 10.

23 A. It doesn't refer to the spread though. I  
24 believe it refers to interest rates themselves.

25 Q. Are you using the 30-year treasury bond as a



1 benchmark?

2 A. Yes.

3 Q. What is the status of treasury bonds these days  
4 in terms of their availability?

5 A. They're still available. I know there has been  
6 discussion about eliminating the 30-year treasury bonds.

7 Q. Are they scarcer than they were previously?

8 A. I can't tell you specifically.

9 Q. On page 20, line 23, you indicate that the  
10 embedded cost of preferred stock on December 31, 2000 for  
11 Southern Union is 9.93 percent. Is that correct?

12 A. That's correct.

13 Q. And would you agree with me that there is a  
14 basic principle in finance which says that the greater the  
15 risk, the higher the return requirement?

16 A. Holding all else the same, if there is larger  
17 risk, the investor may expect a higher rate of return.

18 Q. Would you agree that the preferred stock -- let  
19 me ask you this. Is it your opinion that the preferred  
20 stock has greater risk than the common stock of Southern  
21 Union, or less risk?

22 A. It's an embedded cost. I really don't know  
23 what the risk would be versus the common stock.

24 Q. Would the holder -- so you wouldn't know  
25 whether or not the -- if I were invested in common stock

1 in Southern Union Company or if I had the preferred stock,  
2 on the other hand, which would be more risky?

3 A. Well, generally as far as in lines of if there  
4 is a dividend being received by the shareholders, then  
5 preferred stock would -- obviously the term "preferred"  
6 means they get a preference to dividends.

7 Q. So what does that do in your mind in terms of  
8 risk, then, of preference to dividends?

9 A. Risk to the preferred shareholder?

10 Q. Yes, as compared to the common shareholder.

11 A. I'd say in general terms, any time that you  
12 have a preference to dividends versus a common  
13 shareholder, then, obviously, you're first in line and  
14 more likely to receive dividends.

15 Q. Now, your recommended range for the return  
16 on common equity in this case is 9.45 percent to  
17 10.25 percent. Is that right?

18 A. That's correct.

19 Q. And the cost of the preferred stock is  
20 9.93 percent. Is that right?

21 A. That's correct.

22 Q. So would it be your testimony that the cost of  
23 equity is less than the cost of the preferred?

24 A. As of this point in time on a market base,  
25 that's my testimony.

1 Q. Would you agree with me that it's highly  
2 unlikely that an investor would ever interpret the  
3 preferred as having more risk than a common stock?

4 A. I think there is a very -- as far as dividends,  
5 a preferred stockholder would be considered less risky;  
6 but as far as prices, that fluctuates for various types of  
7 issues. So I cannot comment on that specifically.

8 Q. You don't know what an investor might think  
9 under those circumstances or how an investor might  
10 interpret the risk of the preferred when compared to the  
11 common stock?

12 A. Sir, repeat the question, please.

13 Q. You don't have an opinion on how an investor  
14 might interpret the risk of the preferred stock as opposed  
15 to the risk of the common stock?

16 A. That's correct.

17 Q. On your Schedule 16, if you could turn to that  
18 for a minute, please.

19 Am I correct in understanding that there you  
20 calculate an average of historical and projected growth?

21 A. I'm sorry. I was on page 16. I apologize.

22 Q. I'm sorry. Schedule 16.

23 A. That's correct.

24 Q. Now, when I look at that schedule, some of the  
25 numbers that I see are negative. Is that right?

1 A. That's correct.

2 Q. Some of the actual results are negative?

3 A. That's correct.

4 Q. And you've included those negatives in your  
5 calculations. Is that right?

6 A. That's correct.

7 Q. Now, and I think you said earlier that it was  
8 your understanding that the purpose of the DCF model is to  
9 determine the expectations which an investor might have.  
10 Is that right?

11 A. That's correct.

12 Q. And would it be fair to say that through this  
13 process we're trying to figure out what investors might  
14 think the future would hold based on what has happened in  
15 the past?

16 A. Investors will look in the past to see what  
17 they might think will occur in the future.

18 Q. Would it be your testimony that an investor  
19 would buy stock with a negative earnings expectation?

20 A. I can't comment with what an investor would  
21 specifically do.

22 Q. You don't know.

23 You don't have an opinion on that?

24 A. No.

25 Q. Would you buy a stock with a negative earnings

1 expectation?

2 A. It depends on what the long-term projections  
3 are.

4 Q. Turning, again, to your eight comparable -- or  
5 your group of eight comparable companies, and I want to  
6 make sure I understand.

7 Is it your testimony that these eight companies  
8 are comparable to Southern Union?

9 A. Comparable to MGE, yes.

10 Q. Comparable to MGE?

11 A. Yes.

12 Q. But not comparable to Southern Union?

13 A. Well, comparable to both.

14 Q. And is it your testimony that these eight  
15 companies are comparable to each other?

16 A. If I was going to do an analysis of say, WGL,  
17 likely, these same groups would come into play. Southern  
18 Union may be included, may not be.

19 Q. I'm not sure I understand that.

20 Are you saying that these eight companies are  
21 comparable to each other?

22 A. Yes.

23 Q. And are comparable to Southern Union and/or  
24 MGE?

25 A. Yes.

1 Q. What is the difference between Southern Union  
2 and MGE in your mind?

3 A. Southern Union is the parent corporation with  
4 many operating subsidiaries, and, obviously, those that  
5 want to invest in MGE must invest in Southern Union.

6 And there's -- Southern Union, like I said, is  
7 where the debt and equities is generated for all of their  
8 subsidiaries.

9 Q. Is it fair to say that you're analyzing  
10 Southern Union Company for purposes of determining an  
11 appropriate return for MGE?

12 A. I believe it's appropriate to say I looked at  
13 Southern Union to determine a cost of equity for MGE.

14 Q. Would you agree that the return on equity of a  
15 company has something to do with the risk of the company?

16 A. Are you referring to actual return on equity or  
17 cost of capital?

18 Q. Well, let's try return on equity first.

19 A. I would say that the actual return on equity is  
20 not an indicator of the risk.

21 Q. How about the cost of capital, is that an  
22 indicator of the risk?

23 A. Yes, I would say so.

24 Q. So let me make sure I understand now.

25 Your testimony is that the return on equity of

1 a company has nothing to do with its risk?

2 A. The actual returns on equity, I mean,  
3 obviously, looking at a specific number such as 18 percent  
4 return on equity is not going to tell you how risky the  
5 company is.

6 Q. Okay. Looking at the -- once again, the eight  
7 companies that you have selected as comparable to  
8 Southern Union Company, have you calculated a return on  
9 equity -- estimated cost of common equity for each of  
10 those companies?

11 A. I'm sorry. Repeat the question.

12 Q. Have you calculated an estimated cost of common  
13 equity for each of those companies?

14 A. You're referring to Schedule 19?

15 Q. I have Schedule 18 in front of me.

16 A. Schedule 18.

17 You're asking me if I calculated specific cost  
18 of equity for all the eight companies?

19 Q. Yes.

20 A. That's correct.

21 Q. And that's shown in your column 5?

22 A. Yes.

23 Q. And is it fair to say that the range is from  
24 8.42 percent on the low end for AGL Resources to 10.98 on  
25 the high side for Energy South?

1 A. According to column 5, that's correct.

2 Q. And that's about a 30 percent difference  
3 between the two?

4 A. I'll take your word for it.

5 Q. Okay. Thanks.

6 Would you agree that a 30 percent swaying of  
7 the cost of equity is very significant?

8 A. As far as the cost of equity? I don't know.  
9 It would be relative to what you're comparing it to.

10 Q. Well, comparing those two.

11 A. I would say a 30 percent cost of equity for --  
12 a 30 percent increase in cost of equity for a company is  
13 going to have an effect on their future possibilities.

14 Q. If you apply that 30 percent difference to the  
15 mid point of your ROE range in this case, would you agree  
16 that we would be talking about something like a 13 percent  
17 return on equity for Southern Union?

18 A. Without doing the specific calculations, I  
19 can't tell you, but --

20 Q. Does that sound about right?

21 A. Like I said, without doing the specific  
22 calculations, I can't say.

23 Q. You don't -- okay.

24 Your Schedule 18 -- you're still there, aren't  
25 you, on Schedule 18?



1 A. Yes.

2 Q. It's the cost of equity that you've calculated  
3 on the DCF basis or using the DCF model. Right?

4 A. Yes.

5 Q. And then Schedule 19 you've calculated a cost  
6 of equity for your eight companies using the capital asset  
7 pricing or CAPM model. Is that right?

8 A. That's correct.

9 Q. And I think you indicated that in your  
10 Schedule 18, the cost of equity for AGL Resources is  
11 8.42 percent. Right?

12 A. That's correct.

13 Q. Which was the lowest on that schedule. Is that  
14 right --

15 A. That's correct.

16 Q. -- on Schedule 18?

17 And then when you turn over to Schedule 19  
18 where you do the CAPM, am I correct that AGL's cost of  
19 equity is among the highest. Is that right?

20 It shows 10.17 percent.

21 A. I would say tied for one of the highest, yes.

22 Q. Which one of those is wrong?

23 A. Once again, I think -- I don't know that you  
24 could necessarily say that one is wrong as far as the DCF.

25 We rely on the DCF calculation for our

1 determination of cost of equity. Some analysts may look  
2 to the CAPM, but we use the DCF. And that's what we rely  
3 on and feel is the most accurate way to calculate the cost  
4 of equity.

5 Q. On your Schedule 19, on your CAPM calculation,  
6 am I correct in understanding that the risk-free rate is  
7 the same for all companies and the market-risk premium is  
8 the same for all companies?

9 A. In my schedule, that's correct.

10 Q. Okay. Is it true that the only thing that  
11 varies there is the beta?

12 A. That is correct.

13 Q. And what is the beta?

14 A. For AGL Resources?

15 Q. Just generally speaking.

16 A. Just generally on average?

17 .57 on average.

18 Q. Okay. What does beta mean?

19 A. Oh. Beta is basically a measure of the  
20 volatility of the stock price compared to the market.

21 Q. Now, are you showing -- purporting to represent  
22 this as a measure of risk of an individual company or are  
23 you trying to show it in the portfolio context?

24 A. I don't think I -- by putting the beta in  
25 Column 2, I think my -- my idea was just to calculate the

1 cost of equity, not to give any indication of risk when I  
2 put that column in there.

3 Q. Okay. On your Schedule 18, Energy South has  
4 the highest DCF return of 10.98 percent. Is that right?

5 A. That's correct.

6 Q. And would you agree that that indicates that it  
7 has the highest level of risk of those companies?

8 A. It would imply that, yes.

9 Q. And it has the next to the lowest beta. Is  
10 that right?

11 A. That's correct.

12 Q. Is the risk-free rate on Schedule 19  
13 represented by the yield on 30-year treasury bonds?

14 A. That's correct.

15 Q. And would you agree that treasury bonds are tax  
16 favored, in that the interest paid is not subject to State  
17 income tax?

18 A. I understand they're not subject to various  
19 income taxes. As far as specifics, I don't know.

20 Q. You don't know whether or not treasury bonds  
21 are exempt from State income tax?

22 A. No.

23 Q. Okay. If that proved to be the case, would you  
24 agree that the risk-free rate would understate the actual  
25 competitive rate for a taxable instrument?

1       A.       As far as the CAPM analysis, the idea is to use  
2 the risk-free rate. And the risk-free rate is generally  
3 accepted as a 30-year treasury bond or some other treasury  
4 bonds. So the use of the risk-free rate was based on  
5 literature.

6       Q.       But it could understate the actual competitive  
7 rate for a taxable instrument. Is that not true?

8       A.       As far as a taxable instrument, there may be  
9 some requirements for additional interest rate return  
10 because of tax considerations.

11      Q.       Now, explain what you meant by that statement.  
12 You kind of lost me there.

13      A.       Obviously, if you have to pay, say -- say, for  
14 instance, if you have a municipal security that you don't  
15 have to pay taxes on, that the bond investor that may  
16 invest, say, in a corporate bond where they don't have a  
17 tax preference, that is going to require a higher interest  
18 rate.

19      Q.       Could it be that what you're doing here is  
20 using a tax-exempt rate to determine or figure out what a  
21 taxable rate should be?

22               Is that possible that that is what is going on  
23 here?

24      A.       As I said, the risk-free rate, obviously, there  
25 is no true risk-free rate. There is interest rate

1 volatility.

2 The risk-free rate I'm using is a 30-year  
3 treasury bond.

4 Q. Which, as I suggested, may have some tax-exempt  
5 figures with respect to State income tax, and you don't  
6 know whether that's true or not.

7 But assuming that it is, would you agree that  
8 you might be using a tax exempt rate to figure out what a  
9 taxable rate should be?

10 A. I don't have an opinion on that.

11 Q. Okay. If that were the case, shouldn't you  
12 make an adjustment to take that into account?

13 A. No.

14 Q. Now, Schedule 20 -- which I believe is an  
15 eight-page document analyzing risk premium. Is that  
16 correct?

17 A. That's correct.

18 Q. Is the risk premium stable or does it change  
19 through time?

20 A. It changes.

21 Q. I think you testified earlier that the interest  
22 coverage associated with your recommendation is to the  
23 very low end of the triple B rating. Is that correct?

24 A. Can you rephrase the question, or restate the  
25 question?

1 Q. The interest coverage associated with your  
2 recommendation is to the very low end of the triple B  
3 rating?

4 A. I indicate it may have been towards the low end  
5 of the range.

6 Q. And if your recommendation would be adopted and  
7 if there is any slippage or attrition, let's say, in sales  
8 or earnings to Missouri Gas Energy or Southern Union,  
9 wouldn't you agree that Southern Union would probably lose  
10 its bond rating?

11 A. I can't judge what an analyst -- what the  
12 credit rating agencies would do.

13 Q. Would you agree that when someone buys a stock  
14 which pays a dividend, they are buying the next dividend?

15 A. As far as the next year?

16 Q. The next dividend to be issued.

17 A. I think it depends on when they purchase it.

18 If there is a dividend declaration date, you  
19 have to buy it by a certain time.

20 Q. So when someone buys a stock which pays a  
21 dividend, they are buying the next dividend, or they're  
22 not?

23 A. Just as long as -- if they're purchasing a  
24 stock and they are able to buy it before the specific date  
25 that is required as far as the declaration date, then they

1 would be buying the next dividend.

2 Q. And if they didn't buy it by that time, they  
3 would miss that dividend but would get the next dividend.  
4 Is that right?

5 A. Yes.

6 Q. Okay. Did you make any explicit adjustment for  
7 this next dividend in your calculations?

8 A. I projected what the dividend would be for the  
9 next year, and that's the adjustment I made.

10 Q. That's the forecasted dividends adjustment you  
11 made?

12 A. That's correct.

13 Q. Are you familiar with the terms "flotation  
14 expense" or "preoffering pressure"?

15 A. I'm familiar with flotation expense.

16 Q. Okay. And can you define that?

17 A. It's basically the costs associated with  
18 issuing securities.

19 Q. Did you make an adjustment in this case for  
20 flotation expense?

21 A. No.

22 Q. Are you familiar with the term "preoffering  
23 pressure"

24 A. No.

25 Q. Is it your understanding that Southern Union

1 Company has issued stock in the past?

2 A. I'm sure they have, but I don't know  
3 specifically when and where.

4 Q. Do you believe Southern Union will issue stock  
5 in the future?

6 A. I don't know.

7 Q. Would you agree that the relatively high cost  
8 of natural gas and the general slowing of economic  
9 activity are factors which could result in a loss of sales  
10 for Missouri Gas Energy?

11 A. I have no opinion.

12 Q. So you haven't made an adjustment to account  
13 for the risk of this attrition?

14 A. No.

15 Q. Is it your understanding that the role of the  
16 Commission staff is to balance the interest of  
17 shareholders and customers?

18 A. Yes.

19 Q. And is it your role and -- understanding that  
20 the role of the Office of the Public Counsel is to be an  
21 advocate for the public, the rate-paying public?

22 A. I believe that's the role.

23 Q. Okay. And where is your -- what is your  
24 recommended ROE range in this case again?

25 A. 9.4 to 10.25.



1 Q. And is it your understanding that the Public  
2 Counsel has recommended a 9.9 ROE?

3 A. I believe that's correct.

4 Q. Do you know what other utility companies  
5 regulated by this Commission operate in Missouri Gas  
6 Energy service territories in Missouri?

7 A. In Missouri Gas Energy service territories?

8 Q. Yes.

9 A. Other natural gas distribution companies?

10 Q. Other regulated utilities.

11 A. As far as electric, one that comes to mind  
12 specifically is Empire.

13 Q. Okay. Any others?

14 A. Kansas City, I believe there is some Utilicorp  
15 business.

16 Q. How about Kansas City Power & Light Company, do  
17 they operate in Missouri Gas Energy's territory, do you  
18 know?

19 A. I don't know for sure.

20 Q. How about Utilicorp's Missouri Public Service  
21 or St. Joe Light and Power operations, do you know whether  
22 or not they operate in any of MGE's service territories?

23 A. I don't know for sure.

24 Q. Do you know whether any rural electric coops  
25 operate within MGE's service territory?

1 A. I don't know.

2 Q. Do you know whether or not any municipal  
3 electric or municipal gas systems operate in MGE's service  
4 territory?

5 A. I don't know.

6 Q. Do you know whether or not Missouri Gas Energy  
7 has a local gas distribution company competitor in the  
8 City of Ozark, Missouri?

9 A. Missouri Gas Energy have a local distribution  
10 company that competes against them specifically?

11 Q. Yes. In the City of Ozark, Missouri, an  
12 offshoot of Springfield Utilities.

13 A. I don't know for sure.

14 Q. You don't know one way or the other?

15 A. Exactly.

16 MR. SWEARENGEN: That's all we have. Thanks.

17 MR. HACK: Thank you.

18 MS. SHEMWELL: I have just a couple.

19 CROSS-EXAMINATION BY MS. SHEMWELL:

20 Q. Mr. Murray, has regulatory theory changed since  
21 1998?

22 A. No.

23 Q. Has the DCF model changed since 1998?

24 A. Not as I've used it, no.

25 Q. This morning Mr. Swearengen asked you some

1 questions about your comparable group company. Do you  
2 remember that?

3 A. General terms, yes.

4 Q. Could you describe the risks associated with  
5 the criteria used?

6 A. There is a variety of risks with the criteria.  
7 I think I discussed generally that dividends per share  
8 would be considered a risk factor.

9 I think he also talked about distribution  
10 criteria. 90 percent distribution could be considered a  
11 risk factor.

12 Obviously, some of the facts -- the criteria in  
13 and of themselves don't imply that they are risk -- risk  
14 factors but whether or not they operate in Missouri,  
15 evidently, is regulatory -- obviously, there is regulatory  
16 risk that's involved.

17 So all of the criteria that was used was  
18 intended to narrow it down to a comparable group of  
19 natural distribution companies.

20 Q. Thank you.

21 Again, I don't know whether this was this  
22 morning or this afternoon, but Mr. Swearengen asked you  
23 some questions about indentures. Do you remember that  
24 line of questioning?

25 A. Yes.

1 Q. Do indentures have any impact on your analysis  
2 of Southern Union Gas's common stock?

3 A. As far as the common stock with the DCF  
4 analysis, that takes into consideration all factors that  
5 investors make look at when they invest in the shares of a  
6 company.

7 And so, obviously, if there is anything that is  
8 of concern or an investor wants to contemplate when it  
9 comes to an indenture agreement, they will take that into  
10 consideration.

11 MS. SHEMWELL: Thank you.

12 I think that's all I have for now.

13 Doug.

14 CROSS-EXAMINATION BY MR. MICHEEL:

15 Q. Mr. Murray, you had several questions about  
16 Southern Union Company's capital structure today.

17 Do you know who determines the company's  
18 capital structure?

19 A. Southern Union.

20 Q. The management?

21 A. The management.

22 Q. You also had some questions regarding testimony  
23 in GR-98-140. Do you recall those questions?

24 A. Yes.

25 Q. Do you know whether or not in that case the

1 Commission ended up giving our -- giving an adjustment for  
2 Southern Union's cost of equity capital due to their  
3 alleged low equity ratio?

4 A. I don't believe in the '98 case there was a  
5 specific adjustment.

6 Q. Do you know whether or not in the '98 case the  
7 Commission accepted Southern Union Company's actual  
8 capital structure -- did it use a hypothetical capital  
9 structure or an actual capital structure in GR-98-140?

10 A. I believe they used actual capital structure.

11 Q. You had some questioning about your use of the  
12 continuous growth DCF. Do you recall those questions?

13 A. Yes.

14 Q. Is it correct that the continuous growth model  
15 DCF is the model favored by the Commission?

16 A. Yes.

17 Q. And is that the model that the Commission  
18 adopted in GR-98-140?

19 A. Yes.

20 Q. Do you know who owns the controlling interest  
21 in the common stock of Southern Union Company?

22 A. I believe a large percentage of the family  
23 does.

24 Q. And what family is that?

25 A. I think the Lindemann family.



1 STATE OF MISSOURI )  
2 ) ss.  
3 COUNTY OF COLE )

4 I, Patricia A. Stewart, RPR, CCR, CSR,  
5 Registered Merit Reporter with the firm of Associated  
6 Court Reporters, Inc. do hereby certify that pursuant to  
7 notice, there came before me,

8 DAVID MURRAY,

9 at the law offices of Brydon, Swearngen & England, PC,  
10 312 East Capitol Avenue, in the City of Jefferson, County  
11 of Cole, State of Missouri, on the 9th day of May, 2001,  
12 who was first duly sworn to testify to the whole truth of  
13 his knowledge concerning the matter in controversy  
14 aforesaid; that he was examined and his examination was  
15 then and there written in machine shorthand by me and  
16 afterwards typed under my supervision, and is fully and  
17 correctly set forth in the foregoing pages; and the  
18 witness and counsel waived presentment of this deposition  
19 to the witness, by me, and that the signature may be  
20 acknowledged by another notary public, and the deposition  
21 is now herewith returned.

22 I further certify that I am neither attorney  
23 nor counsel for, nor related to, nor employed by any party  
24 to said action in which this deposition is taken; and  
25 further, that I am not a relative of employee of any  
attorney or counsel employed by the parties hereto, nor  
finally interested in this action.

Given at my office in the City of Jefferson,  
State of Missouri, this 11th of May, 2001.

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3 May 11, 2001  
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5 Missouri Public Service Commission  
6 Governor Office Building, Suite 800  
7 200 Madison Street  
8 Jefferson City, Missouri 65101

9 ATTN: Lera L. Shemwell

10 In Re: Missouri Gas Energy

11 Dear Ms. Shemwell:

12 Please find enclosed your copy of the deposition of David  
13 Murray taken on May 9th, 2001 in the above-referenced  
14 case. Also enclosed is the original signature page and  
15 errata sheet.

16 Please have the witness read your copy of the transcript,  
17 indicate any changes and/or corrections desired on the  
18 errata sheet, and sign the signature page before a notary  
19 public.

20 Please return the errata sheet and notarized signature  
21 page to Mr. Swearengen for filing prior to trial date.

22 Thank you for your attention to this matter.

23 Sincerely,

24 *Patricia A. Stewart*  
25 Patricia A. Stewart

Encl:

CC: James Swearengen  
Stuart Conrad  
Jeremiah Finnegan  
Douglas E. Micheel



17,987

Exhibit No.:	
Issues:	Rate of Return
Witness:	Ronald L. Bible
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Direct Testimony
Case No.:	GR-98-140

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

DIRECT TESTIMONY

OF

RONALD L. BIBLE

MISSOURI GAS ENERGY A DIVISION  
OF SOUTHERN UNION COMPANY

CASE NO. GR-98-140

Jefferson City, Missouri  
March 1998

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EXHIBIT

for 5-9-01

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**DIRECT TESTIMONY**

**OF**

**RONALD L. BIBLE**

**MISSOURI GAS ENERGY, a division of**

**SOUTHERN UNION COMPANY**

**CASE NO. GR-98-140**

Q. Please state your name.

A. My name is Ronald L. Bible.

Q. Please state your business address.

A. My business address is P.O. Box 360, Jefferson City, Missouri, 65102.

Q. What is your present occupation?

A. I am employed as a Manager, Financial Analysis Department for the Missouri Public Service Commission. I accepted this position in August 1997.

Q. Were you previously employed before you joined the Commission's staff (Staff)?

A. Yes, I was employed by Credit Union National Association from 1995 to 1997 and American Express from 1991 to 1995, as a Financial and Investment Analyst/Planner.

Q. What is your educational background?

Direct Testimony of  
Ronald L. Bible

1           A. In 1981, I earned a Master of Business Administration degree with an  
2 emphasis in Finance and Investments from the Southern Illinois University at  
3 Edwardsville.

4           Q. What is the purpose of your testimony in this case?

5           A. My testimony is presented to provide a recommendation to the Commission  
6 as to a fair and reasonable rate of return for Southern Union Company's Missouri Gas  
7 Energy Division's rate base.

8           Q. Have you prepared any schedules to your analysis of the cost of capital for  
9 Southern Union?

10          A. Yes. I am sponsoring a study entitled "An Analysis of the Cost of Capital for  
11 Missouri Gas Energy, a division of Southern Union Company, Case No. GR-98-140"  
12 consisting of 32 schedules which are attached to this direct testimony (see Schedule 1).

13          Q. What do you conclude is the cost of capital for Southern Union Gas  
14 Company?

15          A. My analysis leads me to conclude that the cost of capital for Southern Union  
16 Company (Southern Union or Company) is in the range of 9.35 to 9.55 percent.  
17

Direct Testimony of  
Ronald L. Bible

1        Economic and Legal Rationale for Regulation

2            Q. Why are the prices charged to customers by utilities such as Southern Union  
3 regulated?

4            A. A primary purpose of price regulation is to restrain the exercise of monopoly  
5 power. Monopoly power represents the ability to charge excessive or unduly  
6 discriminatory prices. Monopoly power may arise from the presence of economies of  
7 scale and/or from the granting of a monopoly franchise.

8            For services that operate efficiently and have the ability to achieve economies of  
9 scale, a monopoly is the most efficient form of market organization. Utility companies  
10 can supply service at lower costs if the duplication of facilities by competitors is avoided.  
11 This allows the use of larger and more efficient equipment and results in lower per unit  
12 costs. For instance, it may cost more to have two or more competing companies  
13 maintaining duplicate natural gas distribution systems and providing competing residential  
14 services to one household. This situation could result in price wars and lead to  
15 unsatisfactory and perhaps irregular service. For these reasons, exclusive rights may be  
16 granted to a single utility to provide service to a given territory. This also creates a more  
17 stable environment for operating the utility company. Utility regulation acts as a  
18 substitute for the economic control of market competition and allows the consumer to  
19 receive adequate utility service at a reasonable price.