BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

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

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

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

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ALSO PRESENT: Travis Allen
David Murray

Surrebuttal Schedule JCD-3

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

ROGER MORIN,

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

DIRECT EXAMINATION BY MR. BERLIN:

Q. Are you the same Roger Morin who's submitted Rebuttal Testimony on behalf of MGE in this proceeding?

A. Yes, sir.

Q. And for the purpose of this deposition, I will refer to you as Dr. Morin. Is that acceptable to you or do you have another preference?

A. That is my preference.

Q. All right. And for purposes of this deposition, who is your attorney?

A. Michael Fay.

Q. Okay. Dr. Morin, have you been deposed before?

A. Very few times, but I have.

Q. Then you know that I will be asking questions and that at any time that you do not understand my question, you will tell me?

A. Yes, sir.

Q. Dr. Morin, how are you employed presently?

A. I am distinguished professor of finance at the Robinson College of Business, Georgia State University and professor of finance at the Center for the Study of Regulated Industries at the same institution.

Q. Dr. Morin, how did you come to file testimony in this case?

A. I received a telephone call from the office of Michael Fay asking me to perform a Rebuttal Testimony.

Q. When were you contacted?

A. Approximately a month and a half ago.

Q. What were you told was the scope of the work that you were to perform?

A. The scope was narrowly defined as engaging in the Rebuttal Testimony of Staff Witness Murray's rate of return testimony.

Q. Who told you that?

A. Mr. Fay.

Q. What else did Mr. Fay tell you?

A. That's it. Go ahead and do your Rebuttal, and I did.

Q. What were you told not to do?

A. No instructions were given as to what not to do, just to do a Rebuttal of the Staff witness rate of return

testimony, period.

Q. Who else did you talk with on the scope of your work?

A. No one.

Q. What documents do you have that describe your scope of work in this proceeding?

A. I don't have any specific -- you mean like a contract or --

Q. Well, any document that might describe your scope of work?

A. I don't have a written document. It was done through the telephone. And my main base was described on page 3 -- page 2 and 3 of my rebuttal. Page 3.

Q. Do you have a contract for purpose of retaining your services in this case?

A. Yes, I do.

Q. Who did you contract with?

A. I dealt strictly with Mr. Fay for every aspect of this mandate.

Q. I have a copy of a letter dated May 19th from Utility Research International --

A. Yes.

Q. -- Utility Financial Consultants with your signature and address, contact information. Do you recall that letter?

A. Yes, that's the standard engagement letter.

Q. Is that document the only document that you have that covers or addresses the scope of the work that you were to perform for MGE?

A. Yes, sir.

Q. So there are no other documents?

A. No documents.

Q. Do you have any other electronic communications regarding the scope of this work?

A. No.

Q. When did you meet Mr. Fay?

A. I met him for the first time about an hour ago.

Q. When did you first talk with Mr. Fay?

A. Approximately a month and a half ago.

Q. With regard to your work for MGE in this proceeding, how much are you being paid for your services?

A. If you look at the engagement letter, you will see a fee that is dependent on the absence or presence of a full hearing or settlement and so on. So it can vary from 25 to 30,000.

Q. Have you already been paid?

A. No, sir.

Q. When will you be paid?

A. I have no idea. I don't know how the accounts payable run over there. I have no idea.

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

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

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

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

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

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

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

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

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

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

Q. Do you have any work papers supporting that?

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

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

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

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

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

papers?

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

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

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

Q. Yes, I would like to have that.

A. Okay.

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

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

A. Okay. Shoot.

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

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

Q. All right. Thank you.

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

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

Q. When did you complete the work?

A. I would say something like five weeks ago.

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

A. Yes.

Q. Who is on your staff?

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

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

A. On this one, none.

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

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

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

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

A. Correct. For this specific document, no.

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

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

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

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

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

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

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expertise in one narrow part of that field.

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

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

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

A. No. Of course not.

Q. What is your definition of an expert?

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

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

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

Q. Yes. Names of --

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A. I'll --

Q. -- individuals.

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

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

Q. Do you know a David Parcell?

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

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

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

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

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

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

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

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

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

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

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

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

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

A. No.

Q. Why not?

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

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

A. Yes.

Q. Who is that?

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

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

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

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

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

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

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

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

A. All right.

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

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

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

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

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

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

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

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

Q. Yes, I do.

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

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

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

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

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2004?

A. Yes, sir.

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

A. Yes.

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

A. Yes.

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

A. Yes, sir.

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

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

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

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

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

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

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

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

A. Can you repeat that, please?

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

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

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

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

Q. And what caused that?

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

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

A. Yes.

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

A. Repeat that, please.

Q. Sure.

A. I'm sorry.

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

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

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

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

A. I don't know.

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

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

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

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

Q. How does the market view this?

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

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

A. No, I do not.

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

A. Yes, sir.

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

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

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

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

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

Q. Do you use a quarterly DCF model?

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

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

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

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

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

Q. You're on page 13?

A. Yes.

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

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A. You want me to explain the End Result Doctrine?

Q. Yes, please.

A. Well, the End Result Doctrine -- I'm just quoting out of my book -- strongly suggests that the -- the methodology is really sort of immaterial if the end result is reasonable to both the consumer and the investor. In other words, you're not handicapped or you're not in a straightjacket in terms of what method you use. You're not a slave to any single formula or sort of a robot. That's sort of the spirit of the End Result Doctrine.

Q. All right. Dr. Morin, what in your terms or definition is the DCF model?

A. Well, the DCF model says something very intuitively that when you're buying stock, your return comes in part from dividends and in part from capital gain. And the DCF model is an expression of that reality.

Q. On page 3, line 18 of your testimony --

A. Yes.

Q. -- you refer to Mr. Murray using the -- and I'll quote -- plain vanilla, unquote, DCF model as the primary tool to determine the required return on MGE. What is a plain vanilla DCF model?

A. That is the sort of naked DCF model without any adjustments for floatation costs , without any adjustment for the expected dividend yield as opposed to the spot dividend

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yield, no adjustment for the fact that dividends come in every quarter as opposed to every year. That's what I have in mind with that expression.

Q. Is the term "plain vanilla" a term you use in your textbook?

A. Probably not. I don't know. I suspect not.

Q. Did you develop the concept of a plain vanilla DCF model?

A. Well, I don't think I'm going to take credit for that. It is what I just described it to be. It's a DCF model without any of the real-world refinements like floatation costs and the forward-looking nature of dividends and the quarterly nature of dividend payments.

Q. Are you aware of whether the term "plain vanilla" is used in other leading finance textbooks?

A. I don't know. I didn't survey textbooks to see if they use the same language I use. I -- I've seen some reference to the term "a raw DCF model." I guess that means the same thing.

Q. What other flavors of DCF models do you sponsor or find acceptable?

A. I tend to use the DCF model with adjusted floatation costs and historical test year jurisdictions adjusted for quarterly dividend payments as well. And also I do the prospective dividend yield as the model requires as

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opposed to the spot dividend yield.

Q. When did the DCF model become more popular than the comparable earnings approach?

A. Roughly when Professor Gordon came up with the model in the approximately mid-'60s.

Q. Can you tell me how many models Mr. Dunn used to estimate the cost of common equity in this case?

A. Well, I can't speak for Mr. Dunn, but I read his testimony and I think he basically used the DCF method because that's been the Commission's tradition in the past.

Q. Do you agree that the use of the DCF model is a cost of capital model that will equate to an investor's required rate of return?

A. Yes. And the key word is one model. But yes, I agree with you.

Q. When analyzing historical growth rates, do you believe it appropriate to average five- and ten-year growth rates?

A. It depends on the circumstances of the industry. If the industry is in a state of flux or transition, historical growth rates are not representative of the future. If the industry is very, very stable, then I would say yes. And, of course, the electric and the gas industries have been anything but stable in the last five years, so I would be very cautious on using history, if at

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all.

Q. Do you believe that dividend per share and book value per share growth rates can be used as a test of reasonableness of earnings per share growth rates projected for the future?

A. Yes. As a general proposition, I agree with that. That's if everything is stable, if dividend policies are stable and capital structure policies are stable. And, of course, have not been through -- as we discussed earlier, you and I, energy utilities are in the process of altering their dividend payoff policy so you have to be a little bit careful in equating the growth rates of booked dividends and earnings per share.

Q. Are you aware of any period in which all of the assumptions of the DCF model have been completely accurate?

A. Completely accurate, no. It's a question of degree of accuracy. Prior to the passage of the Energy Policy Act, I think the DCF model was effective with more stability than it is right now.

Q. Which one would you use right now?

A. Excuse me?

Q. I mean what would hold right now, I should say?

A. Which assumptions?

Q. Yes. What assumptions hold right now?

A. Well, I think one assumption that would hold is the fact that Wall Street or investment analysts do use it to some extent. That certainly would continue to be true. That's one assumption.

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

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

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

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

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

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

I mean, historical growth rates are historical

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

Q. Okay.

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

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

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

Q. How do you define the expected dividend?

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

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

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

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

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

A. Yes, sir.

Q. Page 139.

A. Okay. Have it.

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

A. Yes.

Q. -- is that correct?

A. Yes.

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

A. Yes.

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

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

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

A. Yes. Several times.

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

A. Typically the regulated utility.

Q. And who did David Parcell represent?

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

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

A. Yes. Slightly.

Q. How much?

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

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

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

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

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

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

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

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

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

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

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

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

Q. Why is that?

A. Because they're much riskier.

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

A. Yes.

Q. Did you use a group of companies to perform an

analysis for Nevada Power?

A. Yes.

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

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

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

A. That's right.

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

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

It depends on the risk aversion -- the degree of risk aversion of investors like junk bonds versus investment rate bonds. Two years ago, that spread would have been absolutely enormous. Now the spread between quality and

lesser quality electric utilities and gas utilities has -- has decreased substantially. It depends on the time frame. But that's what I would do.

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

A. Yes.

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

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

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

Q. How high do you think long-term interest rates

will rise in the next three years?

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

Q. Okay.

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

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

A. Past century or the past 10 years?

Q. Past century.

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

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

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

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

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

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

A. I have it.

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

A. Yes.

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

A. Yes.

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

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

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

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

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

THE WITNESS: That's fine

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

(A recess was taken.)

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

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

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

MR. BERLIN: Thank you.

DIRECT EXAMINATION BY MR. MICHEEL:

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

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

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

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

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

and riskier.

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

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

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

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

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

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

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

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

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

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

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

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

THE WITNESS: No, absolutely not.

BY MR. MICHEEL:

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

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

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

A. No.

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

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

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

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

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

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

just being courteous and cordial in the letter.

Q. And who did you work with?

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

Q. And what Ameren case was that, sir?

A. Union Power and Light.

Q. Was it a rate case?

A. Yes. AmerenUE.

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

A. No.

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

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

Q. Could you get that for me?

A. Absolutely.

Q. Could you e-mail me that?

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

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

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

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

THE WITNESS: Okay. We have it.

BY MR. MICHEEL:

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

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

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

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

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

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

Q. Are you filing Surrebuttal Testimony in this case?

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

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

A. Wow, that's a really difficult question to answer. I don't know where you're coming from or what perspective you have in mind, but I would say that Moody's and Standard and Poor's periodic publications are very influential in the field as to investor expectations, particularly bond

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holders. And I would say people that provide information like Value Line. I would say the people that analyze utility stocks, Morgan-Stanley, Soloman Brothers, Goldman Sachs and the very, very large institutional investors that have a very good utility investment group are influential.

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

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

A. No, I'm not it.

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

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

Q. Any others?

A. Gene Brigham would be another name. Very

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

Q. Anyone else that you can think of?

A. No, not right now.

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

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

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

Q. How do you spell his name?

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

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

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

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

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

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

Q. Any other books?

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

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

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

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practical trade-oriented book.

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

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

Q. And which schools offer that program?

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

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

A. Yes.

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

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

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

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

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

A. He is one, yes.

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

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

A. No.

Q. Have you ever seen that book?

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

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

A. Yes. Absolutely.

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

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

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

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

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

Dr. Morin?

A. I don't know.

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

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

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

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

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

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

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

A. No.

Q. You don't use it at all?

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

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

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

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

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

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

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

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

A. Absolutely. I agree.

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

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

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

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

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

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

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

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

A. No.

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

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

Q. Are there some minor ways?

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

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

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

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

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

A. Yes.

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

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

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

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

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

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

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

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

A. Yes. I read it once.

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

A. Yes.

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

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

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

Q. What were the minor things that you noticed?

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

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

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

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

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

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

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

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

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

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

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

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

A. He's an economist and a partner in a consulting firm that specializes in public utility economics, and I did not pay attention to his -- the details of his qualifications because my mandate was not to critique or rebut Mr. Dunn.
Q. Well, why don't you read his qualifications there. I want to ask you some questions about them.
A. Okay. Let me see if I can get a hold of it.
MR. FAY: I'm not sure we have it here. We have his testimony. Are you talking about his resume?
THE WITNESS: I have his testimony here, November 2003.
BY MR. MICHEEL:
Q. Could you look at Appendix A?
MR. FAY: We don't have Appendix A. We've got his schedules and we have his testimony.
MR. MICHEEL: So you don't have Appendix A?
MR. FAY: No, we don't.
THE WITNESS: Let me check one more -- no, we don't have it. Sorry.
BY MR. MICHEEL:
Q. So you're unaware, Dr. Morin, of Mr. Dunn's qualifications?
A. Correct.
Q. Did you review Witness Dunn's Rebuttal Testimony?

A. No. I haven't read it yet.
Q. Did you review Public Counsel Witness Allen's Direct Testimony?
A. No.
Q. Now, earlier today in response to a question from Mr. Berlin, you indicated that you had read Mr. Allen's testimony.
A. You asked me about his qualifications, didn't you? I thought you said did I review his qualifications.
Q. Why don't I have the court reporter read the question back to you?
MR. FAY: That's okay. Just ask it again.
BY MR. MICHEEL:
Q. Okay. Did you review Public Counsel Witness Allen's Direct Testimony?
A. Direct Testimony I read, yes.
Q. Did you see anything that you disagreed with in that testimony?
A. Exclusive reliance on DCF, no floatation cost allowance, again, some weight -- some misplaced weight on dividend growth that really should not be there. So those are some of my observations.
Q. Okay. Is it your belief that Mr. Allen relied exclusively on a DCF analysis to arrive at his conclusion?
A. No, he did not. He -- he relied on other

methodologies as well.
Q. And what methodologies did he rely on?
A. He used the CAP-M as well as sort of a check.
Q. And is that an accepted methodology?
A. Very much so.
Q. The second item you talked about was the weight of dividend growth. And what was your problem with that?
A. Well, I don't think you should put any emphasis on historical dividend growth or forecast dividend growth. And we discussed this three times already. Utilities, including gas utilities, are in the process of lowering the dividend payout. So obviously dividend growth for the next couple years is going to be very, very, very minute. And once the dividend tab ratio has been lowered to the target level, then dividends and earnings will resume the same growth pattern.
Q. Is it your belief that Witness Allen utilized dividend growth for his recommendation?
A. I just don't remember since I was not asked to rebut him.
MR. FAY: Doug, if you want to ask him these kinds of questions, you're going to have to give him an opportunity to go back through the testimony. You can't just sit here and expect Dr. Morin to remember this.
MR. MICHEEL: Is that an objection?

MR. FAY: It is an objection, yes.
MR. MICHEEL: Okay
MR. FAY: If you want, give him a few moments to go through it.
BY MR. MICHEEL:
Q. All right. Take a few moments. Let me know when you're ready.
A. I am ready. He did look at historic-- it's all spelled out on his page 10. He looked at five-year and ten-year growth rates, projections and the same quantities. He also looked at the retention approach, which I don't agree with.
Q. And what growth rates did he rely on in coming to his conclusion?
A. Well, if you look on page 13, he sort of picked a range -- summarized on page 13.
Q. Did you see anything in Mr. Allen's Direct Testimony that you agreed with?
A. I agree with his use of growth projections.
Q. How about his comparable companies?
A. Comparable companies, I didn't really scrutinize that too closely. I wouldn't have a problem with those 15 companies, no. I don't have a problem with that.
Q. Did you review Public Counsel Witness Allen's Rebuttal Testimony?

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

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

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

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

sorry about that.
A. Repeat it again to make sure.
Q. Is the C.A. Turner Utility Reports a source appropriate for use in this proceeding?
A. Yes.
Q. Are you aware of any textbooks that support your claim?
A. Which claim? That Turner is a source of data?
Q. Yes.
A. No. Not really. It's just a source of data.
Q. How do analysts arrive at projected earnings growth estimates?
A. That's a fairly lengthy process. They begin with a projection of revenues, the top line, based on the GEP growth of the national economies, regional economies, based on the demand growth of the territory and they look at the cost structure and the margin and all the way down to sort of the bottom line, the earnings figure. So it's sort of a top-down approach where you start with revenue projections and then cost projections and then you arrive at the bottom line and then make projections accordingly.
Q. Is it reasonable to believe that analysts look at what return on equity a company will return in the future?
A. Yeah. They make projections about their expectations as to the ROE in the future.

Q. Would an analyst look at the sub-components of the return on equity?
A. Well, they would look at the drivers of return, which is margin, which is the asset efficiency, the turnover, base of assets, the amount of leverage. Those are the three drives of return on equity and, of course, what commissions are allowing or have allowed.
Q. Are there any other sub-components than those that they would look at?
A. Those are the principal ones.
Q. Are you familiar with the Dupont Analysis?
A. Yeah. I was just explaining to you that the ROE is essentially the product of margin, turnover or asset utilization or leverage. And that's what analysts look at when they project ROE.
Q. Are you familiar with the Pratt Analysis?
A. No.
Q. So you don't know what the Pratt Analysis is?
A. No, I don't.
Q. In arriving at growth estimates, is it reasonable to look at dividend earnings and the level of earnings being retained by a company?
A. Yes. One of the drivers of growth is the increments to the asset base. In other words, the retention of earnings. What is -- what earnings are not paid out of

dividends are plowed back or retained in the asset structure and then that will translate into future growth later on. That's the sustainable growth model approach.
Q. And is that an acceptable approach?
A. It is widely used and should be used except in the utility context. The problem with using it in the utility rate case, it's very, very circular. You have to assume an ROE to get an ROE so you're caught in a hopeless circular logical trap here.
Q. What if you use projected growth?
A. What do you mean by that? You mean --
Q. For your sustainable growth rate.
A. But, again, if you're projecting an expected ROE, the only way that the company can earn it is if the Commission sets rates to produce that ROE. So how can the cost of equity be any different than the ROE? See the circular logic here?
Q. Are you aware of any studies that suggest flotation costs should not be recovered in rates?
A. No, I'm not.
Q. Are you aware of any commissions that deny floatation cost adjustments in rates?
A. Yes. Some do. It's kind of split down the middle. You have maybe half the commissions that allow all or some of floatation costs and some do not. The reason for my

slight hesitation is that it's rare that a commission will openly divulge its recipe, so to speak, on how they arrive at the final ROE determination. They're a little bit reluctant to divulge the exact details, whether they did this or did that, included this, excluded that. But the data that I've seen and I've had experience in 43, 44 states, it's roughly split down the middle.
Q. Have you recommended floatation cost recovery in any case where such recovery has been denied?
A. Yes.
Q. In what cases would those be?
A. Oh, the Entergy cases in Louisiana would be an example.
Q. And in the Entergy case was it -- why did the Louisiana PSC deny floatation costs?
A. One typical argument for exclusion is that, well, we don't anticipate any common stock offering. And that's a pretty empty argument because the idea of floatation costs is to recover the costs associated with tax issues, not the ones that are coming up in the same way that depreciation on plant is to recover past plant investment, not the ones that are coming up is the typical argument that's used.
Q. In the Entergy case that you mentioned where your floatation cost adjustment was adjusted, did the Commission in its decision specifically say why it rejected

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your adjustment?
A. No. I don't think so. They're not that explicit in the rate orders in Louisiana.
Q. Have you seen any rate orders from other states that explicitly state why they rejected your proposed floatation cost adjustment?
A. I've seen those, but I don't recall what they are. And you'd have to do a search on LexisNexis with floatation costs and see as to why that is. But, again, the typical justification for exclusion is there are no anticipated common stock issues.
Q. Are you aware of any court decisions that have found that the denial of a floatation cost recovery is contrary to the ideas set out in Hope and Bluefield?
A. No, I'm not aware of that at all. And that would be surprising because it's a legitimate cost of doing business and equity is not free.
Q. I said the denial of floatation costs.
A. No, I am not familiar with the legal -- the case that you're referring to.
Q. So you have not read the Hope case?
A. Oh, I read that a long, long time ago.
Q. Have you read the Bluefield case?
A. Long time ago.
Q. I haven't read your book, but are those

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cases -- do you quote those cases in your book?
A. Yes. I quote the portions that deal with rate of return and the notion of a fair return.
Q. And are those the seminal cases?
A. Yes, sir.
Q. What is Southern Union Company's dividend policy?
A. None. They don't take dividends.
Q. So they don't pay dividends on a quarterly basis?
A. They don't pay dividends at all.
Q. And how did you find that out?
A. Well, you look at the data and I used Southern Union as a member of my comparable groups in other testimonies and I'm aware of the fact that they are -- the dividend yield is zero.
Q. And why don't they pay dividends?
A. Have to ask them. Perhaps they have a strategic emphasis on growth and they're retaining all earnings to -- to pursue a more aggressive growth strategy.
Q. But you don't know why?
A. I just explained to you why. Probably because they have a growth strategy. And they have many, many expansion plans and perhaps they have a high construction budget and they need to retain earnings and finance it

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internally as opposed to externally. But it's something that you'd have to ask the company senior management.
Q. Would you agree with me, Dr. Morin, that historical growth rates in dividends, earnings and book value are often used as proxies for investor expectations in DCF analysis?
A. Yes, I would agree with that. But that has been less and less the case in the last couple of years because you get ridiculous results if you match historical growth rates with current dividend yields. You get preposterous of equity results. In other words, those growth rates are not representative of the future growth because of all the factors we've already discussed in the deposition, restructuring, mergers, acquisition, dividend suspension, write-offs, restructuring and so on.
Q. Would you agree investors are influenced to some extent by historical growth rates in formulating their future growth expectations?
A. We discussed that a little earlier. Mr. Berlin and I discussed at the point of departure for an analyst forecast is the historical track record. And you go from there and you super-impose current circumstances and what's going on in the industry and remove any contamination from what we call transitory effects. You normalize the earnings, so to speak.

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Q. Historical growth rates and earnings dividends, market price and book value during some past periods are among the most widely used proxies for expected growth, are they not?
A. Yes. I suspect you're quoting from my book here. And that was true prior to the passage of The Energy Act, but since then, there's so much noise and so much erratic patterns of interest rates that I'm very suspect in projecting future growth rates.
Q. You mentioned The Energy Act. When was that Act passed? What is that?
A. '92, I believe.
Q. And what did that do?
A. Well, it specifically sanctioned competition in the industry and liberalized essentially the format of regulation --
Q. Competition --
A. -- and allowed for retail wheeling and wholesales and unbundling and so on and so forth. The whole movement was sort of launched there.
Q. Competition in what industry, sir?
A. Electric particularly.
Q. Did it launch competition in the local gas distribution industry?
A. Well, only to the extent that gas and

electricity are now rivals and competitors.

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

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

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

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

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

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

Q. And that would be better than one individual

analysts' determination of growth?

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

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

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

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

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

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

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

1The answer is yes, they do recommend the method and the method is great and it's fine and it's all -- it's in all the corporate finance textbooks. But in a case -- in a very specific case of regulated utilities, there's an element of circularity which really tarnishes the method because, again, you need to come up with an estimate of ROE to get ROE. And that's very, very disturbing.

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

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

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

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

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

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

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

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

Q. And how big is that chapter?

A. Well, Chapter 5 is 24 pages.

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

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

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

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

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

plus SV in utility finance?
A. He's an advocate of the method, but again, in the context of a rate case, there is an element of circularity, which I don't think he points out.
Q. Does Dr. Gordon in his book recommend utilizing the BR plus SV to determine growth?
A. Yes. That's one of the methods he recommends.
Q. Is that the method he prominently recommends?
A. Yes, it is.
Q. Are there many dimensions and factors that determine a utility's financial integrity?
A. Wow. That's a pretty good question. My first reaction is to say that being investment grade would be part of financial integrity or access to markets under all circumstances. I would say having a market to book ratio that is comparable to other utilities and industrials would be another element of financial integrity. Those are the two that come to mind that are pretty important in capital markets. Does that answer the question or do you have something else in mind?
Q. If that's the best you can do, that answers the question.
A. I think that's pretty good.
Q. Is the notion of financial integrity fluid?
A. No. Capital attraction and access to capital

markets under all conditions of reasonable cost is a fairly eternal concept in the annals of regulation, I would think.
Q. So it's your testimony that the notion of financial integrity is not fluid?
A. I believe it's a notion that's been around a long, long time. It's structural, it's part of the corpus of regulatory wisdom, so to speak. It's part of the Hope and Bluefield criteria. They talk about capital attraction and financial integrity.
Q. What are the Hope and Bluefield criteria?
A. Comparability of risk, comparable returns, capital attraction standard. Those are the two main ones.
Q. Are there any other?
A. Those are the two main ones. It depends how you interpret them, but they're not that specific on the actual ratios that we should use. I interpret it myself as having investment grade bond rating in a competitive market to book ratio.
Q. And that's how you interpret meeting those two requirements?
A. That's a practical -- very practical implementation or manifestation of financial integrity. If you're a junk bond, you're not -- you don't have financial integrity. If your market to book ratio is completely out of kilter with the industry and the market, you don't have

financial integrity.
Q. Does the notion of financial integrity encompass several different considerations?
A. Yes, sir.
Q. And what would those considerations be?
A. Access to markets under all conditions at reasonable cost, offering a competitive rate of return to investors that is commensurate with returns offered elsewhere.
Q. Anything else?
A. Those are -- those are pretty -- pretty broad and pretty important and encompass just about everything else.
Q. I'm just trying to learn some stuff. Does each rate case possess different circumstances?
A. Yes. Absolutely.
Q. And are you familiar with the circumstances -- all of the circumstances present in this rate proceeding?
A. No, sir.
Q. And, in fact, the only thing that you've reviewed in this rate proceeding is Mr. Murray's testimony?
A. That's all I was asked to do.
Q. And that's all you're going to do?
A. That's all I'm going to do.
Q. Do you think that Southern Union Company is an appropriate comparable company for a natural gas distribution company?

A. I -- in my own work for gas rate cases, I tend to exclude it because it doesn't pay dividends so you can't do a DCF analysis on that company.
Q. And if you were going to do a DCF analysis on that company, how would you do it?
A. You couldn't because they don't pay dividends.
Q. Should more than one cost of equity capital estimating technique be consulted?
A. Absolutely. I mentioned earlier that a smart and efficient pilot would fly a plane on several instruments, not fly on one instrument in the same way that rate of return experts should rely on a variety of gauges or meters or signals or indicators to get as accurate an estimate as possible on investor-expected return. So the answer is yes, a variety of techniques should be used definitely.
Q. Must other cost of capital estimation techniques be employed as an additional check on the reliability and the reasonableness of any DCF estimate?
A. No. I don't think that you should employ the other technologies as checks. They should be elevated to full-fledged techniques on the same footing as DCF.
Q. So it should be always 50/50?
A. No. It should be probably be a third, a third, a third.
Q. A third, a third, a third?

A. Risk premium, DCF, CAP-M.
Q. Are you aware of any Public Service Commissions that use a third, a third, a third?
A. Again, they don't -- they don't rely or state explicitly how they arrive that their decisions. They do not discuss weight typically in rate orders. Some commissions are DCF oriented. Others do not divulge their methodology or recipe, so to speak, to arrive at their final orders.
In a survey that was done at NARUC, N-A-R-U-C, on rate of return, it's pretty clear from that survey that commissions rely on all the information that is presented to them that is relevant. Why would you not rely on evidence if it's relevant?
Q. And when you say "NARUC," does that stand for the National Association of Regulatory Utility Commissioners?
A. Yes, sir.
Q. And what survey is it that you're talking about?
A. It's the annual yearbook. I have a copy of that page, that table, that NARUC survey where they essentially ask the commissions, What technique do you use, and they put X's in the columns of the methods they use.
Q. And does that yearbook tabulate what methods they use?
A. No. I just told you that the presence of all

the X's in the various columns indicate that commissions rely on variety of sources of information.
Q. Have you seen any surveys that indicate which methods public utility commissions rely on more than others?
A. I haven't seen that, but I think historically they've relied on DCF more than the other methods because it's been around for so long. The newer methodology, the asset pricing methodologies, are a little bit newer, more contemporary and are gaining increasing popularity and attention.
Q. Is the capital asset pricing method an appropriate check on the reliability and reasonableness of the DCF estimate?
A. I don't think it's an appropriate check. I think it should be a full-fledged method on the same footing as DCF and risk premium.
Q. And so you don't believe that the risk premium method is an appropriate check on the reliability and reasonableness of a DCF method?
A. Same answer.
Q. Is the cornerstone of public utility rate of return regulation the principle enunciated in the Hope case that, quote, The return to the equity owner should be commensurate with returns on investments in other enter-- in other enterprises having corresponding risks, closed quote?

A. Yes. That is one of the seminal principal on which rate of return testimony should rely, along with capital attraction.
Q. So does the CAP-M method present a conceptual framework that meets the legal criteria for establishment of a fair return and that operationalizes the Hope decision?
A. Yeah. It's almost -- when you read the Hope quote that you just cited, it's almost a statement of the CAP-M. Return should be commensurate with the risk involved and the CAP-M articulates that and formulizes that into a measure of risk that we call beta. So I agree with your statement. It's almost an extension of the Hope doctrine.
Q. Does the Hope decision require the consideration of relative risk?
A. Yes.
Q. Does the beta measure of the CAP-M measure the relative risk required by the Hope decision?
A. Yes. It's one measure.
Q. And how does it do that?
A. Well, for a diversified investor -- and most investors are diversified, just think of institutional investors -- beta is a relevant measure of risk. It's the only measure of risk that's relevant in a perfect world. So, yes, the beta would be a risk differentiator that would be quite consistent with the Hope doctrine.

Q. And natural gas utilities, are they risk-- more risky or less risky than the general market?
A. Well, they have a beta that's roughly around -- the latest figures I've seen was .73, so they're about 75 percent as risky as the average stock in the market.
Q. That means that they're less risky, does it not?
A. Means they're less risky than the market. They're 75 percent as risky as the market.
Q. In the Bluefield decision did the US Supreme Court require that the allowed return be sufficient to assure a utility's financial soundness?
A. Yes.
Q. Does that imply to you that market returns must be considered?
A. Yes.
Q. Does the CAP-M method consider market returns?
A. Yes, it is a market-based return.
Q. Does the DCF method properly consider market returns?
A. Yes, it does.
Q. Does sole reliance on the DCF model to come to a conclusion with respect to your recommendation meet the Hope principle that the return to the equity owner should be commensurate with returns on investment in other enterprises

having corresponding risks?

A. I don't think it does by itself. That's just one way to measure such returns and it presumes you've implemented it properly. But if implemented properly, yes.

Q. So if a cost of capital expert only proffers a DCF analysis, in your mind, they haven't met the requirements of Hope?

A. I think they subject themselves to very serious measurement error and potential lack of reliability of the recommendation. In other words, the DCF model on its own is fragile. Just like the CAP-M on its own would be fragile or the risk premium method on its own would be fragile. Again, you don't want to fly on one instrument. You want to fly on a variety of gauges and meters and signals and indicators and get an error-free estimate of the cost of capital.

Q. Are there any witness in this proceeding that are flying on one instrument?

A. Yes. Staff witness certainly is. I believe Mr. Allen at least used the CAP-M as a check and did rely on it in his recommendation. And, of course, Mister -- the company witness, Mr. Dunn -- Mr. Dunn, D-u-n-n, I guess was sort of forced or backed into a corner of following on Commission precedent to rely on DCF, but --

Q. Who backed him into that corner?

A. I don't know. You'll have to ask him.

Q. Well, do you know of anything that was preventing Witness Dunn from conducting a capital asset pricing method?

A. No. I'm -- perhaps he should have.

Q. Do you know of anything that prevented Witness Dunn from utilizing the risk analysis method?

A. Other than the Commission precedent, I am not aware of any such barrier.

Q. And what Commission precedent are you talking about?

A. Well, the Commission places reliance on DCF method is my understanding.

Q. And how did you get that understanding?

A. In discussions with the company people, with Mr. Fay particularly is the only one I really talked to.

Q. And what did Mr. Fay tell you?

A. He told me that the Commission in the past has placed almost exclusive reliance on DCF.

Q. And how did Mr. Fay determine that?

A. I don't know. You'll have to ask him that.

Q. So you don't know and you didn't ask?

A. No. I don't care. You know, my -- I stand on my own views. And my mandate was to criticize Staff's testimony, which is what I did. If I'd been asked to do Direct Testimony, I would have done what I've always done for

25 years, I would have looked at all the meters and all the signals, all the indicators and come up with a global judgment as to what the appropriate rate of return is.

I'm not a DCF man, I'm not a CAP-M man, I'm not a risk premium man. I'm trying to gauge investment returns with all the available techniques assuming. And I've always done it that way and will continue to do it that way.

Q. When you filed your testimony in AmerenUE, did AmerenUE indicate to you that the Missouri Commission had almost exclusive reliance on the discounted cash flow method?

A. I don't remember that at all. That was about two years ago. I just don't remember that.

Q. Well, in your testimony that you filed with AmerenUE, did you file a CAP-M analysis?

A. My testimony in AmerenUE was Rebuttal of Staff witness.

Q. And what Staff witness were you rebutting?

A. I believe it was Mr. Ron Bible.

Q. And do you know whether or not any of the witnesses in that proceeding relied solely on the DCF?

A. No, I don't -- I just don't know. I wasn't involved in the direct proceeding.

Q. Does the sole reliance on the DCF method meet the Bluefield requirement that allowed returns be sufficient to assure a utility's financial soundness?

A. No.

Q. And why not?

A. Because it's highly subject to measurement error. You've got to measure those returns accurately. And strict reliance on DCF, you run the danger that you will not do that.

Q. And explain to me this concept of measurement error, if you will, sir.

A. Measurement error is if you want to know how many people have blonde hair in the United States and you take a sample of one or a sample of ten, the statistical reliability of your sampling technique will be highly suspect and highly subject to measurement error and forecasting error. If you take a sample of 10,000, you minimize sampling error and measurement error. And if you use three or four different ways of trying to measure how many people have blonde hair, you minimize measurement error even more.

Q. And if you utilize two ways instead of one, you've doubled the amount of items you're looking at, so you'd minimize measurement error that way?

A. That's one way of saying it. The other way of saying it is you can use the results of one methodology as a cross-check on the validity of the other result. If you've got, you know, 11 percent, 11 percent and 8 percent, something is wrong somewhere in one of those estimates that seems to be an outlier.

Q. Well, let --

A. The idea of using several methodologies is to use each one as a cross-check on the validity of the other.

Q. Let me say that you have a DCF analysis and you come up with a DCF range of 9.01 percent to 9.34 percent. Can you make that assumption?

A. Yes.

Q. Let's say that you do a capital asset pricing method analysis and you come up with a result of 9.17 percent. Can you make that assumption?

A. Yes.

Q. What does that tell you?

A. That tells you that something's wrong, because I can't visualize a rate of return of 9 percent when the long-term treasury bonds are expected to be 6 percent.

Q. Well, that wasn't my question about whether or not -- my question was, what does that tell you about the reliability of the DCF method and the CAP-M method?

A. It tells you that those two are consistent with one another, but it doesn't tell you that that's the -- that that's the cost of equity. It's not implemented properly.

Q. What does it mean if they're consistent with one another from a statistical standpoint?

A. Roughly within the same range, maybe within

50 basis points of one another.

Q. And if you had that example that I just gave you of DCF range of 9.01 to 9.34 percent and a CAP-M result of 9.17 percent, wouldn't that indicate that your CAP-M and your DCF were compatible?

A. It would probably indicate to me that they're both wrong.

Q. Okay. Let me ask you this. What if it were -- your DCF was 10 percent to 11 percent and your CAP-M was 10.5 percent. What would that indicate to you?

A. They're roughly consistent, that they're within the ballpark. Seems like a reasonable estimate given the level of interest rate, given authorized return and given the industry profile, that seems to be a reasonable number. Given the cost of debt, interest rate forecast, it would seem to be reasonable.

Q. When is it appropriate in a regulatory setting to use a hypothetical capital structure?

A. When the company's capital structure is completely out of whack, so to speak, with the industry capital structure or some very peculiar circumstances that would cause the equity ratio to be so different than the norm or the industry -- or the comparable group's capital structure, it would be appropriate to impute a -- for rate-making purposes, it would be proper to impute a cost

efficient capital structure.

Q. And when would an equity ratio be, to use your term of art, out of whack?

A. That's a judgment call you have to make. There's no recipes or no magic formula, there are no phaenicia. I would say -- again, it's very hard to answer but when you're 1 percent out, it would suggest to me that perhaps you should be thinking about imputing a capital structure.

Q. Let's say that a utility has an actual cap on actual equity ratio of around 26, 27 percent.

A. I wouldn't use that for rate-making purposes. I would impute a capital structure.

Q. So if a company had an actual equity ratio of 28 percent, you would not use that?

A. Probably not, no.

Q. You would utilize a hypothetical capital structure in that situation?

A. Yeah. Either that or if I'm going to use 28 percent, I'm going to adjust the rate of return accordingly. You've got to be consistent here.

Q. So if there's a local distribution company out there that has 28 percent equity, you think it would be appropriate to utilize a hypothetical capital structure?

A. Yes, I would. That's very unusual. To me that's sort of a last resort, not to use an actual capital

structure, but I think under those circumstances you suggest it would be appropriate to impute a more reasonable capital structure for rate-making purposes.

MR. MICHEEL: Thank you very much.

THE WITNESS: Either that or adjust the rate of return upwards to reflect the very low degree of equity ratio. You have to be sort of internally consistent here.

MR. MICHEEL: Thank you very much for your time, Dr. Morin. I really appreciate it.

THE WITNESS: I appreciate your questions. I enjoyed talking to you.

MR. MICHEEL: I look forward to seeing you up here in June.

THE WITNESS: Me too.

THE COURT REPORTER: Signature?

MR. FAY: Can you just send a copy to me and I'll make sure Dr. Morin gets it.

(PRESENTMENT WAIVED; SIGNATURE REQUESTED.)

CERTIFICATE OF REPORTER

I, Tracy L. Thorpe, CSR, CCR and Notary Public within and for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; that the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken, and further, that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

____
Tracy L. Thorpe, CSR, CCR
Notary Public State of Missouri
(Commissioned in Boone County)
My commission expires December 16, 2005.

Midwest Litigation Services
11 North Fifth Street
Columbia, Missouri
Phone 573-442-3600 * 573-636-7551

June 11, 2004

Mr. Michael Fay
1633 Broadway
New York, New York 10019

In Re: MGE's Tariff Sheets

Dear Mr. Fay:

Please find enclosed your copy of the deposition of Roger Morin taken on June 10, 2004 in the above-referenced case. Also enclosed is the original signature page and errata sheet.

Please have the witness read your copy of the transcript, indicate any changes and/or corrections desired on the errata sheet, and sign the signature page before a Notary Public.

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

Thank you for your attention to this matter.

Sincerely,

Tracy L. Thorpe, Certified Court Reporter

Enclosure
cc: Mr. Berlin
Mr. Swearengen
Mr. Hack

STATE OF ______________)
COUNTY OF ____________)
I, ROGER MORIN, do hereby certify:
That I have read the foregoing deposition;
That I have made such changes in form and/or substance within the deposition as might be necessary to render the same true and correct;
That having made such changes thereon, I hereby subscribe my name to the deposition.
I declare under penalty of perjury that the foregoing is true and correct.

Executed this ________ of ________, 2003, at ____

____________________________________.

____
Notary Public
My commission expires:____________________

____
ROGER MORIN
Signature page to Mr. Fay
TLT/RM, 06/11/04
In Re: MGE

WITNESS ERRATA SHEET
Witness Name: Roger Morin
Case Name: In RE: MGE
Date Taken: 6/10/04
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Reporter: Tracy L. Thorpe, CSR, CCR