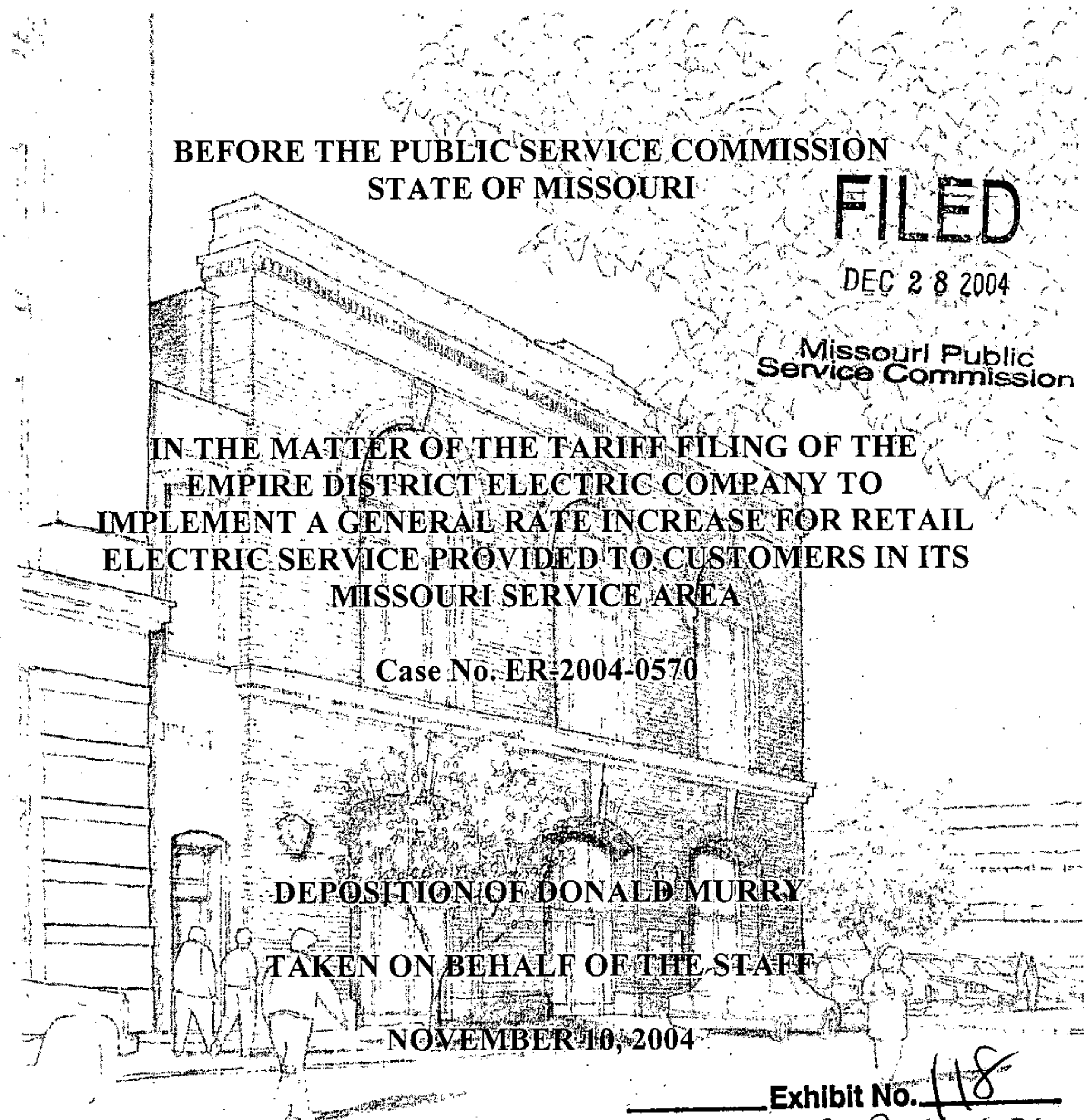

BEFORE THE PUBLIC SERVICE COMMISSION
STATE OF MISSOURI

FILED
DEC 2 8 2004
Missouri Public
Service Commission

IN THE MATTER OF THE TARIFF FILING OF THE EMPIRE DISTRICT ELECTRIC COMPANY TO IMPLEMENT A GENERAL RATE INCREASE FOR RETAIL ELECTRIC SERVICE PROVIDED TO CUSTOMERS IN ITS MISSOURI SERVICE AREA

Case No. ER-2004-0570

DEPOSITION OF DONALD MURRY

TAKEN ON BEHALF OF THE STAFF

NOVEMBER 10, 2004

Exhibit No. 118
Case No(s). ER-2004-0570
Date 12-03-04 Rptr JKF

STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

In the Matter of the Tariff Filing)
of the Empire District Electric)
Company to Implement a General) Case No. ER-2004-0570
Rate Increase for Retail Electric)
Service Provided to Customers in)
Its Missouri Service Area)

DEPOSITION OF DONALD MURRY,

a witness, produced, sworn and examined on the 10th day of November, 2004, between the hours of 8:00 a.m. and 6:00 p.m. of that day at the offices of the Missouri Public Service Commission, Governor Office Building, Room 810, 200 Madison Street, in the City of Jefferson, County of Cole, State of Missouri, before

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and Notary Public within and for the State of Missouri, commissioned in Cole County, Missouri, in the above-entitled cause, on the part of the Staff of the MPSC, pursuant to agreement.

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John Kiebel
Travis Allen
Dave Murray

SIGNATURE INSTRUCTIONS:
Presentment waived; signature requested.
EXHIBIT INSTRUCTIONS:
None marked.

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DON MURRY, being sworn, testified as follows:
DIRECT EXAMINATION BY MR. KRUEGER:
Q. Good afternoon, Dr. Murry.
A. Good afternoon.
Q. My name is Keith Krueger. I'm the attorney for the Staff in regard to the cost of capital issue and I'll be taking your deposition this afternoon. Have you given a deposition before?
A. Yes, I have.
Q. So you're familiar with the procedure?
A. Yes.
Q. I'd ask if you are unclear about what I mean by any of my questions, that you ask for clarification, and that you respond audibly, yes or no, rather than nods or shakes of the head. Is that agreeable --
A. Sure.
Q. -- with you?
Okay. You were formerly a member of the faculty at the University of Oklahoma?
A. I guess technically I'm still a member of the faculty. I'm an emeritus professor now.
Q. Okay. How long did you teach there?
A. From 1974, and then I was on leave of absence at least twice, maybe three times, and I guess I

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went emeritus, that was probably in '98 or '99.

Q. Okay. Thank you. Inasmuch as I'm an alum of the University of Nebraska, David said that the first order of business is to settle a wager on Saturday's game, but I know better.

A. I was going to say, I could probably be persuaded.

Q. What classes did you teach at the University of Oklahoma?

A. Well, I taught a number of classes over that span. More recently I taught -- and this might have changed slightly, but it is, I think, a pretty accurate description. I would teach a graduate course, and I don't even remember the official title, but we called it energy markets. It's economic analysis of energy markets or something like that. And I would teach that in the -- usually in the fall, and also then an undergraduate class that was government relations to business, and then in the spring I'd teach a graduate course that was economics of regulation, and I'd teach undergraduate course in government relations to business also.

And of course from time to time I've taught other courses or special seminars, something like that. But that was probably the most common pattern the last number of years.

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Q. Okay. Would it be correct, then, to say that economics of regulation deals specifically with utility regulation?

A. Yeah, the way I taught it, it did. The government relations to business was a little broader than that, and would certainly include a large component of anti-trust. These were all what economists would call industrial organization.

Q. What textbooks did you use for that course on economics of regulation?

A. Well, since it was a graduate course, I usually had a different -- had a reading list. I have used books from time to time. I know one I used one time was Howell and Rasmussen, but there really -- I didn't really think there was much in the way of a text for a graduate course in the field, so I basically had reading assignments.

Q. Did any of your classes deal specifically with regulatory finance?

A. Well, all of these classes had components of regulatory finance in them.

Q. And what textbooks did you use that dealt with regulatory finance?

A. I don't know that I used a textbook on that subject. I used articles.

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Q. Okay. Did any of the classes deal specifically with the area of rate of return and/or cost of capital for regulated utility companies?

A. Well, sure.

Q. What was the course title of the course that dealt most directly with that?

A. I thought you said did any of those courses, and the answer was sure.

Q. Okay. What was the course title, the title of the course that did deal specifically --

A. No. That's what I just gave you, the title of the courses I was teaching.

Q. The ones you named earlier?

A. Yes.

Q. Okay. Did any of the classes deal specifically with the area of rate of return and/or cost of capital for regulated electric utility companies?

A. The way you're asking the question, I think I need to amplify. I've had students who have written dissertations on regulatory finance for me, and I wouldn't call that a class. It's not a class. But all of these classes had components that had to do with cost of capital in regulatory -- in regulated industries. When I say regulated, I think we're talking about utilities here.

Q. Correct. Did any of the classes deal

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specifically with use of the discounted cash flow model?

A. Sure.

Q. Are the students that major in finance at the University of Oklahoma exposed to the concepts underlying cost of capital models, such as the discounted cash flow model and the capital asset pricing model and the risk premium model?

A. Well, I'm an economist and not in the finance department, so I'm not going to speak to the breadth of the exposure, but the answer to that is yes, I'm sure they are, but exactly how that is structured in that curriculum, I knew better one time than I know now, but I don't know exactly how it's placed in the curriculum.

Q. Do you believe that the students who major in finance at the University of Oklahoma and successfully complete the curriculum have a good grasp on the theories and issues in finance?

A. Well, I know the professors better than I know the students, and so the answer is obviously the professors are well grounded, but I'm not sure I could speak to all the students. The finance was probably normally taught in the MBA program. There is a concentration, and I've taught in that program from time to time and they seem to be for the most part grounded in

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the basics of finance.

Q. You believe that the University of Oklahoma is adequation preparing its finance graduates to take responsible jobs in the area of finance?

A. I can't speak to that. I would presume as well as one would expect in a Big 12 university. Faculty's qualified.

Q. Would you agree that the objective of the University of Oklahoma is to prepare its finance students to have a good understanding of the concepts and fundamentals of finance in order to apply this knowledge in the real world?

A. That sounds like it might have come out of the one College of Business brochures. I don't know. You're asking me about a program that I have not directed, so I don't -- I'm not critical of it. I'm just not privy to say exactly what they -- how they are competitive.

Q. So you're saying you don't know?

A. I'm not saying I didn't know. I'm saying I don't think I -- well, if you want to read the question again, I'll be glad to try to answer it more precisely.

Q. Would you agree that the objective of the University of Oklahoma is to prepare its finance students to have a good understanding of the concepts and fundamentals of finance in order to apply this knowledge

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in the real world?

A. In a general sense, I think the answer to that is yes.

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

A. I think that's the -- certainly one of the intents. I'm not sure that is -- I would say that that's not the only requirement. It's certainly an important benchmark.

Q. Do you believe that when you recommend an appropriate return on common equity for a utility company, primary weight should be given to the cost of common equity estimations that are derived from cost of capital models?

A. I think I'd like to hear that again.

Q. Okay.

A. I may not have quite understood the question.

Q. Do you believe that when you recommend an appropriate ROE for a utility company, primary weight should be given to cost of equity estimations that are derived from various cost of capital models?

A. The word primary is the reason I wanted to

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ask you to read that again. I think I would say yes to that, but I'd probably want to put words around -- quotes around the word primary or something like that. It's certainly not exclusive, and the word primary doesn't imply that it's exclusive.

And I think in some instances the models are more reliable than in others, and so I don't think that's a -- as a general statement, that may be overly strong, but as a general principle, I certainly agree with it.

Q. Do you believe that if the allowed return on equity is based on the utility company's cost of common equity, that this will allow the company to raise capital and maintain its financial integrity?

A. If it's a true measure of the cost of capital in the sense that it's the opportunity cost of capital in the marketplace, the answer is yes.

Q. Do you believe that the cost of capital is a cost of service, just as salaries paid to utility engineers are a cost of service?

A. I think the labor market and the financial markets operate differently, and in that sense I have trouble transposing from one of those markets directly into the others. There are issues in the labor market that we like to think don't exist in financial markets.

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I'd say that's a very bad analogy.

Q. Well, are you saying, then, that the cost of capital should not be included in a determination of the cost of service?

A. No, I didn't say that at all.

Q. Okay. In what sense is it a bad analogy? Why does the analogy fail?

A. Because I think the markets function very differently. If we just want to talk about the equity side of financial markets, they're traded, as we all know, in an exchange, in a very rapid exchange with a lot of market information available, and even that's not perfect.

And the market for, I think you used engineers as professionals, there's obviously not constant wage re-- salary review. There's not perfect knowledge on the parties of either side of the market or anything close to it. There are extenuating labor agreements, union agreements that go into the contracts that are involved. There's extra benefits that are included in salary and wages.

I think -- like I said, I think it's a very bad analogy to try to compare the two. That's how I interpret the question to begin with.

Q. So it's a bad analogy in the ability to determine what the cost is?

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A. No. It's a bad analogy in the sense the way the markets function. We go back to the original question, if you really want to delve on this, I'll try to understand it better and explain it as I understand it.

But I think you asked me a question about the cost of service, is the words that I heard, of capital that was similar to the cost of an engineer. That's how I heard it, and I said, no, I didn't think so, because the markets were quite different, and I think that's factually correct.

Q. My question or my intent was to ask whether the cost of capital is a cost of service, just as the cost of obtaining professional services of an engineer is a cost of service.

A. The answer to that is yes.

Q. Okay. If another state authorizes a return on equity that is higher than the utility's cost of common equity in that state, do you believe that makes it appropriate for Missouri to do the same thing, that is to authorize its utilities to earn a higher return on equity than their cost of equity?

A. On its face, and all other things equal, the answer would be no, I don't think so. I do think it may be relevant information, though.

Q. Do you believe that setting the return on

equity for a utility equal to the cost of capital is consistent with the policies announced or principles announced in the Hope and Bluefield cases?

A. As I understand it, yes.

Q. Empire District Electric has some trust preferred securities outstanding; is that correct?

A. Yes.

Q. Have you ever done any research on determining the amount of the appropriate equity risk premium over trust preferred securities?

A. I don't recall that I have, and I don't think I have.

Q. Have you ever done any research on determining the amount of the appropriate equity risk premium over any other type of preferred securities?

A. The answer to that is the same. I don't recall, and I don't think so.

Q. Now, am I correct to understand that in making your ROE recommendation in the Empire rate case, you relied primarily on the discounted cash flow method, also known as DCF?

A. Well, I relied -- I probably prefer to substitute the word heavily rather than primary. Primarily I think is the word you used. I thought it was a very important element and an important component of my

decision.

Q. I'm looking at your direct testimony, page 29, lines 19 and 20. You said, I relied primarily on the results of the DCF analysis. Direct testimony, page 29, lines 19 and 20.

A. I must have different pagination. Well, you have to read the whole sentence.

Q. Okay.

A. It says, using forecasted earnings per share information at current market prices. That's singling out one of the DCF analysis that I used as opposed to other DCF analysis that I used. In that context, I certainly agree with that statement.

Q. But primarily on the DCF, this qualifies the way that you apply the DCF?

A. Yes. That was a specific DCF calculation that I was referring to at that instance.

Q. And am I correct to understand that you used the capital asset pricing model, also known as CAPM, primarily as a check to verify the reasonableness of your recommendation?

A. I think that's a -- I think that's a fair statement. I may have put a little more weight on it than just thinking of it as a corroboration, but I think that's a fair statement.

Q. And at least in this respect that we've just talked about in these couple of questions, your approach to the ROE recommendation was similar to the approach that Staff witness David Murray used to make his recommendation?

A. As far as the overall methods, if that's your question, yes.

Q. Well, I'm referring to primary emphasis on the DCF with use of CAPM to verify reasonableness.

A. That's sort of how I understood your question. I think that there may have been some different inter-- different uses or different emphasis in the interpretation. I can't go as far as to say we did exactly the same thing.

Q. I didn't mean that it was exactly the same, but I mean generally the approach was similar?

A. I think I'd accept that, yes.

Q. And would you agree that in determining the growth rate, which is designated as G, to include in the DCF equation, that you placed considerably greater emphasis on expected earnings growth than David Murray?

A. As I read his testimony, I would say that's correct.

Q. And would you say that's the main reason why the result of your DCF calculation differed from the

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results of David Murray's?
A. I wouldn't disagree with that. I think that's probably correct.
Q. Now, the DCF model is based on certain assumptions, isn't it?
A. Of course.
Q. Would you please state what some of those assumptions are?
A. Some of the assumptions are -- and then it depends on what you mean by the DCF model. The concept of the DCF model is to -- is to take market information which is available in the form of market prices, known dividend payments and earnings per share information and infer from that what the discount rate is for that anticipated stream of returns, and then by that inference determine what the cost of capital in the minded investor is. That's essentially the concept of DCF.
So you're making an assumption about each one of those elements. Namely, the market price represents prices in an efficient market by investors that are motivated to maximize the expected value of that earning stream. You're making an assumption about the accuracy of the dividend information in the minds of the investors and their expectations. You're making assumptions about the earnings per share assumptions on

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the part of the -- on the part of the investors.
So you're essentially assuming that those data points are representative of the minds of the investors. And when I say investors, I'm really referring to the marginal investor who's setting cost of capital that's relevant in this proceeding.
Q. Do you believe that it assumes market equilibrium?
A. I mentioned efficient markets, and efficient markets assume an equilibrium.
Q. Does it assume perpetual life of the company?
A. Not necessarily. That would be -- that would be a particular DCF definition. That's what you're assuming there is the investors are assuming, and this is probably the point of departure between myself and Mr. Murray. To apply the DCF practically, one is presuming they know or can determine from this information what the investors are expecting. And one assumption would be that this income stream goes in perpetuity.
I frankly don't think most of us make investments in securities thinking about living perpetually, and -- but we do expect that we can liquidate the investment at some point in time and hope that someone else expects to carry it on.

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Q. So you're saying, then, that investors may not look at it as a company of perpetual life, but does the DCF model assume that?
A. That's my point. If one is using the data in the marketplace to determine what's in the minds of the investors, that's what's important. One assumption or one method of the DCF is to assume that the stream lasts in perpetuity, and that's an assumption that has got to produce returns, and that's the assumption the company's going to last forever. I said that falls -- that's probably not likely to be an assumption on our part in reality when we enter the market.
Q. Well, what I'm trying to get at is, is the assumptions that underlie the development of the DCF model and the equation that's used in applying it, not whether -- not what the investors in real life --
A. And that, you see, is the problem. You're trying to define it mathematically, and what we're trying to use is market information to infer what's the cost of capital in the minds of the investors.
Q. You made calculations using the DCF model and the equation that arises from that, did you not?
A. I used the DCF method to estimate cost of capital under several different circumstances.
Q. In the schedules that you prepared and

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attached to your direct testimony, I'm thinking in particular of Schedules 13 through 18, you did some calculations to show a cost of capital for Empire. Now, those -- the answers to those are rigidly determinable based upon the inputs that you put into an equation; isn't that right?
A. Yes, as I understand the question.
Q. There's only one correct answer given the inputs that you have given in determining -- in preparing those schedules?
A. There's a solution when you put -- when you take data from the marketplace and make these calculations, there is a single solution.
Q. Okay. And that single solution is based upon an equation that is used in the DCF model, is it not?
A. No. The equation is just an expressional relationship between the market price and anticipated returns, as I explained earlier.
Q. Is it not true that that equation is only accurate if certain assumptions are met?
A. If you change the assumptions, you're going to change the result, and I -- so I guess I don't know how else to respond to that. You say the assumptions are met. You can have different assumptions, get different results.
Q. I'm not talking about applying the numbers

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to any particular situation. I'm talking about the derivation of that equation. Is it not correct that the equation can only be derived if you make certain assumptions?

A. I think that's tautology, yes.

Q. I'll expose my ignorance. Tell me what tautology is.

A. It means it's obvious. Stating the question is stating the answer.

Q. Does the DCF model assume constant payout rate?

A. The DCF model as I used it assumed a constant -- assumed a constant payout rate. The answer to that's yes. I think to simplify it, yes.

Q. Okay. I just want to ask you about whether some other assumptions are included in the derivation of the equation that's used in the DCF model. Payout of less than 100 percent of earnings, is that an assumption?

A. As it's normally derived, yes, of course.

Q. Constant priced earnings ratio?

A. That would be implied.

Q. Constant growth in cash dividends?

A. As it's normally expressed, that would also be true.

Q. Stability in interest rates over time?

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A. I don't know that that's the case. Somebody's probably stated that as an assumption, but the -- to have a constant discount rate, I don't think one would have to have constant interest rates.

Q. Stability in required rates of return over time?

A. Excuse me?

Q. Stability in required rates of return over time?

A. I think if you're saying we are assuming that the rate of return is constant over time, that's implied from the normal expression of the DCF.

Q. Stability in earned returns over time?

A. I'm sure that would be a statement. I think if one was really looking at it carefully, you'd have to define the term stability.

Q. Are you aware of any period in which all of those assumptions that I've just gone through have held true?

A. Now I think we're going from a mathematical derivation to the application?

Q. Correct.

A. And the answer is no, I don't think so for the reasons I mentioned earlier about efficient markets.

Q. Even if some or all of those assumptions

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don't hold true, is it possible to still achieve a reliable cost of equity estimate through use of the DCF model?

A. Well, as I think I said earlier, the DCF model can be used as indicative of cost of capital in application, and I think that you're getting back to more or less asking the question I stated affirmatively earlier.

Q. So you'd say it's indicative of the cost of equity rather than a reliable cost of equity estimate; is that a distinction you're making?

A. I think it may or may not be reliable. I think it depends on the circumstances.

Q. How does one go about achieving a reliable cost of equity estimate if all of the assumptions that I've discussed with you do not hold true?

A. Well, if none of those assumptions hold true, one needs to look at other things because one is probably not getting a reliable estimate of the DCF exclusively.

Q. I didn't mean if none of them. I meant just not all.

A. I think -- I think it would be an unusual circumstance to say that investors expect returns to be constant in perpetuity, which I think was the first

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assumption. I think that alone is probably not going to hold, I mean, in the minds of certainly many, if not most, investors.

Then the question is, is this DCF analysis useful information to determine the cost of capital in the marketplace? And answer is, in my opinion, in my experience, in most circumstances it's a very useful tool and it accurately reflects what a rational investor is evaluating when a rational investor enters the market, and that's important information. It's not exclusive. It's not mechanical.

Q. You have sponsored rate of return testimony in many utility cases, have you not?

A. In a number of cases, yes.

Q. Both here in Missouri and in other states?

A. Yes.

Q. When was the first time that you sponsored rate of return testimony in a utility rate case proceeding?

A. Probably 1967. I'm not positive.

Q. Okay. Close enough. Do you believe that utility companies' costs of common equity is correlated to the increases and decreases in interest rates?

A. Did you say is the cost of capital? I'm trying to make sure I -- I want to make sure I understood

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the question.

Q. I said cost of common equity.

A. Is it correlated to interest rates?

Q. Yes.

A. And you say common equity of utilities?

Q. Yes.

A. I don't -- I would suspect to be so. I think it would probably depend on the time service, the circumstances at a particular point in time were that to be true. I think over a long series it's the case. I think over a short series it certainly does not have to be.

Q. But it's generally true that as one goes up, the other goes up; as interest rates go up, the cost of common equity goes up, as interest rates go down, the cost of common equity goes down?

A. That would be the general expectation over a long period of time.

Q. Do you recall what the level of interest rates was in the first proceeding in which you filed testimony?

A. Heavens no. I have no idea. I would be -- I would be speculating. That was before the run-up in the '70s, and if I remember more or less correctly in the late '60s the interest rate, the corporate bond rate was

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probably in the 6, 7 percent, but I'm speculating.

Q. Okay. Do you believe it's important to have an understanding about the context of the level of interest rates now as they compare to past levels of interest rates?

A. Is it important?

Q. Yes.

A. Certainly.

Q. Why?

A. Because the interest rates tend to be indicative of overall market positions for capital, and it is a rate, so there is relevance over time. And it's I think -- I think one learns something by comparing present rates to past rates and present rates to forecasted rates.

Q. Do you know the last time interest rates were as low as they are now?

A. Probably in the early 1960s, I think. When I say early as they are now, early as they've been recently. I mean, they started moving back up. But I think it's -- I think it's been roughly that period of time.

Q. Do you believe interest rates were extremely low in 1993?

A. Yes, I think by a historical perspective one would describe the rates that way.

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Q. Do you recall approximately what they were then?

A. If you want to go to the federal funds rate, I think it was being set by Federal Reserve at that point in time. I believe they were at a percent, percent and a half.

Q. Do you recall what you believe would be the general direction of long-term interest rates after 1993?

A. Long-term rates, if you're talking about the year 1994, I presume, since you're saying -- or you said after 19-- I'm sorry. I misunderstood. Did you say 1993?

Q. Yes.

A. I misspoke. I was thinking 2003.

Q. Okay. Maybe I need to go back to this previous question then.

A. Yes. I didn't understand the question, or I misinterpreted the question. You're asking me what was the interest rates ten years ago?

Q. Yes. Were interest rates extremely low in 1993?

A. Not as you've used the word extremely low. Certainly I wouldn't describe them as certainly low or as extremely low.

Q. Okay. Do you recall what you believed at

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that time would be the general direction of long-term interest rates after 1993?

A. I don't remember what I thought rates would be at that period.

Q. Did you --

A. I'm trying to recall the circumstances of the market, and I can't -- I can't pinpoint it that well.

Q. Did you co-author an article about that time about the correlation of the decrease in allowed returns with the decrease in interest rates?

A. You're talking about a Public Utilities Fortnightly article, is that the article you're referring to?

Q. Yes.

A. Yes. The answer is yes. I didn't remember the date, so I wasn't positive what it was about then.

Q. Okay. And did you conclude in that that commissions did not allow returns to continue to fall with interest rates because they believed that interest rates would not continue to fall and would probably rise again?

A. I think you're quoting from the article, and I'd like to put that in context, if I may.

Q. Sure.

A. That article was written really raising the question of what had happened with the spike in interest

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rates in the previous years when the basic interest rate, the long-term interest rate was over 20 percent in many cases, and commissions were allowing approximately 13, 13.5 percent, which raises the question how can you borrow money at 20 percent and earn a return on equity which is a higher risk investment of roughly 13, 14 percent.

And then that's what that article was really addressing was the disconnect that occurred when rates got extremely high and in looking at the time series that was available then as allowed returns versus interest rates. Since interest rates have come back down, and I'd never heard -- I'd never found anybody observe that prior to this time, that as interest rates actually came back down and dropped below the 14 percent level or whatever commissions were generally allowing, bounced around in that range, that rates actually fell below that level, that the commissions were not following it down.

And that was -- so what you're doing is you're reading from one side of the point as opposed to both sides of the point. And the point here was that commissions tend not to steer very far either right or left, because they tend generally to stay down the middle of the road, at least in that point in time. I've not revisited that information, but that was pretty clear that period when interest rates were so very volatile.

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Q. Okay. Thank you. When you prepare and submit testimony on rate of return issues, are there some portions of the testimony that are pretty much standardized?

A. Well, if you mean that I don't -- I change my methods and analysis only very slowly, and I certainly don't change the methods from case to case, that's absolutely true. Over time I have made -- I have made some methodological adjustments as I think I've learned things or as the market situation changes, but it's relatively -- my testimony is relatively stable from how I approach a problem analytically.

Q. And there are some types of analyses that you go through in preparing this testimony that are included in each case?

A. The answer is yes.

Q. Do you believe that the use of the annual form of the DCF model is appropriate for use in making estimations of the cost of common equity for a utility company?

A. If I understand the question, I think I do, you're describing my method, methodology, and I think it's appropriate.

Q. Have you ever used the quarterly form of the DCF model?

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A. I believe I used it in a FERC case or two at the time when I believe FERC was more or less prescribing it, and so I think I can say that I have used it, but that was a number of years ago.

Q. Would that be the only reason you know of to use that form?

A. I can tell you why I don't or why I normally would not. I think what we're trying to do in the DCF, as I stated earlier, is to determine from the data what we think investors are using to make their decisions.

The quarterly model, if I understand how you're using, I think I do, you're assuming the investors are making a very precise discount of the dividends they're going to get each quarter. And I think most investors, especially utility investors, don't fine tune their investment that precisely. I think they're more likely to buy and hold. I think they're more likely to look at dividends as an income stream and for retirement and those sorts of things.

And this, of course, is changing also as to who may be buying these utilities. So it's my interpretation that investors are not that precise in choosing what that income stream looks like, and that's why I do not use it normally.

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Q. Okay. Do you believe that if ValueLine categorizes a company as an electric utility company, that that is a sufficient basis for you to conclude that the company is comparable to Empire?

A. I have usually used ValueLine, at least for a number of years as the -- as the first place to go to get a set of companies from an industry, using the ValueLine expression of what industry it is, and that in part is because ValueLine's readily available and it's likely to be the way investors look at it.

Q. I guess my question is, is the fact that ValueLine categorizes the company as an electric utility company alone sufficient for you to conclude that it's a comparable company or is more required?

A. I have always looked beyond that as a single criterion. I think I can safely say always.

Q. To what kind of things do you look?

A. Well, I look to factors I think are likely to be important in the company in question. So the sorts of things I'd look to would be equity ratio because of financial risk and I -- as my testimony demonstrates, I believe that the size of the company in the financial markets is important and I'm likely to use that. Likely to want to find companies that represent -- and here we need to be careful. We talk about comparable. It's not necessarily a company that is just like the one one is evaluating, which is a reasonable thing to do, but one may be wanting to look for companies that are good reference points or benchmarks for setting a return for the company in question.

And I think that happens to be important in the company in question here because I think Empire has got some financial pressures, and I think it's important to know what the returns would be for healthy companies.

Q. Do you believe that it's appropriate to select a comparable group of companies that includes companies that are diversified energy companies?

A. For electric companies?

Q. Yes.

A. I would certainly look at that very hard. I don't think it's irrelevant by any means.

Q. Now I want to ask some questions about your Schedules 13 through 18 of your direct testimony. In Schedule 13, you've calculated Empire's cost of capital based on stock prices over a 52-week period and utilizing dividends per share to determine the growth factor; is that correct?

A. That's correct. And it's dividends per share both historically and forecasted.

Q. Correct. And that produced a cost of

capital range of 5.70 percent to 7.53 percent for Empire?

A. That's correct.

Q. And that was similar to the cost of capital for the comparable companies that you listed there but slightly less than those?

A. Yes. I mean, it's significantly different obviously from Pinnical West, but other -- the others it's very representative, I guess.

Q. I'm thinking primarily about the average of the comparable companies.

A. I understand.

Q. Now, Schedule 14, this was a similar calculation but based on current stock prices, is that correct, and again utilizing dividends per share to determine the growth factor achieved?

A. Yes. As I understand your question, you've described it correctly.

Q. And that produced a cost of capital range of 5.80 percent to 5.88 percent?

A. Yes.

Q. And again, that was similar to the cost of capital for the average of the comparable companies but slightly less?

A. Uh-huh. That's correct.

Q. And Schedule 15, you calculated Empire's

cost of capital based on stock prices over a 52-week period and utilizing historical and future earnings per share to determine growth factor, correct?

A. Yes, that's correct.

Q. And that produces cost of capital in the range of 7.16 percent to 8.99 percent for Empire?

A. Yes. Yes.

Q. And again, that was similar to the cost of capital for the average of the comparable companies but slightly less?

A. Right.

Q. And in Schedule 16, you did a similar calculation as to Schedule 15 except that it was based on current stock prices, correct?

A. Yes.

Q. And that produced a cost of capital in the range of 7.26 percent to 7.34 percent for Empire?

A. Yes.

Q. And again, that was similar to the cost of capital for the comparable companies, for the average of the comparable companies but slightly less?

A. Right.

Q. So the lowest cost of capital for Empire derived in any of these schedules is 5.70 percent, and the highest cost of capital for Empire is 8.99 percent?

A. I think that's correct, yes.

Q. And the high cost of capital on those four schedules for Empire is still less than the cost of capital that David Murray recommended in his direct testimony, which was 9.29 percent, the high end, the high end of his cost of capital?

A. That's my recollection.

Q. Schedules 17 and 18 attached to your direct testimony both differ from those other schedules that I've asked you about in that they rely exclusively on estimates of future earnings per share growth for determining G?

A. That's correct.

Q. And in both of those schedule, the S&P for future earnings per share growth for Empire was 2.00 percent, correct?

A. That's right.

Q. And ValueLine's estimate of future earnings per share growth is 6.00 percent?

A. Yes.

Q. In Schedule 17, which is based on stock prices over a 52-week period, you calculated Empire's cost of capital as 7.70 percent to 13.53 percent, correct?

A. Yes.

Q. And the low end of that range is similar to the low end of the range for the comparable companies or

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for the average of the comparable companies, but the high end is much higher than for the high end for the average of the comparable companies?

A. That's correct.

Q. Now, if the ValueLine estimate of future earnings growth were not included in this calculation, what would be the high end of the cost of capital range on Schedule 17?

A. I guess I don't understand the question. I'm not sure what you're asking me to admit.

Q. Okay. My understanding of the determination of the cost of capital for Empire on Schedule 17, for the low end of the range, you added the 5.70 percent for the 52-week yield and the 2 percent, which came from the S&P estimate of the earnings per share growth, to come up with 7.70 percent, correct?

A. Yes.

Q. And to determine the high end of the cost of capital range you added the 7.53 percent of the 52-week yield and the 6 percent which ValueLine estimated for the future earnings growth, correct?

A. Yes.

Q. So what I'm asking you is, what result would you have come to if you had not utilized the ValueLine estimate of future earnings per share growth or

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had not been available?

A. You're saying if I had not used -- if I'd only used Standard & Poor's?

Q. Yes.

A. Well, that would be the 7.7 percent.

Q. Well, my -- my understanding is that it would be 7.53 plus 2 percent, is that right, because you would still add in the S&P estimate of future earnings per share growth?

A. Oh, I see what you're -- I understand your question, yes. Answer to that is yes.

Q. So in that case, then, it would have been 9.53 percent?

A. Yes. I understand your question. I'm agreeing with that.

Q. Okay. Which, again, would be very close to the high end of the cost of capital range for the average of the comparable companies, which as I read Schedule 17 is 10.09 percent?

A. Well, that would be mathematically true.

Q. And in Schedule 18, which is based on current stock prices, you calculated Empire's cost of capital as in the range of 7.80 percent to 11.88 percent?

A. Yes.

Q. Again, that 11 -- I have a question about

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how you arrived at that 11.88 percent. It appears to me that might have been a mathematical error. Can you tell me how you determined --

A. Well, I don't see why it's -- okay. Maybe I'm missing a point. The 5.88 plus the 6 would be the 11.88.

Q. Let me correct that. You're right.

A. Okay.

Q. That's not the one where I saw possibly a mathematical error.

The low end of that range is similar to the low end for the comparable companies, for the average of the comparable companies?

A. That's correct.

Q. And the high end of that range for Empire is quite a bit higher than the high end of the range for the average of the comparable companies, more than 3 percent higher?

A. If you want to characterize it that way. It seems to be mathematically correct.

Q. Would it be -- do you think it would be fair to say, then, that were it not for ValueLine's estimate of future earnings per share growth, the high end of your cost of capital range for Empire would not exceed 10 percent on any of these six schedules?

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A. The mathematical calculation you're describing for the DCF, if you remove the ValueLine, I think the numbers are correct.

Q. Would it also be fair to say that your analysis of Empire's cost of capital is heavily dependent upon ValueLine's estimate of future earnings growth per share?

A. The results of the DCF to produce the high end is heavily dependent upon the ValueLine forecast of earnings.

Q. And you recommended an ROE for Empire of 12 percent?

A. Yes.

Q. 12.00?

A. That's correct.

Q. It seems that you disregarded the calculations of Empire's cost of capital that are shown on Schedules 13, 14, 15 and 16 in making your recommendations regarding Empire's ROE because none of those, even at the high end of the range, exceeded 10 percent. Would you agree with that?

A. I don't know the 10 percent was ever a benchmark in my mind, if that's part of the question. I don't -- I don't know that there was ever a 10 percent threshold.

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Q. That's not my question. My question is, as I read these Schedules 13, 14, 15 and 16, the high end of the range of your calculation of Empire's cost of capital does not exceed 10 percent on any of those.

A. I'll accept that.

Q. Okay.

A. I can go back and check it, but I can accept that.

Q. So would you say that you relied on the calculations that are in Schedules 13, 14, 15 and 16 or did you disregard them?

A. Well, I did not disregard them or I would not have made -- I would not have reported the calculations. If I thought they wouldn't have some analytical value, I wouldn't have made the calculations to begin with.

Q. But the ROE you recommended was 12.00 percent, which was more than 2 percent higher than any of those produced?

A. That's correct.

Q. So what weight did you give them in coming up with your ROE recommendation?

A. I gave them little weight, as I think I explained in my testimony, and nor did I -- and I also think I mentioned in my testimony that I gave little

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weight to the 13.53 percent which I calculated as well.

Q. Why did you give little weight to the results that are shown this Schedules 13, 14, 15 and 16?

A. Primarily because there was not sufficient differential between that and the at that time corporate bond rate to represent the risk differential between common equity for Empire and the bond market. There was -- these were obviously results that were not very useful and I did not find them reliable.

As I recall, the corporate bond rate for Baa bonds, which of course is higher -- well, I guess Baa would be somewhat representative, I guess of Empire. At the point of the time of the testimony, I think it was 6 point -- almost 6.5 percent, and it doesn't make any sense to choose a return of 7.7 percent at a time when the bond rate is at 6, 6.5 percent.

Q. So in this circumstance, the application of the DCF model does not produce a result that's that useful to you?

A. I wouldn't -- I called it useful. I said I wouldn't report it if I didn't think it had value. I think it's -- I think it's a worthwhile analysis, and I have made similar analyses for a number of years to interpret sort of the long-term movement of the market versus the present circumstances in the market, and I

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think it requires judgement as to what the meaning of this is and whether it makes sense.

Q. And in this case, the risk differential achieved a significant importance in reducing your reliance on the results of the DCF?

A. That's my recollection of my interpretation of these data at that time.

Q. Do you know why ValueLine's estimate of Empire's future earnings growth is so much greater than S&P's estimate of Empire's future earnings growth?

A. I cannot distinguish those two numbers, and I guess the answer is no, I do not. I cannot tell you why S&P's forecast is so much lower than ValueLine's.

Q. Did you do any investigation or analysis to determine why it would be so much higher, why ValueLine's would be so much higher?

Q. Well, I was -- I can say that I recall trying to understand why they were different, and so in that sense I'm sure I did investigate, and, of course, I had people working with me and I was asking them. I cannot sit here today and pinpoint the difference, and I don't know that I ever felt that I comfortably knew the difference.

Q. Do you believe that a 6 percent growth rate is sustainable for Empire?

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A. Well, this was a forecast out for, I guess, four years at the time, three to five years at the time of the testimony, and I think that's a fair time horizon for many investors. Sustainable indefinitely? No, I don't think that.

Q. But you believe that it's sustainable for what time frame did you say?

A. Well, I said ValueLine's estimate for three to five years, but that's -- S&P's estimate was also for five years, as I recall.

Q. And so that's one basis for the comments that you made earlier about the assumption of a perpetual life of the company; is that right?

A. It's certainly related.

Q. Do you believe it's appropriate for utility companies to have a financial plan for the future?

A. I'm sure the answer to that's yes.

Q. What period of time should a long-term financial plan for a utility company cover?

A. I think that's a management decision of the company, and I don't feel that I can make that judgment.

Q. Do you believe that a company's targeted capital structure should be a part of that long-term financial plan?

A. Yes.

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Q. What types of issues and/or events would impact a company's capital structure?
A. The capital expenditure obviously has a major influence on their capital issuances and their issuance of different forms of capital, and their issuance of different forms of capital influence their capital structure.
Q. So future investment needs would be one?
A. Of course.
Q. Expected revenues?
A. Expected revenues and the profile of those revenues.
Q. Expected expenses?
A. Well, if you're -- if you're talking about cash flow net of expenses, the answer is yes, of course.
Q. Amount of dividends paid?
A. Of course.
Q. Newly issued common equity and debt issuances?
A. I've already said that.
Q. Level of retained earnings?
A. Well, that's -- retained earnings is another way of saying what's left over after paying dividends.
Q. Okay. Do you believe it's important for a

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company to have a written dividend policy?
A. Again, that's a management issue, and I don't feel I know how -- I don't think I can judge how important it is for the company to have a written dividend policy.
Q. If a company's paid the same dividend for ten years or longer, would you say that the company has at least an unwritten dividend policy?
A. I would not say that at all. I'd say --
Q. Why not?
A. I'd say they have a flat dividend. Because I don't know that it implies that they have a dividend policy other than to maintain the dividend.
Q. Do you believe it's important for a company to reconsider its dividend policy periodically whether a dividend policy is written or not?
A. Again, that's a management issue. I more likely look at the implications of what they do as opposed to what they should be doing.
Q. Do you believe it's appropriate for a company to have a targeted dividend payout ratio?
A. I think that probably depends on the industry. That would be my way of thinking about that. You use the word company. You didn't say utility. And so I think there's likely to be differences, say, between a

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company like Microsoft which historically has not paid a dividend and a utility which historically is paying dividends to ratepayers --
Q. Okay.
A. -- or customers who expect -- investors who expect it.
Q. Then let me reask the question with regard to the electric utility industry. Is it appropriate for such a company to have a targeted dividend payout ratio?
A. To the extent that a company has expected earnings, I think that a payout ratio is implied from an expected dividend policy. That seems to be just a mathematical calculation.
Q. Do you think that the targeted dividend payout ratio should be based on an average of various expected scenarios of the company's performance in the near future?
A. Again, you're asking me a management question, and I don't think I'm knowledgable enough in financial planning to answer that.
Q. Do you think that dividend policy should take into account the amount of investment that the company may need to make over some long period of time?
A. I don't see how you could plan dividends without taking into account capital expenditures and

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retained earnings that would go into capital expenditures.
Q. Do you know if Empire has a targeted dividend payout ratio?
A. No, I do not.
Q. Do you believe it's appropriate for a company to set goals for the annual growth in earnings per share?
A. Once again, you're asking me a management question, and I don't feel like that's an area where I'm an expert.
Q. I'll just write down no opinion.
On page 12, line 9 of your direct testimony, you indicate that the comparable companies that you analyzed in this case have what you call a healthy dividend payout ratio of 70.8 percent.
MR. SWEARENGEN: Excuse me, Keith. That was what, page 12 line?
MR. KRUEGER: Page 12, line 9 of direct testimony.
THE WITNESS: I described it that way, yes.
BY MR. KRUEGER:
Q. Why do you characterize such a payout ratio as healthy?
A. I guess I was basing that on my experience that a utility seems -- utility payout ratio seems over

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time to roughly fall in that category, and that was based on experience and looking at a number of companies. I did not make any particular study other than -- for this case other than what's represented in Schedule DAM-7, and that showed that from '99 through 2003 estimate, the payout ratio of those five companies average about 70 percent. And I think that sentence is just a reflection that that looked to me to be what I expect in that period of time for utilities.

Q. Do you know what Empire's dividend payout ratio has been in recent years?

A. Well, I recorded that in Schedule DAM-7.

Q. And would it be fair to characterize that as near or above 100 percent consistently?

A. Yes. It even goes beyond that schedule. It goes back, I think, a number of years.

Q. Okay. Would you agree that if Empire were to reduce its dividend, that would also reduce the dividend payout ratio, other things being equal?

A. By definition, yes.

Q. Do you believe that Empire might realize some financial benefits if it were to cut its dividends so its dividend payout ratio would come closer to what you refer as a healthy payout ratio of 70.8 percent?

A. I think my rebuttal to Mr. Murray on that

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subject is that I think it would be a very unfortunate thing if they were forced to cut their dividend, and I could see the company doing it because I think they may get in a position where they can no longer maintain the dividend that they've been paying for, I think, 11 years. And I don't have -- I'm not privy to any information with regard to the company's dividend plans or policies.

Q. Why do you think it would be very unfortunate?

A. Because I think they're sending a very bad signal to the market, as I reported in my testimony. In all likelihood, they will drive down the price of this stock, making raising capital for any expansion more costly.

And I think it would probably be a bad outcome for both the investors and ultimately probably the ratepayers, because I think it would drive up the cost of capital that will have to be paid in the future.

Q. If a company's having financial problems as a result of lower earnings for whatever reason, is it sometimes appropriate for the company to reduce its dividend while they pursue strategies that will allow them to improve and sustain a higher level of earnings that would support a higher dividend?

A. As a hypothetical question, I think you've

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stated it, there's certainly circumstances where that might be a good strategy on the part of the company or I could see that being the case. I do not think that's the case for Empire.

Q. Do you believe that a payout ratio of 70.8 percent is more healthy than a payout ratio of 100 percent or more?

A. I think as I'm using -- as I use the term healthy, and maybe I should even use the term representative of what one would expect, I think -- I think if the company is maintaining its dividend and has a retained earnings of 30 percent, that that signals the company's in better financial condition because it has retained earnings than a company that year after year does not have retained earnings. And that's going to be especially the case when the company has expansion it has to consider.

Q. Do you believe that a company with a payout ratio that's consistently above 100 percent would not be considered healthy by investors?

A. I think it's a signal to the investors, and I -- rather than my judgment, what I tried to represent in my testimony is what I think that people who are writing about Empire -- I'm being more specific now -- writing about Empire in the financial community, and that is there

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is enough being written about Empire's exposed dividend, I'll describe it that way, that I think it may -- I think it's an issue with potential investors. And so in that sense, my opinion is almost irrelevant; however, I certainly concur with those positions.

Q. Is it your belief that the write -- that the writing about Empire that you're talking about is important or very important?

A. I think it's important because I think it's sending -- I mean, if it were just one instance and it did not fit into the history for such a long period of time, then it might be anomalous and may not be that important or relevant in this case.

But neither of those conditions were met. This has been the case for a couple of years and a number of people are recognizing it, and I think it's important to -- it's undoubtedly important to investors. It's hard to imagine why it is not.

Q. Do you think that where the payout ratio is consistently above 100 percent, that might cause investors to avoid the company's stock?

A. I think the company's -- I think investors who are knowledgeable are likely to look at the history and the circumstances as cases which I cited and think that the dividend is at risk, and they would look at

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Empire as a company which could be forced to reduce its dividend in the near term, and they would price it accordingly and invest in it accordingly.

Q. If a company were to cut its dividend, would you agree that this would allow the company to utilize a greater amount of internal equity for investments in plant and equipment?

A. By definition, if they don't pay as much in dividend, there's a larger retained earnings.

Q. Wouldn't the use of internal equity for such investments reduce the amount of external equity that the company needs?

A. Not necessarily.

Q. In what circumstance would it not?

A. If the signal of reducing dividend causes the market price to drop and causes the cost of debt to increase because of the reaction of in one case the bond raters, in the other case the equity investors, the cost of the capital being raised to put with this small stream of retained earnings would be greater. And that's when this policy of forcing a dividend reduction would actually backfire.

Q. Would you agree that the issuance of external or new equity would cause a dilution in the company's earnings per share?

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A. I don't know. Dilution is a strange word in that case.

Q. Okay. If there's new equity issued, it would cause a reduction in the company's earnings per share, other factors being equal, would it not?

A. If earnings per share are constant and there are more issues -- more common stock issued divides those earnings, then that is a dilution, that's correct.

Q. Conversely, if the earnings per share are not reduced in that way because retained earnings have been used for future investments, wouldn't that result in greater earnings per share?

A. If I follow the question correctly, I don't see why it would necessarily be the case. Retained earnings would go up, but I don't think of that being an increase in earnings per share. It seems to me the earnings per share might stay the same or go down or go up, and what's changing is the payout ratio and the retained earnings. Maybe I didn't understand the question, sounds like to me.

Q. Would you agree that an increase in earnings per share would create value for shareholders?

A. Yes, all things equal, I would expect that.

Q. Are you aware of the various theories surrounding dividend payment policies and the conclusion

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of those theories on how they affect the cost of capital?

A. You'd probably have to ask me some specific questions about that. I've read about various ideas about dividend policy, but I don't feel like I'm an expert in dividend policy.

Q. Okay. Are you familiar with the dividend irrelevance theory proposed by Miller and Modigliani?

A. I'm familiar with Modigliani and Miller, yes.

Q. And does that indicate that a company's dividend policy doesn't affect the cost of capital?

A. Their theory would imply that -- and as a matter of fact, I think that's in my testimony. Their theory would imply that you can change dividend policy. I happen to think that's probably not viewed as broadly today as it once was, and I have some trouble with that, with generalizing about that proposition.

Q. So are you saying that that's not an accurate statement about their theory or that you don't believe that their theory is accurate?

A. It is an accurate statement about their theory. Their theory is -- now I don't remember exactly how old, but let's say 30 or 40 years old, and I think there's some other thinking that's more recent about Modigliani and Miller.

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Q. Okay. You're familiar with the bird in the hand theory? I think there was reference to that maybe in your --

A. I think I cited that in my testimony.

Q. And that indicates that a firm's value will be maximized by setting a high dividend payout ratio; is that correct?

A. If you're using a company's -- and I think are you -- using the company's value here to reflect market price, the answer is yes, and that I -- the idea there would be that an investor prefers near-term payments in the form of dividends over delayed payments in the form of reinvested earnings and therefore would have a preference to a dividend over earnings.

Q. Tax preference theory, are you familiar with that?

A. I normally stay away from issues related to tax, but I think I'm familiar with that.

Q. That indicates that, because dividends are taxed, that investors prefer that companies reinvest earnings to grow earnings per share rather than pay the earnings out in dividends; is that accurate?

A. Yes. And obviously some investors who want to defer their income would prefer not taking the dividends, especially because they'd be taxed in the

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current time period. So that's the theory, yes.
Q. Which of those theories do you believe has the most merit?
A. Oh, I think depends on the circumstances to which has the most merit.
Q. Do you believe that a company's future investment needs should influence the company's dividend policy?
A. As I understand the question, sure.
Q. Which is more expensive to a company, internal equity generated by retaining the company's earnings or external equity obtained by issuing new common stock?
A. I think that depends on the circumstances.
Q. What factors would influence the conclusion you come to?
A. The cost of raising capital, which would be the alternative cost of using internally generated funds, would be the first thing I think of, just off the top of my head.
Q. Would there be some cost of raising capital in connection with any external equity issuance?
A. Yes.
Q. Wouldn't that then make it more expensive in any case than simply retaining the earnings?

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A. Would you elaborate? I'm sorry. I'm not -- I'm not sure I'm following the question.
Q. Okay. It seems to me that where you retain the earnings there's not a cost associated with raising the capital; whereas, if you --
A. You don't have acquisition costs.
Q. Right.
A. I understand that. Okay.
Q. And as I understood it, and you're saying that in some cases this may be less than others, but in all cases it's greater than just utilizing retained earnings, is that not so?
A. I think what's -- I think what I'm having trouble with in -- and it may just be the phrasing of the question, and I want to make sure I'm understanding it. It seems to me that there are more things to consider than just the cost of a substitute dollar for retained earning. The question is what are you going to do with those retained earnings? For example, when do you need retained earnings? Can you park them somewhere for a return until you need them? What do you think are going to happen to interest rates in the future?
I mean, it's not just a decision at a spot in time that's closed off. It's a dynamic decision over time, and all of these things change. And that's why I

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think I responded earlier, I think it depends on the circumstances.
Q. Okay.
A. In a narrowly defined instant, I think the question you're asking is -- I don't have any problem with it, but I just think it's more complicated than that.
Q. If the costs of issuing new equity are passed on to ratepayers, doesn't that take away from the -- take away the incentive for the company to avoid issuing common stock?
A. I certainly wouldn't think so. The key thing that comes to mind there -- and I'd want to think about this in more detail because I think again that's a dynamic question, but the sort of thing that comes to mind is the concept of the lag of regulation. We're talking about the allowance and passing through costs. To me, that's a consideration that you'd have to take into account, what your alternatives are over that time period, when you'd recover it, not recover it.
Q. Would the incentive be reduced to just the regulatory lag of recovering it?
A. I doubt it, but I can't think of anything at the moment. I think it's probably a more complicated issue than that.
Q. Would you agree that earnings per share are

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diluted when new common stock is issued?
A. Generally speaking, yes.
Q. Would you agree that for every new share issued a dividend will be paid?
A. I probably should go back to that previous question and say it's diluted if you're issuing -- number of shares of common stock and earnings are constant. I think in a sense the question -- the answer is yes, but I want to make sure it's correct. I'm sorry. I interrupted you.
Q. Would you agree that for every new share issued, a dividend will be paid?
A. I think that's to be expected.
Q. And the amount of the dividend will be the same as the dividend that's paid on the -- to the existing shareholders?
A. If they're the same class of stock and same obligations, yes.
Q. Has it been your position in your direct testimony that if Empire cuts its dividend, this will cause Empire's cost of common equity to increase?
A. I don't remember exactly how I phrased it, but I think I said something like most probably or something like that. I can't say it's certainty. I think it's -- to me, it's a most likely result.

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Q. And, in fact, you looked at five companies that had cut their dividends as support for that position?

A. I looked at five companies who cut dividends in that period since 9/11, because that was kind of a major event in the marketplace, and I looked at five companies since that point in time, and there was significant changes in price earnings ratio that occurred in a subsequent year after the year in which they cut the dividend.

Q. Is your position that if Empire cut its dividend, it would cause the cost of Empire's common equity to increase, is that position consistent with Miller and Modigliani's theory?

A. No. I think as we said earlier their theory would essentially be neutral on that, or that would be implied, I think. If you assume the markets are efficient, which is an extremely strong assumption to begin with, and you assume that Modigliani and Miller would cover the circumstances, the answer to that is absolutely correct.

Q. Would you agree, then, that theories don't always hold true and that you have to look at facts and circumstances in a particular case to determine if a particular theory makes sense?

A. Absolutely.

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Q. If an equities analyst publicly expressed concern about a company's dividend payout ratio, do you believe this would cause investors to be more cautious about investing in the company's common stock?

A. I'm sorry. I missed -- I lost track of the question. I'm sorry.

Q. The premise is, if an equities analyst publicly expressed concern about a company's dividend payout ratio, would that cause investors to be more cautious about investing in the company's common stock?

A. If it's an analyst that the investors believe and look to, yes.

Q. And if investors are more cautious about investing in stock, does that put downward pressure on price of the stock?

A. Normally, yes.

Q. And if so, would that cause the company's costs of common equity to increase?

A. Yes.

Q. Do you believe that it's important for a company to react to its current financial situation and then pursue strategies to improve its financial health?

A. If I understand that question correctly, of course.

Q. Do you believe it's prudent for a company

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to continue a financial policy that's causing deterioration in the financial ratios of the company in the hope that some future event will cause these financial ratios to improve?

A. Well, I think -- I think that's a case where it depends on the circumstances. I think you have to know what the company's being faced with to determine whether or not they have an intervention strategy that would change whatever is causing that.

Q. If a company is having some financial difficulty, how long do you think that can continue and still be considered a temporary problem?

A. I don't know. I would presume that would depend on a number of circumstances, including the kind of industry, what's causing it, many factors. I certainly don't have a benchmark time in mind.

Q. Generally speaking, what issues do investors consider when investing in the stock of a company?

A. Well, if we look at quantitatively, our discussion about the discounted cash flow earlier I think captures what we think investors look to rationally, which is a stream of returns relative to the level of the investment. To characterize the reliability of that estimate about the stream returns, I think investors

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should look -- I say should because I think a lot of investors don't look very much and some look a lot. So I think it's hard to say, generalize and say what investors do. But I think they look to such factors as the market, the growth, management, competition.

Q. How about expectations of future levels of interest rates?

A. That would be a factor, yes. But one has to ask the question why. If it's an investor looking for a return that's close to interest rate as an alternative investment, then they'd be very interested in interest rates. If you're buying a speculative west coast software company, you probably wouldn't consider the interest rate very important in your decision process. So speculating on long-term capital gain and not expecting dividends, anything in between. So those are different kinds of investments.

Q. It would depend upon the extent to which earnings correlate to interest rates?

A. That's a good way to express it, I think.

Q. In your direct testimony you indicated that historical dividend growth rates have very limited value in a DCF analysis when dividends are flat. Is there a way to adjust for this when performing a DCF analysis?

A. Well, I think I did, and I think the way to

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adjust for it is to recognize that that's probably not -- that's probably not the primary thing that investors are really considering, because we're talking about investor expectations. And if we believe that the history doesn't reflect the future, then that in effect is adjusting for it, and I think I took that into account.

And I'm not sure that there's any mathematical way to take that into account. I think that has to be a qualitative judgment matter.

Q. If a utility company's value is based on its high dividend payout ratio, do you believe it's more important for an investor to look at historical -- at the historical and projected growth in dividends per share to determine the investors' expectations than it is to look at earnings per share growth?

A. Since dividends have to come out of earnings, and if I remember the hypothetical you're establishing, and if the dividends have been constant, I would think the investors would be very concerned about the earnings and potential of either capital gains or dividends, because what they're interested in is the future, not the history.

Q. Future earnings rather than dividend history?

A. They're interested in their future returns,

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however they come, and they're not going to come through dividends if there's not earnings to have dividends, to get dividends.

Q. Do you believe it's important for a rate of return witness in a utility case to review and understand the various viewpoint about the prospects of the stock market, the level of interest rates and the expected equity risk premiums when recommending a rate of return?

A. I should think the answer to that's yes, if I understand.

Q. Do you know Jeremy Siegel or are you familiar with his writings and work?

A. I can't place anything he's written at the moment, and so I can't say that I can cite something he's written.

Q. Do you know him by reputation?

A. Well, I can't -- I can't put him in the right category. So the answer is that I'm not able to sit here and tell you exactly who he is and what he's done.

Q. Do you know Cliff Asmus or are you familiar with his writings and work?

A. I don't know, but I don't think so. I just don't know.

Q. How about Warren Buffet?

A. I'm familiar with Warren Buffet.

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Q. What do you know about him?

A. I read the book Buffet at one time, and I follow some of his pronouncements from time to time.

Q. Do you regard him as an authority on financial markets?

A. The answer to that is yes, I think he's demonstrated he either understands financial markets very well or he is extremely, extremely lucky.

Q. Does a utility company compete for capital with other utility companies?

A. Of course.

Q. Are they the only companies that a utility must compete with for capital?

A. No.

Q. Would you agree that investors' required returns in the broader market, that is in the market that includes non-utility stock, influence the required returns for utilities?

A. Yes.

Q. Are you aware of whether certain debt contracts will limit the amount of dividends that can be paid in certain situations by a company?

A. I think you're asking me am I aware that interest obligations precede the payment of dividends, and the answer is yes.

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Q. Can they also -- do they sometimes also limit the amount of dividends that can be paid? I'm thinking about an indenture.

A. Yes.

Q. Why would lenders impose such covenants on a company?

A. Because they could have a precedential claim on the income stream and it would protect their investment.

Q. In your rebuttal testimony, you indicate that at a minimum Staff witness David Murray's recommendation regarding Empire's return on equity contributed to Empire being placed on S&P's credit watch with negative implications; is that correct?

A. I think that's a little more definite than I stated. I think I said I didn't -- as I recall, and I'd be glad to see if we can find it. As I recall that statement, it was more to the effect of I cannot be certain what was in the minds of the writers.

Q. Page 1, and I have it noted as line 16 to 17. It may begin a little before that. I'm not sure.

A. Well, see, Standard & Poor's said that -- well, we could look at that. Standard & Poor's said that the credit watch, and that's on line 18, reflects prospects for erosion of Empire's present financial condition if recent testimony by the Missouri Public Service Commission Staff in Empire's pending general rate is ultimately endorsed by the MPSC. I guess that implies it's Mr. Murray's.

Now, if you go back to page 3, when I say you stated that -- the question is, you stated the adoption of Staff's recommended allowed return will result in financial ratios below S&P's published guidelines and medians, why is this important? I point out the role of Standard -- of S&P.

Oh, what I was looking for was on line 11 on page 3. The question is, are you aware of why S&P may have issued a statement about Staff testimony in this case while it is still in progress? And the answer was, of course I'm not -- I cannot know for certain why Standard & Poor's would comment on Staff testimony in Credit Watch, but it would seem to relate the impact the Staff recommendations would have on critical financial ratios of Empire if the Commission were to adopt them.

And that's because they were -- that in my rebuttal I pointed out that the Staff recommendation would violate two of the conditions at least of Standard & Poor's for a creditworthy company, and that those same criteria were actually in Mr. Murray's testimony. I just used the criteria that he laid out in his testimony, and I

used numbers that were presented by the Staff, either the accounting staff or in his testimony to show that.

Q. Are you aware of anything in the S&P report that you referred to that indicates that S&P believes the Staff is not recommending a return on common equity that's equivalent to its cost of common equity?

A. I don't remember anything like that.

Q. Does that S&P report indicate that Staff's return on equity recommendation is a problem?

A. I don't remember it used the word problem. I thought I quoted the concern that was expressed by S&P. I obviously can't testify for S&P.

Q. Have you contacted S&P to determine whether it calculated the three major financial ratios based on Staff's position in direct testimony? And when I talk about the three major financial ratios, I'm referring to funds from operation to interest, funds from operation to debt, and total debt to total capital.

A. Did I contact and ask them if they contacted it?

Q. Yes.

A. No, and the rating agencies are notorious for not saying what they look at in any rating instance. I guess what I'm saying is I didn't contact them because I didn't expect to get an answer.

Q. Did you develop the methodology to calculate the FFO to total debt and the FFO to interest coverage ratios that are shown in Schedules 3 and 4 to your rebuttal testimony?

A. I guess the right answer to that is to say that was developed under my direction, because actually it was an accountant who works for me who developed those numbers. She did also talk to an internal audit within the company to verify some of the numbers and also I think maybe to certify her calculation.

But I used her -- I used her expertise to determine the total funds from operations calculation. It is similar to ones we've seen elsewhere.

Q. And when you say she talked to someone in the company, you're talking about Empire?

A. Yes.

Q. And not S&P?

A. That's correct.

Q. Did you use any reference source to determine that this methodology accurately approximates how S&P would calculate those ratios if it were to make the calculations?

A. I think the answer to that is yes, because we referred to the S&P guidelines. One I believe was issued in June. The other one's issued some date in the

summer. It was an update, I believe. And I think there's some definition in those documents. It's been sufficiently long since I've read them, I cannot say how specific the definition was. And I know that she also was reviewing some accounting definitions of funds from operation, but I'm not an accountant.

Q. So you made an attempt at least to calculate them in the same way that S&P would calculate them; is that right?

A. I think the answer is made the attempt, so the answer is yes.

Q. And have you ever calculated these ratios in support of testimony that you've submitted in previous rate cases?

A. Well, the first document produced by Standard & Poor's didn't come out, I think, until June, and so I wouldn't have done anything before June. Since then I have used it in some other settings analytically. Right now I can't remember what I filed.

Q. Do you know whether S&P would have included any additional fund flows that you did not take into account in performing your calculations of these ratios?

A. I think there may be other categories that didn't show up on these accounting statements, maybe another accounting. In the numerator there, there might

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be other non-cash items which I think are not included here, but I don't think we had that information if there was such a thing.

Q. Do you have any way -- I'm sorry.

A. And the -- with regard to the debt calculation, there may be other pieces of debt, such as commercial paper or -- I don't think there would be any current maturities, but I guess that's possible, that might show up. But, of course, if it went into the denominator, it would make the ratio even lower.

Q. Do you have any way of estimating how significant those effects might be?

A. No, because we were in this case from the information from the Staff's schedules.

Q. I think you may have touched on this. Do you know whether S&P might have excluded any debt when making its own FFO to average total debt calculation?

A. I think what I said was that their debt was rather -- I think it was rather encompassing, as I remember. As I just said, I think it includes commercial paper. I think it may include short-term borrowings. But if you increase the denominator, you're going to lower the ratio result. So that would make this a rather conservatively high estimate.

Q. My question is whether they might have

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excluded any debt.

A. I don't recall. There may be, but I don't recall what it was. I have -- as I'm sitting here, my recollection is that their debt measure was rather inclusive as opposed to excluding items, but I don't know. I don't remember if I did know.

Q. In making your calculations, did you calculate the average total debt or did you use the total debt at some specific point in time?

A. Well, you can see on Schedule -- rebuttal Schedule 3, the level of debt was the debt -- was the rate base, which was the rate base from Staff Accounting Schedule 2 times the debt ratio. So that was a calculated number, and that's shown on line 13, Schedule 3.

Q. Why did you not calculate these ratios, these financial ratios in support of the recommendation you made in your direct testimony?

A. I don't know that I considered it that important until I saw the testimony of Mr. Murray, and because it seemed to tie to the Standard & Poor's statement and that seemed to be very relevant based on his testimony. I mean, I did a coverage calculation as a test of financial integrity of my recommendation because my direct testimony I was trying to determine that I thought that my recommendations would not be overly excessive nor

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insufficient, and I did a coverage test and I thought that was adequate.

Q. Do you believe that the returns on equity that other states allow for utility companies reflect the cost of common equity for those utilities?

A. Their allowed returns reflect --

Q. Yes.

A. Allowed returns represent allowed returns, which may be more than or less than the real cost of equity.

Q. Are they intended to reflect the cost of common equity?

MR. SWEARENGEN: Excuse me just a second. Are you asking that from the standpoint of what the law might require them to do or what he thinks is in the minds of each of the commissions? Maybe you can clarify that.

BY MR. KRUEGER:

Q. I'm asking whether you believe that they do reflect the cost of common equity.

A. Well, I've worked both for and in opposition to some issues at the Federal Energy Regulatory Commission, Federal Power Commission, and in a number of states, and I believe that the allowed returns in all the jurisdictions that I am familiar with, the objective was to set an allowed return that was equal to the cost of

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capital, and I don't -- I don't find any major distinction among the jurisdictions that I can -- that comes to mind.

Q. When you observed what returns on common equity other states have allowed, how much research do you do to determine why those returns were set at the level where they're set?

A. Are you talking about the numbers that I reported in my testimony?

Q. Well, I'm thinking specifically about the Ohio and Illinois cases that you cited on page 30 of your direct testimony.

A. Oh, I didn't look into those cases specifically. I just reported that those were nearby states and those were returns that were released by the Regulatory Associates, or RA, and I did not investigate behind those allowed returns.

Q. Have you compared the extent of Empire's reliance on natural gas to generate electricity with the extent to which your comparable companies rely on natural gas to generate electricity?

A. I did not use generation fuel as a criterion for selecting companies to evaluate.

Q. Have you compared the extent of Empire's reliance on purchased power with the extent to which your comparable companies rely on purchased power?

A. No. It's the same, same question.
Q. Okay.
A. Or same answer.
MR. KRUEGER: That's all my questions.
MR. SWEARENGEN: Take a break.
(A BREAK WAS TAKEN.)
CROSS-EXAMINATION BY MR. MICHEEL:
Q. Dr. Murry, Mr. Krueger asked you some questions about your teaching of regulatory finance, and you indicated in response to questions that you didn't use a textbook but you offered up articles for your students to read.
A. I said normally I would use, yes. I think I mentioned Howell and Rasmussen because that happened to be one I remembered I used once as a text. But that class was a graduate class. You don't think of it as a textbook driven class.
Q. And what articles would you offer to these graduate students or recommend in the reading list?
A. Well, I almost hate to admit it, but I think my reading list changed from semester to semester depending on what I wanted to cover. But I would always have them read some classics like Bondbright, Alfred Cohen, Cose. I might have them read Modigliani and Miller. The basic approach was to -- and often a lot of

things that were relatively current during a -- if you can put in the context of teaching regulatory course during the time of deregulation of natural gas and electricity, often there were some things that were current that I might not even agree with but I thought were good reading, and might be from something like Public Utilities Fortnightly or one of the investment bankers or something like that.
Q. Do you keep the syllabuses for your classes?
A. I might have them and I might not. I don't know.
Q. So if I asked you a DR question, you'll be happy to look for those?
A. I will give you a good faith effort, but I will not promise that I have them.
Q. Mr. Krueger also talked with you about your schedules DAM-13, 14, 15 and 16, and could you explain to me how you relied on those schedules again inasmuch as your ROE recommendation is 12 percent?
A. Well, as you recall, he asked me a number of questions related to those low returns, and I told him that I -- the primary reason I did not consider them that relevant in this case was during the time of those estimates the -- and the number that I was recalling was

approximately 6 and a half percent -- was the Baa bond rating, and the 7.2 percent or whatever return on common equity for Empire is not relevant. And we talked then about the other issues of Empire and its maintaining its dividend and the market acceptance of Empire. These factors are all relevant.
Q. And how did you determine what the appropriate spread should be for the ROE vis-a-vis the bond, the Baa bond that you're talking about?
A. Well, I didn't -- I didn't calculate a risk premium in that sense, if that's the implication of the question. I think -- I think generally one has to have in mind a number that's -- that's at least on the order of 4 percent as a credible number.
Q. And how --
A. And so it was more of a -- of an evaluation that these numbers are not really credible, and I -- and I think in many ways I know why they were not credible because they represented, for example, historical dividends that were constant and companies were not rating their dividend, and that was not a realistic thing for investors to be expecting, and that means that one would not use that kind of analysis. I pointed that out in my testimony.
Q. And how did you arrive at the 4 percent

spread?
A. I'm just saying that -- I just gave you then an average estimate of what's probably historically a low number or a reasonable but low number between -- between a non-AAA bond and common equity for a typical utility. That's a ballpark number. That's not an analytical number.
Q. And did you use any sort of analytical way to determine that spread in arriving at 12 percent?
A. No. I said I did not. I said that was based on experience and so forth.
Q. So there are -- you conducted no studies or analysis to arrive at the 4 percent adder?
A. Not in this particular case, no, I did not.
Q. Have you in other cases before this?
A. I've looked -- I've looked at those things on my own and I've looked at testimony of others many times that relate equity risk differentials with various bonds.
Q. And what methods did you utilize to determine those?
A. When I say that, I'm referring primarily to a historical differential, a risk premium kind of analysis.
Q. And that risk premium analysis is based on

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just the lowest investment grade bond or is there some other --

A. No. You can use a AAA grade for that matter. In this case, Empire is a lower grade bond, and so you'd be interested in that.

Q. My question was historically what do you use when you do? I recognize you didn't do it in this case.

A. Well, I just -- I answered that I have done it on occasion and I have read testimony of others, and it depends on the circumstances.

Q. And when was the last time that you did it?

A. I have no idea.

Q. Do you think you've done it within the last year?

A. Probably, or I reviewed someone else's testimony which had those calculations.

Q. But you can't tell me specifically?

A. Well, you could -- if you're trying to get that specific, there are DR responses, and I think they came from you, that show various long-term risk premium from Ibbotson Associates, and you can reference those. But the numbers don't change. The time series may change, but the numbers don't change.

Q. And so --

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A. So I'm cognizant of that and I look at those, and I've responded to some of those in the DR.

Q. And the appropriate benchmark to look at is the Ibbotson Associates book? Is that the one we should use?

A. Ibbotson Associates I think probably has the recognized time series of returns for both equities as well as dividends.

Q. And when you say recognized time series, what do you mean?

A. I mean representing historical time series of both debt instruments as well as equity instruments.

Q. And in your opinion, what's the appropriate time series that we should be looking at for that, how many years?

A. That depends on the circumstances. Ibbotson's goes back, I think, to 1926.

Q. In the circumstance in this case, what time series did you look at?

A. I told you I didn't make that special calculation in this case.

Q. In response to some of Mr. Krueger's questions, you indicated that somebody else had helped you with your testimony. Is my understanding correct about that?

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A. I have people working with me, yes.

Q. And who were those folks?

A. I guess in this case I had probably four people who helped me in different ways in testimony and rebuttal in this case.

Q. Why don't you tell me those four people?

A. One is Mike Knapp. Another is Mark Cichetti, a third is Zhen Zhu, and a fourth would be Audrey Osborn. And my administrative assistant is Angela Nisk, and she obviously helped with preparation.

Q. And what did Mr. Knapp do?

A. He's a Ph.D. economist, and he works in a lot of different areas in reviewing what I write. He knows the methodologies I use very well, so he's able to check that. He knows the field well. He's able to argue with me about various issues, and so he's generally a good colleague.

Q. Did he argue with you about any issues in this testimony?

A. I'm sure he did. He usually does.

Q. And what issues did he argue with you about?

A. I don't recall precisely.

Q. Does he provide --

A. He's outspoken.

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Q. Did he provide a written critique?

A. No.

Q. Did he provide you any e-mails?

A. Probably.

Q. So if I asked you a DR for those e-mails, you'd share those with me?

A. Sure.

Q. Mr. Sheting, I don't know if I --

A. Cichetti.

Q. Can you spell that?

A. C-i-c-h-e-t-t-i.

Q. And what did Mr. Cichetti help you with?

A. Same sort of thing. He's got -- he's an expert witness in his own right, and he's -- he worked on some of these issues and responded to some of my questions.

Q. What issues did he work on specifically?

A. I remember discussing the Modigliani and Miller issue with him at one point. Both Dr. Knapp and Richard Cichetti read my testimony in its drafting stage and would make comments on it.

Q. And what did you discuss with Mr. Cichetti regarding Modigliani and Miller?

A. I think the assumptions -- I mean, I can't remember. I think the assumptions around that issue --

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the issue of Modigliani valuation of dividend, valuation of dividends versus earnings and that concept.

Q. And what was Mr. Cichetti's view?

A. I don't know that it differs from my view. I mean, he's very familiar with the two, with the original work and how it's used and applied. I am probably more suspect of the market efficiency position than he is if there's a -- if you're looking for a point of intellectual departure or any kind of a gap between us that might be there. I'm not sure.

Q. What questions did Mr. Cichetti have for you?

A. I don't remember. He's a colleague, and he comments on what I do and I comment on what he does.

Q. Did he send you any data -- or any e-mails or any written response or any marked up draft of your testimony?

A. He probably did at the very end a red line in which he made some editorial comments, and that's probably the only thing I got from him in writing. I think everything else I got from him was telephonic. He's in Tallahassee, and I spent some time in Tallahassee, but I didn't work with him face to face on this case. I talked to him by phone.

Q. Do you have a copy of that red line?

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A. I doubt it.

Q. You don't save documents?

A. I don't save red lines.

Q. Why not?

A. I accept the red lines or change the red lines and move on.

Q. You said you also spoke with Zhen Zhu. Could you spell that and tell me what you spoke to Mr. Zhu about?

A. That's Dr. Zhen Zhu, and it's Z-h-e-n, last name Zhu, Z-h-u. And he and I have been doing some work on the evaluation of earnings versus dividends in a broader sense, and so the data that -- from these five companies with dividend reductions actually were on his computer, and that -- or he had that data file, and that's where I got that data. He's an econometrician.

Q. And did he send you any e-mails, written information regarding this case?

A. I think he did, and I think you have that in a Data Request, which was just the data.

Q. Did he have any questions about your testimony or things he disagreed with?

A. No, not that I recall.

Q. I believe you talked about a Ms. Osborn.

A. Ann Osborn, yes. Or excuse me. Audrey

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Osborn.

Q. And what did you discuss with Ms. Osborn?

A. She was -- she did the -- as I testified previously, she's an accountant, MBA, and she did a number of things related to preparation of the schedules, and she worked on the flow of funds calculations. Everything that was on her computer I think has been provided in data response.

Q. And what schedules did she prepare for you?

A. Well, in final analysis, she probably had all of them prepared because they would come off of her machine, but she didn't necessarily do the schedules originally.

Q. Who did them originally?

A. Well, whoever might have been working on them. Might have been Mr. Knapp. Might have been me, she might have done it under my direction. The way we're organized in the office, the text goes through Angie Nisk, but the schedules come from Ann Osborn. So we feed into that place and it's compiled.

Q. Do you hold yourself out as an expert in accounting?

A. No.

Q. And so to the extent that there's accounting information attached to your testimony, that's

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not something that you're offering as an expert?

A. Well, I have -- I have accounting as a -- and I use accounting as a tool, but I am not testifying as an expert accountant.

Q. You indicated in response to a question from Mr. Krueger that, with respect to the ValueLine 6 percent growth rate, that you didn't believe that that growth rate could go on indefinitely. Do you remember that answer?

A. Yes.

Q. And so is it your view that the 6 percent growth rate that you're utilizing is not a sustainable growth rate?

A. It's not sustainable indefinitely. That's what I testified to.

Q. It's only sustainable for the three to five year?

A. As I pointed out, it's estimated a growth between now and three and five years out.

Q. And is it your belief that the DCF model requires a growth rate, an indefinite growth rate or a growth rate that's a snapshot of five years?

A. I think there's a lot of testimony about that this afternoon, and that the DCF mathematically may be derived one way, but, in fact, as far as application's

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concerned, what's in the minds of the investors may be something else.
Q. What did you review to prepare for this deposition?
A. I read my testimony and my rebuttal testimony, and I also looked over the DRs that were -- had been sent out earlier.
Q. Did you talk with anybody at the company prior to having your deposition today?
A. I called Mr. Dave Gibson and told him I was going to be here and I wanted to make sure that that was in concurrence with his expectations, and he said yes. That's all we discussed.
Q. You didn't discuss anything else?
A. No.
Q. Did you talk with any of your colleagues about this deposition?
A. Well, sure. Told them I had a deposition.
Q. Who do you believe are the most influential individuals in the field of regulatory economics?
A. You'll have to define what you mean by influential.
Q. Who are the people that you look to?
A. Well, I guess it depends on the topic. It seems to be any time that there's an issue that we're

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investigating, we almost start over again to see who is working in that particular area. And with the availability of the Internet and more journal articles electronically, that gets much easier. Plus I notice there's a lot of new names pop up all the time because there's more things available through that process than there used to be through just a library of journals or a library of publications.
Q. Who do you consider your mentor in this field?
A. Probably Hasker Wald. If you're talking about a mentor, who I learned a lot from, kinds of persons would have been Hasker Wald. That's one party that comes very much -- I guess comes very much to mind.
Q. Do you believe that Dr. Myron Gordon is an influential individual in the field of regulatory economics?
A. I think he was very influential at an earlier period, and I think that -- I think he cast a very long shadow in that sense.
Q. Is he the individual who essentially invented the discounted cash flow method?
A. It's associated -- at one time it was even called the Gordon model. So I would say it's been associated with him.

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Q. And that's something standard for use in the field of regulatory economics, is it not?
A. Yeah. That was the application he had in the mind at the time.
Q. When you were a young professor, that is something that you looked to, was it not?
A. Certainly, I had his textbook and I assigned things from -- it's not really a textbook. It was a publication by the institute at Michigan State. As I recall, that's where it was originally -- or the one I'm thinking of was published, and I've assigned from it.
Q. And that brings me to my next question. What books do you believe are authoritative in the field of regulatory economics? Would Dr. Gordon's book, the Cost of Capital to a Public Utility, published in 1974, be one of those?
A. It was a major publication at the time.
Q. Do you think it's an authoritative publication?
A. Authoritatively to -- authoritative today, I would say sure, in its context, what it represents.
Q. What about, for example, Dr. Warren's book, Regulatory Finance, do you think that's an authoritative book --
A. Certainly.

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Q. -- in the field of regulatory economics?
A. Certainly, I think it's -- and if you want me to qualify authoritative, I think that doesn't mean it's -- everything in it is --
Q. I'm not asking --
A. That I necessarily agree with everything that's in it, but it's a very comprehensive book and I cite it and refer to it.
Q. Those are books that you as both a professor of economics and as an expert witness would look to?
A. Yes, and I've -- I've assigned from them and I've looked through them and referred to them.
Q. And those are recognized textbooks in this field, aren't they?
A. I'm not sure about that. I don't think of either one of them as a textbook. I certainly don't think of Gordon's publication as a textbook at all.
Whether Roger Moran uses his book as a text, I don't know. You'll have to ask him that question. I probably would not use it as a text, but I use it as a source.
Q. I think he does use it as a textbook when I asked him, just FYI.
On page 17 of your rebuttal testimony, you

criticize Mr. Allen's use of a sustainable growth rate.
A. Yes.
Q. And you offer up, I think, three what you call fundamental flaws. Is that a proper understanding of that testimony appearing on page 17, lines 3 through 15?
A. Yes.
Q. And the first thing you say, it's difficult to estimate the components of a sustainable growth rate; is that correct?
A. Yes.
Q. Can it be done?
A. Can those four be estimated?
Q. Yes.
A. Sure.
Q. Are you aware of any academic papers that indicate that the sustainable growth rate, the VR plus SV, is not an appropriate growth calculation for use in the DCF?
A. We were just talking about Roger Moran's book, and I think his book criticizes the VR/SV, as I recall. I'm trying to think what sources I've seen that criticize it. This statement is not original with me, that the calculation of a growth rate. It's been approached from several different directions. The calculation of the growth rate is more direct and probably

more reliable through other methods than using the VR plus SV.
Q. Whose thought was this originally?
A. As I'm sitting here, I can't tell you. I'd have to go back and look at some things.
Q. So if I asked you a DR about that, could you tell me whose thought it was originally?
A. I don't know that I'd know who it was originally.
Q. You don't know where you copied it from?
A. If you give me a DR, I can give you some response to it, but I'm not sure whether it would be original seminal thought or not. I'm just telling you it's not original with me.
Q. I appreciate your candor.
You indicate that empirical financial literature demonstrates that the sustainable method of determining growth is not significantly correlated through measures of value such as stock price and price earning ratios; is that correct?
A. Yes.
Q. Could you name those articles?
A. I can do it, but I can't do it as I'm sitting here. Again, if you give me a DR, I'll be glad to give you a reference.

Q. I mean, so you don't know sitting here what those empirical financial articles are?
A. I can't give you the author and cite the articles. As I recall, there's like several people looked at this question, and they essentially all say the same thing, that the -- that the correlation of price or value is closer to other things than to the VR/SV. One is the analyst -- I think the most common calculation is the analyst growth rate. And as I recall, there's even a distinction made among analysts, and ValueLine is placed very high, which is one of the reasons I rely on it.
Q. Are those articles that you're talking about, the empirical financial literature, are they discussing the use of historical growth rate, the VR plus SV, as opposed to projected growth rate to determine VR plus SV?
A. Probably, but I don't recall positively the methodology in calculating it.
Q. But you believe it's probably criticism of use of historical growth rates?
A. No. The criticism was of the VR plus SV. The methodology in which they were calculating how much was historical and how much might have been forecasted is what I don't recall.
Q. Have you used the VR plus SV growth rate in

any of your testimonies?
A. I don't think so. I may have used it indirectly when others have used it and I've pointed out that there was maybe a superior way to calculate. So I can't say I positively have never used it. I don't recall ever using it as we sit here, and I've never been a fan of it as a way to measure growth for the reasons I've just named.
Q. Do you know if it's been endorsed at one time by the Federal Energy Regulatory Commission as the appropriate way to determine the growth competent for the DCF?
A. I think that was probably the case, but let me also say, as you know, I was at the predecessor of the Federal Energy Regulatory Commission, and the -- it was not the case then. And I know that for a number of years there was another method in which it was actually the so-called official method, which then FERC abandoned and it was not the method then.
I also know as recently as about 6 to 9, 12 months ago that Mr. Cichetti who works with me contacted FERC and FERC said -- told him that they have no official method of calculating the cost of capital presently. And that was even after they had the person take on the phone who was supposed to be their cost of capital person, well,

I'll have to check with somebody and get back with you. So it was -- we were rather convinced that they're not promoting any method, and that was the case I say 6 to 12 months ago.

Q. What do you think that the most reliable technique is to determine the growth rate component of the DCF?

A. I told you just a moment ago, I think it's analyst forecast. It's whatever investors think is the growth rate, and that probably would change from time to time. And to think it's a mechanical process of saying this is the right answer, and to think that that's going to be the right answer for a long period of time, all those things are suspect.

Q. But your best --

A. And I think today that there is enough information available that analysts are looking -- or what analysts are convincing investors is the growth rate is probably what is germane.

Q. So today, sitting there today, you believe the analyst forecast is the best predictor of growth?

A. I think that's more likely to be the growth rate, yes.

Q. Let me ask you this: Which is better, a consensus estimate of the analyst or a growth estimate by

a single analyst?

A. For what purpose?

Q. The G in the discounted cash flow method.

A. That obviously depends on the circumstance. If you have a single analyst who's more likely right than the consensus, then that would be better. I can tell you this, that if you do what I think both witnesses did in this case, they take numbers and start averaging today, you can be certain of one thing, it's not right, because what it is is an average. But trying to determine what's better is difficult.

Q. Do you know if there's any academic research out there that indicates whether it's better to use a single analyst's estimate or a consensus estimate for determining the growth rate component of the DCF?

A. Oh, I'm sure there probably is. I can't sit here and tell you that I can cite an article about it, but I'm sure there must be because there's bound to be.

Q. Now, you use the ValueLine estimate, is that correct, in determining your growth rate?

A. Yes. And Standard & Poor's for earnings, but I use ValueLine primarily.

Q. But ValueLine primarily, and that's where you provide your 6 percent growth rate?

A. That's the 6 percent, yes.

Q. And would you agree with me that ValueLine, that growth, that 6 percent growth estimate is just the opinion of one analyst?

A. No, I would not. It's an opinion of one research -- one analytical source or one financial source.

Q. And so is it your -- I just want to understand this. Is it your testimony that ValueLine somehow goes out and looks at other analysts' growth estimates for Empire in arriving at their 6 percent?

A. I don't know how they precisely -- what they precisely look at to bring it in house, and I have not checked this recently, but my recollection of what ValueLine does is they have a person follows a security, and that person makes a recommendation to a group, and it's the group recommendation or it's the ValueLine recommendation that comes out of that.

Q. When I look at the ValueLine recommendation, I've got a copy of your work papers here and I've got the page from ValueLine regarding the Empire District and the earnings growth at 6 percent. I see the name here of Paul E. Debbas, D-e-b-b-a-s, CFA, as the individual that did that report.

A. That's the person that writes the report, as I understand it, and follows that company, but that doesn't mean the forecasts are all his, as I understand

the ValueLine process. It's a publication and it's a commercial publication, and this has been described in the past and I'm sitting here telling you my recollection of it. It goes through essentially a review committee process, and that's -- that would be distinguished from a particular analyst sitting and saying, okay, here's what I think.

Q. Let me ask you about that review committee process, then. What you're saying is that more than the analyst who writes that bit about Empire, everybody in that group has their own growth rate estimates for Empire and then they settle on the 6 percent?

A. I don't know what happens inside of ValueLine when you close the door.

Q. So you really don't know sitting there how ValueLine arrived at that 6 percent?

A. I told you what I understood was the process in ValueLine when they sort of opened the door a crack.

Q. And who told you that?

A. As I remember, it was something that was written about the ValueLine process a few years ago.

Q. Did you --

A. I might even have something on that. I don't know. But that's my recollection.

Q. Did you call ValueLine to find out how they arrived at the 6 percent?

A. No, of course not. Or I say of course not. I did not.

Q. Are you aware that the Standard & Poor's growth rate for Empire District, according to your work papers, the five-year projected EPS growth rate is 2 percent?

A. Sure.

Q. And are you aware that that's based on four analysts who cover --

A. Yes.

Q. -- Empire for a living?

A. There are four people, and Empire is among the companies that they cover, yes.

Q. And those folks probably do it for a living, correct?

A. Yes. I don't know who the four are, and that's probably -- that I think can be determined, but I don't happen to know who they are, and they are professional analysts.

Q. And so those four folks at least believe that it's going to be 2 percent?

A. That's a consensus that comes out of the four, yes.

Q. So some could be higher, some could be lower?

A. That is correct.

Q. Other than the S&Ps, are there other analysts growth projections consensus such as Thompson and IBES?

A. Well, as I -- I'm trying to remember who was whom, who's who. I think that you're getting essentially the same people when you use the term IBES, Thompson and Standard & Poor's. I'd have to double check that, but I believe that's correct.

Q. So it's your view that those are not independent companies?

A. I think there's at least -- no, I didn't say that.

Q. Okay. I'm sorry.

A. Talking about the analysts. These are not Standard & Poor's analysts among those four, and I think -- I can't sit here and tell you positively. I think there's an overlap.

Q. How many equity analysts cover Empire District Electric?

A. I don't know.

Q. Do you think the company would know that?

A. I don't know whether they would or not.

They'd be more likely to know that than I would.

Q. Let me ask you this: Why did you pick the highest growth estimate?

A. Because it's a relevant piece of information. I did not pick the highest growth estimate that I calculated or the highest growth estimate. Because it's relevant.

Q. Why didn't you pick the 2 percent growth estimate recommended by S&P?

A. Well, I reported it, and I think it's relevant. I can tell you why I think ValueLine is superior in many cases, and that is that ValueLine is generally available and S&P is not.

Q. Generally available to who?

A. Public libraries and locations where you don't find Standard & Poor's.

Q. Is, for example, Thompson growth estimates, consensus growth estimates generally available on the Internet?

A. Yes.

Q. And that's a consensus growth rate, right?

A. That's right.

Q. What I'm trying to understand, Dr. Murry, is other than the fact that S&P is generally -- or excuse me -- ValueLine is generally available, why did you choose

to utilize primarily or rely heavily on the 6 percent growth rate, the highest growth rate out there?

A. I think ValueLine is in the past and present a very reputable source and widely recognized source, and I have always considered -- the rest of my data came from ValueLine for that same reason. I have felt that way for some time and still feel that way.

Q. Do you think S&P, Standard & Poor's, is a reputable source?

A. Of course.

Q. Do you think Thompson Financial is a reputable source?

A. To my knowledge, their reporting is accurate.

Q. Do you think IBES is a reputable source?

A. I'd say the same thing about them.

Q. And what is it about ValueLine that gives you the warm fuzzies over Thompson Financial, IBES or Standard & Poor's?

A. Let me -- I tried to answer that question. I think ValueLine is widely recognized. I think it is generally more widely recognized historically. There has been empirical testing of ValueLine to show you that. And interestingly enough, reporting an average is certainly not superior to reporting the estimate of a recognized financial source. And the irony is it's what the investor thinks that counts.

Q. Okay. Let's unpack that. What empirical testing is there that suggests that ValueLine is superior?

A. I mentioned that earlier.

Q. Mention it again.

A. Okay. You're asking me about -- you're asking me about growth rates, and I told you that analyst growth rates were superior, and my recollection was that specifically the preferred was ValueLine.

Q. And what empirical study is this?

A. I told you I can't sit here and cite it.

Q. But you've read one?

A. That's my recollection, yes.

Q. Okay. Have you seen any studies that indicate that S&P isn't on the mark or appropriate for use?

A. I don't remember a study that said one way or the other about S&P.

Q. What about Thompson Financial, have you seen any studies that indicate that they're not on the mark?

A. I don't recall seeing anything that said one way or the other about them. I told you I think they report accurately. I'm not questioning the accuracy of

their data.

Q. I'm just trying to understand if there are any other academic studies out there so I've covered the waterfront. What about IBES, are there any --

A. The same answer. I can't recall seeing one on them.

Q. Give me your understanding of this empirical study that suggests -- the conclusions of this empirical study that suggest that ValueLine is a better indicator of growth.

A. As I recall, it was just a look back of the history of performance based on what had been forecasted. That's my recollection.

Q. Was that ValueLine versus other estimates or ValueLine versus historical growth of a company?

A. I don't know that I understand the question, but let me just answer the question that I -- that I think that you asked, and that is, it was ValueLine results compared to what actually occurred.

Q. Let me ask you this: Should a cost of capital witness perform a DCF analysis on the common stock of the subject company or just perform a DCF analysis on a group of comparable companies?

A. I think it depends on the circumstance.

Q. Okay. Well, when is it appropriate only to

perform it on a group of comparable companies?

A. When for some reason one doesn't believe the analysis of the subject company would give a representative return that's relevant for -- or cost of capital that's relevant for a rate case.

Q. Do we have that case here with Empire?

A. Well, obviously I didn't think so because I calculated cost of capital.

Q. Do you know if any witnesses in this proceeding thought it was appropriate to do a cost of capital analysis based on a group of comparable companies?

A. Well, I think I saw in rebuttal that there may have been an accusation of Vander Weide that he did this, but I haven't read his testimony yet, so I don't know whether he did or not. I'm referring now just to I thought I picked that up in just reading through one of the rebuttals I got in the last few days.

Q. So you haven't read Dr. Vander Weide's testimony?

A. I haven't read it yet.

Q. Why did you think it was appropriate to do a DCF analysis just on Empire in this proceeding and Empire alone?

A. Well, as I think I've said in several different ways, that I think the DCF calculations are

relevant, but I think there's some clear problems with the DCF calculation for Empire, which I pointed out.

Q. What's the appropriate time period to analyze when performing a risk premium analysis?

A. I think that clearly depends on the circumstances and the purpose.

Q. For performing a risk premium analysis on Empire District Electric, what is the appropriate time frame?

A. The answer's still the same. It depends on the circumstances and the purpose.

Q. How about for determining the cost of capital in a rate case proceeding such as this?

A. I don't think I would do a -- and I did not, do a strict risk premium analysis for Empire in this particular case.

Q. If you were to do it, what time frame would you utilize?

A. I don't think I'd be interested in, as some people have done, looking at a period prior to World War II, and I have problems with risk premium analysis as an independent calculation because of the structural change that's been occurring in the electric industry and what I think are probably changing perceptions on the part of investors looking at electric utilities. So I think when you start looking very far back in history, you're probably not representative of what the current market is and the way investors are looking at the current market.

I think the information is relevant. As I pointed out, there needs to be a sufficient gap, a reasonable gap between the bond market and the equity rate market, but it's a question of how much you rely on that.

Q. So you would go from World War II to date?

A. I just -- I said I wouldn't go to World War -- I wouldn't go beyond World War II as some people have done, I don't think.

Q. So 1945 forward?

A. I didn't say that either. I don't have a time in mind. I didn't do it, so I didn't go down that avenue.

Q. Why didn't you do a risk premium in this proceeding?

A. I think I just answered that. I said I have some real problems with risk premium in the current marketplace.

Q. And elucidate for me those real problems.

A. I already did. I'll repeat it.

Q. That would be great.

A. And that is that structural changes in the market have changed probably investors' perceptions of

utility securities, and there's probably a differential that's change -- there's probably things going on on the investors' side of the market that are hard to interpret, and just saying mechanically you can pick a differential for a period of time is problematic.

Q. What are the structural changes going on in the market?

A. Primarily the deregulations occurred, the sale of generation assets by utilities, the entry of power marketers into the industry, creation of wires company, acquisitions, mergers.

Q. If the risk premium were, let's say, 150 basis points higher than the market, would that be an appropriate measure in your mind?

A. I don't understand. 150 basis points higher than what market?

Q. Higher than the DCF calculation.

A. I think -- I think I've explained what I think about risk premium currently. I don't think it's irrelevant. I have some problems with how it might be used.

Q. Let me ask you this: When you perform a risk premium analysis, is it appropriate to adjust the market risk premium for the beta of the subject company if you were to do that?

A. I don't understand the question.

Q. Well, if you're going to perform a risk premium analysis on a certain company and you get that analysis for the market and you have a certain beta for the subject company, is it appropriate to adjust the risk premium based on the beta profile of the subject company?

A. I would have to know more about that before I'd methodologically comment on it.

Q. So you don't have enough factors in there?

A. From the hypothetical you've described, I don't know how to answer.

Q. Let me ask you this: You also did a capital asset pricing model as a check or as part reliance for your recommendation in this case; is that a proper understanding?

A. I think you've characterized it accurately.

Q. Why is it appropriate to use a beta in your CAPM that was calculated using the New York Stock Exchange as the market and a market return that incorporates not only the New York Stock Exchange listed companies but also the American Stock Exchange and the NASDAQ listed companies?

A. I think they're both representative of market conditions. The competitive funds that one must look at as alternative investments to in this case Empire

certainly include smaller companies.

Q. But on the one side of the equation, you only used the New York Stock Exchange companies, and on the other side you used the American Stock Exchange and the NASDAQ companies, and my question is why is that an appropriate comparison? Why didn't you use on the other side the NASDAQ and the American exchange companies?

A. Because I don't think that represents the investment alternatives that the investors are considering.

Q. Why not?

A. Because they -- because the investors are looking at the market as a whole.

Q. So why didn't you determine a beta for the market as a whole?

A. I used the ValueLine published betas, and I prefer to use published recognized betas than calculate a new beta.

Q. Again, that goes to the ease of use of ValueLine and its widespread --

A. I would say it certainly goes to the widespread recognition of ValueLine.

Q. Let me ask you this: Why is it appropriate in your CAPM to use one proxy for the risk-free rate when determining the risk premium and a different proxy when

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determining the current risk-free rate as you did in your Schedule 20 to your direct testimony?

A. What's your question?

Q. My question is, why is it appropriate in your CAPM analysis to one proxy for the risk-free rate when determining the risk premium and a different proxy when determining the current risk-free rate? And if it helps you out, I'm looking at the long-term corporate bonds return of 6.2 percent --

A. Right.

Q. -- where you used Ibbotson.

A. Right.

Q. And the AAA corporate bonds return of 5.45 percent where you used the Federal Reserve publication according to your work papers.

A. Okay. I understand. The long -- this is looking at a historical CAPM, and the long-term corporate bond rate is the -- is the benchmark historical bond rate, return on bonds. And then for the current rate, in this case I used AAA corporate bonds, which, in fact, is going to bias my results downward because the AAA rates is actually going to be lower than the BBB rate, which is the Empire result, current rating, which for that reason is a very conservative estimate.

Q. Well, if you compared an apples to apples

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comparison of AAA to AAA, would there be no bias at all because you'd be comparing apples to apples?

A. I think what -- I think you misunderstood what I said. The 5.54 percent is the current return at the time of entering testimony of a AAA. That's a lower return, which would be the base from which one starts to add the risk premium. That's lower than the base would be for a BBB. I just simply -- I simply stated that this is a conservative estimate of the cost of capital of a company like Empire. If I used a higher base interest rate, the result would have been higher.

Q. If you use the Ibbotson to get -- Ibbotson over on the corporate bonds return with the Ibbotson on the long-term corporate bond returns, would that eliminate any sort of bias?

A. No, I don't think so, because I think what we're trying to do is take the historical relationship of long-term corporate bonds and relate that relationship to the current market, and the most recent was the Federal Reserve report, and Ibbotson doesn't publish that frequently. I'd say you'd be introducing bias.

Q. And that's because of the timeliness of the Ibbotson filing or the Ibbotson reporting of those?

A. That's primarily why, yes.

Q. Is there other reasons?

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A. I'm not -- as I'm sitting here, I'm not sure that there are or there aren't.

Q. Let me ask you this: Do you think it's appropriate to use one electric proxy group for conducting a DCF analysis and a different proxy group for conducting a risk premium analysis when you're looking at the same company?

A. Well, I didn't do it.

Q. I understand that. Do you think it's appropriate to do it that way?

A. I can't judge methodologically whether it would make sense or not for some reason. I did not do it.

Q. Why didn't you do that?

A. I was looking for a benchmark set of companies that were not in financial difficulty, that would generate benchmark numbers for this rate case for me to evaluate for my recommendation.

Q. Let me ask you this: Is there some reason you didn't review Dr. Vander Weide's testimony?

A. No. I intend to. I just haven't done it yet. I guess the reason is I've been busy. I purposefully -- and you'd have to ask him, and I guess you probably will Friday.

Q. I will.

A. But you'll have to ask him. I purposefully

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have not talked to him about this testimony because I thought we should do it independently. And I believe that there may have been a couple phone calls where we were both on the phone at the same time with other people getting data and so forth. I'm aware he submitted testimony.

Q. Who was in on those phone calls?

A. Oh, probably Dave Gibson, probably Kelly Walters.

Q. Are those folks with the company?

A. They're with the company. It had to do with what data we needed and so forth.

Q. Do you think it's appropriate to use the quarterly DCF model to determine the cost of equity capital?

A. I answered that question earlier.

Q. Help me out again.

A. Okay.

Q. Got a new baby at home. I don't sleep as well. I apologize if I'm --

A. I've been there and I understand that. I don't know if I can regenerate an answer as clear as what I hope the first one was.

I did not do a quarterly DCF -- quarterly dividend DCF calculation because I do not believe

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investors that buy utility stocks are that precise in visualizing their expected cash flows. Theoretically, it's sound. Theoretically, mathematically it would be more precise to what the stream of earnings would be. You can look at financial -- you can look at financial reports and some of them will have a quarterly dividend schedule in them. Most of them probably do not.

Q. Let me ask you this: Do you know if Empire District Electric pays their dividends on a quarterly basis or an annual basis?

A. I probably have to verify that, look it up. I think they pay on a quarterly basis. Probably have that.

This ValueLine I'm looking at, which is from early January 2004, shows a quarterly dividend of 32 cents. That goes from December 31st, 2003, back to first quarter 2000.

Q. So investors would be aware, would they not, because the ubiquitous one they all use is ValueLine, that Empire uses a quarterly dividend?

A. Yes. Investors who want to know and investors who expect a check would know that, yes.

Q. And they can find that in ValueLine?

A. Yes. A lot of places they can find that.

Q. Is it appropriate to use a gas company

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proxy group to determine the cost of capital for an electric company such as Empire?

A. I have looked at gas companies as relevant to electric companies in the past. I think it might be relevant. I don't think I'd substitute gas companies for electric companies. I don't think I've ever done that.

Q. You've never done it?

A. I don't think I've ever substituted gas companies for electric companies. I've looked at them both.

Q. And why wouldn't you substitute a gas company for an electric company? Are their risk profiles different?

A. I think in today's market there's sufficient difference that I would be more comfortable using electric companies in cases I can think of.

Q. What are the differences between an electric company and a gas company that make those differences sufficient, to use your term?

A. As electric companies become closer to wire companies, some of the differences may actually be reconverging. For a period of time I think the big difference, a big different was the generation of the electric companies and gas companies were mostly -- were transporters, storage and transporting companies, and so

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they had a -- they had a different revenue profile.

Q. So it has to do with the vertical integration of the electric companies?

A. Well, I'm not -- I think it has to do with a lot of things. I'm not going to try to sit here and just quickly dissect that much further. The cash flow of a gas distribution company looks different than the cash flow of electric companies generally.

Q. I want to ask, do you have copies of your DR responses to our Data Requests with you?

A. I don't think so.

Q. Okay. That's fine. I can hand you some. I want to ask you some questions about this, specifically our Data Request 2102, which provided two hypothetical companies, and you indicated in your answer, Dr. Murry believes that the hypothetical company No. 2 method for estimating cost of -- for estimating capital structure would be unorthodox and in almost all cases inappropriate for ratemaking.

A. I recall that.

Q. What cases would it be appropriate for ratemaking?

A. Let's speak about what you call Company 2 here in a general way, which I think is using market value as opposed to book value, if I understand the

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hypothetical. In cases where I've seen that it's useful or actually required almost is in cases where there's been an acquisition of assets and the acquisition is a market valuation that may not be reflected in book value, and the recovery costs of that are appropriate for ratemaking. And I -- and that's one I'm just thinking of. There may be others.

Q. Let me ask you this: Would this method be appropriate for use in this proceeding?

A. If I understand it correctly, I didn't do that. So I guess I think I prefer what I did, which is looking at book value, if I understand the -- this is a hypothetical case.

Q. I understand that.

A. So I'm trying to respond to that.

Q. If somebody did a hypothetical like that in this proceeding, would it be appropriate?

A. All I can say is that I didn't do it really. That's kind of the beginning and the end of my thoughts about that. I -- I haven't seen -- I haven't seen evidence that would persuade me that I should change what I did.

Q. Let me ask you this: Other than the acquisition of assets that you mentioned as perhaps a reason for utilizing this type of hypothetical, are there

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any other reasons?
A. Well, like I said, I don't know. That's an instance where I'd actually been involved in those kinds of adjustments to a market -- to a capital structure, and I think they were -- I think they were appropriate in those instances. There might be others. I'm not sure.
Q. Well, your answer says, in almost all cases it's inappropriate for ratemaking.
A. Well --
Q. And I'm trying to figure out because I want to know when it's appropriate.
A. Well, I told you at least cases when I thought it was appropriate, and almost says most of the time I think I wouldn't do that. My history -- in this case, I did not. The history of my testimony has been that I have only rarely done that, and there's been specific reasons why I did it when I did it.
Q. Can I infer from the fact --
A. I mean, I'll even point out in one instance that's coming to mind that the market value was less than book and that was my recommendation on the capital structure.
Q. Is it safe to infer because you did not do that method in this case you did not think it was appropriate?

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A. I didn't consider it. That's all you can really say about that.
Q. You didn't consider it?
A. No. I'm responding really to your hypothetical question.
Q. Let me ask you, sitting here today, would you consider doing that in this case?
A. I've already testified to that. I said I haven't seen anything from your hypothetical that would make me reconsider it.
Q. Well, take away the hypothetical. Use the numbers and what you know about Empire Electric -- Empire District Electric Company. Do you think it's appropriate to use that method in this case?
A. I use the capital structure that I understood was consistent with the company's capital structure in their case, and I would -- if I were doing it over, I'd do it the same way.
Q. Let me -- there's been a lot of talk about the Standard & Poor's rating systems, and you've done some calculations, my understanding, on some -- or someone in your office did some calculations in your rebuttal testimony about various coverage ratios, funds from operations and various other coverage ratios from Standard & Poor's.

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My question to you is, is it correct that Standard & Poor's has both qualitative and quantitative measures that they go over --
A. Of course.
Q. -- to determine a specific range?
A. They so state.
Q. And so just focusing on two or three of those, be it qualitative or quantitative measures, doesn't guarantee what Standard & Poor's is going to rate a specific company?
A. No, it doesn't. But you have to remember when you read -- put my testimony in context, what really started me looking at these ratios was the fact that Standard & Poor's published a Credit Watch which stated that there was a negative outlook, and the question, hypothetical question in that case is, can we discern anything about this, why they would single out Staff position and why they would link that. To me, that was an extraordinary announcement by a rating agency.
Q. That's something that you don't see often in your -- in your practice, you don't see companies put on negative watch or positive watch based on actions of a regulatory body?
A. This wasn't an action of a regulatory body.
Q. Or the staff of a regulatory body?

Page 124

A. This was specifically -- and we can dig it out and read the words, but best recollection, without taking that time, this was a specific statement, if the Commission adopts the recommendation by the Staff.
It's very common, of course, for a rating agency to refer to something that came out of a regulatory commission for a regulated industry that was above or below what was expected and how that might affect their view. That's not uncommon. But to single out testimony and the implications of that testimony, I don't read everything that they produce, and I'm not claiming I do. I don't recall ever seeing that before.
Q. So this is the first time you've ever seen something like a pronouncement like that from Standard & Poor's?
A. I think it's safe to say it's extraordinary, but you'd have to ask somebody who thinks they read all of them or --
Q. And that's not you?
A. I have not done that.
Q. How did you become aware of the Standard & Poor's pronouncement?
A. If you want to know how I got the document, is that your question?
Q. I want to know how you became aware of the

pronouncement, if that means you called Standard & Poor's and got the document --

A. No, no. I got that --

Q. -- Mr. Gibson from the company gave it to you, Mr. Swearengen gave it to you.

A. I got that from the company, but I routinely the ask the company, or treasurer office or someone to send me what they have because they get them all and they keep them.

Q. And do you know --

A. And we don't necessarily get them in my office because we don't -- they go to people in securities and people that subscribe to them, and we don't subscribe to all of that. We subscribe to ValueLine, Standard & Poor's.

Q. Do you know in arriving at their ratings whether or not companies do presentations to Standard & Poor's and have input on the Standard & Poor's reports?

A. I know companies make recommendations or make representations to the rating agencies.

Q. Do you know whether or not the rating agencies provide drafts of the reports for companies to review prior to publishing them?

A. I know sometimes they do. I think sometimes they don't.

Q. Do you know if they did that in the case of Empire District Electric?

A. I'm sure they have done so in the past. I don't know if they did in this instance or not.

Q. Did you ask the company that?

A. I haven't discussed that with the company.

MR. MICHEEL: Thanks a lot for your time. Really appreciate it.

(PRESENTMENT WAIVED; SIGNATURE REQUESTED.)

CERTIFICATE OF REPORTER

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, KELLENE K. FEDDERSEN, RPR, 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 to 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.

____
KELLENE K. FEDDERSEN, RPR, CCR
Notary Public, State of Missouri
(Commissioned in Cole County)
My commission expires 3/28/05.

SIGNATURE PAGE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, Donald Murry, do hereby certify:

That I have read the foregoing deposition;

That I have made such changes in form and/or substance to 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 the ____ day of________, 2004, at ____.

____
DONALD MURRY

Notary Public:
____
My commission expires:
____

KF/Donald Murry
Re: Empire District Electric Company

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ERRATA SHEET

Witness: Donald Murry
In Re: Empire District Electric Company

Upon reading the deposition and before subscribing thereto, the deponent indicated the following changes should be made:

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Reporter: Kellene K. Feddersen, RPR, CSR, CCR

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Midwest Litigation Services
714 West High Street
P.O. Box 1308
Jefferson City, MO 65102

Phone (573)636-7551 * Fax (573)636-9055

November 11, 2004

James Swearengen
Brydon, Swearengen & England
312 East Capitol
P.O. Box 456
Jefferson City, MO 65102-0456

In Re: Empire District Electric Company

Dear Mr. Swearengen:

Please find enclosed your copy of the deposition of Donald Murry taken on November 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. Krueger for filing prior to trial date.

Thank you for your attention to this matter.

Sincerely,

Kellene K. Feddersen, RPR, CSR, CCR
Enclosure
cc: Keith Krueger

SIGNATURE PAGE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, Donald Murry, do hereby certify:

That I have read the foregoing deposition;

That I have made such changes in form and/or substance to 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 the 1st day of December 2004, at ______________________.

Donald A. Murry

DONALD MURRY

Notary Public:
Carolyn S. Hanes
My commission expires:
Dec. 4, 2005
#01019787

NOTARY SEAL PUBLIC
CAROLYN S. HANES
Oklahoma County
Notary Public in and for
State of Oklahoma
My commission expires Dec. 4, 2005.

KF/Donald Murry
Re: Empire District Electric Company

ERRATA SHEET

Witness: Donald Murry
In Re: Empire District Electric Company

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Reporter: Kellene K. Feddersen, RPR, CSR, CCR

Page: 17	Line: 16
Should read: cost of capital in the **mind of the** investor is. That's	
Reason assigned for change: delete minded / insert mind of the	
Page: 21	Line: 20
Should read: Q. Constant **price** earnings ratio?	
Reason assigned for change: incorrect spelling	
Page: 21	Line: 13
Should read: constant – assumed a constant payout **ratio**. The answer to	
Reason assigned for change: incorrect spelling	
Page: 25	Line: 8
Should read: think it would probably depend on the time **series**, the	
Reason assigned for change: incorrect word	
Page: 61	Line: 15
Should read: theory **will** essentially be neutral on that, or that would	
Reason assigned for change: incorrect spelling	
Page: 63	Line: 8
Should read: whether or not they **can employ** an intervention strategy that	
Reason assigned for change: word omitted	
Page: 71	Line: 8
Should read: numbers. She did also talk to an internal **auditor** within	
Reason assigned for change: incorrect word	
Page: 72	Line: 25
Should read: another accounting **category**. In the numerator there might	
Reason assigned for change: word omitted / delete duplicate "there"	
Page: 76	Line: 15
Should read: Regulatory Associates, or **RRA**, and I did not investigate	
Reason assigned for change: incorrect spelling	
Page: 77	Line: 24
Should read: have them read some classics like **Bonbright**, Alfred	
Reason assigned for change: incorrect spelling	
Page: 77	Line: 24
Should read: **Kahn**, **Coase**. I might have them read Modigliani and	
Reason assigned for change:	
Page: 83	Line: 8

Should read: **Cicchetti**, a third is Zhen Zhu, and a fourth would be	
Reason assigned for change: incorrect spelling	
Page: 83	Line: 10
Should read: **Nist**, and she obviously helped with preparation.	
Reason assigned for change: incorrect spelling	
Page: 84	Line: 9
Should read: A. **Cicchetti**.	
Reason assigned for change: incorrect spelling	
Page: 84	Line: 11
Should read: A. C – i – **c** – c – h – e – t – t – i.	
Reason assigned for change: incorrect spelling	
Page: 84	Line: 12
Should read: Q. And what did Mr. **Cicchetti** help you with?	
Reason assigned for change: incorrect spelling	
Page: 84	Line: 20
Should read: **Mr. Cicchetti** read my testimony in its drafting stage	
Reason assigned for change: incorrect spelling	
Page: 85	Line: 3
Should read: Q. And what was Mr. **Cicchetti's** view?	
Reason assigned for change: incorrect spelling	
Page: 85	Line: 11
Should read: Q. What questions did Mr. **Cicchetti** have for	
Reason assigned for change: incorrect spelling	
Page: 86	Line: 24
Should read: Q. I believe you talked about a Ms. **Osburn**.	
Reason assigned for change: incorrect spelling	
Page: 86	Line: 25
Should read: **A. Audrey Osburn**, yes. Or excuse me. Audrey	
Reason assigned for change: incorrect spelling	
Page: 87	Line: 1
Should read: **Osburn**.	
Reason assigned for change: incorrect spelling	
Page: 87	Line: 2
Should read: Q. And what did you discuss with Ms. **Osburn?**	

Reason assigned for change: incorrect spelling	
Page: 87	Line: 16
Should read: them. Might have been **Dr**. Knapp. Might have been me, she	
Reason assigned for change: change Mr. to Dr.	
Page: 87	Line: 18
Should read: organized in the office, the text goes through Angie **Nist**,	
Reason assigned for change: incorrect spelling	
Page: 87	Line: 19
Should read: but the schedules come from **Audrey Osburn**. So we feed into	
Reason assigned for change: incorrect spelling	
Page: 90	Line: 11
Should read: A. Probably **Haskell** Wald. If you're talking	
Reason assigned for change: incorrect spelling	
Page: 90	Line: 13
Should read: would have been **Haskell** Wald. That's one party that comes	
Reason assigned for change: incorrect spelling	
Page: 91	Line: 22
Should read: Q. What about, for example, Dr. **Morin's** book,	
Reason assigned for change: incorrect spelling	
Page: 92	Line: 19
Should read: Whether Roger **Morin** uses his book as a	
Reason assigned for change: incorrect spelling	
Page: 93	Line: 19
Should read: A. We were just talking about Roger **Morin's**	
Reason assigned for change: incorrect spelling	
Page: 93	Line: 20
Should read: book, and I think his book criticizes the **br plus** sv, as I	
Reason assigned for change: incorrect spelling / word omitted	
Page: 94	Line: 1
Should read: more reliable through other methods than using the **br** plus	
Reason assigned for change: incorrect spelling	
Page: 95	Line: 7
Should read: is closer to other things than to the **br plus** sv. One is the	
Reason assigned for change: incorrect spelling / word omitted	

Page: 95	Line: 14
Should read: discussing the use of historical growth rate, the **br** plus	
Reason assigned for change: incorrect spelling	
Page: 95	Line: 15
Should read: sv, as opposed to projected growth rate to determine **br**	
Reason assigned for change: incorrect spelling	
Page: 95	Line: 21
Should read: A. No. The criticism was of the **br** plus sv.	
Reason assigned for change: incorrect spelling	
Page: 95	Line: 25
Should read: Q. Have you used the **br** plus sv growth rate in	
Reason assigned for change: incorrect spelling	
Page: 96	Line: 4
Should read: that there was maybe a superior way to calculate **growth**. So I	
Reason assigned for change: word omitted	
Page: 96	Line: 21
Should read: months ago that Mr. **Cicchetti** who works with me contacted	
Reason assigned for change: incorrect spelling	
Page: 96	Line: 24
Should read: that was even after they had the person on the phone	
Reason assigned for change: delete "take"	
Page: 98	Line: 8
Should read: this case, they take numbers and start averaging **them together**,	
Reason assigned for change: delete "today" / insert "them together"	
Page: 99	Line: 13
Should read: ValueLine does is they have a person **who** follows a security,	
Reason assigned for change: word omitted	
Page: 110	Line: 10
Should read: marketers into the industry, creation of wires **companies**,	
Reason assigned for change: incorrect spelling	
Page: 110	Line: 20
Should read: **relevant**. I have some problems with how it might be	
Reason assigned for change: incorrect spelling	

Page: 111	Line: 8
Should read: **I could logically comment on it.**	
Reason assigned for change: incorrect spelling	
Page: 121	Line: 4
Should read: of adjustments to a market **based** capital **structure**, and	
Reason assigned for change: delete "to a" / insert "based"	
Page: 121	Line: 12
Should read: A. Well, I told you at least **one** case when I	
Reason assigned for change: word omitted / delete "is"	
Page: 121	Line: 21
Should read: book **value** and that was my recommendation on the capital	
Reason assigned for change: insert "value"	