BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric)
Company d/b/a AmerenUE for Authority)
to File Tariffs Increasing Rates)
for Electric Service Provided to)
Customers In the Company's Missouri)
Service Area.) Case No. ER-2008-0318
)

DEPOSITION OF STEPHEN G. HILL

Taken on behalf of AmerenUE
October 8, 2008

Pamela G. Williams, CCR 880

QUESTIONS BY:	PAGE NO.
Mr. Byrne	5
Mr. Williams	119

INDEX OF EXHIBITS

AMERENUE NO.		PAGE MKD.
1	List of Testimonies	8
2	Billing Information	8

(Whereupon the exhibits were attached to the original and copies.)

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DEPOSITION OF WITNESS, STEPHEN G. HILL, produced, sworn, and examined on the 8th day of October, 2008, between the hours of one o'clock in the afternoon and four-fifteen in the afternoon of that day, at 9900 Page Avenue, Suite 103, St. Louis, Missouri, before PAMELA G. WILLIAMS, a Notary Public and Certified Court Reporter within and for the State of Missouri, in a certain cause now pending Before the Public Service Commission, in the State of Missouri.

APPEARANCES

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UE Exhibit No. 63
Case No(s). ER-2008-0318
Date 11-21-08 Rptr KF

Page 5

IT IS HEREBY STIPULATED AND AGREED, by and between counsel for AmerenUE and counsel for Staff, that the deposition of STEPHEN G. HILL may be taken in shorthand by Pamela G. Williams, a notary public and shorthand reporter, and afterwards transcribed into typewriting; and the signature of the witness is expressly requested.

* * * * *

STEPHEN G. HILL,

of lawful age, being produced, sworn and examined on behalf of AmerenUE, deposes and says:

[EXAMINATION]

QUESTIONS BY MR. BYRNE:

Q Good afternoon, Mr. Hill. My name's Tom Byrne and I am an attorney representing Ameren UE. We are here today to take your deposition in Case No. ER-2008-0318 which is Ameren UE's electric rate case that is currently pending before the Missouri Public Service Commission. And with us in the room today are Nathan Williams and Eric Dearmont who are both attorneys for the staff of the commission and, of course, the court reporter. Mr. Hill, could you please state your name and business address?

A My name is Stephen G. Hill. My business address is P.O. Box 587, Hurricane, West Virginia 25526.

Q And by whom are you employed, Mr. Hill?

A I'm self-employed.

Page 6

Q Okay. And is it Hill Associates is your --

A Right. D/b/a, doing business as Hill Associates.

Q Okay. And are you the same Stephen G. Hill that filed direct testimony in Case No. ER-2008-0318 on behalf of staff of the Missouri Public Service Commission on the issue of return on equity?

A Yes.

Q Okay. And, Mr. Hill, have you ever been deposed before?

A Yes.

Q Okay. Well, I'd like to go over some -- a couple of preliminary matters which are, I think, pretty normal in depositions. First of all, if you don't hear one of my questions or you don't completely understand it, will you ask me to repeat it or correct it so that you understand it?

A Sure.

Q Okay. And second, to your knowledge is there any reason that you wouldn't be able to completely understand or answer questions today? Like, for example, you're not on any medication or anything that would interfere with you answering questions today?

A No.

Q Okay. And there's no other reason that you know of?

Page 7

A No.

Q Okay. And third, if you would like to take a break at any time, you know, please just let me know, we can take a break any time you want.

A Okay. Sure.

Q I'd like to start by asking about did you receive the notice of deposition that I sent the staff attorney?

A Yes, I did.

Q And I think you've brought some things that were asked for in that notice of deposition. I was wondering if you could tell me what they are?

A The first is a list of testimonies. I had already drawn up a list of testimonies from 2000 forward to the most recent one. I think the Appendix A request was for the last ten years. This I already had drawn up and it's, you know, if you want two more years '98 and '99 I can provide them. But this is, you know, 90 percent of those testimonies.

Q Okay. I think that's okay for now. This will be fine.

A The other stack of paper is you also asked for my billing to the Missouri Public Service Commission. I think, again, that was over the last ten years. And the only two cases in which I've worked for the Public Service Commission have been the Ameren cases, this one and the one immediately prior to this one. And those are all the bills in both of those cases. They're all dated.

Page 8

Q I guess what we probably ought to do is mark these as exhibits so that we know what they -- so that they tie to your deposition if that's okay?

A Sure. Sure.

Q So the first one I'll mark as Exhibit One. Is that okay?

A The list of testimonies.

Q Yes, the list of testimonies since 2000. And the second one I'll mark as Exhibit Two which is the billing information for this case and the last case; is that right?

A Yes.

Q Okay.

(Whereupon, Deposition Exhibit Nos. 1 and 2 were marked for identification by the reporter and a brief discussion was held off the record.)

MR. BYRNE: We're back on the record. Based on our discussion off the record I'd also like to say that we've apparently already received the testimony, copies of the testimony that we asked for, copies of the articles that Mr. Hill wrote, copies of Mr. Hill's work papers.

Page 9

MR. WILLIAMS: In this case.

MR. BYRNE: In this case. And anything else, Nathan?

MR. WILLIAMS: Resume.

MR. BYRNE: And a copy of his resume is attached to his testimony so we have received all that.

Q (By Mr. Byrne) Mr. Hill, do you have a copy of your testimony filed in Case No. ER-2008-0318 with you?

A Yes.

Q Okay. And the first topic I'd like to talk a little bit about is your background. From looking at your resume that's attached to your testimony I understand you got a degree in chemical engineering from Auburn; is that correct?

A Yes.

Q What year was that?

A Seventy-one.

Q 1971. Okay. And then after that you went to Tulane?

A Yes.

Q Did you go directly after you graduated from Auburn to Tulane?

A Yes, I did.

Q And then you got a MBA from Tulane?

A Yes.

Page 10

Q And graduated in 1973 it looks like; is that correct?

A That's right.

Q Okay. And then what did you do when you graduated from Tulane?

A For a couple of years I played music professionally. I then worked for -- moved to West Virginia. And then as it says in my employment began working for the state air pollution control commission in West Virginia in '75. Continued to play music off and on professionally. Worked for the air pollution control commission for a couple of years. And then in the late '70s went back to playing music full time which ended with my employment with the Public Service Commission in West Virginia in '82 and I embarked on my current career.

Q Okay. What just out of curiosity, what musical instrument do you play?

A I play base and guitar and a couple of other sundry things but mostly those two things.

Q Great. Okay. And then once you started at the Public Service Commission, and it says consumer advocate. I guess is that kind of similar to the office of the public counsel in Missouri or is it more like the staff?

A Yes, it's an -- in West Virginia it's an

Page 11

adjunct of the public service commission but it is a division of the public service commission. But it's effectively the same as public counsel in Missouri.

Q Okay. And is there a separate staff that is -- in West Virginia that's like the staff in Missouri?

A Yes. There's a public service commission staff that is like the public service commission in Missouri. And they present cases and represent the staff separately from consumers or the company. Similar to the way they do it here.

Q Okay. And how long did you work as the consumer advocate in West Virginia?

A Well, I worked through the 1980s. It says here in my resume that I started Hill Associates, I started consulting in the late '80S. And I was fortunate actually that West Virginia had a civil service classification such that you could work part time. And I declared that I would work at first three-quarter time and then half time while I was beginning to start consulting.

Because being in this -- in the field for a number of years and developing expertise and testifying expertise in cost of capital I began to meet people around the country that had a need for cost of capital witness, because there are not too many folks that do it on the consumer side. And so I saw an opportunity to be a

Page 12

consultant and sort of started that way.

So there's a bit of an overlap there working for the public service commission through the late '80s and then starting my consulting business kind of overlapping there at the end of the 1980s.

Q You think like just a couple years it overlapped?

A Oh, about -- it wasn't that long. It was more like half a year, six months, maybe three-quarters.

Q And then when you started your own consulting practice was it primarily representing consumer interests in public service commission cases?

A Yes, initially it was.

Q Okay. And then did it -- I mean has it stayed that way or has it evolved to the point where you're representing all different kinds of entities?

A It has evolved. I've represented -- I can't remember exactly the first commission that asked me to testify. Might have been Arizona, but I'm not sure about that. But over time as I began to get a reputation as a cost of capital witness I began to be asked by other parties besides consumer advocates. And first it was commissions and most recently in Missouri I'm sure you know I testified on behalf of a company first time.

Q Trigen?

A Trigen, right.

Q And is that the first time you represented a company in a proceeding?

A Yeah.

Q When did you start, if you know, about when did you start doing -- represent staffs?

A Well, I don't have a date in mind when that started. I would say -- I would have to guess mid '90s. But I can say that most of my work and in 250 cases I'm sure 80 percent of it, 75 percent of it has been on behalf of consumer advocates. Maybe 20 percent on staffs and just that one case recently for the company. For a company.

Q Okay. I was interested in you are, it looks like, certified as a certified rate of return analyst?

A Yes.

Q Is that -- And what organization gives that certification?

A It's the Society for Utility and Regulatory Financial Analysis -- Analysts, I'm sorry. It's called SURFA, S-U-R-F-A for short.

Q Okay. And what do you have to do to get that certification?

A You have to take an examination. That -- just a little bit about SURFA, it started out as a national rate of return analyst society. It was started about 25 years

ago by a woman that worked at FURC and a cost of capital expert named Joe Brennan who was famous in the industry, I don't know if you guys have heard of him or not.

But they decided that even though they were on different sides of the aisle that they would get together and have a meeting discussing issues of the day and that sort of thing. And that society has stayed together and stays oddly divided with the industry representatives and staff or consumer representatives both going to the meetings and arguing over issues much as we do in rate cases.

But early on they decided to have a certification program which they drew up -- in which they drew up requirements that you had to meet and a testing procedure that you had to undergo which was held a couple of days before the annual meeting. And I think I took the test in probably the late '80s, something like that.

Q And is the test focused on cost of capital issues --

A Yes.

Q -- in utility rate cases?

A Basic finance issues, you know, kind of the college level finance, present value theory, embedded debt costs, you know, fundamental kind of discounted cash flow calculations, that sort of deal. And, also cost of capital

issues. Models, theory, support, that sort of thing.

And each of the tests, and I assume, I haven't actually attended any tests lately, but I assume each of them still winds up in a mock rate case sort of estimated cost of capital quote unquote testimony. You have to do here's the data, do your analysis and support it. So that's the final sort of day of testing.

Q And about how many members are there in this organization?

A I should know this, I've been on the board for five years and I don't know the answer to that question. I would say less than two hundred.

Q Less than two hundred, okay. And is a part of the benefit of this organization is it helps you keep up with what's going on with regard to cost of capital around the country?

A Exactly. Well, for example, last year Dr. Morin and I both gave presentations to the -- to SURFA. His was about DCF and mine was about restrainism, they were on different days. But this year I'm trying to get ahold of -- I did get ahold of Eugene Famma to try to get him to come to speak about his Famma French model which is an alternative to the Cap M. He declined so I'm now going for French, see how I do with that.

So we're -- and I'm not particularly enamored

of that model. I don't think it's very useful. But it's something that we're interested in. And so we'll have someone come to represent the theory, the application, and then we'll have some of our members as a cross critique panel. And so it's going to be a lively debate.

Q And can you -- Do you take a look at like what different states are doing like, you know, in terms -- on this topic?

A Not so much. That's really not the issue. It's more sort of global than that. It doesn't break down to -- I mean we -- people will obviously talk about that, you know. Like Dave Murray, for example, is a member. He will say well, in Missouri we don't do it that way, we do this.

Q Right.

A So it's more anecdotal that way. But we don't really say here's a matrix and --

Q You're looking more at the theory behind it?

A Yes, the theoretical thing. People present their opinions about how things should be applied. That's one aspect of it. Another aspect of it is we'll have one of the members of Standard & Poor's come in, for example, and we did a session where we had hypothetical XYZ utility with these characteristics. And using the Standard & Poor's information that they use to rate companies let's

Page 17

work up a rating.

So we would break down into groups and you figure out what the rating is. And we'll see how many people rate the company triple B plus, how many rate it A minus. That was one of the more interesting things we did. But so it's not exactly always cost of equity capital related. It can be issues on the global scale about where the debt markets or where the oil prices are going to go. So it gets a broader reach than that.

Q And I guess would it be fair to say that one exercise you were talking about were you looking at how rate of return or an authorized rate of return can affect your credit ratings or was it just separate, a whole separate examination of all different things?

A I would say that particular exercise was an examination of all different things. But that, of course, is a -- is a factor. But we were looking more at coverages, cash flow coverages.

We were looking at what kind of, you know, construction strain the company was under. Their service territory, you know, the basic fundamental business risk which is really the foundation of a bond rating. If your company's got a service territory where people are making pretty good salaries and it's growing and they got a good industrial base, blah, blah, blah, that's a very positive

Page 18

thing for the company.

Then you look at financial matrix next as an overlay, see what the final rating's going to be. So that's the kind of thing we looked at. That order of consideration. And, of course, allowed return is in the mix. But it's not the focus.

Q Yeah. Okay. Do you have any specific training that related to cost of capital, I mean aside from sort of your general education at Tulane I mean is there any specific training that you've undergone to train you to calculate cost of capital?

A Other than a master's degree in business, my involvement with SURFA, reviewing way too much testimony, I would say no.

Q Okay. Let me ask you, now you're self-employed are you -- and it's Hill & Associates is your doing business as name. Are you -- Do you have an office or do you operate out of your home or do you have employees or just tell me a little bit about --

A I operate out of my home, I have no employees.

Q Okay.

A I have had situations where I have hired associates to do work for me when I was too busy. There are people that I have trained in -- when I left the consumer advocate in West Virginia they asked me to train

Page 19

someone to take my place. This -- it was a female and I had her do a couple of cases for me when I was too busy to do a case.

Q And do you generally charge your clients hourly rates?

A Yes.

Q Okay. My understanding, turning a little bit to your testimony, is you are accepting the company's capital structure; is that correct?

A Yes.

Q And how come you were willing to accept the company's capital structure?

A Well, the company is -- the main difference in the capital structure's outlined in my testimony is the issue about short term debt. About using the actual amount of short term debt or an amount that's adjusted for CWIP balances. And my understanding through discussions with the staff that that methodology has got long standing approval in the state.

So I'm not going to try to upset the apple cart, you know. I think it's reasonable to use the actual amount. But that's not the way it's been done here so I'm willing to recognize that regulatory adjustment.

I wanted to -- I quantified it, the rate impact of it so the commission could understand what the

Page 20

rate impact is. Because I think it's favorable for the company, favorable regulatory treatment. And I wanted the commission to be aware of that. So that's why I went through that exercise. But I'm willing to utilize the company's request 50 percent equity which I think is a high equity ratio. And because it's higher than average I think it's appropriate to recognize that lower financial risk in the equity return that I recommend. So that's how I deal with it.

Q Okay. I'd like to talk you a little bit about cases where you've appeared at the Missouri Commission just to make sure I know about them.

A Okay.

Q I think I do. I guess your -- the Trigen case we talked about before. You're representing Trigen on the cost of capital, right?

A Right.

Q And that case is still pending; is that true?

A I think it was settled.

Q Oh, okay.

A Just for your information and background of this, started at least two years ago, it might have been more. I was contacted by a consulting firm here in Missouri called Utilitech. I do work with them from time to time.

Page 21

Q Is that like Steve Carver and --
A Yes, Mike Brosch (phonetic).
Q Mike Brosch.
A And it was Steve Carver was the lead agent in the case and contacted me and said this utility wants to use quote, unquote consumer advocate type witnesses to present their case. They haven't had a case increase rates in years and years and it looks like it's pretty clear that they do. And they think the fastest way to get there is to use, you know, consumer advocate witnesses. And I said that's fine with me. I mean I'll provide my analysis. You know, if they don't like the number that's their problem. And that was not an issue so.
Q Do you remember what you recommended for the ROE for them?
A I think the ROE for them at the time I did it they were below investment grade and I think the ROE was ten percent.
Q And did you -- You ended up filing direct testimony, I guess?
A I did file direct testimony.
Q Did you file any rebuttal or --
A No, I think I Murray was the staff representative and I didn't have any problem with his testimony. Situation had changed, the company had changed

Page 22

hands, changed hands three times while I was involved in this whole thing. Changed hands the last time between my filing my testimony and when Dave looked at the case. And he had a different slant on capital structure and debt costs which seemed totally fine to me. So I didn't really have anything to say.
Q And Dave Murray is a staff -- a Missouri Public Service Commission staff --
A Yes.
Q -- cost of capital expert, right?
A Yes, he is.
Q And was his return on equity also 10 percent or do you remember?
A I don't recall.
Q Okay. But however you -- a settlement was reached as far as you know on what it should be?
A Yeah.
Q Okay. And then the next one on your list is our previous case so I know about that. And then this case. Are there -- Have you been involved in any other cases before the Missouri Public Service Commission?
A Yes, but not for the staff. And they were more than beyond 2000 so they aren't listed there. There were cases for the public counsel. And I think there was a Kansas City merger case, I'm trying to think. I think

Page 23

there was a water company case. And I don't remember the name, I'm sorry.
Q That's okay.
A And it might have been a gas case. I'll have to look and see. I'll be happy to do that.
Q Yeah, I don't want to -- I know you've done 250 cases and I don't want to burden you with getting every piece of testimony. But it would be helpful if we could at least see the Missouri testimony if that's possible.
A Sure. Do you want copies of that or?
Q Yeah, copies of that if you don't mind.
A Okay.
Q I can send a data request if you'd like.
A No, no, I'll do that.
Q Okay. Great.
MR. WILLIAMS: Are you just asking for the ones that he recalls or that he's mentioned here or -- how far back do you want to go, I guess, is my question?
Q (By Mr. Byrne) Well, I'm hopeful there aren't very many of them no matter how far back we go.
A Yeah, I think that's true.
Q I guess I'd like all of them if it's not too much trouble.
A Okay. All previous Missouri cases.
MR. WILLIAMS: Well, certainly whatever he

Page 24

has.
Q (By Mr. Byrne) Right. Whatever he has. If he's got them all, you know.
A Yeah, mouse eaten.
Q Okay. And do you know if in any of those Missouri commission cases that you testified in has the Missouri commission ever adopted a return on equity that you recommended?
MR. WILLIAMS: I'm going to object to that as being irrelevant. You can go ahead and answer but with the objection on the record.
A First of all, it's unusual that a commission would adopt any one particular witness's number. Although that has happened on occasions. I don't recall that it happened in Missouri but, you know, I haven't really checked it.
Q (By Mr. Byrne) Okay. Do you recall if they've ever, the Missouri commission has ever explicitly rejected your analysis in any of those cases?
A I don't recall. I don't believe that's the case.
Q I mean I think you --
A That's also pretty rare.
Q I think -- I think usually they typically just pick, you know, they recite the recommendations and pick a

Page 25

number.

A Yeah, exactly. They say somebody said this and they said that, and we chose in between this and that.

Q Yep.

A In my experience.

Q Now, in this case you are recommending a 9.5 percent return on equity as your -- well, it's really not your mid point but if you had to pick a point in your analysis the point that you're picking is 9.5 percent; is that correct?

A Right. Right.

Q And I was wondering, have you ever recommended a return on equity as low as 9.5 percent in other cases?

A Yes.

Q Do you remember -- well, often or do you remember ones that you did?

A Well, over the past four or five years the cost of capital has been pretty solidly between 8.75 and 9.75. So I think you could look at any of the cases that I've given you that are recent and you'll see those kinds of numbers.

Q And when you say -- you mean return on equity?

A Return on equity, not overall return. Overall return would be lower than that.

Q Okay. So you think for about four or five

Page 26

years you've been in that range?

A Yes.

Q Okay. Let me ask you this, to your knowledge has any state commission ordered a return on equity of 9.5 percent or lower in 2007 or 2008?

A I'd have to check that. I don't know that that's the case but it wouldn't surprise me. I have tat data at home but I don't know, I haven't committed it to memory.

Q Okay. You can't think of ones as we sit here that's ordered 9.5 percent or lower?

A I can't think of one, no. Doesn't mean that's not the cost of capital.

Q Sure. Okay. I'd like to try to talk to you a little bit about how you developed your return on equity. And my understanding is that the primary analysis that you used was the discount cash flow or DCF method; is that a fair characterization?

A Yes, but I also have always -- I think the DCF is the most accurate method. But I've always used other methods to check and temper the DCF.

Q So would it be fair to say in this case your really the primary one is the DCF and the other ones you're using as sort of checks on the DCF?

A Well, I'm a little leery of saying the primary

Page 27

one is the DCF. I do think it's the most -- the most accurate like I said. And if I had to pick only one to use that would probably be the one I would use. But I've never used it -- in the entire time I've been testifying on this topic, which has been quite a while, I've always used multiple methods. Because I've always believed that multiple methods will lead to the best result.

Q So would it be fair to say that the other methods aside from the DCF are more than -- in this case are more just checks on your result on the DCF; is that a fair characterization?

A They -- I think that's fair. I think that they are important methodologies that, for example, if I got a DCF result of 9 percent and my other methodologies indicated a range of 9 and a quarter to 10 percent, then I certainly wouldn't recommend 9 percent. That DCF number would have to adjusted upward. So these other methodologies have weight and I use them in that way.

Q And maybe not -- I don't want to put words in your mouth -- but maybe not as much weight as the DCF but they still have weight; is that right?

A Let's just say that they have weight. I can consider all of the methodologies when I'm making my recommendation. And I've said before I think the DCF is the most accurate.

Page 28

Q And I guess just to follow this up, it's certainly not a rigid mathematical formula how you weight these, I guess; is that true --

A I think that that's --

Q -- it's a judgment?

A -- fair. I think the cost of capital process is a judgmental process. There's no way to get around that fact.

Q Okay. Can we -- all right, I hesitate even to ask this question. But do you think you could briefly explain how the DCF method works and the formula that's embodied in the DCF?

A Yeah, very briefly it's pretty simple. The dividends are cash flows in the future. They're periodic cash flows. And those cash flows under the DCF theory are discounted by investors at a certain rate. And the present value of all those future cash flows is the stock price. The discount rate at which investors bring back all those cash flows to the present value is the cost of capital.

Q And are there other -- are there other cash flows besides the dividends? In other words, is there appreciation of the stock that's a piece of that?

A Well, it's often the simplistic DCF is often described as we have dividends for a couple periods that we sell the stock. There's a P zero, piece of zero which is

Page 29

the current price. And P so X or when you sell the stock. And if that's the cash flow you have in the future then that would be discounted back as well at the same discount rate, i.e., the cost of capital. You could look at it that way.

But then you have to ask yourself, well, what is that piece of X, that price in the future. That itself is a discounted value of dividends out beyond that price. So really what you're looking at is a stream of dividends out to infinity that are discounted to the current price. Of course, once you get past 50 years the present value of those dividends is very, very, very, small. It doesn't have much impact on the price.

But so the answer to that question is, yes, and no. You can look at it that way. But what is that price in the future based on. It also is based on the stream of dividends beyond that price.

Q Okay. And my understanding is the DCF method is a pretty commonly method in different commissions around the country; is that a fair statement?

A Yes.

Q Okay. And it's currently being used around the country?

A Yeah, it's the most common method.

Q Okay. And just if we could just previously

Page 30

talk about the other analyses that you also used. I guess the first one might be the Cap M; is that the first time one in your testimony after DCF?

A Yes.

Q Can you briefly explain how that works?

A Yes. The capital asset pricing model is based on a theory of capital markets in which the expected return is a function of the risk free rate. And an additional risk related to the non systematic risk of a particular security. And that probably requires some explanation.

Q Please explain.

A There's as far as Cap M theory goes there's risk that has to -- that relates to the economic system called systematic risk. And there's risk that's related to the particular security, that's non systematic risk. In Cap M theory, non systematic risk can be diversified away and is of no concern. Company specific risk can be diversified away. And is not of a concern to investors. The only concern -- risk of concern is systematic risk. Risk that can't be diversified away.

So the return that investors expect is related to the risk free rate and the degree of risk of systematic risks exhibited by any particular security. And that degree of systematic risk is measured by a factor called beta.

Page 31

If the security has equivalent risk to that of the market the beta is 1.0. And the expected return is the same as the expected return for the market. If the security being considered has lower risk than the market, the beta will be below 1.5. Utility betas are typically between .6 and .9. They're less risky than the market. So the expected return for a utility stock is below that of the market.

In the Cap M formula the cost of equity would be equal to the risk free rate, and I'll tell you what that is in a minute, plus beta times the market risk premium. And the market risk premium is the difference, expected difference between the return on the market and the return, the risk free return. And the risk free rate is the rate of interest that investors could realize with certainty. What that works out to be is treasury bonds or treasury bills.

Q And I guess the risk free rate, and correct me if I'm wrong, but my understanding is that's generally not much of a point of controversy, don't most experts agree that it's treasury bills?

A It's a point of controversy between practical applications of the Cap M and theoretical applications of the Cap M. The theorists pretty much always use T bills, short term treasuries because they don't have maturity

Page 32

risk. And those are truly risk free. They're the lowest cost securities available and, therefore, the lowest risk securities available.

But practitioners often use T bonds to try to match, to try to get a sense of long-lived risks. Which are some consider to be appropriate for consideration in doing cost of capital which is a more long term phenomenon. But in theory they should both give you the same answer.

Q And has the divergence in interest rates between T bills and T bonds made it -- made it more important to use T bonds in your view in recent years or not?

A Not really. The interest rates do diverge, therefore, it' important to understand the differences between them in relation to long term historical averages. The long term historical difference between T bonds, long term treasuries, and T bills, short term treasuries, is about a 1.5 to 2 percent.

Today with all that the Fed's been doing T bills are pushed down very, very low right now, one percent, one and a half percent. T bonds are still up, the long term treasury bonds are still up in the four percent, four and a half maybe, I haven't looked today for that. That could be down some, too. So there's a three percent difference. That's wider than historical.

Page 33

So, if you were to use T bills in this situation you would probably get an understated Cap M for that reason. And the reason you can use both, let's say the current situation didn't exist and the yield differential between those two items was normal.

Q One and a half?

A One and a half to two. Then you can use long term T bond with your beta and a market risk premium related to long term T bonds and come up with say ten percent. If you use short term T bills your company beta and a market risk premium related to T bills which would be larger, then you could also come up with ten percent. So that's why I couldn't answer you yes one way or the other that you have to use T bonds or have to use T bills. Because in theory they'll give you the same result. If the spread between the two is equal to long term historical averages.

Q Let me ask you this, I thought there was maybe an inconsistency in your answer but it's probably that I don't understand it. I thought -- doesn't -- doesn't the beta component of the equation build in company specific risk into the equation? Because I thought you said you don't look at company specific risk because it can be diversified away.

A But it's -- here's -- that's a good question

Page 34

actually. And I think --

Q You sound surprised.

A -- no, I think what I said probably gave you that impression and it's not the right impression. When you look at what beta is, is the risk relative to the market. The risk of a company relative to the market. So it is not the company specific risk but it's the risk of that company to that of the market. And the way it's measured is the co variance of reports of one particular stock to the co variance of returns in the market.

So, for example, if company X is -- if you use let's say we did like Value Line does and just use the stock price and not the co variance of returns which is much more complicated. The stock price of company X is like a roller coaster zig zag, zig zag. And let's pretend that the stock price of the market is not. Which today, of course, it is. But let's pretend that's not the case. Then company X is going to have a beta that's much higher than the market because the volatility and the risk of that company compared to the market which that's what beta is, is going to be high.

Q And they're going to demand a higher cost of capital?

A And investors to invest in that risky roller coaster stock are going to demand a higher return than the

Page 35

market. So the risk is measured -- that's why we talk about systematic risk. It is measured relative to that of the market.

Q Okay. And my understanding from my limited experience is that Cap M also is pretty widely used by utility commissions around the country?

A I see it in, I think, almost every case that I'm in. As for how much utility commissions rely on it, the only evidence I've seen which is a mid '90s survey by Narook (phonetic), shows that not many list the Cap M as something they rely on. Could have changed since then but I don't know that a survey has been done since that time. But back in mid '90s, '96 I believe the survey was, almost every single regulatory body in the U.S. and Canada listed DCF. Only about 11 or 12 listed the Cap M as a specific methodology that they relied on.

Q Okay. Let's look at the other ones. What would be the next one in your testimony, if you know?

A It's something that's called a modified earnings price ratio analysis.

Q Okay. And what's that briefly?

A It's a combination of an earnings price ratio analysis, and that's simply the expected earnings divided by the current price. That's the earnings price ratio. And that at one time was considered a measure of the cost

Page 36

of equity. This is back in the '60s. It's an older methodology.

I first came upon using the earnings price ratio and the expected return when I was involved in the federal energy regulatory commission generic rule making on rate of return on equity for electric utilities which occurred in the 1980s and it was called to a halt in the early '90s.

But as part of that process, which was a multi year process with lots of input from lots of people, one of the methodologies that FURC used to check -- let me back up and say FURC was looking for a methodology to use to estimate the cost of equity for electric utilities.

They had the idea that if they did that in a generic sense then utility X that comes in could say, well, we're riskier than average so if the average is 13 we need 13.5 and that would sort of be the be all end of the rate of return and it would get rid of all this contentious stuff.

Well, it turned out that never happened. They did their -- they did their generic and they published it and still they had these contentious knock down drag out things with rate of return in every case.

Q All the lawyers and the rate of return experts would be out of work.

A Exactly. Right. And we don't want that to happen. So they found that it was like inefficient. So they ultimately got rid of it. But their task was to look for a methodology. In narrowing down the field they look at Cap M and risk premium X Y Z. One of the factors they used to check their results was a combination of earnings price ratio, market to book ratio, and the expected return.

Now, what happens with those two measures, and by two measures I'm talking about earnings price ratio and the expected return, ROE. When they related to the cost of capital through the market to book ratio, and here's how it works. When the market price is above book value, then the ROE, the projected expected return on equity is in theory above the cost of equity, okay.

And at the same time, in that situation when the market price is above book value the earnings price ratio is below the cost of equity. So here we have a situation A, market price above book value. You have the expected ROE above the cost of equity earnings price ratio below the cost of equity.

Now, in scenario two when the market price is below book value those factors switch and the expected return is below the cost of equity. The earnings price ratio is above the cost of equity. So these two factors have a tendency to orbit around the cost of equity capital.

So this a -- and using these two factors, averaging these two factors to get a mid point gives an approximation. And it's not an exact approximation, I have no problem admitting that. But it is a methodology that's different than the other methodologies I use that helps to locate where the centrality of those two measures is. And that centrality is the cost of equity capital.

Q And is what you just described the modified earnings price ratio?

A Yes.

Q Okay.

A Because the earnings price ratio is just the earnings divided by the stock price. And that equals the cost of equity, that one measure only when the market price is approximately its book value. In that situation the earnings price ratio does approximate the cost of equity. But because market prices not so often equal the book value you need to modify that.

Q Okay. This one I had not heard of before. Is it -- is it used very much? I mean or --

A I would say the short answer to that is no. But as I said, the federal agency regulatory commission used it, and I believe they used -- they probably use it and I found this out actually from rebuttal testimony in a case ten years ago. They used something back in the '70s

it's my understanding called the midpoint analysis. And that's what this is.

It's basically taking the earnings price ratio, the expected ROE and averaging them. But they didn't refer to it in the generic rate of return. They just used those two methods and said those methods bracket our estimates so therefore our estimate is reasonable. That's how they used it. And so it was my bright idea to after doing some more research about it, of course, to combine those and average those and I've done it ever since.

Q But FURC doesn't use it now, do they?

A No, they stopped the generic in 1992.

Q Okay. And when you -- to your knowledge are there any other states that use it or rely on it now?

A Going back to that survey, the earnings price ratio is a methodology that is referenced in there. It's not as -- I don't think it has as many users as the Cap M. But it's listed on that sheet as methodologies considered by regulators. And that's not the modified earnings price ratio, that's the original one. But I don't think that one is nearly as good as what I do.

Q And to the extent it's on, you know, it's on that list it's like a considered one rather than relied upon? I mean --

A Yeah, I don't think that you could say anything -- that survey doesn't say which ones do you use to set the cost of equity, it says which ones do you consider. So I think the answer to your question is yes, it's considered.

Q Okay. Because I thought before when we were talking about the Cap M you were saying, well, only 10 or 11 of them rely on it?

A Oh.

Q Does that --

A Well, maybe that emphasis was not correct. But I have to look at the survey. I think that --

Q I mean I usually see Cap M considered or at least one of the things they look at in almost every case at the Missouri commission, but I wouldn't necessarily say they rely on it. So if you had two columns, considered or relied on you'd probably say in Missouri DCF is relied on and Cap M maybe is considered?

A Yeah. You know, I have to look at the survey to see whether it says considered or relied on. And I that -- as I think about it I have to say I'm not sure, but as I think about it I would go back to my original response to say it was relied on, not considered. Because it's quite often that like I said, I see the Cap M in pretty much every proceeding that I'm in. But I would agree with that it's not relied on as much as the DCF. I'd be happy to check that for you and I think I provided that survey in the work papers but.

Q Okay. Well, let me ask you this way. Would it -- let me ask two questions. One is, do you know of a state sitting here now, I know we can look on the paper see, do you know of a state sitting here now that relies on the modified earnings price ratio to set of return?

A No, I would say no. But all the ones I've testified in I've certainly seen it.

Q Right. And would it be fair to say that it's -- if the DCF is the most common and then Cap M is a little less common would it be fair to say this is even -- as far as things that are considered, the modified earnings price ratio is even a little less common?

A That's a little bit of a pejorative framing but I don't really disagree with it. I think it's not something that's widely used. I think that it's -- I've used it for a very long time. I think it's reliable. It's been consistent. It's theoretically robust. That is, when market price and book value change position I see those parameters change position. It follows the theory. So I believe it's an accurate methodology. It is used less, I think, than the Cap M.

Q How long have you been adding it to your

testimony, do you know about?

A I'd say since the mid '80s. Started testifying in the early '80s and I was involved quickly in the generic ROE proceedings at FURC and became aware of it and started using it.

Q In the cases that you've testified in do you remember any commission adopting it as the method of calculating the ROE?

A No, not as the method. They review it, repeat it, cite the results, and then come up with their number.

Q Fair enough. I think there's one more; is that right?

A Yes, market to book ratio methodology.

Q Okay. Help me out with that.

A That really is an algebraic rearrangement of the DCF. As I state in my testimony it's -- you can't really consider it as strictly independent methodology. But I believe as, and I also say this in my testimony, it has value in that it uses different parameters to try to get at the same result.

In other words, I use instead of using growth rates and dividends and that sort of thing, I use retention ratios and market to book ratios and that sort of thing. So I'm using different parameters and projected for the next year and for three to five years in the future in a

very specific way that's different than I do the DCF.

And if my results for the market to book ratio analysis then are different than the DCF, then I have a problem with my DCF. Because if this methodology which is based on the DCF but uses different parameters that are projected, you know, provided by Value Line or other reliable sources, and they give me a different result than the DCF, which does sometimes happen, then I've got to look at the DCF and say, well, maybe I need to, you know, my number needs to move ---

Q Your data's wrong or something like that?

A Well, or I need to move my recommended result more towards these methodologies. Especially if those are corroborated by the Cap M and the modified earnings price ratio like I said a while ago, the DCF is 9, these other things are saying, no, no, it's between 9 and a quarter and 10, then I'm not going to recommend 9.

Q How is this method -- I guess you've kind of told me how it's different. But how is it -- why is it like the DCF? I don't understand that.

A It starts out with the same DCF formula and algebraically rearranges, makes substitutions for the DCF variables so that I can use different variables. In other words, for the dividends it uses the retention ratio and earnings. You know, and so instead of using the dividend

I'm using projected retention ratio and projected earnings and its the same value you see. But it's different parameters.

Q And would you expect normally if things are working right would you expect the DCF and this method, what's it called the --

A Market to book ratio?

Q -- market to book ratio. Would you expect those to produce similar results?

A Yes. And if they don't then there's an issue. And that's for me, that's another way to check the DCF. I've got, you know, I've got the Cap M, totally different methodology. I've got the modified earnings price ratio methodology which is different than the DCF. And then I've got this algebraic rearrangement of the DCF using different parameters than the DCF to check it. So I've got, I think, three checks of the DCF.

Q Got ya. How about this one in terms of do you know of any states that use that method to determine return on equity?

A All states use the DCF. So the methodology that is the basis for market to book ratio, everybody uses. This particular more version, this algebraic rearrangement that's called a market to book ratio analysis, I'm not aware of a commission that has said we base our cost of

Page 45

equity result on the market to book ratio analysis.

Q Okay. As part of your analysis for this case did you look at any return on equities that had been awarded by commissions in other jurisdictions?

A Yes.

Q And how did that play into your analysis?

A It didn't play into my analysis.

Q Okay. How did you use it?

A I make reference to it at the outset of my testimony. Discussing this commission's hundred basis points, page five. And I looked at Regulatory Research Associates publications over the past couple of years. The median ROE for electrics was 10 and a quarter.

Q And that's 2006 and 2007?

A Yes.

Q Any particular reason you picked those years, those are just --

A That was the most recent data I had available. And a hundred bases points on either side of that is obviously 9 and a quarter to 11 and a quarter.

Q Okay. Let's me ask you this, is -- is -- I think you may have sort of already answered this but I'll ask it a different way. In setting an allowed ROE for a utility is the riskiness of the investment in that utility a consideration in setting the appropriate authorized

Page 46

return on equity?

A Certainly.

Q Okay. And I guess it's fair to say that some electric utilities are more risk than other electric utilities?

A Yes.

Q And I think you've even taken some risk factors into account in this case; is that fair to say?

A Yes.

Q And the ones that jump to my mind are the, I guess, the proportion of equity and debt and the capital structure led to an adjustment. And also I think you took into account the fact that we don't have a fuel adjustment clause; is that true?

A Yes, those are the two factors I considered beyond selecting a sample group of companies that I thought was of generally similar risk to Ameren UE.

Q Do -- Let me ask you this, how did you -- how exactly did you make -- did those factors weigh into your analysis? What -- How did you calculate the adjustment for both of those things, if you did?

A I can't give you an exact numeric. The mid point of my range was 9.375. And I noted that the company's 50 percent equity ratio was considerably higher than the industry average which was 46 and even higher

Page 47

still than the common equity ratio average of my companies or Dr. Morin's companies which was 43 and 42 respectively.

So Ameren UE's rate making equity ratio which, again, is higher than its actual ratio is considerably higher than the industry average and certainly higher yet still than the companies I use. So an ROE below 9.375 would be appropriate. Because with less financial risk that imparts less risk to the investor. And that would require a lower return. On the other hand -- I didn't quantify that number. It should be below 9.375.

On the other hand, the company doesn't yet have a fuel adjustment clause. And the fact that most electric utilities do means that that aspect of the company's business risk is probably a little bit higher than average.

So weighing those two factors together, moving the bar down a little bit for the capital structure difference, financial risk difference, and then moving it back up a little bit for the lack of fuel adjustment clause caused me to make the judgment that 9.5 percent was reasonable.

Q So I guess that means it's more bad that we don't have a fuel adjustment clause than it is good that we have a high equity ratio?

A I thought it -- I thought it outweighed the

Page 48

equity ratio difference a little bit. And that, once again, is my judgment.

Q And would it be fair to say that if -- so if you were looking at this case and we let's just say we had a fuel adjustment clause, your recommendation would be something below 9.37 --

A Yes.

Q -- for return on equity?

A That's right.

Q Do you know much below or do you have a ballpark?

A I haven't done that calculation. I would say 9 and a quarter would be reasonable. I don't know if I would go as low as split the difference between 9 and a quarter and 9 or not. I'd have to consider it which I haven't done.

Q Okay. I'm going to ask you about some other potential risk factors. And ask you if that might affect -- might affect the cost of capital for a utility if depending on how you ---

A Any utility or Ameren UE specifically?

Q Just any utility. Well, okay, we already talked about FAC which is important. How about if one utility operates a nuclear plant but another does not, is that -- is that a risk factor that would affect the cost of

Page 49

capital in your opinion?

A These days, probably not. There was a time when that would be -- would be a definite yes. But nuclear history in this country has been benign for a number of years. Mid 1980S it was a big deal. That was a very big deal. And if you are operating a nuclear plant or thinking about building one, it definitely did have an impact on the cost of capital.

But that said, you can make an argument that nuclear plants are more complicated to operate and, therefore, would might ratchet up business risk of a company. So you can make a theoretical argument that it would. I don't know that at this point in time I would make a specific adjustment for that. Because I don't think that that's big on the radar screen of investors today.

Q Okay. And I mean would it be fair then, to say you don't think as a practical matter there's materially greater risk in operating nuclear plants and coal plants or gas fire plants or anything?

A No, I don't -- I don't think that's a correct characterization. I don't think that given the -- Let's put it this way. If you utility X had a hundred percent nuclear generation and utility Y had a hundred percent coal generation then you got a case. If that's all they got is nukes and all they got is coal power plants nukes are more

Page 50

complicated to operate.

Q And they'd be riskier --

A And they would be riskier. Now I think that's pretty clear. But I don't know of any situation that's like that. Nuclear power generally these days is a mix of utilities power facilities. And you've got other risks involved. And when you're talking about comparing a Southern Company to a Puget Energy it's very difficult to parse out those risks, you know. Southern Company's got Vogel Plant in Georgia. But and Puget Energy's got low risk hydro power. But when they have a dry year out there they got nothing and they got to buy everything. So that, you know, which is more risky. You know, that's a very difficult call.

Q Each type of generation has its own risks?

A Each type of generation has its own risk. Nuclear power is definitely more complicated to operate than combined cycle gas or even coal. But coals getting very complicated, too, with the all the talk about coal sequestration and blah, blah, blah. So it's hard. It's hard to say these days and that's why I gave you the answer that I wouldn't give a higher ROE to a company because it had some nuclear generation. I wouldn't do it. In the mid '80's I would have.

Q Do you know if credit rating agencies take

Page 51

that into account, take into account whether you own nuclear plants in setting your credit -- or your credit rating?

A Yes, they do. They take everything -- they take everything into account.

Q And I mean would it be fair to say credit rating agencies think that makes a company more risky when they have nuclear plants?

A I think it depends.

Q Okay. What does it depend on?

A It depends on how big a part of their generation mix it is. And what the operating history of the plant is. If you've got a plant that's teeter tottering, it's got a lot of violations, then, yeah, you got a risky situation. If you got a plant that's worked well, performed well and is a reliable part of the power, cheap part of the power then it works in your favor.

Q And would it also matter how big of a part of your generation portfolio the nuclear plant is?

A I think I said that.

Q Okay. That's a consideration. The more -- the higher percentage in your portfolio it is the more of a risk it is?

A Once again it depends. If you got a good plant, well operated, that's a cheap source of power.

Page 52

That's very valuable these days. It's finally gotten to the point the promise of too cheap to meter, it's finally making sense for companies that have nuclear plants that are operating well, they can run them much cheaper and they're very valuable.

I think that's why, for example, you see Entergy is just about to spin off all of it's nuclear plants into a separate entity. They've got them running pretty well. They are very valuable right now. They get a whole lot more value of those on the free market than they can under regulation.

Q Let me ask you about some regulatory policies and see if you believe different regulatory policies can affect the risk and ultimately the cost of capital. One issue in Missouri is construction work in progress is not allowed -- you're not allowed to recover the cost of construction work in progress while you're building a plant. So say -- well, say an electric utility builds a plant, it has to wait until the plant is operational and in service. But in some other states there's ways to recover the cost while you're building the plant.

And my question to you is, is that a consideration that would make the utility that can't recover its cost more risky to investors? Can't recover its cost until the plant is in service more risky to

Page 53

investors versus the one that is allowed to recover CWIP while it's building the plant?

A I think that that's a clear yes. I would have to say the only caveat I would have to say is that not recovering construction work in process is the norm. Recovering it is the abnorm. It's begun to happen. I think in the past few years there are jurisdictions that are allowing CWIP to be included in rate base in order to facilitate, help facility the building process.

When I started in the business this CWIP in rate base was never an issue. The goal of regulation was to replicate what happens in competition absent, you know, absent a monopoly situation. And certainly Ford motor doesn't earn a dime on a new plant they build until they sell the car. So there is no CWIP anywhere in anybody's rate base except in the utility world.

So in the sort of normal rate base rate of return regulation CWIP and rate base doesn't exist. It's started to come into play because people are now concerned in a more enlightened world about infrastructure building and infrastructure support. So it's begun to exist. And there's no question for an investment point of view, investor likes a company that has CWIP support. And as opposed to one that doesn't. What difference that makes, I haven't done that analysis. Haven't quantified it. It has

Page 54

to do with, once again it's a depends answer. The size of the construction budget related to the current rate base. If it's enormous, if you're building like they did in the 1980s, if you're building a nuclear plant that's ten times your current rate base, you probably need some help. And CWIP would make sense in that situation.

Q So the bigger the construction budget the more getting CWIP and rate base matters?

A The more impact it would have on the financial position of the company. Now, if the company is well situated like if you had a 50 percent equity ratio then that's a healthy equity ratio and I think a company like that could certainly withstand power plant construction under normal situations without CWIP in rate base. It's been done for years and years and years. It's certainly doable.

Q But in any event, having CWIP in rate base is more attractive to investors than not having CWIP?

A I think there's no question about that. It favors investors.

Q Okay. Another sort of a regulatory item is a historic test year versus a projected test year. You know, my understanding I'm only a Missouri person, but my understanding is some other states out there allow projected test years to some degree or another. And it

Page 55

would seem to me at least in an environment where the costs of construction and it seems like the cost of operation of utilities are going up, a projected test year would be attractive to investors rather than an historic test year. But I'd like to know your opinion on that.

A I think it works to the advantage of investors and investors would find that attractive. Whether or not that makes sense in a particular regulatory setting, that's not my call.

But I think from an investment point of view investors would find that attractive and assign a lower cost of equity capital because of that. In other words, they would be willing to take a lower return because its less risky. The problem from the other side of the scale, the rate payer side of the scale is that once you start dealing in funny money, which is a pejorative term for projected numbers then you're at the, you know, sort of beck and call of the people making those projections.

If you do a historical test year and you get your billing determinants right, and it's all about the relationship between the billing determinants and the amount of money that you can raise, if that is set correctly then theoretically there should be no difference in the amount that you recover using historical or projected test years. If those are projected correctly.

Page 56

Q But if you have -- if you're in a rising cost environment how would that work in a rising cost environment?

A You anticipate what the rate of those rising costs. And if you are able to do that -- and you're -- I mean when I say historical test year I mean, you know, with known immeasurable adjustments. You've got to be looking at once against it's the amount of billing determinants you've got. And assuming that the rate base increase is commensurate with the growth and the billing units then everything's fine. The problem with utility investment is it's lumpy. You spend a lot of money now and then you don't spend anything for ten years so.

Q Right. I consider the problem more there's, you know, where there's a known cost increase coming in the future but it's past the cut off date for the historic test year and for the past cut off date the known and measurable increases wouldn't that favor a projected test year if you had a situation like that?

A It would -- it depends. I would assume that that situation is not something that's going to occur over and over again. There would be -- there could be a situation where the company will not recover because of that expense. It could be that expense would not be as much as you thought it was and you may not undercover.

Page 57

But at some point in doing the calculus you got to have a snapshot of the company in order to get it. And your question is, I think, the original question was would investors be advantaged or would they assign a lower cost of capital to a company that had a fully projected test year I think the answer to that is yes.

Q Okay. Let's see. What about -- I do think your analysis took this into account but let me ask you about it anyway. There's been unbundling a lot of states. A lot of electric utilities don't have generation anymore. I assume, my recollection is that was one of your considerations in picking your proxy companies. Can you tell me why that's important?

A I didn't look at unbundling so much as I -- but I did -- if by that what you mean is whether or not a company has generation, yes, I selected companies that had generation, weren't just wires companies. And the reason for that is because Ameren UE has generation. This is not a T and D company.

Q And I guess there's different risks or more risks maybe, I don't want to put words in your mouth. But are there more risks for a company that owns generation than one that just owns wires?

A Yes.

Q Okay. So the -- So in isolation, that factor

Page 58

in isolation would suggest you should have a higher return on return on equity or higher cost of capital let's say then a company that's only just wires only?

A Right. And all these factors we've been talking about, CWIP and rate base and projected test year, my responses to you about investors being favored by those and giving lower cost of capital, we're talking about in isolation.

Q Sure.

A When you're looking at once again looking at industry averages and trying to pick groups of companies, those kind of factors are muted to a great extent.

Q Sure. You got to look at the whole picture.

A Yeah. Or else you got -- there are no true comparable companies. There's no company exactly like Ameren UE. You're just not going to find one. But you; got to get a sample group.

Q What about high -- high customer growth or high growth in sales? You know, there's probably -- well, there's probably parts of the country -- my father-in-law lives in North Dakota and they lose one percent of their residents every year and --

A Sounds like West Virginia.

Q Or I have relatives in Las Vegas where they, you know, they have booming growth. Is that a factor that

Page 59

affects how investors would view the utility?

A I think it is. I think that you're looking at your service territory. You want -- the ideal situation I think you can find in Pacific Northwest. Puget Energy has got a growing service territory. They're looking at growth rates of like three percent, four percent, five maybe. Those are manageable growth rates. They're looking at building significant plant, mostly transmission plants as a matter of fact, to service that growth.

When you go to a Las Vegas, although it's cooled off a great deal in the past year, but you go to a Las Vegas it's got seven percent growth. And that's a little tougher to deal with.

Now Southwest Gas has been dealing with it just fine. And they've been, you know, raising money from investors and they've gotten along just fine.

So and then you have the situation in North Dakota or West Virginia where the population today is the same as it was 20 years ago. And the growth there is not so much the number of people but the quality of service to people. Getting decent service in the outlying areas, that kind of thing.

So there's still construction and still ways to build rate base. Which is the way utilities make money in that situation. So it's not clear that a growing

Page 60

service territory is a bad thing unless it gets away from you, unless you can't cover it. That can be -- that can be a negative aspect.

Q Would it be fair to say growth could be a blessing or a curse but in either event it could be a factor that affects investor percentages?

A It could be a factor that affects investor sentiment but once again, it's got to be considered in context. All these things have to be looked at.

Q Wholistically?

A Yes. Thank you. Wholistically.

Q I don't want to put words in your mouth.

A And you just did.

Q How about -- How about the utility's credit rating, does that impact -- I know it obviously impacts access to debt. But does that impact access -- or the cost of equity? In other words, are equity investors more willing to invest their money in a higher rated utility than in a lower rated utility?

A I don't know that that's the case. I don't know one way or the other. I don't think I've seen -- I haven't seen any studies that said that investors prefer A rated utilities versus triple B rated utilities. I can say certainly as you said, it makes a difference with the debt investors. You say that an A rated utility has less

Page 61

financial risk and overall debt investment risk than a triple B rated utility.

But you note that, for example, Value Line gives different sort of ratings, you know, financial strength ratings but they give also timeliness ratings. And so people invest in equities for different reasons than people invest in debt. So I don't think you could say absolutely that investors prefer single A rated companies other triple B rated companies.

Because in fact, most electric utilities are triple B rated. They're not the singly rated.

Q I mean, you know, but let's imagine you have a A rated utility versus a utility that's a notch above, you know, non investment grade. I mean wouldn't -- isn't there a greater risk that something's going to happen that would knock that -- that would knock that second utility below investment grade and then that would be it's, I don't know, you tell me, but I think it might be a catastrophe not just for the debt holders but also maybe for the equity holders in that utility?

A It would be more of problem for the debt holders. But in theory I would agree with that. But I think your question to me was what's the practical, quantifiable impact of those two things on equity holders. And I'm not really sure that you can quantify that.

Page 62

Q Okay. How about -- Well, let me say this. Let me ask you this, even though you can't quantify it would it be fair to say it could have an impact or not? You're not sure about that?

A Oh, it could. I think it -- yeah, it could have an impact. But for me, I'm speaking totally from my personal investment, if I want to invest in an investment grade company that's my concern. Is it investment grade. Whether it's triple B plus or single A minus, I don't care. You know and so --

Q What if it was at the very low end of investment grade?

MR. WILLIAMS: Tom, I'm going to ask you to let him finish his question before you -- I mean his answers before you go into the next question.

MR. BYRNE: Okay. Sorry.

A So all the point I'm asking is that for some people it doesn't make any difference. For some people it could make a difference. In your example if somebody was a a triple B minus, and there are a bunch of companies that are a triple B minus. And they are raising capital just fine. So I think the criteria is really investment grade, non investment grade.

Q (By Mr. Byrne) Okay. How about climate? Are there -- For a utility, for an electric utility are there

Page 63

some climates that expose equity investors to less risk versus others? In other words, if you have variable temperatures versus very predictable temperatures does that make a utility more attractive to an equity investor?

A I don't think that makes much difference. There are differences in every -- every situation. I mean you've got weird circumstances, and let's talk about Arizona for a minute.

You've got a strange phenomenon in Arizona where most people have evaporative cooling which works until the temperature gets to 92 degrees at which point it doesn't work any more. And at which point Arizona power companies have a needle peak, suddenly everybody's air conditioner pops on at once. They have to be able to handle that peak, that's tough. When you might think, well, gosh, you know, electric utilities in Arizona got it made, you know, they're just lighting stuff, you know, who care about that. Or that the air conditioning load is on constantly. Definitely not the case.

And in Maine you've got -- you got terrible ice storms, you know. So everybody's got something.

Q Sure. Sure. Okay. Let me ask you about another subject and that is, you know, since you filed your testimony and since we filed our testimony there's been some turbulence in the world economy.

Page 64

A Really?

Q I hope you don't own any common stocks.

A No, I got out of that about two years ago.

Q Good move. But anyway, you know, there's obviously been, you know, the whole federal bail out package for 700 billion dollars and banks have failed and other banks have been taken over. I mean it seems to me, not being an expert in these matters that it's a pretty serious financial crisis; would that -- would you agree with that?

A Yes.

Q And, you know, it also seems to me that it's becoming -- it's certainly becoming difficult for everyone, utilities and individual people to get access to credit, the credit markets have tightened, would you agree with that?

A Yes.

Q And I mean it strikes me that this sort of economic, I hate to say catastrophe, but I'll say it anyway, catastrophe might make things -- I mean, you know, might be a consideration in figuring out what the appropriate return on equity is for any utility. Is there any -- Is there any truth to that or not?

A At this point it could be. At this point I think it's very difficult to say. Because we are in the

Page 65

midst of a change. And right now you have factors at work which I think are not going to be long term factors. There's a whole lot of fear in the market. And I think the last three days you've seen people selling stocks on the expectation that they don't know where the bottom is. And that's really the only reason.

Because, and we were talking about this at lunch, things really have -- on a manufacturing sector basis, you know, people going to work every day, that kind of thing really hasn't changed much. What's happened is a realization that these -- all these derivative insurance things all around the world are sort of interconnected.

And we're seeing the public at large and the officials are having to fess up to the fact that what we're looking at over the next year is not a good economic situation. And, in fact, they're talking, they're using the recession word. And they haven't done that up until now. They've been able to say, oh, we'll be all right. You know, we do this tax cut back in, you know, April last year and that helped us out and we're going to save Behr Sterns or let Behr Sterns go or move it off to some place.

But then now they can't do that. Now they have to say, well, it's more serious. We're looking at economic slow down, perhaps a recession in 2009. Well, people haven't used the recession word in a very long time.

Page 66

So that means less growth, less expectation. If you're talking about the GCF model your G has gone down in people's minds. And so that means the expected return is lower and they're not willing to pay the same price for those stocks. So that's driving the price down.

Now, as I said in the beginning a transitional period. We don't know where this is going to turn around. My suspicion is, is that we're pretty close to that turn around point. I may be wrong about that. But the cost of capital is the return investors expect.

Now what they expect in a situation where the economy is not very good because it's obviously not going to be as high as it is when the situation when the economy is goods.

Normally when you think of stock prices going in a DCF model you think dividend yields going up, cost of capital going up. But if you look at the cost of debt treasury bonds are saying it's a risk free rate. The fed is pushing those rates down. And the interest rates are falling.

So one indicator of capital costs in this financial crisis is that they're lowering capital costs aggressively to try to free up those markets. And you talk about the seizure of the debt markets. That's a circumstantial situation. That's not a long term

Page 67

expectation of investors. That's a circumstantial situation where banks are holding on to their capital because they've got derivative instruments out there that have to be covered and they can't -- they're afraid to give somebody else money overnight because they may have to cover those derivatives.

So that's why the federal government is stepping in to afford credit to businesses. And the fed directly offering credit to businesses in the situation because banks are afraid to lend to each other.

This is once again a severe transitional situation. As far as the cost of capital goes, it's not a good time to try to estimate the cost of capital. There are indicators that are that, you know, you think the stock price drops. Well, that means capital costs are going up. But, in fact, interest rates are going down. So you got contrary indicators.

Q I mean isn't -- I understand what you're saying about how the perhaps the DCF calculation would go down as a result of ---

A Because growth is going to go down.

Q Because growth is going to go down. But it strikes me that it's more difficult for Ameren UE and for other utilities to access capital in this environment, both -- both debt and equity, I mean debt's the obvious,

Page 68

but I think equity as well, it's more difficult to get people to invest in stocks in this environment; is that -- Do you agree with that or not?

A I think in a -- over the past three days people obviously have been selling, not buying. Well, they're selling to someone, someone's obviously buying them or else they couldn't sell them. But there are as many buyers as there are sellers in the market. The price is going down, though, because there are more at any one point. There are more sellers than there are buyers. That is going to reach equilibrium at some point and then we'll be able to assess where we are.

But you can't take the DCF numbers that Dr. Morin or I generated a couple of months ago and then apply new stock prices to them. Because the growth rates have all changed. So and we're not going to be able to sitting here today try to look at Value Line and analyze what the cost of equity is going to be because you're not going to be able to do that.

I think that the fact that capital is hard to come by is a situational phenomenon which will be resolved when the markets stabilize and the financial community realizes that the capital flows are being supported by the federal lending institutions. And basically we relax a little bit.

Page 69

Q Would you agree that -- You said capital is hard to come by but -- and would you agree with me that incremental equity capital is hard to come by?

A I think that it would not be a good situation if you went out today and tried to sell a new issue of equity capital, there's no question about that.

But once again, we're trying to look at especially when you're doing cost of capital, you're looking at a long term phenomenon. You can't look at the current situation and try to generate a long term situation. It's not the -- the debt markets aren't going to be frozen for 15 years. And you can't base rates, utility rates on that expectation.

Q So you wouldn't plan to adjust your recommendation to reflect this -- these economic conditions that have recently occurred?

A Right now, and I did a -- in doing my, some of my preparation for rebuttal in this case looked at some more current information looking at Dr. Morin's numbers. And this is before the recent down turn in the markets. And those numbers were corroborating with my numbers which are in the low 9 percent range for the cost of equity capital. So I think that's -- a steady state situation is a better way to gauge what investors long term expectations are.

Page 70

I mean things are different now. We're in a midst of a very stressful financial situation. And I don't think investors are expecting high returns now. I don't think that's what you got. I think investors would be glad to get 9 percent right now. They'd be very happy with 9 percent. Because they've got negative 30 percent. That's what they're looking at. So 9 percent looks very, very good. My point is, you can't make a long term decision based upon short term scared phenomenon.

Q Okay. And you said before, I think, that it's a bad time -- conditions right this very second since this economic turmoil that's occurred recently make it a bad time to do a cost of capital analysis? Maybe you didn't say that.

A I think it would be not only bad, I don't see how you would do it. I mean if I had no inkling what the cost of capital of was, what the long term cost of capital was and tried to use the stock price data over the past week it would be no good.

Q Okay.

A Because it's not -- it's panic selling. It's note with an expectation of a long term return. It's get me out of here before I sink.

Q To the extent people are saying get me out of here, though, wouldn't higher -- a higher return, paying a

Page 71

higher return to them attract capital better?

A Not in this market.

Q Okay.

A I mean they're selling everything. They're selling companies that have, you know, 30 percent returns on equity. They're selling everything. They just want out. Because the overall, you know, the waters being let out of the jug and people don't want to be stranded.

Q All right. On page nine of your testimony I was going to ask you about something that's in there. On lines like 27 and 28 you say, "Now all of that is changing as oil and gas climb to one pricing record after another." And I guess you're basically saying that oil and gas have been sort of volatile commodities at least in the period that you're looking at?

A Yes.

Q Is that true?

A Yes.

Q Do you know if that's true of other fuels? For example, do you know if coal has experienced a volatility like that?

A Coal prices have gone up. They usually -- they usually go in tandem or not exactly tandem, but in concert with oil prices. I know West Virginia is one of the few economies that's doing very well in the country

Page 72

right now because of coal prices.

Q Would it be fair to say that coal prices have been volatile?

A I don't know about how much fluctuation they've had but I know that they've gone up with oil prices because I know that all the coal producers in West Virginia are very happy right now.

Q How about nuclear fuel like uranium or processed uranium, do you ever follow that at all?

A I don't ever follow that. It wouldn't surprise me that it moves with oil prices.

Q Do you follow power prices in the, you know, like in the power markets?

A No.

Q Okay. Are you familiar with the trends in construction costs in recent years?

A No. I wouldn't be surprised if they weren't up. I would expect that.

Q You cite a text in your testimony that -- well, it's on page 34. But you really don't even need to turn to that. It's the Brealey and Meyers text. And is that a pretty well recognized textbook on the principles of corporate finance?

A Yes.

Q Okay. I would like to talk a little bit about

the DCF method that you used and the DCF analysis. And in particular how you got to your, I guess, growth is one of the components of the formula; is that right?

A Right.

Q I'd like to talk to you about or -- I'm hoping you can explain to me how you got to your growth number. Because I couldn't figure it out.

A Okay. If you look at page 18. I have discussed over three pages how I estimated the long term substantial growth for Ameren. And what did you not understand about that?

Q Well, that -- yeah, I guess -- and I guess you have the same kind of analysis for each of your companies so maybe we should -- maybe if I understood Ameren I would understand all of them.

A Okay.

Q Do you know where in your testimony the Ameren decision is?

A Page 18.

Q Oh, it starts on page 18, okay. Okay. Well, I guess at the end -- Okay. At the end you get to the -- cutting to the chase, your long -- you have a long term sustainable growth rate of 3.5 percent is a reasonable expectation for ADE you say on page 28. And it seems to me that's the punch line of the --

A That's my conclusion.

Q That's your conclusion. Okay. But I couldn't -- I mean is that -- I couldn't figure out how that was calculated or if it wasn't calculated is it just -- how did you got there?

A It's a judgment based upon the data that I -- that I present here. I go through telling you what the data is. I look at historical data for sustainable growth. I talk about changes in sustainable growth. I talk about changes in -- by changes I mean current -- or near term historical changes and projected changes in the future.

Q Okay.

A I look at the same sort of thing for book value growth. And the near term changes, historical and projected for the future.

I look at projected earnings growth. I looked at projected dividend growth. I looked at historical dividend growth. I look at historical earnings growth. And I look at analysts projections for earnings growth from Value Line, IBS -- IBES and Zachs. I look at all those data. And then make a decision about the centrality of those data, looking at what the projections are. And not looking only at earnings like Dr. Morin, looking at more of the data I come up with an estimate of what the long term growth rate expectation will be.

Q Okay. But it's more -- I mean --

A That's the internal growth rate. That's not all of it.

Q Okay. And just I'll let you go on to the next one in a minute. But just focusing on the internal growth rate, I mean what you're saying is it's a judgment not a calculation; is that fair to say?

A Growth rate in a DCF is judgment. Whether or not you use a mechanistic methodology like Dr. Morin and simply pick a number that's printed on a page and say, that's the number, that's a judgment. He's making a judgment that Value Line or Reuters or Zachs or whoever he takes the number from is the only number that investors utilize. That's a judgment. And I think it's an incorrect judgment.

I'm making a judgment when I look at all the data that's available for Ameren and for AEP and for all these other companies that I analyze. So it's inescapable that you use judgment in reaching a DCF growth rate.

Q You listed a bunch of different data points that you look at in making your judgment. Are some weighted more than others or is there one that's the most important or not necessarily? Can it vary from company to company?

A I think that I start my analysis looking at

the sustainable growth, the B times R growth. I think that is something that's been identified by the originator of the DCF, Professor Gordon as a valuable tool in judging the cost of equity capital. So the B times R growth is a sustainable growth. And I start looking at that. And --

Q And in Ameren, just so I'm following you, in Ameren's case that's 1.33 percent? On page --

A That's for the past five years, yes.

Q Okay. And that's what you're talking about where you start or you --

A Not that particular number.

Q Not that particular number, right.

A But that parameter is where I start. But that's laid out in my testimony here.

Q Okay.

A And but I also look at projected dividends, projected earnings, as well as historical data. But the determination of a long term steady growth is a judgment.

Q Okay. I think I understand. And if I looked at some of these schedules -- Let me see. Well, like schedule --

A 5.2?

Q Well, I was kind of starting on Schedule 4.

A Okay.

Q And this just lays out a lot of these

Page 77

parameters.
A Right. Let's look at Schedule 4, page 205.
Q Okay. That would be Ameren's?
A The top -- the top grouping is Ameren, yes. You see the years 2003 through 2007 you see retention ratio in each year. You see return on equity in each year. The product of those two is the B times R sustainable growth under the column G.
Q That's the 1.33 that I --
A That's the average, yes.
Q -- the historical average.
A Right. And you see that Value Line projects that the sustainable growth by the -- in the next five years, three to five years is going to be near three percent.
Q Got ya.
A So it's going to increase dramatically. Two and a half times higher. You see book value per share in each year you see the historical average book value growth rate. You see the projected book value growth rate down there for 211, 213. And then with the external growth is on the right. You see the shares, the outstanding in millions of shares, and the growth rate over the past five years. And then over 2008, 9 and for the next three to five years.

Page 78

Q Okay. What's the -- Help me out here. You were about to tell me this when I think I cut you off. What's the difference between internal and external growth?
A Well, the internal is just the -- what Professor Gordan calls the internal growth rate. It's the retention ratio times the return on the equity. But that's not all that investors would consider. Because if a company is going to sell stock or is expected to sell stock at a price above book value the difference between the market price and book value inures to the current shareholders. That difference goes to their bottom line. It makes their shares worth more. So that works to in effect increasing growth for them.
Q It's like the growth and the price of the stock?
A It is. Right. And this accounts for that. Now, if they're selling stock at below book value that has the reverse effect. Or if they're buying back shares. You see, some of -- these companies let me find one here. Just got a negative growth rate.
Let's look at on page one, First Energy. You see that they've got bought back shares at a two percent rate over the past five years and are expected just to freeze rates going forward. I mean I believe -- I'd have to look at it, but I chose just to go with a zero rate.

Page 79

But you could make an argument that investors might take a little bit off the top because they had sold shares in the past so.
Q Okay.
A That's how that works.
Q That makes sense. I had some questions about -- Well, look on page 29 of your testimony. These are sort of some questions about around the edges of some of these analyses. But there's a quote in the middle of that page from Mehra, I think?
A Yes.
Q And, you know, apparently he's saying -- I think he's saying stocks on average should command at most a one; is that a one percent?
A Yes.
Q Return premium?
A Percentage point.
Q Over bills?
A Yes.
Q So he's saying you should -- the equity holders in stock should only and get one percent more than treasury bills?
A Yes, that's what he's saying.
Q Doesn't that strike you as odd?
A No. But you have to understand the context.

Page 80

He is a part of the financial economics universe that studies utility function. In other words, he's not -- he's not studying dollar maximization, he's studying utility maximization. And for him an investment that pays big in good times is not as valuable as an investment that pays less in bad times.
Q For the --
A It's a utility function.
Q That pays okay in bad times?
A That pays okay. Less than the other one. See, his thing is what's my utility for this investment. And that's a legitimate area of corporate finance. It's not some kind of, forgive the expression, hippy dippy sort of branch of finance. It's a legitimate branch of finance.
And his look at the historical Ibbitson data was, gosh, this doesn't make much sense. Seven percent return seems odd to me because of the utility of stocks and bonds are different. And they -- and the -- and my research indicates that the return difference between those two is only about one percent. Based on, once again, his behavioral economic view of a utility function.
Q But you don't think investors only expect one percent more than treasury bills to invest in stocks?
A It doesn't matter what I think. It matters a great deal what he thinks. He's way more important than I

Page 81

am. The point is, is that this Mehra is a proponent of a legitimate branch of finance that questioned the historical Ibbitson data.

And started the whole -- and the reason I mention this story, trying to get this back story, is I've been asked time and time again when I present this, well, why did people all of a sudden start studying the risk premium? This is why. It created a conflict. The risk premium puzzle, quote unquote. If you Google -- Google risk premium puzzle when you go back to your office.

Q No thanks.

A Okay. Well, you'll get about ten zillion hits because this has been a topic of research for 15 years. He set off a flurry of research. One track was a behavioral track. Saying, well, maybe one percent is too low. Maybe Mehra's view of the utility function is messed up. But he reviews that research in this paper and comes to the conclusion that nobody's been able to get a better number than he got.

The other track research is all the stuff.

Q I mean the only --

A Let me finish. The other track of research is all the stuff that I mention which is financial economists. Which they look at the Ibbitson data and say, well, there is some reasons to believe that this 7 percent number or

Page 82

6.5 number is way too high. And that's all way the stuff that I talk about. Because frankly, that's my bailiwick. The financial economics. I'm not well versed in behavioral economics. And that's not the point. The point is, is it created risk premium puzzle and it caused a huge amount of research. And this research shows, I believe, very strongly that the Ibbitson data overstates the risk premium.

Q But I don't even bonds pay more than one percent more than treasury bills? I mean how could an equity only command one percent?

A Well, you're not -- in a financial economics basis I would agree with you. I think the number's probably closer to four percent. It's certainly not seven percent.

But on a utility basis if you look at the utility function, and you remember it's like -- what was the example. Oh, what's the utility of a steak dinner. If you're hungry, that's about 40 bucks. But if you've just eaten lunch you're not going to pay 40 dollars for it.

So that's what I'm talking about. That utility function is very important and it does control how people behave. So it's a legitimate branch of finance.

Q Okay. Another issue I wondered about, kind of around the edges, is when you're talking about on page 31

Page 83

you're talking about Dimson and --

A Staunton?

Q -- other people. Yeah, Staunton. And on lines a 567 you're talking about measure historical returns over a longer period than Morning Star, a hundred years of data, and include an analysis of the returns of stock markets in other countries.

And my question is, you know, aren't there problems with A, looking at a hundred years of data, and B, looking at stocks from other countries. And I mean I guess I'm thinking of, you know, just a layman's view of, you know, there's political turmoil -- if you look at the South America in the 1940s and '50s and '60s there's tremendous political turmoil, huge inflation. It would seem to me that on the world stage there are markets that really distort the data but what -- am I off base in thinking that?

A Yep.

Q Okay. And why am I off base in thinking that?

A Okay. First of all, with regard to a hundred years of data, there are reliable data for a hundred years. The Dimson data is well researched. I think what you're thinking about is the Seigel study that goes back to the early 1800s. He uses data that's based on railroad stocks and there's a handful of those back to the early 1800s.

Page 84

But even though those data, the Seigel data have been vetted, there's still a rational argument that that's pretty thin water. Not the case with the Dimson data. There's plenty of good data back a hundred years. The CSRP data that Morning Star and Ibbitson are based on is not the only data base out there.

The second point, and you raise -- and the point that you raised goes right to why it's important to consider more information rather than less. We have lived a very charmed existence in this country. And what were looking at is historical return data. We haven't had anybody invade us.

At one point in the 1940s after World War II we were the world. We made all the dishwashers that were made. Because there was no other industrial capacity in the world except the United States. That's not a realistic situation. That's not something you can say, well, here's the kind of return we'll make in the future, because that situation's not going to exist in the future.

The point of looking at world wide markets, and you don't look at markets that totally disappear like you're talking about the South America in the 1940s. They don't look at those markets. They look at the industrialized countries of the world where there is reliable data. And they look at the European countries.

Page 85

The point is, is what you're trying to assess here is not necessarily a particular zenophobic view of American investors. You're looking at more of a human quality. What does -- What do humans need in order to invest. It's a – it's bigger than the United States. It's global phenomenon. And if you exclude economies that haven't had the benefits of ours then you have a selection bias. Then you're looking at only the good stuff.

And what I say in my testimony here is that it's like considering only New York Stock Exchange Companies. Well, you got to pretty darn successful to get to the big board.

In other words, by only measuring New York Stock Exchange Companies in the CSRP data you're just looking at the very most successful companies and measuring their historical return. What about all the guys that didn't make it? What about all those guys? If you measured their returns, your historical returns are going to be a lot less. And that's a better – that's a better look at what investors' expectations are. Not just the ones that are good. But all the ones. And that's the idea of using the whole world.

Q Well, why don't you use the economies that failed then, why don't you use Brazil in the 1940s and Paraguay, and failed, you know, following that logic why

Page 86

wouldn't you use all of them?

A You can't make up the data. You can't just make up data, that's why.

Q But otherwise you would, right?

A I wouldn't and they didn't.

Q Not make up data, but if you had data you would use it for every failed economy in your data base if you had data?

A They would use -- I think the idea is to use all the data that's available. And all the reliable data that's available. And that makes sense. That's the only way you could understand what kind of return investors really expect.

Q Do you know what countries specifically they used or is it?

A I think I provided you this paper that I cited and they list the countries in there and you can see but. This Dimson study has taken the place of the Ibbitson study in Brealey and Meyer's latest textbook. Brealey and Meyers no longer refer to Ibbitson data, they refer to Dimson data. They're teaching now in college course the Dimson data, not the Ibbitson data.

Q And you've talked a little bit about Jeremy Seigel. I think maybe you said he was a little bit on thin water for going back as far as he did. He went a hundred

Page 87

more years back it seemed like; is that correct?

A I think you can make that argument. And Dr. Morin has successfully made that argument. I think that his data have been vetted by a guy named Schwert who I found out from about from Dr. Morin, s-C-H-W-E-R-T, looked at those data and said they are remarkably consistent with the more modern data. But, yes, you can make a theoretical argument that railroad data from the 1820s when there were, you know, 12 railroad companies in the United States is not representative of a wide sample.

Q There wasn't the New York Stock Exchange until probably the mid 1800s or later.

A Exactly. But one thing that's very interesting about those data is that if you look at sort of the pre World War II data of that whole period, and then the post World War II data, those risk premiums match up very well. That the killer, what makes the Ibbitson data so high is that period that I'm talking about after World War II where America ruled the roost and made very high returns, higher than expected returns on its industrial base because there was nothing else in the world.

Q Okay. I guess you know Dr. Morin pretty well; is that true? Is he a reasonably well respected cost of capital person in the industry?

A He is a prominent cost of capital person in

Page 88

the industry and I don't doubt that he's well respected as well.

Q Okay. I was going to ask some specifics. And I don't know, you could -- we can maybe we can short circuit this line of questions. But, you know, I was going to ask you about the companies -- some questions about the companies in your sample group.

A Okay.

Q And tie it to some of the risk factors that we talked about before.

A Okay.

Q And so I guess there's a list -- there's a list of them on page 18 of your testimony, I think.

A Work off of Schedule 3 would be easier.

Q Okay. All right. Move to Schedule 3.

A That's the sample group screen and you can see why I selected the ones I selected.

Q Okay. Good. So then the first one, the ones with the checks are selected, I guess, on the far right side, right?

A Right.

Q Okay. So Central Vermont's the first one. And so I was wondering if you -- Well, do you know where Central Vermont is located? I guess they're in Vermont; is that true?

Page 89

A Yeah. Right. Central Vermont.
Q And do you know if they have a fuel adjustment clause?
A I don't.
Q And do you know how many customers they serve?
A No, it's a relatively small utility, I know that.
Q Do you know the rate of customer growth for that utility?
A No. I would guess it would be not very rapid.
Q Okay. Do you know what their sources of generation are?
A Generally. They have some fossil generation. They still own a part of or they get -- generally they get generation from nuclear. They were part owner of a nuclear plant. I don't know if Central Vermont still owns a nuclear plant. They may be purchase power. But they do rely on that plant. And they also have hydropower.
Q Okay. Do you know if they are allowed to have CWIP and rate base?
A Don't know.
Q CWIP is C-W-I-P by the way for spelling purposes. Everyone always does Q-U-I-P. Do you know if they use a historic or projected test year in setting rates?

Page 90

A I'm pretty sure it's historic. The last time I was there it was historic.
Q Okay. And do you know what the weight of equity and debt is in their capital structure?
A Just a minute. I think I've got that somewhere over here. I think they have a pretty high equity ratio as I recall, 60 something percent. 51 percent.
Q And do you know what their authorized rate of return is?
A I think they're working on an alternative regulatory plan now. And their ROE is 10 and a quarter, 10 and a half, something like that. I'm not sure.
Q When you say alternate -- Did you say an alternative?
A Alternative regulatory plan.
Q What does that mean?
A That's a situation where the company, I believe, is allowed to flex its rate within a certain percentage of current rates for a period of time after which the commission will reassess the allowed return rate.
Q They can -- Okay. They can raise or lower their rates without going through a whole rate case basically?
A Well, I think they're allowed to adjust their

Page 91

rates. And I'm not sure exactly the metric. My recollection is pretty fuzzy is that there is a band within which they can move. And then after a certain period of time there's a sunset and the commission looks at the whole as if it were a rate of return base rate again. And decides whether or not to renew or to go back to regular regulation.
Q But some way is it -- does it allow them to adjust rates without going through a full rate case at least during the period when it's in effect?
A I think so.
Q Okay. Same sorts of questions on the next one which I think is First Energy Corporation. One, is do you do you know where they're located?
A Ohio, I believe.
Q Okay. And do you know how many customers they have?
A No, I don't. That's a much larger utility.
Q Do you know about anything their customer growth?
A I do not.
Q Do you know what type of generation they have?
A Mostly coal but I believe they also have nuclear.
**Q Do you know if they're facing any requirements

Page 92

to make major infrastructure investments?**
A I think that's pretty much true for all utilities across the board.
Q Okay. Do you know if they can use a fuel adjustment clause?
A I don't know.
Q Do you know if they can include CWIP in rates?
A I don't know. I know that Ohio's a pretty pro company state.
Q Do you know if they use a historic or projected test year in setting rates?
A I don't know.
Q Do you know the weight of debt and equity is in their capital structure?
A Yes, 41 percent equity.
Q Do you know what their authorized return on equity is?
A Do not.
Q Okay. This is going to get tedious but same questions for all of them. Except I'll stop asking the one about infrastructure assuming they probably all have needs for infrastructure investment.
A Yes.
Q Northeast Utilities is the next one. Do you know where they are located?

Page 93

A They're -- the only -- my only experience with Northeast Utilities was in New Hampshire with Dr. Morin. In an ROE proceeding. And so I know they have facilities in New Hampshire but I think they're bigger than that.

Q Okay. You don't know how many customers they have?

A No, I do not.

Q Don't know what their level of customer growth is?

A I don't recall it being an issue so I would say it's pretty normal.

Q How about what type of generation they have?

A They have a few generating units that they -- that was difficult to answer because this is one of the utilities that was on the path of deregulation and then they pulled back on that. And so they've got some plants that they still own, some plants that they're going to buy back and so they're kind of influx on that. And I'm not sure exactly which ones they own. And I think the nuclear plant they had they got rid of. But they do still have generation.

Q So they don't have nuclear generation?

A I'm not sure. I think they got rid of their nuclear.

Q Would you think it's mostly coal or gas fired.

Page 94

A I think it's coal and gas.

Q Okay. Do they have any kind of alternative regulatory plan like, you know, similar to Central Vermont, adjustment mechanisms or anything?

A Not that I know of. That doesn't mean they don't but this -- my case with them was several years ago. I'd say four years ago.

Q I didn't really ask that question of First Energy. Do you know if First Energy's got any kind of alternative rate mechanisms?

A There's something going on in Ohio. I don't think anybody really knows. It's a form of re-regulation but it's not really. That's as close as I can tell you what's going on. They are -- they tried to deregulate, that was -- didn't seem to work. Now they're trying to re-regulate and the way the law has been written I'm not sure exactly what the status is.

Q Is it possible that they let rates change without going through a whole rate case?

A I don't know. I can't answer that question.

Q Okay. I guess I'm still on Northeast Utilities. Do you know if they can use a fuel adjustment clause?

A I think there is.

Q Do you know if they can include CWIP in rates?

Page 95

A I don't think so.

Q Do you know if they use a projected or historic test year?

A I'm pretty sure it's historic.

Q Do you know what the weight of debt and equity is in their capital structure?

A When you ask me that I'm looking on Schedule 2, page three of four. 42 percent equity.

Q And do you know what their authorized return on equity is?

A Do not. When -- I think that one is below ten, though. The only reason I say that is because when Dr. Morin and I testified three or four years ago there, the equity return that the commission selected was 9.6, I believe, something like that. And I think they've been in that range since then.

Q Any idea what year you're talking about? A couple years ago?

A More than that. Probably four years ago.

Q Okay. The next one's Ameren Corporation. I guess let me ask you about the non UE pieces of Ameren Corporation. Because I think you know about Ameren UE. But for the non UE utilities do you know where Ameren's non UE utilities are located?

A I'm sorry?

Page 96

Q Do you know where they're located?

A I know Illinois. I don't know if there's another state involved. But I know that most of what I read about Ameren and the difficulties that company has had has been with their Illinois utilities.

Q Do you know if there's -- How many customers they serve?

A Do not.

Q Do you know if there's much customer growth?

A I don't know the answer to that.

Q Do you know what type of generation they have?

A Mostly coal. I'm not sure if Ameren has another nuclear power plant. I think they do but I'm not sure. I believe they also have an unregulated generation operation.

Q Do you know if they can use a full adjustment clause?

A Don't know.

Q Do you know if they can include CWIP in rates?

A Don't know.

Q Projected or historic test year?

A Don't know that either.

Q I think you know the debt and equity and I won't ask you. Do you know what their authorized return on equity is?

Page 97

A No.

Q Okay. Next one. American Electric -- oh, yeah, American Electric Power is the next one. So same string of questions. Do you know where they're located?

A They're located in Michigan, West Virginia, Virginia, Indiana, Ohio, Texas.

Q Do you know how many customers they serve?

A Lots. They're one of the biggest.

Q And do you know if they're experiencing a lot of customer growth?

A They are in their central Texas region. And not so much in West Virginia. But in the Virginia territories they are. They're experiencing some growth. Not sure about Michigan and Illinois. Indiana.

Q Do you know what type of generation they have?

A Mostly coal. They've got a couple of nuclear plants but it's predominantly coal.

Q Do you know if they can use a fuel adjustment clause?

A They do have a fuel adjustment clause in the jurisdictions with which I'm familiar.

Q Do you know if they can include CWIP in rate base?

A That's not allowed as far as I know.

Q Do you know if they use a projected or

Page 98

historic test year?

A I don't know of any jurisdiction that American Electric Power works in that uses a projected test year.

Q How about the weighting of debt and equity in the capital structure?

A 39 percent. Risky.

Q Equity?

A Very risky.

Q And do you know what their authorized return on equity is?

A I think West Virginia gave them some outrageous number like 10 and a half or something like that last time.

Q Wow.

A Yeah.

Q And do you know if they have any alternative regulatory plans that allow them to change rates outside of a rate case or anything like that?

A No, I don't know, once again this is one of their operations is in Ohio. And another one of their operations is in Virginia. And the Virginia, again, is a re-regulation plan. So I can't really say what's going on there. I think the Virginia re-regulation is really more of a institution of base rate of return regulation than what's going on in Ohio.

Page 99

Q Okay.

A So it's kind of a mix bag.

Q Okay. Next one is Cleco Corporation. Do you know where they're located?

A Louisiana.

Q Do you know how many customers they have?

A Not, that's a small company.

Q Do you know if they're experiencing growth or negative growth?

A They're building a plant so -- in a pretty large part of their rate base so they are experiencing growth. Central Louisiana is surprisingly robust.

Q Do you know what kind of plant is it?

A Coal or lignite.

Q And what kind of general in general do they have?

A Coal. They got some gas, too.

Q And do you know if they can use a fuel adjusment clause?

A I don't know.

Q Do you know if they can include CWIP in rates?

A Don't know.

Q Do you know if they use a projected or historic test your?

A I think Louisiana uses a historical test year.

Page 100

Q Do you know the weighting of debt and equity in their capital structure?

A They have a relatively high equity ratio, 51 percent.

Q And do you know what their authorized ROE is?

A Also relatively high. For some reason the Louisiana commission gives them a high ROE. And I don't know the number but I would say off the top of my head it's 11 something.

Q Okay. And any odd, you know, alternative regulation that you know of about them?

A No.

Q Empire District Electric Company, do you know where they're located?

A This state.

Q Do you know how many customers they have?

A Do not.

Q Do you know if they're experiencing customer growth?

A I would assume that they are but not excessive.

Q Do you know what type of generation they have?

A Mostly coal, I believe.

Q Do you know if they can use a fuel adjustment clause?

Page 101

A I don't know. I know that this state doesn't so -- hasn't so far allowed that. I don't know if they've made a special dispensation for Empire district or not.

Q Do you know if they can include CWIP in rates?

A I don't know. I don't think so.

Q Do you know if they can use a historic or projected test year?

A I would guess it would be historic.

Q Do you have a debt/equity ratio?

A Let me see, 45 percent.

Q Do you know what their authorized return on equity is?

A I do not.

Q Did you look at any other Missouri commission decisions on authorized returns on equity in preparing your testimony?

A I did. The most recent, if that was Empire district then I looked at it. But I don't remember what it was.

Q Yeah, I think it.

A Was that the most recent one?

Q Yeah. Okay. Entergy Corporation is the next one. Do you know where they're located?

A Texas and Louisiana and Mississippi.

Q Do you know how many customers they have?

Page 102

A That's a medium sized utility, I don't know the number.

Q Do you know if they're experiencing much customer growth?

A I think that they are in a building phase but largely because of rebuilding because of the Katrina and other hurricanes in the area.

Q Do you know what type of generation they have?

A They have quite a bit of nuclear power. But other than that it's coal.

Q Do you know if they can use a fuel adjustment clause?

A I think so, yes. I'm not absolutely sure but I think so.

Q Do you know if they can include CWIP in rates?

A Don't know.

Q Do you know if they use a projected or historic test year in setting rates?

A Once again in the Louisiana area I would say it would be historic. And also in Texas it's historic.

Q Do you know the weighting of debt and equity in their capital structure?

A Forty percent equity.

Q And do you know what their authorized return on equity is?

Page 103

A Do not.

Q Do you know if they have any other kind of unusual alternative regulation going on?

A Not that I'm aware of. I should say that there is -- in Texas there is a separation of the generation and the transmission distribution function. So to the extent that they operated in Texas then that would be the case. It's the same as for American Electric Power.

Q Okay. Their Texas operations, in other words, you screen for whether they own generation but they might not own it in one of those specific areas?

A They definitely don't own it in Texas. Because those are relegated to generation companies. They have -- the utilities in Texas are split into generation companies, T and D companies, and something called retail electric providers.

Q Okay. Got it. Is that phenomenon true of any of the other companies that you know of?

A That situation exists only in Texas as far as I know.

Q Okay. I mean there are other states where utilities don't own generation, right?

A Yes. Maine was a state in which it was required that they divest generation. Maryland was another one. It wasn't required but ultimately they spit off. For

Page 104

example, Constellation split off a generation unit. And Pepco sold its generation and became a T and D company. So there are others.

Q Let me ask you this, to the extent that these companies operate in multiple states it's possible, I guess, that one of the states -- that they just have to own generation somewhere to get through your screen, right? So if they were operating in two states and one state they have generation the other they don't, they would pass your screen?

A Yeah, you're correct.

Q Okay. I think West Star is the next one. And again the same questions. Do you know where West Star is located?

A Kansas.

Q And do you know how many customers they have?

A Once again it's a medium sized utility.

Q And do you know what their growth rate is or if they have good or bad customer growth?

A No, I don't think it's unusual high or low.

Q Do you know what kind of generation they have?

A Mostly coal. I'm trying to remember if they have tied into a nuke also. They may be.

Q Okay. Do you know if they can use a fuel adjustment clause?

Page 105

A I can't recall.
Q Do you know if they can include CWIP in rates?
A Don't believe so.
Q Do you know if they use a projected or historic test year?
A I believe it's historic.
Q Do you know what the weighting of debt and equity is for them?
A West Star is 43 percent equity.
Q Do you know what their authorized return on equity is?
A I do not.
Q Do you know if they have any other unusual alternative regulation things going on?
A No, they do not have any alternative regulation.
Q Okay. We're getting towards the end. Thankfully. The next one's Hawaiian Electric. Do you know where they're located?
A Let me see. Hawaii.
Q Have you been to investigate them yet?
A I am in -- Dr. Morin and I -- it's the Roger and Steve team, are in a Hawaii electric case as we speak.
Q Oh, really?
A Yeah.

Page 106

Q And doesn't -- And doesn't Utilitech do -- represent the staff in those Hawaiian cases?
A Yes, I'm working with the Department of Defense. I'm not working with Utilitech on that case.
Q Okay. Do you know how many customers they have?
A No, by our standards it's a small utility, it's a small place.
Q Do you know what their level of growth is?
A Pretty high.
Q Do you know what kind of generation they have?
A Oil and more oil and just a tad solar.
Q Do they have geothermal at all?
A Barely. One of their subsidiaries on the big island has a small geothermal unit. I don't know why they don't have more. They certainly have plenty of resources there. It's expensive for one thing.
Q Do you know they can use a fuel adjustment clause?
A They do have a fuel adjustment clause.
Q Do you know if they can include CWIP in rates?
A I should know that but I don't. I don't know the answer to that.
Q Do you know if they use a projected or historic test year?

Page 107

A They use a historic test year.
Q Do you know what the weighting of debt and equity is in their capital structure?
A Yes, 29 percent equity. Very risky.
Q Do you know what their authorized return on equity is?
A The last case was a settled case as I recall. And it was in the high 10s, 10.8 or something like that.
Q Okay. And do you know if they have any unusual alternative regulation plans in place?
A No.
Q Okay. IDA Corp, Inc. do you know where they're, I-D-A C-O-R-P.
A Yeah, they're in Idaho, I think. I'm not sure if they're in another state or not.
Q Do you know how many customers they have?
A No.
Q Do you know what their rate of customer growth is?
A I do not.
Q Do you know what type of generation they have?
A Mostly coal.
Q Do you know if they can use a fuel adjustment clause?
A I don't think so.

Page 108

Q Do you know if they can include CWIP in rates?
A No.
Q No, they can't?
A No, they can't.
Q Okay. Do you know if they use a projected or historic test year?
A I believe it's historic but that one I'm not sure about.
Q Weighting of debt and equity, do you know what that is?
A 46 percent.
Q Equity?
A Equity.
Q And do you know what their authorized return on equity is?
A I do not.
Q And do you know if they have any alternative regulatory plans in effect?
A I do not.
Q Okay. Pinnacle West is the next one. Do you know where they're located?
A They're located in Arizona.
Q And do you know how many customers they have?
A No, I don't. A medium sized utility.
Q Are they in Phoenix or elsewhere?

Page 109

A Yeah, Phoenix and surrounding area.
Q Okay. Do you know if they have a lot of customer growth?
A Phoenix is a pretty fast growing area. So I would say it would be in the higher reaches of this group.
Q Okay. And do you know what kind of generation they have?
A They have Palo Verdes, it's a big nuclear unit. I don't think they own all those units but pretty good percentage of nuclear power for them. The rest is coal, some gas but mostly coal.
Q Do you know if they can use a fuel adjustment clause?
A You know, I don't think they have a fuel adjustment clause.
Q Can they include CWIP in the rates?
A I don't think so.
Q Do you know if they use a projected or historic test year in setting rates?
A Last rate case I was in, it was historic. That was a big issue for them. Because they were trying to re-rate base plant that had been spun off as unregulated. This is another state that's re-regulated.
Q So they wanted to use a projected test year?
A Yeah, they did.

Page 110

Q And they weren't allowed to?
A That's correct.
Q Okay. And do you know what the weighting of debt and equity is in their capital structure?
A 49 percent.
Q Equity?
A Equity.
Q And do you know what their authorized return on equity is?
A I should know that. I can't recall the number. It seems to me it was in the mid tens. Might have been as up into the upper tens.
Q And, again, is there any alternative regulatory plan in effect for them as far as you know?
A Not as far as I know. As I said, there was an alternative regulatory plan and they backed away from it.
Q Okay. The next and second to last one, is Unisource Energy. Do you know where they're located?
A Arizona.
Q Do you know where?
A Tucson.
Q Do you know how many customers they have?
A About half the size of Pinnacle West.
Q And do you know if there's a lot of customer growth?

Page 111

A Yes.
Q And do you know if they are allowed to use a fuel adjustment clause?
A No.
Q And do you know what kind of generation they have?
A They are mostly coal fired. I think their springerville units are their primary units. They may also buy some nuclear power from Palo Verdes.
Q Okay. And do you know if they can include CWIP in rates?
A I don't believe so.
Q Do you know if they use a projected or historic test year in setting rates?
A Historic.
Q And what is the weighting of debt and equity in their capital structure if you know.
A 27 percent equity.
Q Do you know what their authorized return on equity is?
A I don't.
Q And do you know if they have any alternative regulatory plans in effect?
A I'd say I don't know. It seems to me the last time I recall there was something in the works for trial

Page 112

with Unisource. And so I don't know. And Arizona remember is a state that doesn't really do that. Or they've pulled back from that with this Pinnacle West so I'm just not sure.
Q Okay. Last one, yeah. Excel Energy, Inc. Do you know where they're located?
A You though, I'm not sure that I do. I think it's in the west. And it may be -- it's not California. Maybe it's -- I'll just say know.
Q And I assume you don't how many customers they have?
A That's a good assumption.
Q Or if there's significant customer growth?
A No, without knowing the location and the general lay of the land regulatorily I'm not going to be able to answer those questions. I can tell you what the equity ratio is, it's 43 percent.
Q Would the answer to all my other questions that I've been asking you be you don't know?
A Yeah. That's right.
Q I think I'm about done. But do you think maybe we could take maybe about a five minute break just so I could go over my notes and see -- Are you in any rush to get out of town?
A It's 4:30?

Page 113

Q No, it's 3:30.
A Oh, is it. No, I'm good.
(Whereupon, a brief recess was taken off the record.)
Q (By Mr. Byrne) One question I was going to ask you is in selecting your companies, what do you call those, your proxy companies or your similar companies?
A Uh-huh.
Q What's the phrase you use for them?
A Similar risk proxy group.
Q Okay. In selecting your similar risk proxy group was there any geographic consideration? I mean in other words, closeness in proximity to Ameren UE in your -- in what you looked at?
A No. And there shouldn't be because capital markets aren't constrained and neither should the sample be constrained.
Q We're competing in a capital market that's at least national and -- at least national; is that true?
A Yeah, we all are aware as we talked a minute ago that markets are world wide but certainly they're not constricted to the central part of the U.S. So I wouldn't look at -- in order to find a proxy group I wouldn't look at central U.S. utilities and some analysts do that, I think that's not right but it's done.

Page 114

Q I mean and is it fair to say the way I said it before that we're competing, Ameren UE is competing for capital with other utility companies throughout the country?
A That's actually limiting who you're competing with. You're competing with all other investments across the board. But as far as similar risk investments you're competing with other similar risk utilities all over the place.
Q Okay. And would it -- would it be fair to say that Missouri ought to set a return on equity that is sufficient to allow us to compete against those other -- with those other companies that are seeking capital?
A You should set a return on equity that's equal to the return investors require. Which is the cost of equity capital. And if you do that you will allow the company a return that will attract capital.
Q Okay. And I guess the phrase I used is, it will allow us to compete successfully with other similarly will situated similar risk companies to attract capital; is that a fair way of saying it?
A I don't think I would say it that way. I don't think that's an particularly unfair way to say it but it's a little bit inartful. I think that the goal of cost of capital analysis is to estimate the return that

Page 115

investors require. And if that is used to set the allowed return and the company's expected to earn that return, then the company will be able to attract capital.
Now, you can set a higher return. The only thing that will happen is the company won't necessarily attract any more capital. Just that stockholders would be advantaged at rate payer's expense in that situation. If you set a return that is below the cost of capital the other thing will happen. Rate payers would be advantaged and stockholders will be disadvantaged.
Q Yeah, I keep wanting to put the term competing in there. Because I think in figuring out what's necessary to attract capital don't you have to consider the alternative investments that are available to people with money to invest?
A And we -- and I have done that. By using market base methods, DCF, Cap M, earnings price ratio, and market to book ratio. Those are all based on market data and the market is competitive. And those data tell us what investors expect.
So if we allow a return based on those data, my expectation of the cost of equity capital the company will be able to attract capital.
Q Okay. I might have asked you this already and maybe you answered it already but did you -- I think you

Page 116

said you looked at the Empire order which was the last order, I think, that the commission issued on return on equity.
A Yes.
Q You looked at that one. Did you look at any other commission orders that have been recently issued on return on equity Missouri commission orderers?
A No.
Q Did you look at any previous testimony filed in any previous Missouri cases?
A Other than the Ameren case last year?
Q That you were a part of?
A That I was part of, no.
Q Okay.
A You mean in preparation of this case or ever?
Q No, no. In preparation of this case.
A Yeah, yeah, yeah. Same answer.
Q Okay. I was going to ask you if you could look at Schedule 2-3. And I think maybe, and I was asking you about the common equity ratios. Was this where you were getting the information from?
A Yes.
Q Okay. And I think you cite the source as the A-U-S Utility Reports?
A Yes.

Page 117

Q Can you tell me what that is?

A It is a publication by AUS Utility Services. They have a -- one of their subsidiaries is a publication company that -- it's a report that provides selected data for electric, combination of electric and gas, gas, telephone, and water utility companies.

Q Do you know exactly how they calculate that equity ratio? Like what's the numerator and what's exactly the denominator?

A Yeah, it comes from the ten q's and ten k's of these companies. And the numerator is common equity. The denominator is total capital. Total which includes short debt, that's your next question.

Q Okay. So it would include long term debt, short term debt, common stock, preferred stock, all those would be included in the --

A Yeah, it's total capital.

Q Would capital leases also be included, do you know?

A No.

Q Those would not. Is there anything else besides what I named which is, again, common stock, preferred stock, long term debt, short term debt, that's in the denominator?

A No, but these are the data that are published

Page 118

in the financial statements of the companies and these are the data that investors receive and base their expected return on.

Q And is this -- What period -- Is this a point in time equity ratio or is it over a period?

A It's -- for any month, this happens to is be June, 2008. It's the -- the immediately preceding quarter report. So in June I doubt that the second quarter report is out for use, this is probably first quarter.

Q So it's basically they pull the ten q, whatever most recent ten q is available at the time they publish their June report?

A Right.

Q Okay. That makes sense. And I assume you view AUS as a reliable source of information?

A Yes, believe it is.

Q Okay.

A Like any publication they make mistakes from time to time.

Q Sure. But generally --

A Generally it's reliable, yeah.

Q The last question, is -- and I guess this would not apply to any discussions you had with staff attorneys, okay. But and you might want to wait a second to make your attorney doesn't have any objection to this

Page 119

question, I don't think it's objectionable but, you know, were you given -- aside from attorney -- aside from discussions with attorneys were you given any instructions by the staff about what they wanted you to do or what result they wanted you to reach in putting your testimony together?

A None.

Q Okay. Who hired you for the staff? Was it the cost of capital department people?

A I think I was originally contacted by Ron Bible saying that they would want me to submit a proposal for this case.

Q When did they first contact you? When it first got filed?

A Boy.

Q I guess we filed it in April.

A I would have to guess it would be about that time.

Q Okay.

A You know, I can't pinpoint.

MR. BYRNE: That's all the questions I have. Thank you very much, Mr. Hill.

THE WITNESS: Not a problem.

[EXAMINATION]

QUESTIONS BY MR. WILLIAMS:

Page 120

Q I'm going to ask one question. In response to questions from Mr. Byrne you mentioned that you'd done some training when you left the, and I guess it was your replacement, when you left Virginia Public Service Commission as a consumer advocate?

A Yes.

Q Do you recall that? Have you done any other training regarding return on equity and how to determine it?

A Yeah, I've done seminars, return on equity seminars for this commission, for Arizona commission, New Hampshire commission, for the National Society of State Utility Consumer Advocates. And have spoken at the society for utility and financial analysis, SURFA, several times on different occasions about topics related to rate of return.

Q And when you said this commission were you referring to the Missouri Public Service Commission?

A Yes.

MR. WILLIAMS: No further questions.

MR. BYRNE: Great. Oh, the last one thing was you were going to get me testimony that you filed in Missouri?

THE WITNESS: All previous Missouri cases that I have copies of.

MR. BYRNE: Great.

Page 121

MR. WILLIAMS: He'll read it.

Page 122

CERTIFICATE OF REPORTER

I, Pamela G. Williams, Certified Shorthand Reporter, 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; the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto, nor financially or otherwise interested in the outcome of the action.

____

Notary Public within and for
the State of Missouri

My commission expires November 19, 2009.

Page 123

I, STEPHEN G. HILL, do hereby certify:

That I have read the foregoing deposition;

That I have made such changes in form and/or substance to the within 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 ___________, 20___, at ______________________________.

____________________________.

Stephen G. Hill

My Commission Expires: ____________________

Notary Public: ________________________

PW/Stephen G. Hill

In the Matter of Union Electric Company, etc.,

Page 124

Errata Sheet

Witness: Stephen G. Hill

In Re: In the Matter of Union Electric Company, etc.

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

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Reporter: Pamela G. Williams

Midwest Litigation Services
711 North Eleventh Street
St. Louis, Missouri 63101
Phone (314) 644-2191 * Fax (314) 644-1334

October 16, 2008

Mr. Stephen G. Hill
Financial Consultant
P.O. Box 587, Benedict Road
Hurricane, WV 25526

In Re: In the Matter of Union Electric Company, etc.

Dear Mr. Hill:

Please find enclosed a copy of your deposition taken on October 8, 2008 in the above-referenced case. Also enclosed is the original signature page and errata sheets.

Please read your copy of the transcript, indicate any changes and/or corrections desired on the errata sheets, and sign the signature page before a notary public.

Please return the errata sheets and notarized signature page to Mr. Thomas Byrne for filing prior to trial date.

Thank you for your attention to this matter.

Sincerely,

Pamela G. Williams

CC: Mr. Thomas Byrne

DEPOSITION EXHIBIT #1 10/8/08 pa

STEPHEN G. HILL
EXPERT TESTIMONY SINCE 2000

ARIZONA

Testimony on behalf of : Az. Corporation Commission, Residential Utility Consumer Office

Docket No. G-01551A-00-0309 – Southwest Gas Corporation – cost of equity capital / capital structure / debt refinancing

Docket No. E-01245A-03-04437 – Arizona Public Service Company – capital structure / cost of common equity / restructuring issues

Docket No. G-01551A-04-0876 – Southwest Gas Corporation – cost of equity capital / capital structure / recapitalization plan

Docket No. E-01345A-05-0816 – Arizona Public Service Company – capital structure / cost of common equity / restructuring issues

CALIFORNIA

Testimony on behalf of : Federal Executive Agencies

Application Nos. 07-05-003 through 008 - Annual Cost of Capital Proceeding; cost of equity capital

CONNECTICUT

Testimony on behalf of the Office of Consumer Counsel

Docket No. 01-05-19PH01 – Yankee Gas Services Company – capital structure / short-term debt / cost of equity capital

GEORGIA

Testimony on behalf of the Governor's Office of Consumer Utility Counsel/ GPUC Commission Staff

Docket No. 14000-U – Georgia Power Company – Testimony on capital structure and the cost of equity capital / comparable earnings

Docket No. 14618-U – Savannah Electric & Power Company – Testimony on capital structure and the cost of equity capital / comparable earnings

Docket No. 18300-U – Georgia Power Company – Testimony on capital structure and the cost of equity capital / investor required market return

Docket No. 18638-U – Atlanta Gas Light – Testimony on capital structure and the cost of equity capital

Docket No. 19758-U – Savannah Electric and Power Company – Testimony on capital structure and the cost of common equity

Docket No. 20298-U – Atmos Energy – Testimony on cost of common equity and capital structure

HAWAII

Testimony on behalf of the Hawaii Consumer Advocate/Department of Defense

Docket No. 04-0104 – Purchase of Verizon Hawaii by the Carlyle Group; developed position on financial requirements for Consumer Advocate

Docket No. 04-0113 – Hawaiian Electric Company, Testimony on cost of equity capital and capital structure.

Docket No. 06-0386 – Hawaiian Electric Company, Testimony on cost of equity capital and capital structure.

KANSAS

Testimony on behalf of the Citizen's Utilities Ratepayer Board

Docket No. 01-WSRE-436-RTS – Western Resources – capital structure / cost of equity / capital structure implications of spin-off of unregulated operations

Docket No. WSRE-949-GIE – Western Resources – review of company plans to separate electric utility business from unregulated business

Docket No. 03-KGSC-602-RTS – Kansas Gas Service Company – capital structure / convertible preferred stock / cost of common equity / overall cost of capital

LOUISIANA

Testimony on behalf of : Louisiana Public Service Commission Staff

Docket No. U-20925 – Entergy Louisiana, Inc. – Annual Rate Review/ Formula Rate Plan / FRP 2000 and FRP 2001 – Testimony on the cost of common equity capital

MAINE

Testimony on behalf of : Public Advocate

Docket No. 2001-249 – Communitay Service Telephone Company – capital structure / company financial history / cost of equity

Docket Nos. 2002-99/2002-100 – Lincolnville/Tidewater Telecom – capital structure / cost of common equity capital

Docket Nos.2002-747, 2003-34, 35, 36, and 37 – FairPoint New England Telephone Companies; testimony on capital structure, cost of common equity.

Docket No. 2004-112 – Bangor Hydro-Electric Company; testimony on capital structure; market-based cost of common equity, overall cost of capital

Docket No. 112/339 – Bangor Hydro-Electric Company; Central Maine Power; stranded cost hearings, lower risk of guaranteed returns, cost of common equity capital for electrics

Docket No. 2005-155 –Verizon Maine – Alternative Form of Regulation/Rate Proceeding; cost of equity capital for a local distribution company and capital structure / competition

Docket No. 2007-215 – Central Maine Power Company; cost of equity, capital structure

MARYLAND

Testimony on behalf of : Maryland Peoples' Counsel

Case No. 8890 – Pepco/Delmarva Merger – financial and capital structure issues related to the proposed merger

Case No. 8959 - Washington Gas Light Company – Capital structure, cost of capital

Case No. 8994 – Delmarva Power & Light – Capital structure, financial cross-subsidization, cost of capital benchmark for merger review.

Case No. 8995 – Potomac Electric Power Company – Capital structure, financial cross-subsidization, cost of capital benchmark for merger review.

MINNESOTA

Testimony on behalf of: Minnesota Department of Public Service

Docket Nos. P404 et. Al./CI-oo-712 – Sherburne County Rural Telephone Company - Cost of equity/ capital structure/ relative competitive risk of rural telephone companies

MISSOURI

Testimony on Behalf of Office of Missouri Public Service Commission / Trigen-Kansas City Energy Corporation

Docket No. ER-2007-0002 and 0003 – Ameren-UE, cost of capital, capital structure, market value versus book value capital structure

Docket No. HR-2008-0300 – Trigen-Kansas City Energy Corporation – capital structure, cost of equity capital, overall cost of capital

Docket No. ER-2008-0318– Ameren-UE, cost of capital, capital structure, overall cost of captial

MONTANA

Testimony on Behalf of the Montana Consumer Counsel

Docket No. D2002.5.59 – Montana-Dakota Utilities Company, cost of equity / capital structure / overall cost of capital.

Docket No. D2004.4.50– Montana-Dakota Utilities Company, gas operations, cost of equity / capital structure / overall cost of capital.

NEW HAMPSHIRE

Testimony on behalf of the Office of Consumer Advocate

Docket No. DT02-110, Verizon New Hampshire; cost of common equity and capital structure in both a TELRIC and traditional rate base rate of return cases.

Docket No. DE 04-177; Public Service Company of New Hampshire; cost of equity capital of integrated generation operations.

Docket No. DE-06-028; Public Service Company of New Hampshiore, cost of equity capital, capital structure.

NORTH CAROLINA

Testimony on behalf of the North Carolina Department of Insurance

Docket No. 1073 – Private Passenger Automobile Insurance Rate Proceeding – cost of capital/fair rate of return

Docket No. 1174 – Private Passenger Automobile Insurance Rate Proceeding – cost of capital/fair rate of return

Docket No. 1235 – Private Passenger Automobile Insurance Rate Proceeding – cost of capital/fair rate of return

Docket No. 1407 – Private Passenger Automobile Insurance Rate Proceeding – cost of capital/fair rate of return

OKLAHOMA

Testimony on behalf of the Oklahoma Corporation Commission; Attorney General of Oklahoma

Cause No. 200300076 – Public Service Company of Oklahoma – cost of capital/ capital structure/ leverage adjustment to cost of capital

PENNSYLVANIA

Testimony on behalf of : Office of Public Advocate

Docket No. R-00027975 – York Water Company, cost of capital / capital structure

Docket No. R-00038805 – Aqua Pennsylvania Water Company, cost of capital/ capital structure

Docket No. R-00049884 - Pike County Light & Power Company; cost of capital/ capital structure

Docket No. R-00051030 – Aqua Pennsylvania Water Company, cost of capital/ capital structure / market-value capital structures

Docket No. R-00061346 – Duquesne Light Company, cost of capital/ capital structure/ market-value capital structure

TEXAS

Testimony on behalf of : Office of Public Utility Counsel, Allied Coalition of Cities

Docket No. 22344 – Texas Universal Cost of Service Hearings – capital structure / cost of capital

Docket No. GUD 9400 (Before the Texas Railroad Commission) – TXU Gas – capital structure/ cost of capital

Docket No. 28840 – AEP Texas Central Company – capital structure / economic environment / cost of capital

Docket No. 32093 – Centerpoint Energy – capital structure/ cost of capital

Dokcet Nos. 33309 and 33310 – AEP Texas Central Company and AEP Texas North Company – capital structure/cost of equity capital

VERMONT

Testimony on behalf of : Vermont Department of Public Service

Docket NO. 6167 – Bell Atlantic – Vermont – alternative regulatory plant / capital structure / cost of capital

WASHINGTON

Testimony on behalf of : Attorney General's Office and Washington Utilities and Transportation Commission Staff

Docket No. UG-011570/1-Puget Sound Power & Light; Interim/Emergency Rate Case/ financial need / bond rating impact of purchased power losses

Docket No. UG-031885 – Northwest Natural Gas; capital structure / cost of common equity capital

Docket No. UE-032065 – Pacificorp; capital structure / cost of common equity capital

Docket No. UE-040640000/UG-040641 – Puget Sound Energy; capital structure / cost of common equity capital

Docket No. UE-050684 – Pacificorp; cost of common equity / capital structure / overall cost of capital

Docket No. UE-0501090 – Pacificorp/Mid-American Energy Holding Company Merger Application; financial aspects of merger / leverage at parent company

Docket No. UT-051291 – Sprint/Nextel – Merger/Spin-off of regulated telephone operations; financial aspects of spin-off / leverage at parent company

Docket Nos. UE-050482 & UG-050483 - Avista Utilities – testimony on cost of equity capital / capital structure / economic environment

Docket Nos. UE-060266/UG-060267 – Puget Sound Energy, cost of equity capital/ capital structure/ overall cost of capital

Docket Nos. UE-072300/UG-072301 – Puget Sound Energy, cost of equity capital/ capital structure/ overall cost of capital

Docket Nos. UE-072375 – Puget Holdings LLC and Puget Energy, acquisition proposal by private equity firm for utility operations of Puget Energy

WISCONSIN

Testimony on behalf of: Wisconsin Citizens' Utilities Board

Docket Nos. 9403-YI-100 and 6680-UM-100 – Alliant Energy – merger-related issues/unregulated investment limitation

Docket No. 6680-UR-112, Wisconsin Power & Light – capital structure / cost of common equity / overall cost of capital

Docket No. 6680-CE-171, Wisconsin Power & Light – cost of common equity / fixed rate of return for wind generating plant

Docket No. 6680-CE-170, Wisconsin Power & Light – cost of common equity / fixed rate of return for coal generating plant

EASTERN CARIBBEAN TELECOMMUNICATIONS AUTHORITY (ECTEL)

Testimony on behalf of: ECTEL

(No Docket Number) Initial Rate Determination of Cable & Wireless local exchange telcommunications operations – capital structure/ relative risk/ cost of equity/ risk premium for investing in Easter Caribbean/ overall cost of capital.

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

September 1, 2006

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: August 2005

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of August 2006. At this point in the case, the following work has been completed : review of company testimony and filing, preparation of interrogatories, and review of initial interrogatory responses.

This is my initial billing in this proceeding, if you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

September 1, 2006

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: August 2005

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE		HOURS	DESCRIPTION
8/2		7.0	Review Test/Prepare DRs
8/3		5.5	Review Test/Prepare DRs
8/25		3.0	Review Data Responses
8/29		2.0	Review Data Responses
	TOTAL	17.5 Hrs.	

Total for Professional Services 17.5 Hrs.@ $150/ Hr. : $2,625.00

Expenses
None

Total Professional Services	$2,625.00
Total Expenses	0.00
Total Billing August 2006	**$2,625.00**

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

November 1, 2006

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Sept/Oct 2005

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of September and October 2006. At this point in the case, the following additional work has been completed : preparation of follow-up interrogatory responses, initial preparation of direct testimony.

This is my initial billing in this proceeding, if you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

Novermber 1, 2006

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Sept/Oct 2005

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE	HOURS	DESCRIPTION
9/12	4.0	Review Data Responses
9/13	2.0	Follow-up DRs
10/12	3.0	Process/Collate Data Responses
10/29	2.0	Initial Testimony Prep.
10/30	8.0	Prepare Test.
10/31	7.0	Prepare Test.
TOTAL	26.0 Hrs.	

Total for Professional Services 26 Hrs.@ $150/ Hr. : $3,900.00

Expenses
None

Total Professional Services	$3,900.00
Total Expenses	0.00
Total Billing Sept/Oct 2006	**$3,900.00**

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

December 1, 2006

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Nov 2006

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of November 2006. At this point in the case, the following additional work has been completed : continuing follow-up interrogatory responses, preparation of direct testimony.

If you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

December 1, 2006

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Nov. 2006

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE	HOURS	DESCRIPTION
11/1	6.0	Prepare Test.
11/2	6.0	Prepare Test.
11/3	3.0	Prepare Test.
11/9	8.0	Prepare Test.
11/10	5.0	Prepare Test.
11/13	3.0	Prepare Test.
11/14	5.0	Prepare Test.
11/17	1.0	Teleconference w/Company
TOTAL	37.0 Hrs.	

Total for Professional Services 37 Hrs.@ $150/ Hr. : $5,550.00

Expenses
None

Total Professional Services	$5,550.00
Total Expenses	0.00
Total Billing Nov. 2006	**$5,550.00**

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

January 1, 2007

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Dec 2006

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of November 2006. At this point in the case, the following additional work has been completed : finalization of direct testimony, preparation of interrogatory responses.

If you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

January 1, 2007

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Dec. 2006

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE	HOURS	DESCRIPTION
12/7	3.0	Finalize Test.
12/11	6.0	Finalize Test.
12/28	3.0	Respond to DRs.
12/29	1.0	Respond to DRs.
TOTAL	13.0 Hrs.	

Total for Professional Services 13 Hrs.@ $150/ Hr. : $1,950.00

Expenses
None

Total Professional Services	$1,950.00
Total Expenses	0.00
Total Billing Dec. 2006	**$1,950.00**

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

February 6, 2007

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: January 2007

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of January 2007. At this point in the case, the following additional work has been completed: preparation of rebuttal testimony.

In looking at the contract for this case, this billing brings me pretty close to the limit for my services. We had estimated $17,350 for my services and, with this billing, my total charges come to $17,025, according to my records. Dealing with data responses and two witnesses in two separate cases has taken considerably more time than I estimated. Also, I did not anticipate filing Surrebuttal testimony (i.e., my original estimate did not include that). So, if we add 10 hours for preparation of Surrebuttal to the amounts originally estimated for tasks yet to be undertaken (cross preparation (4.0), hearing preparation and attendance (13.3) and post-hearing brief assistance (5.0)), the total additional hours needed for me to complete the case would be 32.3 hours. At $150/hour, that amounts to $4845.00 of additional charges.

Since this is my first time working for the Staff, I am unfamiliar with the procedure necessary to amend the contract. If you will let me know how to proceed, I'll be happy to comply. If you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

February 6, 2007

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Jan. 2007

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE	HOURS	DESCRIPTION
1/11	5.0	Prepare Rebuttal
1/17	6.0	Prepare Rebuttal.
1/18	4.0	Prepare Rebuttal
1/25	5.0	Prepare Rebuttal
TOTAL	20.0 Hrs.	

Total for Professional Services 20 Hrs.@ $150/ Hr. : $3,000.00

Expenses
None

Total Professional Services	$3,000.00
Total Expenses	0.00
Total Billing Jan. 2007	**$3,000.00**

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

April 1, 2007

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Feb/Mar 2007

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of February and March 2007. At this point in the case, the following additional work has been completed: review of Company and intervenor witnesses' rebuttal testimony, preparation of Surrebuttal testimony, preparation of cross-examination, preparation for and attendance at hearing, review of supplemental capital structure testimony by the Company.

If you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

April 1, 2007

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2007-0002
Case No. GR-2007-0003
Billing Period: Feb/Mar. 2007

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE	HOURS	DESCRIPTION
2/8	4.0	Rev. Co Rebuttal/Prep. DRs
2/13	2.0	Review Reb Workpapers
2/14	2.0	Review McShane DRs
2/19	1.0	Review Vander Weide DRs
2/21	4.0	Prep. Surrebuttal
2/22	4.5	Prep. Surrebuttal
2/23	4.0	Prep. Surrebuttal
3/5	3.0	Prep. Cross
3/6	3.0	Prep. Cross
3/22	2.0	Attend Hearing
TOTAL	29.5 Hrs.	

Total for Professional Services 29.5 Hrs.@ $150/ Hr.: $4,425.00

Expenses

Airfare	$237.60
Auto Rental	$163.63
Lodging (lowest available rate)	$252.36
Meals (Breakfast 3/22)	$7.00
Total Expenses	$660.59

Total Professional Services	$4,425.00
Total Expenses	660.59
Total Billing Feb/Mar. 2007	**$5,085.59**

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

June 30, 2008

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2008-0318
Billing Period: May/June 2008

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of May/June 2008. At this point in the case, the following work has been completed : review of company testimony and filing, preparation of interrogatories, and review of interrogatory responses, preparation of follow-up interrogatories and initial preparation of draft direct testimony

.

This is my initial billing in this proceeding, if you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

June 30, 2008

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2008-0318
Billing Period: May/June 2008

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE	HOURS	DESCRIPTION
5/2	7.0	Review Test/Prepare DRs
6/2	5.5	Review Resp/Prepare Add'l DRs
6/11	3.0	Review Data Responses
6/13	7.0	Prepare Draft Test.
6/16	6.0	Prepare Draft Test.
6/17	6.0	Prepare Draft Test
6/18	3.0	Prepare Draft Test
6/20	6.0	Prepare Draft Test.
6/18	2.5	Review Supplemental Test.
6/27	2.0	Review Data Responses
TOTAL	48.0 Hrs.	

Total for Professional Services 48.0 Hrs.@ $150/ Hr. : $7,200.00

Expenses
None

Total Professional Services	$7,200.00
Total Expenses	0.00
Total Billing May/June 2008	**$7,200.00**

HILL ASSOCIATES
Regulatory Finance

Bus: (304) 562-3645
Fax : (304) 562-3645

PO Box 587, Benedict Rd.
Hurricane, WV 25526

October 2, 2008

Budget and Fiscal Services
Missouri Public Service Commission
Attn: Connie Landolt
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2008-0318
Billing Period: Jul/Aug/Sept 2008

Dear Ms Landolt:

Enclosed please find my bill for professional services and expenses in the above-referenced matter for the period of July/August/September 2008. At this point in the case, the following additional work has been completed : finalization of direct testimony, submission of workpapers, initial preparation of rebuttal testimony.

This is my initial billing in this proceeding, if you have any questions regarding this billing, please do not hesitate to contact me.

Sincerely,

Stephen G. Hill

enclosure

October 2, 2008

BILL TO :

Budget and Fiscal Services
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Re: Ameren UE
Case No. ER-2008-0318
Billing Period: Jul/Aug/Sep 2008

SERVICES RENDERED :

Professional Services of Stephen G. Hill @ $150 / Hr.

DATE	HOURS	DESCRIPTION
8/5	3.0	Finalize Direct
8/19	5.0	Finalize Direct
8/20	3.0	Finalize Direct
9/22	4.0	Prepare Draft Rebuttal
9/23	6.0	Prepare Draft Rebuttal
9/26	6.0	Prepare Draft Rebuttal
9/26	3.0	Prepare Draft Rebuttal
TOTAL	30.0 Hrs.	

Total for Professional Services 30.0 Hrs.@ $150/ Hr. : $4,500.00

Expenses
None

Total Professional Services	$4,500.00
Total Expenses	0.00
Total Billing Jul/Aug/Sep 2008	**$4,500.00**

I, STEPHEN G. HILL, do hereby certify:

That I have read the foregoing deposition;

That I have made such changes in form and/or substance to the within 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 19 day of ~~Sept~~ Nov., 2008, at Jefferson City, MO.

Stephen G. Hill

Stephen G. Hill

My Commission Expires: August 25, 2012

Notary Public: Carla K. Schnieders

PW/Stephen G. Hill
In the Matter of Union Electric Company, etc.,

CARLA K. SCHNIEDERS
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: August 25, 2012
Commission Number: 08533187

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Errata Sheet

Witness: Stephen G. Hill

In Re: In the Matter of Union Electric Company, etc.

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

Page 15 Line 19 Should read: restrainsm -- risk premium
Reason assigned for change :

Page 18 Line 16 Should read: Hill & Associates -- Hill Associates
Reason assigned for change :

Page 26 Line 7 Should read: tat -- that
Reason assigned for change :

Page 27 Line 10 Should read: more just -- more than just
Reason assigned for change :

Page 28 Line 24 Should read: periods that -- periods than
Reason assigned for change :

Page 28 Line 25 Should read: piece of zero -- P sub zero
Reason assigned for change :

Page 29 Line 1 Should read: P so X -- P sub X
Reason assigned for change :

Page 29 Line 7 Should read: piece of X -- P sub X
Reason assigned for change :

Page 29 Line 19 Should read: commonly -- common
Reason assigned for change :

Page 33 Line 9 Should read: non-systematic -- systematic
Reason assigned for change :

Page 31 Line 5 Should read: below 1.5 -- below 1.0
Reason assigned for change :

Reporter: Pamela G. Williams

Errata Sheet

Witness: Stephen G. Hill

In Re: In the Matter of Union Electric Company, etc.

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

Page 34 Line 9 Should read: reports -- returns
Reason assigned for change :

Page 35 Line 10 Should read: Narook -- NARUC
Reason assigned for change :

Page 36 Line 11 Should read: FURC -- FERC
Reason assigned for change :

Page 36 Line 12 Should read FURC -- FERC
Reason assigned for change :

Page 36 Line 17 Should read: be all end -- be all end all
Reason assigned for change :

Page 37 Line 10 Should read: When they related -- They are related
Reason assigned for change :

Page 38 Line 22 Should read: Agency -- Energy
Reason assigned for change :

Page Line Should read:
Reason assigned for change :

Page Line Should read:
Reason assigned for change :

Page Line Should read:
Reason assigned for change :

Page Line Should read:
Reason assigned for change :

Reporter: Pamela G. Williams

Errata Sheet

Witness: Stephen G. Hill

In Re: In the Matter of Union Electric Company, etc.

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

Page 39 Line 12 Should read: FURC -- FERC
Reason assigned for change :

Page 42 Line 4 Should read: FURC -- FERC
Reason assigned for change :

Page 53 Line 9 Should read: facility -- facilitate
Reason assigned for change :

Page 53 Line 18 Should read: CWIP and -- CWIP in
Reason assigned for change :

Page 56 Line 8 Should read: against -- again
Reason assigned for change :

Page 61 Line 11 Should read: singly -- single - A
Reason assigned for change :

Page 63 Line 18 Should read: care -- cares
Reason assigned for change :

Page 66 Line 2 Should read: GCF -- DCF
Reason assigned for change :

Page 66 Line 6 Should read: beginning a -- beginning its a
Reason assigned for change :

Page 66 Line 14 Should read: goods -- good
Reason assigned for change :

Page 66 Line 15 Should read: going -- going down
Reason assigned for change :

Reporter: Pamela G. Williams

Errata Sheet

Witness: Stephen G. Hill

In Re: In the Matter of Union Electric Company, etc.

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

Page 66 Line 18 Should read: it's a risk -- it's a lower risk
Reason assigned for change :

Page 70 Line 22 Should read: note -- not
Reason assigned for change :

Page 77 Line 2 Should read: 205 -- 2 of 5
Reason assigned for change :

Page 77 Line 21 Should read: 211, 213 -- 2011, 2013
Reason assigned for change :

Page 83 Line 4 Should read: 567 -- 5,6,7
Reason assigned for change :

Page 83 Line 4 Should read: measure -- measuring
Reason assigned for change :

Page 103 Line 25 Should read: spit -- split
Reason assigned for change :

Page 112 Line 9 Should read: know -- no
Reason assigned for change :

Page Line Should read:
Reason assigned for change :

Page Line Should read:
Reason assigned for change :

Page Line Should read:
Reason assigned for change :

Reporter: Pamela G. Williams