BEFORE THE ARIZONA CORPORATIO

IN THE MATTER OF THE APPLICATION OF CHAPARRAL CITY WATER COMPANY, INC., AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON.	)	DOCKET NO. W-02113A-07-0551 **EVIDENTIARY HEARING**

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BE IT REMEMBERED that the above-entitled and numbered matter came on regularly to be heard before the Arizona Corporation Commission, 1200 West Washington Street, Phoenix, Arizona, commencing 9:00 a.m. on the 8th day of January, 2009.

BEFORE: TEENA WOLFE, Administrative Law Judge

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ALJ WOLFE: Good morning, and welcome back everyone. We'll start today by taking appearances again just since it's been so long since we've been here, beginning with the company.

MR. JAMES: Thank you, Your Honor. Norman James with Fennemore Craig representing Chaparral City Water Company.

ALJ WOLFE: Thank you.

And for intervenor Pacific Life?

(No response.)

ALJ WOLFE: Let the record reflect no appearance.

RUCO?

MS. WOOD: Michelle Wood on behalf of RUCO. Good morning, Your Honor. And with me is Mr. Rigsby and Mr. Pozefsky.

ALJ WOLFE: And for Staff?

MS. MITCHELL: Good morning, Judge Wolfe. Happy New Year, everyone. Robin Mitchell, Wesley Van Cleve, and Amanda Ho on behalf of Commission Staff.

ALJ WOLFE: Thank you. And good morning, everyone, again.

Mr. James, are you ready to call your first witness, or are there procedural issues that the parties want to address first?

MS. MITCHELL: Well, yes, Your Honor, I do have a couple of procedural issues. And first I want to say with regard to the order of the witnesses, in reviewing the transcript you had indicated that it would be Mr. Fox because we needed a date certain for him.

ALJ WOLFE: That's correct. Thank you.

MS. MITCHELL: And then Mr. Abinah, Mr. Bourassa, Mr. Rigsby, and then Mr. Parcell. The first procedural issue is that we did not move into admission the last time Exhibit S-4, which was, I think, the errata for the surrebuttal of Marvin Millsap.

ALJ WOLFE: Okay.

MS. MITCHELL: And if there are no objections, we would like to move that. The court reporter so nicely let us know that we didn't move that when we concluded.

ALJ WOLFE: Are there any objections to the admission of S-4?

MS. WOOD: No objection.

MR. JAMES: No, Your Honor.

ALJ WOLFE: S-4 is admitted.

(Exhibit S-4 was admitted into evidence.)

MS. MITCHELL: And then I have just one other matter that I would like to bring up regarding the recent filings that Staff has made in the docket.

ALJ WOLFE: Yes.

MS. MITCHELL: You know, as we stated in the filing, Staff received a call right before the holidays from the California Public Utilities Commission that indicated that in the course of their investigation of Golden States Water, which is the sister company of Chaparral, they discovered information that might be of interest to the Commission. The CPUC indicated they could release that information to Staff, you know, under a confidentiality agreement.

After we learned of, you know, this information, we issued some data requests to the company hoping that we could maybe short circuit the negotiation of a confidentiality agreement to get the documents by having the company cooperate in response to some data requests to provide us with the documentation. We were trying to avoid a discovery dispute, which we may or may not have, which may also come before you, because I think the company may have some objections to Staff's data request.

We haven't received the documents from the company. And to the company's credit, they have asked to meet with Staff, and RUCO is going to be present, too, and they're going to meet on Monday to sort of explain to us the nature of the investigation.

Also, in the course of our investigation, we uncovered a complaint filed in Los Angeles Superior Court that was a wrongful termination lawsuit filed by two fairly senior executives of Golden States and American States Water. In reviewing that complaint -- and these are just allegations because it's a plaintiff's complaint, but there were allegations that there had been some billing irregularities with respect to the Shea treatment plant, which, of course, is not a Golden State facility but a Chaparral City Water facility.

At this point all we have are allegations, and we're doing due diligence and investigating. You know, we're hopeful that the company will cooperate and provide us the documents that we have requested in our data request. That will sort of short circuit the time frame that it will take to conduct a complete investigation, because I'm still trying to negotiate an agreement with the California Public Utilities Commission.

At this point I don't know what all of this involves procedurally, but Staff would request that the record remain open. You know, I'm not sure what is going to come out of this investigation, whether we -- you know, it's appropriate to address anything in this docket or there needs to be another docket open. If the allegations are substantiated, would that require an OSC? I'm just not really sure procedurally how this would work.

But what Staff would like to commit to do would be after we meet with the company and give the documents and work with the CPUC, that we file a status report in the docket, and then at that point I think we may be in a better position to offer some type of Staff recommendation as to how to proceed.

ALJ WOLFE: And what would be the proposed timing of the status report?

MS. MITCHELL: I would say no later than three weeks from now. But, you know, as soon as we have enough information and a recommendation, we certainly won't wait the full three weeks, because there's some concern about moving this docket along. There has been a delay and certainly we don't want to contribute to the delay, but then, on the other hand, the allegations seem fairly serious, particularly with respect to the call that we received from the CPUC, and so it's going to take some time to investigate it.

ALJ WOLFE: Mr. James.

MR. JAMES: Well, I'm at a bit of a disadvantage. Most of what counsel for Staff said is accurate. We were served, I think, the initial data request on the afternoon of December 29. And obviously I'm not involved in what is going on with the company, with Golden States Water, which is another subsidiary of American States Water. I'm not involved in what is going on in California, so my knowledge is limited. I have spoken with the company. I have spoken with counsel for the company in California, which is how the meeting that Ms. Mitchell mentioned evolved.

Obviously, to the extent that there's some sort of impact on this rate case in terms of, for example, affecting the rate base, we don't think there is. Obviously, the Staff has already audited the company's rate base, but obviously we want to work with Staff and make sure that they don't have any concerns.

I mean, the activities, at least as I understand it sitting here today, Judge Wolfe, the activities that we're talking about here occurred almost entirely in California, not in Arizona. So we're still ferreting out exactly what, if anything, might be relevant. Certainly if something is relevant, we'll disclose it. That's not a problem. And I think probably the two to three week timeline that was suggested is probably fine.

Obviously, the last thing we want to do is delay this rate case further, particularly if what we're talking about is something that really doesn't have any affect on this rate case. But at this point I'm at a bit of a loss to give you a definitive response because, obviously, this caught me completely by surprise.

ALJ WOLFE: Understood.

Ms. Wood, do you have anything to add?

MS. WOOD: Yes, Your Honor. Two points. First is that there should be a correction. And, of course, it's based on the allegations in the whistleblower's lawsuit against the company, is that they have alleged that a major portion of the improprieties occurred at the Shea water treatment plant here in Arizona and is part of this rate case in terms of the -- it's part of the rate base, so it does affect the Arizona. There seems to be some allegation -- I can't say there's a finding, but there's an allegation.

It is possible the company has made appropriate adjustments to reflect either imprudent expenditures or overpayments or paybacks to officers from contractors. They may have made some sort of adjustment, but nobody here from RUCO knew about it. It should have been something we had notice of and fully developed in the course of this case.

But being that it has not been fully developed, RUCO's concern is that if it's not fully developed within this case, there needs to be another case, but we don't want the discussion of it here to waive our right to proceed elsewhere. So we want to make sure that those allegations have a forum. If they're not fully developed within this case, then they need to be opened within another docket and proceed there.

So I'm, you know, because I'm the newest person in the room, I'm not quite sure how you handle these issues, or if they're even very common, or the theory or procedure for handling them, but my concern is that if not fully developed here but addressed in part here, then if we find out that the nature of the problem is far more expansive than we knew, someone could argue -- the company -- that we waived the right to pursue that, and we don't want to do that. So I guess our preference would be that another docket be opened and that the matter proceed expediently.

ALJ WOLFE: Thank you.

Ms. Mitchell, do you have a response?

MS. MITCHELL: It's like I indicated, you know, earlier. I have no idea procedurally how to handle this because, you know, we do want to give the company a chance to put forth their side of the story.

What I have heard so far is, you know, I have read a complaint and I have had a conversation with the assistant general counsel of the CPUC who indicated that, you know, one of the documents he has is a report and it contains some substantial information concerning Chaparral.

I agree with Ms. Wood, you know, it needs to be aired out. I don't know whether in this rate case -- I mean, if it affects the rate base and it has affected the rates, you know, that are already being paid by ratepayers, then certainly it's relevant within this docket. You know, if the allegations are substantial, I mean, Staff obviously has the option to file an OSC in another docket.

At this point I don't know how to proceed because I don't have enough information, but I do know that the allegations are of some grave concern to Staff, which is why we have requested that the record remain open so that we can, you know, either file more information in the docket and be able to make some recommendation of whether it impacts this rate case, or whether there's another docket, or maybe Your Honor could weigh in on that on how best to proceed. But we're doing our investigation. We're going to try to make sure that we can do it timely so that we can see how best to proceed.

ALJ WOLFE: It seems like all of the parties are pretty much in agreement on that. And as Mr. James said, he didn't -- the company doesn't object to a two or three-week timeline for the filing of a status report. And it seems to me that this issue would benefit from a full discussion between all of the parties as to how best to proceed. So I do think it's a good idea to leave the record open for at least that time until we know how best to address the issue, if indeed the Shea water treatment plant that's in rate base is affected.

Is there anything further on that issue?

MR. JAMES: No, Your Honor.

ALJ WOLFE: Okay. Then I will wait to get a status report on that issue. Today is Thursday, January 8. Three weeks from today is January 29.

MS. MITCHELL: That will be fine, Your Honor. And should we have more information sooner, we certainly will file a status report as soon as we can.

ALJ WOLFE: Thank you. You said that better than I was going to say it. So if it's sooner, I'll be glad to see it sooner. But otherwise, I'll expect something by January 29. And if necessary, we'll schedule a procedural conference very soon after that.

Okay. So is Staff prepared to call Mr. Fox at this time?

MS. MITCHELL: Yes, Your Honor, we are. Staff would call Gordon Fox.

GORDON L. FOX

called as a witness on behalf of ACC Staff, having been first duly sworn by the Certified Reporter to speak the truth and nothing but the truth, was examined and testified as follows:

DIRECT EXAMINATION

Q. (BY MS. MITCHELL) Good morning, Mr. Fox.
A. Good morning, Ms. Mitchell.
Q. Would you please state your name and business address for the record.
A. My name is Gordon L. Fox. My business address is 1200 West Washington Street, Phoenix, Arizona.
Q. And by whom are you employed and in what capacity?
A. I'm employed by the Arizona Corporation Commission in the Utilities Division as a public utilities analyst manager.
Q. And could you briefly describe your duties as a public utilities manager?
A. I supervise and facilitate other analysts that prepare testimony and Staff reports presenting Staff's recommendations to the Commission on various aspects of rate cases and securities issuances and other financial issues.
Q. And did you prepare and prefile testimony in this docket?
A. Yes, I did.
Q. I think you have in front of you what's been marked as Exhibit S-5. Can you identify that for us,

please?

A. This is the direct testimony that I filed.

Q. And do you have any additions, corrections, or modifications to make to your testimony?

A. No.

Q. And do you adopt S-5 as your sworn testimony?

A. Yes, I do.

MS. MITCHELL: Your Honor, at this time I would like to move into admission Staff Exhibit S-5.

ALJ WOLFE: There having been no objection, S-5 is admitted.

(Exhibit S-5 was admitted into evidence.)

Q. (BY MS. MITCHELL) Mr. Fox, in Mr. Bourassa's rejoinder testimony, he criticizes Staff's adjustments to account for inflation because he says the Staff adjustments fail to account for the impact of inflation on the other aspects of Chaparral's business, namely operating expenses and earning results.

Does Staff have a response to that criticism?

A. Yes. First, can you repeat that question just for a minute for me?

Q. One of the criticisms that Mr. Bourassa levels against Staff in his rejoinder testimony is that the adjustments that Staff makes on account of inflation don't account for the impact of inflation on the other aspects of the company's business, and he specifically named operating expenses and earning results.

A. Oh, okay. The first thing is that the adjustment made to inflation on the fair value rate of return isn't an adjustment to reflect matching. Fair value rate of return is a forward-looking issue, and operating expenses are matched historically with the revenues.

So the issue is that there has to be an adjustment to the fair value rate of return because there's a double counting of inflation, once in the -- assuming the fair value rate base includes an RCN or some kind of rate base that includes the depreciation in pricing of the plant values, then -- and since there's also an inflationary aspect in both the equity and debt costs of the rate of return. So there's a double counting of inflation in the fair value rate of return, unlike operating expenses that just have -- there may or may not be some inflationary component there, but it's -- whether it's there, it's not double counted.

And the other aspect is that there really -- the ratemaking framework recognizes that there may be inflation in operating expenses. And that's one of the things that is supposed to serve to encourage companies, utility companies that are operated in a noncompetitive business, to provide efficiencies.

Q. Thank you. Does the adjustment for inflation of Chaparral's fair value rate of return impact the company's ability to earn its authorized rate of return?
A. No. The adjustment for inflation may change what the authorized rate of return is, but it doesn't have any impact on whether the company can actually realize whatever the rate of return authorized is.
Q. Thank you. In Mr. Bourassa's rejoinder, he states that because half of the company's fair value rate base consists of its original cost rate base, and the original cost rate base is unaffected by changes in price, and thus the adjustment to the cost of equity doesn't recognize this fact, that therefore it dramatically overstates the impact of inflation.
Is that a correct statement according to Staff?
A. Well, I always would be a little bit concerned about anything that talks about dramatic. But generally I think Staff agrees that there needs to be some recognition that balances and takes into consideration that part of the rate base. If part of the rate base is an item that does not reflect inflation, then that has to be recognized.
And I think if we look back at the decision that was made in the remand decision, I think that was Decision No. 70441, that the method that I referred to, I refer to

that method as Method 1 in my testimony. And that method actually mitigates that in the circumstance of the original cost rate base not having any inflation in it, because that method doesn't make any adjustment to debt in the consideration of the fair value rate of return.

I think Staff's position is that Method 2 goes a step further and refines the step one so that it more fully recognizes the fact that the original cost doesn't reflect any inflation.

Q. Thank you. Does the fact that long-term debt has a fixed cost and is unaffected by changes in price or other inflationary effects make it improper, then, to reduce the cost of debt?

A. No. All debt, regardless of when it was issued, is going to have an inflationary component. So it's not a question of whether the inflationary component increases or decreases or changes in any way. It's the fact that there is an inflationary component in the cost of debt and, you know, it will remain there as long as the debt remains outstanding.

So if you're going to consider a fair value rate of return that includes a debt component and you also have a fair value rate base that includes the inflationary component, if you're going to offset the inflation one against the other, the adjustment should be made to debt as well as to equity.

Q. And does it impair the company's ability to earn its authorized rate of return by adjusting the cost of debt to remove the inflationary component?

A. I think it -- again, it doesn't have any effect on the company's ability to earn its return. It may affect what the authorized return is, but it won't have any effect on the company's ability to earn that return.

Q. And finally, Chaparral in Mr. Bourassa's rejoinder advocates for the use of 5-, 7-, and 10-year treasury yields to calculate the inflationary adjustment to the weighted average cost of capital.

Are there any problems with that approach?

A. Yeah. I think he grabbed that from the concept of a holding period from the CAPM model that is used in developing cost of equity, but that's not what we're trying to do here. We've already -- the adjustment that we're making is to an item that's already -- where the cost of equity has already been determined.

And what we're really trying to do with this adjustment is remove the inflationary component that investors require for making investment in a long-term asset that over the life of the -- what the average life of the plant is built with the funds. In this company's case, the average life, if I use somewhat of a compounded depreciated rate, the average life of the assets is over 30 years. So in order to make a comparable consideration for what investors require for additional return over the long-term period, we should be looking at something in the ballpark of 20 to 30 years instead of 5, 7, or 10 years as proposed by the company.

And you can see -- just to give you an example and an analogy why the holding period aspect doesn't really apply here, an investor could make an investment in a 30-year U.S. Treasury, but only anticipate holding that security for five years, but the return on that 30-year investment is based on what 30-year treasury rates are and not on what five-year treasury rates are.

MS. MITCHELL: Thank you, Mr. Fox. I have no other questions. Mr. Fox is available for cross-examination.

ALJ WOLFE: Thank you.

Ms. Wood, do you have questions of Mr. Fox?

MS. WOOD: I do.

CROSS-EXAMINATION

Q. (BY MS. WOOD) Good morning, Mr. Fox.

A. Good morning, Ms. Wood.

Q. Would you agree that fair value rate base reflects a weighing of the original cost rate base and the RCND? I'm sorry. Yes, that's the question.

A. My understanding of the way it's done in this case, it does, yes.

Q. Okay. And is it also true that the RCND proposed by the company reflects an inflationary component?

A. Yes, it does.

Q. Okay. Because RCND includes an inflationary component, would you agree that the inflation component carries forward into the fair value rate base?

A. Yes, it does.

Q. And do you agree also that the rate of return must be based on the fair value of the utility's property?

A. Yes.

Q. Okay. Utilities are not entitled to profits in excess of normal returns, are they?

A. No, they're not.

Q. Accordingly, would you agree that it's inappropriate to allow an inflationary component in the fair value rate base and to also include it in the rate of return?

A. I agree with that.

Q. Thank you. To do so would be to overstate the inflationary component, correct?

A. Would you -- I'm sorry. I had a little trouble hearing that.

Q. To do otherwise would be to overstate the inflationary component, correct?

A. Yes, it does.

Q. Thank you.

A. It would.

Q. Do you agree that investors are satisfied with a relatively lower level of current income and dividends in a growth industry where the value of the stock and the anticipated future levels of dividends are expected to grow over time?

MR. JAMES: Could I have that repeated? I'm sorry. You kind of lost me.

ALJ WOLFE: Sure. You want it read back?

MR. JAMES: Yes, please. Either way.

Q. (BY MS. WOOD) Do you agree, Mr. Fox, that investors are satisfied with a relatively lower level of current income and dividends in growth industries when the value of the stock and the anticipated future levels of dividends are expected to grow over time?

A. Well, I wouldn't necessarily limit it to growth industry. I think if you look at -- you can look at the formula for the discounted cash flow model and you can see the components. You've got a dividend yield component and a growth component. And if the growth component increases, then the yield component will decrease if the expected return remains the same. So that is effectively what happens with utilizing either Method 1 or Method 2 is there's a little bit of a transfer of the yield factor to the growth factor.

Q. Is it true that the market-based models used to estimate equity can be appropriately applied to utilities' OCRB, original cost rate base?

A. Well, I think that's the way it's generally done throughout the U.S.

Q. Thank you. Did you compare yields on treasury inflated protected securities with the yields on other comparable government securities not linked to inflation?

A. I'm sorry. I missed a little bit of that.

Q. Did you do a comparison of the yields on treasury inflated protected securities with yields from other comparable government securities not linked to inflation?

A. Well, Staff did that. I didn't personally do that.

Q. Okay. Who on Staff did that?

A. I believe that was Staff witness Mr. Chaves.

Q. What time period was considered? If you don't know --

A. Well, the method that was used was a forward-looking method, but I can't tell you what -- it's not a historical period so it wasn't -- it was a going-forward period. So if we looked at a 20-year treasury going forward, it would be what is the current rate on the treasury, on a future 20-year treasury.

Q. Okay. So it was computed on an overall expected future inflation rate?

A. Well, there is a little bit of a difference between what the expected inflation rate is, or at least there could be a difference between the expected inflation rate and the return that investors require due to inflation. And I think that the measurement that's made by comparing the TIPS to the noninflationary-protected securities of similar length measures the additional return that investors require due to inflation, which may be different than the inflation expected inflation rates.

Q. So Mr. Chaves did this analysis; is that what you're saying?

A. Yes.

Q. In relying on it, then, you divided the inflationary component by two and deducted it from both the cost of debt and the cost of equity. That's the methodology you used?

A. That's correct.

MS. MITCHELL: And I would like to also suggest that -- I was going to do this on redirect, but I'll just mention it now -- that Mr. Parcell may be the better witness to respond to some of these questions. That's all.

Q. (BY MS. WOOD) Is the analysis consistent with the methodology adopted by the Commission in Decision 70441?

A. Well, I believe it's consistent with it. It's not identical to.

Q. Okay. So it's not identical to the methodology used by the Commission?

A. That's correct.

Q. In the prior rate case, 70441, Ben Johnson testified, correct?

A. I believe Dr. Johnson was RUCO's witness.

Q. Yes. And in that instance, he recommended that the inflationary component be deducted from the weighted average cost of capital, correct?

A. I believe I read that in the order.

Q. Okay. What are the reasons that you have for not adopting that methodology here?

A. I guess I'm failing to understand. I believe we are -- the Staff is making a deduction from the weighted average cost of capital for both debt and equity in this case. The difference is that the adjustment is only for half of the adjustment, because we're recognizing that the original cost rate base doesn't have an inflationary factor and it represents 50 percent of the fair value rate base as proposed by the parties.

Q. Could you repeat that again? I did not quite catch the entire statement.

A. Okay.

MS. MITCHELL: Excuse me. Do you want to have the court reporter just read back his answer?

MS. WOOD: I'm happy with him just repeating his answer.

ALJ WOLFE: Well, if you want to know exactly what he said, let's have it read back.

MS. MITCHELL: Yes.

MS. WOOD: Okay. I'm happy with that.

ALJ WOLFE: If you want him to paraphrase it again, that's different. But he did answer the question already, so let's just have it read back. That would be the best thing.

MS. WOOD: I'm fine with that, Your Honor.

(The record was read back by the Court Reporter as requested.)

ALJ WOLFE: Thank you.

Q. (BY MS. WOOD) You're suggesting that the original cost rate base is one half? That the proportion is one-half of the fair value rate base?

A. I believe that's the way that Staff and the company have proposed it.

Q. Well, what is the original cost rate base? What is the figure? Do you know?

A. I don't know.

Q. Do you know what the figure is for the RCND?

A. No.

Q. Do you know what the proportion of the two are?

A. No.

Q. Have you reviewed the testimony of Mr. Rigsby?

A. No.

Q. Do you disagree that his cost of capital computation is entirely consistent with the decision of the Commission in 70441?

MR. JAMES: Objection. Your Honor, the witness just testified that he didn't read Mr. Rigsby's testimony.

ALJ WOLFE: Sustained.

Q. (BY MS. WOOD) Are you familiar with his testimony even though you may not have recently read it?

A. No.

Q. So when you made your testimony today, you did not review the most recent decision of the Commission on this very issue?

A. No. I have read the decision.

Q. Okay. And within the course of that decision, Mr. Rigsby's position is disclosed as well as RUCO's position in that matter is disclosed, correct?

A. Yes.

Q. Are you sufficiently familiar with the position proffered up in that decision to be able to discern whether or not the proposal you're making in Method 2 is consistent with that?

A. Well, I don't know what you're getting at, so I guess the answer is no.

MS. WOOD: I have nothing further, Your Honor.

ALJ WOLFE: Thank you.

Mr. James.

MR. JAMES: Thank you, Your Honor.

CROSS-EXAMINATION

Q. (BY MR. JAMES) Good morning, Mr. Fox.

A. Good morning Mr. James.

Q. Let's start with just a few background questions. You testified that you are the utilities -- is it utilities rate analyst manager; is that right?

A. Public utilities analyst manager.

Q. Public utilities analyst manager. Okay. Thank you. And you had indicated that as part of your duties you supervise rate analysts here at the Corporation

Commission that are employed by the Utilities Division?
A. That's correct.
Q. And how long have you worked for the Corporation Commission?
A. Well, I began as a rate analyst in 1990, and I spent three years in the interim working for RUCO. Other than that, I've been working for the Commission. So I guess that makes it about 15 years.
Q. All right. 15 years here and another, you said, three years with RUCO?
A. Yes.
Q. Okay. Now, according to your prefiled testimony, you had indicated that you supervise analysts whose duties include the preparation of testimony on rate base, operating income, cost of capital, and rate design; is that correct?
A. That's correct.
Q. So do you supervise the Staff's cost of capital analysts?
A. Yes, I do.
Q. What do you do as the supervisor for Staff's cost of capital analysts?
A. Well, I do a lot of things. You want to give me a little bit of a clue what you're looking for?
Q. Well --

A. I mean, I review their testimonies. They consult with me. I have had input into development of the models that we use, that kind of thing.

Q. Okay. That's fine. It wasn't a trick question.

At the present time -- well, let me just ask you. Who are Staff's cost of capital analysts at the present time that are actually employed by the Utilities Division?

A. It's a little bit difficult to say that, because I feel that I can call upon anyone that is on our Staff to prepare cost of capital analysis. But of those that have prepared cost of capital analysis, we have Pedro Chaves and Dennis Rogers and Steve Irvine. And Steve Irvine is no longer under my supervision, though.

Q. Okay. And you had stated that other people, including yourself, have from time to time also provided cost of capital testimony in rate cases; is that right?

A. Well, just to be clear, I don't know if I have ever -- I have sponsored cost of capital testimony that was prepared by other analysts. I don't believe I have ever directly prepared cost of capital testimony. That doesn't mean they haven't done any cost of capital analyses or haven't sponsored the cost of capital rate in the context of a rate case.

Q. Well, for example, do you recall sponsoring cost of capital testimony in the Arizona Water Company's

Western Group rate case? That was testimony that you had adopted that was actually written, at least ostensibly, by Alejandro Ramirez.

A. I remember sponsoring testimony prepared by Mr. Ramirez, and I also sponsored testimony written by other analysts, but I don't recall exactly that case.

Q. Would it refresh your recollection if I provided you with a copy of Mr. Ramirez's direct and surrebuttal testimony in the Arizona Water case?

A. Well, I review them all anyway, so they're going to look familiar. I don't know if it would help me to realize that I sponsored that one versus another.

Q. That's a fair answer.

I assume you work closely with Mr. Chaves; is that fair?

A. That's fair.

Q. How long have you worked with Mr. Chaves?

A. I believe about three years.

Q. And obviously you have reviewed a fair number of Mr. Chaves's cost of capital testimony in the past?

A. I'm not sure what a fair number is, but maybe five or so.

Q. Okay. Did you review Mr. Chaves's cost of capital testimony that was filed in this case?

A. Yes, I did.

Q. Have you seen Mr. Chaves testify here at the Commission?

A. Yes.

Q. Do you think Mr. Chaves is competent to provide cost of capital testimony?

A. Yes.

Q. Were the methods that Mr. Chaves used in his direct testimony in this case consistent with the methods that Staff has used in prior water and wastewater utility rate cases?

A. Well, Staff's methodology varies over time. We try to continually improve it, so it isn't identical to everything that we have always done.

Q. And what is different about the testimony, the methods -- excuse me -- that Mr. Chaves used in this case that would have been different, for example, from Chaparral City's prior case?

A. I can tell you that there were a couple of differences. And I'm not sure I can tell you what all of them are, but, for example, I believe that there were a couple of changes that were made, a couple of -- about three years ago. And most of those, all of those changes -- well, let me give you an example.

I believe we used to look at arithmetic -- I'm sorry -- the geometric growth instead of the arithmetic, using the numbers from the arithmetic method in the growth factor for DCF and those kind of things. So that is just an example. There were a couple of other factors that we changed.

Q. Okay. What about -- well, and maybe I sort of jumped to specifics too quickly. Staff has consistently used the DCF model as a way of estimating the current cost of equity in water and wastewater utility cases; is that correct?

A. Let me say this. Since I have been the supervisor, we've consistently used it. And I'm not going to speak to what Staff did before my time.

Q. Okay. And that's fair, too. I apologize. Again, I wasn't trying to ask an open-ended question here.

How long have you been supervisor?

A. Since 2000.

Q. Has Staff also -- again, based on -- let's just stick with the 2000 to the present time frame. Has Staff also used the capital asset pricing model, or the CAPM, to estimate the cost of equity for water and wastewater utilities?

A. That's correct.

Q. And my recollection is that Staff has used the DCF model and the CAPM model, but has not employed any other models absent some real unusual circumstance; is that correct?

A. Well, unfortunately, we have a lot of those unusual circumstances and they're not so unusual, but --

Q. Well, let me -- and I apologize. Let me refine that question a little bit.

Some of the very small companies, you have to use things like operating margins and other techniques; is that correct?

A. Yes.

Q. And that's what I was trying to distinguish, I think, between the larger sized water and wastewater utilities and some of the very small companies that the Commission regulates.

And by large companies, Mr. Fox, I'm referring to Arizona Water Company, Chaparral City, Arizona-American, the larger sized, the A and B water and wastewater utilities. Okay?

Thinking of that universe of companies, does Staff consistently use the DCF model and the CAPM model to estimate the cost of equity?

A. Yes.

Q. Do you agree, Mr. Fox, that investors are risk adverse and require a greater return for bearing greater risk?

A. I think that's generally recognized in modern finance theory and the fundamental theory behind the capital asset pricing model that we've been discussing as the CAPM.

Q. Are you familiar with the use of beta to estimate the relative riskiness of an investment?

A. Yes.

Q. And beta measures a systematic risk of a security relative to the market as a whole; is that correct?

A. That's basically the definition, yes.

Q. Let me go back to Mr. Chaves for a second. Well, strike that. Let me ask you a couple of other just background questions here.

During your tenure as supervisor, has Staff consistently used the same sample group of six publicly traded water utilities in estimating the cost of equity in water and wastewater utility rate cases?

A. I believe there used to be a seventh, but we couldn't use it anymore because they changed their organization.

Q. Was that American Water Works?

A. Yes.

Q. Okay. And so since American Water Works was acquired, the Staff has been using the same six publicly traded water utilities in estimating the cost of equity?

A. That's correct.

Q. And those companies are American States, Aqua America, California Water Services, Connecticut Water, Middlesex Water, and SJW Corporation; is that right?

A. Yes.

Q. Do you know whether the average beta of that sample group has increased over the last four to five years?

A. Yes, it has increased.

Q. Suggesting that the water industry is becoming more risky; is that right?

A. Compared to the market, yes.

Q. Compared to the market.

Now, you indicated earlier that you had reviewed Mr. Chaves's direct testimony before it was filed; is that right?

A. That's correct.

Q. And did Mr. Chaves utilize the methods that Staff has used in prior cases in that direct testimony?

A. In recent prior cases, yes.

Q. And did anybody else review -- to the extent that you know, did anybody else review Mr. Chaves's testimony before it was filed?

A. Well, we have a review process that includes other individuals reviewing the testimony, so yes.

Q. Who else would have reviewed Mr. Chaves's testimony?

A. Usually the assistant director and the legal staff assigned to the case.

Q. And when you say assistant director, who is the assistant director?

A. In this case it would be Mr. Abinah.

Q. Okay. Is there anybody else that would have reviewed it?

A. There are other -- we have a compliance section that has a check-off for it, but I'm not familiar with what aspects of the testimony they actually review.

Q. All right. Fair enough.

Did anybody have any particular difficulties or problems with the cost of equity estimate that Mr. Chaves made in his direct testimony?

MS. MITCHELL: I need to interpose an objection to the extent that this may ask for information that may be privileged, because Mr. Fox indicated that the legal staff reviewed it and they may have given comments concerning that. And to the extent that Mr. James is asking for that, then we object.

MR. JAMES: Your Honor, I'll rephrase the question.

ALJ WOLFE: Thank you.

MR. JAMES: That was not my intent.

Q. (BY MR. JAMES) Putting aside comments that you may have received from one of the staff attorneys. I'm just talking now about people in the Utilities Division. Did you or anybody else in the Utilities Division, not Legal, have any objections or any difficulties with Mr. Chaves's direct testimony?

MS. MITCHELL: And I may need to object to that one as well because, you know, in the course of other Staff members having problems, they may have sought and did actually seek legal advice, and some of these answers may intrude upon matters that may be protected by attorney-client privilege.

I mean, if he can get around answering it without disclosing, it's just intertwined, the process here for review. And I just want to make sure that we're not waiving any type of attorney-client privilege based on some advice that maybe was given to the director's office or to Staff concerning the testimony. And it's just not Mr. Chaves's testimony. It affects other testimony as well.

ALJ WOLFE: Mr. James, you're asking for Mr. Fox to disclose any specific objections there may have been to the testimony prior to its being filed? Is that your question?

MR. JAMES: Yeah. And maybe I can try to refine it again to avoid this problem. I'm not trying to get into anything, Your Honor, that would be subject to attorney-client privilege. And obviously you don't know and I don't know the extent of Legal's involvement here, so let me try to rephrase this and make it a little bit more specific.

ALJ WOLFE: Okay.

MR. JAMES: Perhaps that will solve the problem.

Q. (BY MR. JAMES) Mr. Fox, I'll start over again. Do you recall receiving -- or let me rephrase this.

And I may have asked you this, but just to start this I want to try to break this into a couple of questions. And if I asked you this before, I apologize.

But did you personally, did you have any difficulties or problems with the methodologies and inputs used by Mr. Chaves in his direct testimony to estimate the cost of equity for Chaparral City?

MS. MITCHELL: You know, I may need to -- I hate to stop Mr. James's flow here, but this may intrude on work product issues. Whether there have been objections to testimony, you know, intrudes upon the ability of parties to privately develop what their testimony is to present. I mean, it's a kind of give-and-take flow situation when testimony is being developed, and, you know, parts of it will involve seeking legal advice and then reacting to that legal advice and changing testimony.

I mean, it's not that we don't have a -- you know, we have another witness that's adopted portions of Mr. Chaves's testimony, which is now the Staff position.

ALJ WOLFE: And I think that's why Mr. James is asking the questions.

MS. MITCHELL: But I just still am concerned with the ability of a party to ferret out information that may -- objections that may have been addressed with legal counsel present, and addressed and readdressed in testimony, and testimony changed because of legal advice, and then, you know, that's disclosed, which is privileged.

ALJ WOLFE: So you're asserting privilege as an objection to Mr. James's question?

MS. MITCHELL: Yes.

MR. JAMES: Your Honor, I had asked Mr. Fox that time for his personal view, not for the view that was provided by legal counsel. Again, I was trying to be very careful.

ALJ WOLFE: You may answer the question.

THE WITNESS: From my perspective, this was somewhat of a unique and more difficult case to prepare testimony for than what we have done in the past. The changes and the considerations for fair value presented challenges for Staff.

Q. (BY MR. JAMES) That was because of -- not to interrupt -- but that was because of the fact that the rate base being used in the case is a bit different than the typical case, which is strictly original cost. Is that what you're saying?

A. That's correct.

Q. Okay. Please continue. I'm sorry. I just wanted to make sure that was clear.

A. So I think overall there were concerns about whether we could come up with a methodology that we thought was the best effort. So I'm not sure if that answers your question, but --

Q. Okay. Well, which ultimately evolved into Staff's recommendation of what you're calling Method 2; is that right?

A. Yes.

Q. Okay. Let me back up.

A. I think it really -- you know, it's not just Method 2. It evolved into all of the recommendations that Staff has.

Q. Okay. But let me ask you again, and I'm asking now for your personal opinion as Mr. Chaves's supervisor and as someone who reviewed Mr. Chaves's direct testimony.

Was there any issue or problem with respect to the methodology and inputs used by Mr. Chaves in his DCF model estimate of the cost of equity?

A. I don't recall.

MS. MITCHELL: Your Honor, can I object? You know, the direct testimony of Mr. Chaves, as with a lot of direct testimony, is refined and changed through surrebuttal. I'm not sure ferreting out what happened in direct and how the positions have changed in surrebuttal, you know, is an appropriate line of questioning. I mean, it would be like me beating up Mr. Bourassa on something he said in his direct testimony that he ultimately changed in his rejoinder.

ALJ WOLFE: Are you objecting on grounds of relevance? What is the objection?

MS. MITCHELL: Relevance, partially, and the direct testimony speaks for itself. I mean, the ultimate work product was what was filed in the docket. The parties refined their direct testimony before -- I guess they refined their direct testimony. I mean, you have drafts and drafts and drafts, and ultimately you get a final product. That's the final product.

And I'm just trying to understand how this helps anyone to go back and say, well, did you change this word or did you change this word? I'm not understanding when we have surrebuttal that is changed and refined the direct testimony.

ALJ WOLFE: In this case I believe that the question and the answer are relevant. It's overruled.

MS. MITCHELL: Thank you.

Q. (BY MR. JAMES) Do you remember the question, Mr. Fox?

A. No. Could you repeat it, please?

MR. JAMES: Could you read it back, please.

(The record was read back by the Court Reporter as requested.)

THE WITNESS: I think the decision was that we were going to continue to use the methods that we had previously used in terms of the DCF model itself.

Q. (BY MR. JAMES) Okay. So I take it your answer, then, is that there were no particular issues or problems? There was a decision made -- and I apologize, Mr. Fox. I'm not trying to put words in your mouth.

There was a decision made to continue to use the same methods and inputs with respect to the DCF that Staff had been using. Is that what you're saying?

A. Yes. We have continued to use the same inputs, the same methodologies. There's no difference that I'm aware of in this case versus the recent prior cases in terms of the calculation of the DCF. It doesn't mean that we didn't have concerns about whether that outcome should be used or how that outcome should be used in making a final recommendation on a rate of return.

Q. And again, that goes back to the issue here with respect to the fair value rate base?

A. Yes.

Q. Let me ask you the same question, Mr. Fox, with respect to Mr. Chaves's CAPM estimate. Was there any issue or problem with respect to the methodology and input used with respect to that estimate?

A. Well, when we saw the inputs, we obviously were somewhat surprised that one input in particular was radically different than what we had historically seen. And so we had to think about whether or not that was something that we should throw out as an outlier and something that just wasn't representative of what would be a normal situation. So yes, there were concerns.

Q. But ultimately the decision was made to file Mr. Chaves's direct testimony?

A. Yes.

Q. So the concern, if I understand your question, the concern was with respect to the result produced as opposed to the methodology being used?

A. No. The concern was when we saw that the growth input that we get from Value Line was unusually large.

Q. That's the growth input that's used to estimate the current market risk premium?

A. Yes, it is.
Q. Did you consider using a different approach to estimate the current market risk premium?
A. We considered whether there was something else that we could do to -- that would be representative of what we thought was a good recommendation, and we concluded that fundamentally the methodology continues to be sound.
Q. Do you know if Mr. Chaves prepared draft surrebuttal testimony on the cost of capital in this case or draft schedules?
A. Well, he prepared schedules. I don't recall whether we had draft versions versus the final version. I don't recall whether the final version was the same as the draft.
Q. But he did updated schedules that would have normally been used in connection with surrebuttal testimony; is that correct?
A. I'm not aware that that happened.
Q. Oh, I apologize. I misunderstood your testimony. Let me ask you the question again. I think I misunderstood.
I was asking you whether Mr. Chaves prepared schedules containing an updated estimate of the cost of equity that would accompany surrebuttal testimony?

A. To the best of my knowledge, that never happened.
Q. Okay. And at what point, Mr. Fox, did Staff decide to hire Mr. Parcell in this case?
A. I wasn't part of that decision, so I don't know the answer to that.
Q. Fair enough. Do you know who was involved in making that decision?
A. Well, I don't really know.
Q. People higher up on the food chain than you are?
A. Yes.
Q. So you're not aware of any of those discussions or what Mr. Parcell was instructed to do then?
A. No.
Q. Okay. Well, let me ask you this just personally, Mr. Fox. Do you agree with the decision to replace Mr. Chaves with Mr. Parcell in this case?
A. It's not really something that I considered as an agreement or not agreement. If my supervisors make decisions, unless there's something unethical about them, I'm agreeable.
Q. Fair enough. Again, these are decisions being made by people higher on the food chain?
A. Yes.
Q. Do you think that the methods -- and again, I'm referring to the DCF and CAPM. Do you think that the

methods and inputs that have been used, and as you had indicated there have been a few tweaks here and there, but the methods that have generally been used in other recent rate cases for water and wastewater utilities, are those methods sound methods?

A. Yes.

MR. JAMES: Your Honor, I know it's a bit early. I wonder if we could take a short break at this point because, unfortunately, my witness that I need to confer with didn't arrive until about 9:20.

ALJ WOLFE: This would be a good time for a break. We'll take a 15-minute morning break. We'll be back here at 10:25.

MR. JAMES: Thank you.

(A recess was taken from 10:08 a.m. to 10:38 a.m.)

ALJ WOLFE: Let's go back on the record.

Mr. James.

MR. JAMES: Thank you.

Q. (BY MR. JAMES) Mr. Fox, did you reply on Mr. Chaves's testimony in this case in developing your recommended fair value rate of return?

A. Mr. Chaves put together the weighted average cost of capital and also provided the inflationary adjustment, and I used those components in preparing my testimony.

Q. All right. Mr. Fox, I have handed you what has been marked for identification as Exhibit A-16, a copy of Mr. Chaves's direct testimony that was filed in the docket on October 3, 2008. Does that look familiar to you?

A. Yes.

Q. And this is the testimony, as we discussed earlier, that you would have reviewed before it was filed?

A. That's correct.

Q. Let's go to page 36 of Mr. Chaves's testimony.

A. Okay.

Q. Now, this is the section I believe you were referring to where Mr. Chaves calculated the adjustment for inflation; is that right?

If you want to take a moment to look at that, that's fine. I believe it continues onto the next page, Page 37.

A. Yes.

Q. That is the section that you relied on in your testimony?

A. I think you can look at the Schedule 1 and Schedule 2 as well.

Q. The adjustment is also shown on Schedules 1 and 2 to Mr. Chaves' testimony. Is that what you're saying?

A. Yes.

Q. Now, what rate of inflation did Mr. Chaves calculate? I'll refer you to Footnote 16 on Page 36, if it speeds things up.

A. I believe it's 2.4 percent. Yeah, 2.46 here.

Q. Okay. And in doing that -- strike that.

How did Mr. Chaves calculate the inflation adjustment? I think you touched on it earlier, but --

A. Well, the paragraph says: How did Staff calculate the inflation adjustment, slash, accretion return?

Staff first calculated the first -- excuse me -- Staff first calculated the difference between the treasury yields for 20-year securities and the 20-year -- treasury real yields for 20-year securities to estimate the additional return required by investors due to inflation on long-term, in parens, 20-year, horizon, and in parens, inflation adjustment, slash, depreciation adjustment. Then, Staff multiplied the accretion adjustment return by a 50 percent factor. Finally, Staff calculated a fair value rate of return by subtracting the modified inflation adjustment, slash, accretion factor from the weighted average cost of capital.

Does that explain it?

Q. That explains it pretty well. And then there's also that footnote -- actually, two footnotes on the bottom of that page, are there not?

A. Yes.

Q. And I note that Mr. Chaves used the 20-year treasury yield as of August 8, 2008; is that right?
A. That's correct.
Q. And he also used the 20-year treasury real yield as of that same date?
A. Yes.
Q. And when he says 20-year treasury real yield, I assume he's talking about what we talked about earlier. I think you may have talked about this in response to some questions by RUCO's counsel. We were talking about treasury inflation-protected securities or TIPS; is that right?
A. That's correct.
Q. So Mr. Chaves looked at the difference in yields between a regular 20-year treasury and a 20-year TIPS treasury instrument on a particular date to calculate the inflation adjustment; is that right?
A. That's what he did.
Q. Now, this approach is consistent with other aspects of Staff's cost of equity estimate, at least Mr. Chaves's cost of equity estimate, isn't it?
Do you want me to be more specific? That's a pretty general question.
A. Yes, please.
Q. Well, first of all, for example, if you turn to

Mr. Chaves's testimony at Page 15.
A. Okay.
Q. Do you see the question that begins on Line 12? Again, Page 15: How did Staff calculate the dividend yield component of the constant-growth DCF formula?
Do you see that question?
A. Yes.
Q. And Mr. Chaves indicates that he again used a spot stock price; is that right?
A. Yes, he used a spot stock price.
Q. At the close of the market August 6, 2008; is that right?
A. Yes.
Q. And is that consistent with the methodology Staff normally uses in water and wastewater utility cases?
A. Yes, we use the spot stock price.
Q. And on the top of the next page, Mr. Fox, Page 16, Mr. Chaves explains, beginning on Line 3, that the use of current market stock prices, parens, spot stock price, paren, is consistent with finance theory, i.e., the efficient market hypothesis. Do you see that?
A. Yes.
Q. And that's again the position that Staff has taken in a number of recent water and wastewater utility rate cases, correct?

A. Yes. We've consistently advocated for use of spot stock prices.

Q. And the Commission has adopted that methodology, correct?

A. That's correct.

Q. Mr. Chaves also goes on in Line 5, he says, use of a historical average of stock prices illogically discounts the most recent information in favor of less recent information. The latter is stale and is representative of underlying conditions that may have changed; is that right?

A. That's what it says.

Q. And that, again, is the position that Staff has consistently taken in recent water and wastewater utility rate cases?

A. Right. Absent some kind of unusual factor that comes into play that makes us think differently, I think that's the approach that we have taken consistently, yes.

Q. And here we talked earlier about the fact that the company is using a fair value rate base that's the average of original cost and RCND, but that wouldn't affect the position that Staff has taken with respect to the use of spot stock prices, would it?

A. I don't see any reason why that would affect our analysis.

Q. In addition, if you look at Page 28 of Mr. Chaves's testimony, take a quick look at this, Mr. Fox.

You see there on Line 14, there's a question: What does Staff use as an estimate for the risk-free rate of interest in its current market risk premium CAPM method. Do you see that?

A. Yes.

Q. And again, the answer is: Staff used the August 6, 2008, spot rate on 30-year U.S. Treasury notes as presented in the U.S. Treasury Department website; is that right?

A. That's correct.

Q. And up above there's a question that begins on Line 6: What did Staff use as an estimate for the risk-free rate of interest in its historical market risk premium CAPM method. Do you see that?

A. Yes.

Q. And again, here Mr. Chaves explains that Staff calculated an estimate of the risk-free rate of interest by averaging three intermediate term U.S. Treasury securities' spot rates on August 6, 2008, to correspond with the date Staff selected the sample companies' spot -- or stock spot market prices.

Do you see that?

A. Yes, that's an accurate reading of Mr. Chaves's testimony.

Q. Now, this method of determining the appropriate risk-free rates to use in implementing the CAPM method, this is again the approach that Staff has used in a number of recent water and wastewater utility rate cases; is that right?

A. That's correct.

Q. And so it looks like what Mr. Chaves did, then, was he used the spot stock prices in calculating the dividend yield in the DCF; is that right?

A. Yes, he used the spot prices.

Q. As of a specific date?

A. Yes.

Q. Right. Because that's what a spot price means is that it's as of a specific date, right?

A. That's correct.

Q. He also used the yields on treasuries in implementing the CAPM, again using spot rates; is that right?

A. Yes.

Q. And he also used the yields on treasuries, the spot yields on treasuries at a specific date, in calculating the adjustment for inflation; is that right?

A. Yes, that's correct.

Q. And it looks like he attempted to do so on the same date so everything would match up.
A. Yes, that's correct.
Q. And again, that would be consistent with Staff's typical methodology in water and wastewater utility rate cases?
A. Yes, and it's typical. Barring some unusual circumstances, that would be the methodology that we would employ.
Q. And again, there's nothing in this particular case that would merit a change with respect to using spot stock prices or spot yields on treasuries, right?
A. No.
Q. Let me ask you to turn to Page 43 of Mr. Chaves's testimony. Do you have that page?
A. Yes.
Q. If you look down on the sentence that begins on -- I guess it's entirely contained on Line 36. It states: As previously stated, the best forecast of tomorrow's yield is simply today's yield.
Does that testimony say that?
A. That's what it says.
Q. And again, I've seen that statement appear in Staff cost of capital testimony in the past. That's the position Staff has taken in prior cases as well; is that

right?

A. Yes.

Q. And if you turn to the top of the next page, Page 44.

A. Okay.

Q. There's also the statement, and it's a quote on Line 1: The direction of interest rates, bracket, bond yields, cannot be predicted any better than by the flip of a coin, close quote. Is that correct?

A. Yes.

Q. And if I recall correctly, I have seen that statement appear in Staff cost of capital testimony in the past as well. Do you recall that?

A. You are correct.

MR. JAMES: Let me introduce another exhibit at this point, Your Honor. This would be Exhibit A-17.

Q. (BY MR. JAMES) What you should have in front of you, Mr. Fox, has been printed off of the Federal Reserve website. It's entitled, "Federal Reserve Statistical Release, H.15, Selected Interest Rates (Daily)."

Is that what your document says?

A. Yes, it does.

Q. Have you seen this sort of presentation of interest rates previously?

A. Well, probably in electronic form.

Q. Okay. Does this appear to be a true copy of what would be found on the Federal Reserve's website?

A. It would appear so, yes.

Q. Now, Mr. Chaves estimated the inflation adjustment again using spot yields on U.S. Treasury notes as we discussed before; is that right?

A. Yes.

Q. But he did so using spot yields back in early August of 2008; is that right?

A. Yes.

Q. And you would agree that we should be using current financial data to calculate the inflation adjustment, wouldn't you?

A. Just as Mr. Chaves used a similar date for calculating the dividend yields and the treasury yields and the inflation adjustment, I would expect to have some kind of uniform calculation for all of the data in the cost of capital analysis.

Q. Okay. So you would say -- well, let's take a look at this, and then you make a valid point which we should address.

But if you turn to the second page of what has been marked as Exhibit A-17, do you see the -- looking down on the top of the page, there's an interest rate given. Actually, two interest rates. The first column, the column on the left is for January 5, 2009, and the column on the right is for January 6, 2009.

A. Yes.

Q. Let's focus on the most recent date, January 6, 2009. What is the yield that's reported on a 20-year nominal rate treasury?

A. According to this schedule, it's 3.41 percent.

Q. And so the way Mr. Chaves calculated -- or the method he used to calculate the inflation adjustment is he would take that yield, and then he would subtract from it the yield on a 20-year inflation indexed treasury, which is found below; is that right?

A. Yes.

Q. And what is the yield on a 20-year inflation indexed treasury as of the same date, January 6?

A. 2.65 percent.

Q. And so would you accept subject to check that the difference between the two would be .76?

A. Yes.

Q. And the methodology that Staff is proposing here, that would be divided by -- divided in half, which would be .38, right?

A. Assuming all of the data -- again, relying on all of the analysis done and the same data, if this is the date that that analysis was done, that would have been the outcome of our calculation, Staff's calculation.

Q. And Mr. Bourassa in his supplemental rejoinder testimony actually made such a calculation, didn't he?

A. Yes.

Q. And so in that particular case -- now, he used data, I think, from December 18, I believe. Do you recall?

A. I don't recall.

MR. JAMES: Okay. Well, Your Honor, this is a bit unusual, but I would like to put Mr. Bourassa's supplemental rejoinder testimony in as an exhibit at this point. I'll have Mr. Bourassa, obviously, lay a foundation for it. There has been no objection to it.

ALJ WOLFE: You can certainly ask questions about it.

Q. (BY MR. JAMES) Mr. Fox, you should have in front of you what has been marked as Exhibit A-18, which is a copy of Mr. Bourassa's supplemental rejoinder testimony that's dated December 23, 2008. Do you see that?

A. Yes.

Q. Now, let me find the page. If you take a look at Page 5 -- in fact, let's start on the bottom of Page 4. Do you see there's a heading on the bottom of Page 4 entitled, "Updated Inflation Estimate"?

A. I see it.

Q. And there's a question that begins on Line 19. It says: Did you also update the current rate of inflation so that it is consistent with your updated estimates of the cost of equity, question mark.

Do you see that?

A. Yes.

Q. And what is the answer that Mr. Bourassa gives that begins on Line 22?

A. He says: Yes, I used the same method discussed in my prior testimony to be consistent with Staff's view that spot yields should be used in accordance with the efficient market hypothesis. The yields at December 18, 2006, are --

Q. And then it gives -- let me stop you there. And then he gives the various -- I wasn't going to make you read the table.

A. I just wanted to comment, I'm guessing that 2006 is not the right year.

Q. That's probably right. I'll have to have Mr. Bourassa correct that. I believe that's probably 2008.

But this is, essentially, the methodology, then, that you're suggesting that we should try to match everything up using the same date, using the same date for the inputs; is that right?

A. That's correct.
Q. And if you go down to the paragraph that begins on Line 11, Mr. Bourassa states. If 20-year treasuries are used instead, the indicated inflation is 87 basis points. Do you see that?
A. Yes, that's correct.
Q. Is that correct, to your knowledge, Mr. Fox?
A. That's what it says here.
Q. That's what it says. Have you checked the current difference between the yields on 20-year treasuries and 20-year TIPS?
A. I have not.
Q. It's certainly gone down since last August, though, hasn't it?
A. I haven't reviewed them, so I don't know.
Q. Well, Mr. Bourassa, and he'll testify --
A. Other than what we've reviewed for the 5th and the 6th of January just a moment ago.
Q. Well, the methodology, though, assuming -- and again, I realize you haven't checked it, but assuming that the difference between a 20-year treasury and a 20-year TIPS is 87 basis points as of December 18, 2008 -- and hopefully Mr. Bourassa will correct that when he testifies -- using Staff's methodology, you would divide the 87 basis points in half; is that right?

A. The inflation adjustment would be half of the 87 basis points, that's correct.

Q. Okay. Let's talk for a moment about something that you had testified to earlier, and that's the appropriate treasury to use.

Isn't it true that Staff has testified in prior cases that intermediate term treasuries should be used in implementing the CAPM because investors hold stocks for an intermediate period of time?

A. Yes, that's Staff's position.

Q. Okay. If an investor intends to hold a security for an intermediate period, which I believe would refer to a period between 5 and 10 years; is that right? When we say intermediate period, is that what we're talking about?

A. Yes.

Q. Okay. If an investor invests in a security with the intent of holding that security and receiving a return on that security for an intermediate period of time, would it make sense for the investor to also consider the likely expected inflation during that holding period?

A. Yes. I think that investor is going to look at what the expected inflation period is over the holding period. And if you have a security that lasts longer than the holding period, then they also have to consider that whoever is going to purchase that security from them subsequent when they go to sell it is going to take into consideration the inflation changes that are going to happen subsequently over the remaining life of the security.

Q. And that's what you would -- I think that's what you had discussed earlier in response to questions by RUCO's counsel; is that right? Where I'm getting confused by that is isn't that inconsistent with the Staff's position on the CAPM, because doesn't someone -- doesn't an investor face that same -- strike that.

Isn't an investor in the same position relative to selecting the appropriate yield in the CAPM, because even if the investor intends to hold the investment for 5 to 10 years, he or she has to sell the security, assuming that it has a life that's greater than an intermediate term?

A. The issue is a little bit of a different one. One is an estimate of what is the cost of equity. The issue that Staff has proposed for making an adjustment to the fair value rate of return reflects something different. It's not a calculation of cost of equity. It's a calculation of what is the inflation anticipated from an investor's point of view of the plant that has to be purchased, because that is -- it's the plant that's going to -- that is considered in the fair value rate base with an RCN considered in it. And the plant, as I discussed earlier, in Chaparral's case has an average life expectancy in excess of 30 years.

The investor in the stock can't do anything about the fact that the company has invested in plant that's going to last longer than their holding period. We're trying to -- what Staff's recommendation does is make an adjustment to remove the excess inflation, and that inflation is in the appreciation of the properties through the RCN. And so we have to match the adjustment for the investment period from the company's standpoint of the plant that it has to invest in. This isn't an estimate on cost of equity. So the holding period from the company's standpoint, the investment they have to make and the plant is long-term.

Q. Okay. Well, I think we're talking about apples and oranges here. We've got two different pieces, if you will. One piece is the rate base, and I want to ask you some questions about that later. But one piece is the rate base, and the other piece is the cost of capital, right?

A. That's -- well --

Q. I mean, you're talking about overcounting or double counting inflation, and your contention is that there's inflation contained in the rate base and there's

inflation contained in the cost of capital, correct?
A. That's correct.
Q. Okay.
A. So the inflation component that we're trying to adjust for is the one that's in the rate base. Because the cost of capital, when you look at the weighted average cost of capital, that component already is matched up. There's no -- it already has the inflation calculated in it, so it's excess. So what we want to do is remove the excess, which is the component that's in the rate base.
Q. Okay. But the adjustment that you're proposing to make is to the company's cost of capital, right? You're proposing to adjust the cost -- under your inflation adjustment, slash, accretion allowance, Staff is proposing to adjust the cost of capital down, correct?
A. Proposing to reduce the fair value rate of return, which I'm not sure you consider that synonymous with the cost of capital, to reflect the additional inflation in the fair value rate base.
Q. Okay. Let's focus for a second just on the cost of equity. Do you believe that the cost of equity contains a component for future expected inflation?
A. Yes.
Q. And it's a forward-looking inflationary expectation. It's what investors expect inflation to be

in the future while they're holding their investment, correct?

A. Yes.

Q. Okay. And as you testified earlier, I think you agree that -- well, you said Staff's position has been that the typical investor holds an investment for an intermediate term, correct?

A. Yes.

Q. Okay. Let me shift gears slightly here and talk about -- let's talk about Method 1 versus Method 2. As I understand your testimony, Mr. Fox -- and correct me if I'm wrong -- Method 1 is essentially the method that was adopted in Chaparral City's decision on remand; is that right?

A. The intention is that Method 1 is the same methodology adopted in the remand decision, which I believe was 70441.

Q. Method 2 is the method that Staff is proposing in this case; is that right?

A. Well, I think what we're proposing is that either Method 1 or Method 2 are reasonable methods for the Commission to use.

Q. Is one method more reasonable than the other?

A. I'm not going to use the word reasonable. What we believe is that there is -- I think I have used the word symmetry, and then there's some better financial soundness to Method 2 versus Method 1. And I don't think that the -- Staff's view is that the Method 1 is still a reasonable method. But whatever method that's used, we want it to be one that's reasonable. And when you can nail down, to put it one way, a method and make it more consistent with financial theories and consistencies, that, I think, gives you a better ability to see whether it's a fair measure.

And from Staff's point of view, Method 2 provides a little more of that consistency in that we clearly think that -- I think there is an inflation component in the cost of debt, and so Method 1 didn't remove any inflation in the cost of debt.

I just grabbed about six or seven texts that were near me when I was looking at this issue, and every single one identifies inflation as a component of debt. I couldn't find anything that said anything differently. You know, it's kind of like the financial equivalent of does mass have gravity? It's just there. So it makes sense to Staff to have a methodology that's consistent with that financial theory.

Q. Well, let me ask you some more detailed questions relating to the difference. And again, you testified earlier that you have participated in rate cases in various ways. We've been talking here primarily about cost of capital and related issues, but you have also testified, haven't you, on rate base and similar types of issues?

A. Yes.

Q. And I assume you also review testimony on those sorts of issues?

A. Yes.

Q. On a regular basis?

A. Yes.

Q. So let me just ask you a few questions that relate to what you were talking about with respect to Method 2, then.

Does the company's fair value rate base consist of the average of its original cost rate base and its reconstruction cost new rate base?

A. That's the way Staff and the company have proposed it.

Q. Now, how does inflation affect the amount of Chaparral City's original cost rate base?

A. I don't believe inflation has impacted the original cost. That is, inflation subsequent to the purchase of those items has impacted it. Obviously, inflation prior to the original cost date has affected what the original cost was.

Q. But the original cost is based on the historic cost to build the plant, correct?
A. Yes.
Q. And it's not going to go up or down as a result of changes in prices, construction costs, cost of labor and materials, and so on; is that right?
A. It's established at the time of the purchase, yes.
Q. So essentially, an original cost rate base looks to the past. Would you agree with that?
A. Yes.
Q. Now, in the future as we move forward, and assuming there is some inflation in the economy in the future, the dollar, a dollar declines in value as a result of inflation; is that right?
A. I'm going to agree with you in general. There's different definitions of inflation, but if you're looking at the general level of prices in the economy on average, the dollar is going to decrease in its ability to purchase goods.
Q. So in other words, a dollar that I give you today is likely going to be worth more than a dollar that I give you five years from now?
A. Yes.
Q. And the effect of that on the original cost rate

base is, isn't it, that the original cost rate base in a sense is being valued, if we're valuing it in today's dollars, is worth less than it would have been when it was originally constructed?

A. You know, I don't think I would agree with that, no.

Q. You don't think so. Okay. The original -- well, let me strike that and I'll get back into that in a minute.

We talked about how inflation affects the amount of the company's original cost rate base. If original cost were used in this case, Mr. Fox, as fair value, so we weren't using an average of original cost and reconstruction cost new, okay, we're simply using original cost, would the return on equity be adjusted downward for inflation?

A. I really don't know because we didn't do that analysis, but historically that has not been the way it's been done.

Q. Well, would there be any theoretical -- you were talking about ensuring that the positions that Staff takes and the Commission adopts have solid theoretical underpinnings a few moments ago.

Would there be any theoretical basis for adjusting an original cost rate base down or the return on an original cost rate base down for inflation?

A. I don't see any.

Q. Okay. You're not aware of any?

A. I'm not aware of any right now.

Q. And the Commission has never done that, have they, that you're aware of?

A. I'm not aware of any --

Q. Okay.

A. -- circumstance where the Commission reduced the rate base or the rate of return because the original cost was used.

Q. Right. Thank you.

Now, let's suppose that instead of using an average of original cost and reconstruction cost as the rate base, which is what we're doing here, suppose we relied solely on the company's reconstruction cost new rate base to set rates.

And again, applying the financial theories and principles that you were talking about earlier, if RCN were used as the fair value, how would you determine the inflation adjustment?

A. Again, that wasn't the analysis that we did, so I can't say 100 percent how we would have done it, but I don't think we would have -- just on the surface, it would appear that we wouldn't have done it -- Staff wouldn't have done anything differently than it did in this case other than -- since the rate base would have reflected all RCN instead of 50/50 RCN and original cost, we would have made a reduction for the 100 percent of the inflation adjustment. Our inflation adjustment would have been 100 percent of our inflation calculation instead of 50 percent of our inflation calculation.

Q. So to summarize, then, Staff's reasoning here, half the rate base consists of original cost, the historical costs of the plants, correct?

A. Correct.

Q. And that half of the rate base on a going-forward basis isn't affected by inflation, right? It's fixed?

A. That's correct.

Q. So what Staff is proposing under Method 2 is to calculate an appropriate adjustment, inflation adjustment, to the cost of capital, but because half of the rate base is the historic cost of the plant and is not affected by inflation, Staff is recommending that the adjustment be cut in half?

A. That's correct. We want some consistency in the amount of inflation adjustment versus how much of the rate base is being considered -- reflects a change due to inflation.

Q. Okay. And the original cost rate base is not going to change. It can't be affected by changes in prices.

A. That's correct.

Q. Let's talk for a few minutes about inflation, the relationship between inflation and debt. And as you testified a moment ago, inflation is a widely recognized component of the cost of debt; is that right?

A. Yes.

Q. Let's look for a moment at Exhibit A-17, which is the Federal Reserve Statistical Release. Do you still have that up there, Mr. Fox?

A. Yes, I have it.

Q. Now, if you look at that document, if you turn and look at the very bottom. I've got to find my copy.

Near the very bottom of Page 2, do you see in the list of interest rates there, do you see there are corporate bonds listed? Do you see that?

A. Yes.

Q. It's actually about the middle of Page 2 of the document.

A. Yes, I see it.

Q. As of, again, the column that's headed January 6, 2009, as of January 6, 2009, a Baa corporate bond as reported by Moody's, the interest rate is 8.28 percent; is that right?

A. That's what it says here.
Q. That's what's being reported here, right?
A. Yeah.
Q. Now, a portion -- assuming that that debt instrument were issued today, and assuming this is correct and it's the Federal Reserve, the interest rate would be on average 8.28 percent, right?
A. For a Baa bond, yes.
Q. I'm sorry. For a Baa bond. And a portion of that 8.28 percent interest rate would be, again, the expected future inflation, correct?
A. Yes.
Q. And that's what you're saying when you have looked at various books that the cost of debt, when a debt instrument is issued, contains an inflationary component just like the cost of equity, right?
A. That's correct.
Q. Now, Chaparral City's long-term debt consists of what, Mr. Fox?
A. Chaparral City's cost of debt?
Q. What does Chaparral City's long-term debt consist of?
A. I don't know.
Q. Okay. You didn't investigate the type of debt instruments that Chaparral City issued?

A. No.
Q. Do you know when their debt instruments were issued?
A. No.
Q. Is that something that Mr. Chaves did?
A. Yes.
Q. Okay. So I need to ask Mr. Chaves about that area?
A. Well, you might want to ask our cost of capital witness.
Q. Well, your cost of capital witness --
A. Yes.
Q. -- the details on the debt. Okay.
But you would agree, wouldn't you, that the interest rate on Chaparral City's long-term debt is fixed, right?
A. Well, they could have variable debt instruments. I don't know if they do or not.
Q. So you don't know anything about Chaparral City's debt?
A. No, I don't think that's a correct statement.
Q. Well, what do you know?
A. Well, I know what capital structure is used, so I know approximately how much debt is being financed compared to equity.

Q. Roughly 25 percent of the capital structure is debt and about 75 percent is equity, right?

A. That's correct.

Q. And of the debt portion, a small portion of that is short-term debt, right? Or do you know that?

A. I believe a small portion is short-term debt, and I believe that the average debt cost is about 5 percent.

Q. And would you accept subject to check that the long-term debt consists of industrial development bonds?

MS. MITCHELL: Your Honor, I need to object. I think this is going beyond the scope of Mr. Fox's direct testimony. And we do have a witness that may be more appropriate to respond to these questions than Mr. Fox, and that would be Mr. Parcell.

ALJ WOLFE: Mr. James.

MR. JAMES: I have no problem with that as long as Staff withdraws its recommendation supported by Mr. Fox that the cost of debt should be adjusted downward for inflation. That's Mr. Fox's recommendation and he is sponsoring it. If he doesn't know anything about the company's debt but he's claiming that the debt contains inflation, obviously we've got a problem, Your Honor.

MS. MITCHELL: I think to the extent that there are specific questions about the cost of debt, Mr. Parcell probably can spout those off when he gets on the stand.

ALJ WOLFE: What was the last question that was objected to? Could you tell me? Could you repeat it, Mr. James?

MR. JAMES: I asked whether he would accept subject to check that Chaparral's long-term debt consists of industrial development authority bonds.

ALJ WOLFE: You may answer that question, Mr. Fox.

THE WITNESS: I don't know. But to answer your question about whether or not I need to know what type of debt you have to know if there's interest, I don't have any reference that says only certain kinds of debt include an inflation factor. All debt includes an inflation factor.

Q. (BY MR. JAMES) Well, let me try to approach this from a different angle, hopefully to avoid the problem. Let's look at Page 7 of your direct testimony.

Now, on Page 7 of your testimony, do you have that, Mr. Fox?

A. Yes.

Q. You have got a chart that's labeled Chart 1 at the top. Do you see that?

A. Yes.

Q. That shows the correlation of interest rates with inflation; is that right?

A. That's correct, using the Consumer Price Index as inflation.

Q. And you use the CPI, and you used 5- and 10-year treasury yields on here, intermediate term treasuries, right?

A. That's right.

Q. Okay. Let's suppose looking at this chart now, suppose in 1962 I borrowed $10,000 from you, Mr. Fox, at an interest rate of 8 percent. Okay. I think 1962 is where your chart begins, isn't it?

A. Yes.

Q. Okay. So for ratemaking purposes my cost of debt, if I'm the utility, my cost of debt would be 8 percent, right?

A. Yes.

Q. Now, let's look at, say, 19 -- it's a little hard to read, but let's say 1975, Mr. Fox. What was inflation as estimated by means of the CPI in 1975 on your chart?

A. It looks like it was about 11 percent.

Q. Okay. So assuming that that's a valid measure of inflation, and assuming that inflation was 11 percent, what would my cost of debt be in 1975?

A. Well, the debt --

Q. Would be 8 percent, would it not?

A. Would be about 8 percent.

Q. I'm sorry. I didn't mean to cut you off. It's a fixed cost. It doesn't change, does it?

A. Well, once it's issued, it doesn't change. If it's a fixed-debt instrument, which not all of them are, it's fixed after it's issued, but it doesn't change the fact that there's an inflation component in it. And as long as that security remains outstanding, it will have an inflation component in it.

Q. Okay. Let me just ask you a couple of additional questions. If we continue to look at your chart, if we go to 1990, what is the rate of inflation in 1990 as shown on your chart?

A. It's approximately 5 percent.

Q. And the cost of debt is still 8 percent, right, for ratemaking purposes?

A. Roughly 8 percent.

Q. Well, I mean, my original hypothetical was I borrowed $10,000 at a fixed interest rate of 8 percent, right?

A. Okay.

Q. And so if we look at 2000 on here, the interest rate is now down to, what, 3.5 percent or 3 percent?

A. That's roughly correct.

Q. But the cost of debt is still 8 percent, right?

A. Well, the cost of debt, as you can see in the chart, the cost of debt that you issued at some point in the past is still 8 percent, but the cost of debt at that point in time is different, but it doesn't matter. The 8 percent still has the inflationary factor that was in it, embedded in it at the time it was issued.

Q. Okay. And when were Chaparral City's IDA bonds issued?

A. I don't know when they were issued.

Q. Well, you would be able to determine the amount of inflation in the industrial development bonds based on when they were issued, right?

A. Well, Staff hasn't tried to calculate how much inflation was in the 8 percent, or whatever, in Chaparral City's actual bonds, because we haven't made an adjustment to the weighted average cost of capital portion of the rate of return. We made an adjustment to reflect the inflation that's in the rate base.

Q. Well, if you don't know what amount of inflation is embedded in the bonds, how do you know what adjustment to make?

A. Because the inflation adjustment is not to the capital side, not to the rate of return side, it's to the rate base side. You make an adjustment in the rate of return to reflect the inflation in the rate base.

Q. Is the company's rate base being increased or decreased as part of the adjustment that you're talking about?

A. The company's rate base is being increased by use of the RCN, which is higher than the original cost. And that's what we measured going forward is on a prospective basis there's an inflationary factor.

As I discussed earlier, there's a difference between what inflation is and what investors' required additional return is due to inflation, and what we've measured is what is the additional rate of return required by investors due to inflation. And so the inflation that's being reflected by the incremental use or by the use of RCN in the fair value rate base is measured over the long-term period, and that inflation is an adjustment to the rate of return.

Q. Maybe let me try to approach this a different way. If you go back and look at Exhibit A-17 this time, that's the Federal Reserve Statistical Release. Okay?

We talked earlier -- turning to Page 2, we talked earlier about how the difference between a 20-year treasury and a 20-year TIPS is .76, 76 basis points, right? Do you recall that?

A. Yes.

Q. Now, if you look down that same column, you see that the reported interest rate on a Baa bond, an investment grade bond is 8.28 percent; is that right?

A. Yes.

Q. So applying your logic, then, the interest rate of 8.28 percent would contain a future inflation component that would be equal to 76 basis points; is that right?

A. Yes.

Q. Okay. And what is the -- well, again, you said that you don't know what the inflation component is in Chaparral City's outstanding long-term debt; is that right?

A. That's correct. And there isn't any way that I know of to identify that.

Q. Okay. What are Chaparral City's earnings? Do you know what the term "earnings" means? Is that net income after taxes. Is that one way to define earnings?

A. I'll accept that.

Q. Okay. Is the cost of debt part of a company's net income?

A. Yes.

Q. It is? Aren't the earnings determined after debt obligations have been paid?

A. Yes.

Q. Okay. So what is left over after the payment of any debt obligations would be earnings, net income after taxes, right?

A. Right.
Q. Well, let's look at it another way. What is the cost of debt used for? When we talk about the cost of debt, it's an interest rate, right? What is it used for? Where does it go?
A. Well, I don't know what you mean by where does it go. Let me say that I'm assuming that you want to know what classification it is. Is it an expense or is it a capital expenditure or --
Q. No. That was a poorly phrased question. That actually wasn't where I was going.
Does the cost of debt reflect the amount required for the company to pay its bondholders, its creditors?
A. Yes.
Q. Now, the net income is used to pay dividends or to reinvest in capital assets, correct?
A. Well, those aren't the only uses, but those would be some of the uses.
Q. Okay. Would net income be used to pay creditors, to pay bondholders?
A. It could be used for that purpose.
Q. Wouldn't that be contrary to the definition of earnings? Isn't earnings what is left over after creditors have been paid?
A. Well, there's a difference between interest

expense and debt service, because we have principal and an interest component.

Q. That's a valid point. Let's just talk about interest. Because when we talk about the cost of debt in setting rates, we're talking about interest, aren't we?

A. The cost of capital. And when you calculate the average weighted cost of capital, you're talking about the interest component.

Q. Not the amount that's necessary to retire the principal, right?

A. That's correct.

Q. Why isn't the current market cost of debt used to determine the cost of debt?

A. Because that's not the embedded cost that the company pays.

Q. The embedded cost reflects the amount that must be paid to the utilities' creditors, correct?

A. Well, it should be paid.

Q. It should be paid?

A. Yeah.

Q. Well, if it doesn't get paid, then the company --

A. They default.

Q. The company is in default, and that's not a good thing.

A. Right.

Q. How does the DCF model, Mr. Fox, as implemented by Staff account for accretion?

A. Well, it includes both the accretion and the -- that is to say the revenue requirement components of the overall return.

MR. JAMES: I'm sorry. Would you read that back.

(The record was read back by the Court Reporter as requested.)

Q. (BY MR. JAMES) The DCF model incorporates -- includes the overall revenue requirements?

A. Well, the DCF model produces a cost of equity, so it's not a complete representation of the overall rate of return. So we're only talking about -- so it only provides us with the equity component. So you have to make some assumptions if we're going to throw in whatever debt there is to come up with an overall weighted cost of capital. And then in the case of making the adjustment, which we call an accretion adjustment, there's a component of the cost of equity that is an accretion component that's included in the cost of equity that comes out of the cost of equity is the way Staff has used it in Method 2.

Q. Okay. Let me approach it from a different direction then. The DCF model is based on measuring a dividend stream produced by an investment in a particular

security; is that right?
A. That's part of it.
Q. That's part of it. And that's what I was getting at. Is there another part?
A. Well, it's the dividends and the growth.
Q. Right. Okay. It's dividend yield plus growth, but the growth is not growth in stock prices. It's growth in --
A. Dividends.
Q. In dividends, exactly. So the DCF model doesn't account for increases in stock price, does it, or decreases for that matter?
A. Well, that's not the purpose of DCF. DCF pertains to coming up with a cost of equity, not for what cost of equity changes are.
Q. I see. So in estimating the current cost of equity, you look only at the return produced by dividends and not the total return produced by dividends and increases in stock price?
A. No, that's not what I said.
Q. Okay. Well, how do -- well, let me ask the question again, then.
Does the DCF model take into account the total return that an investor expects when he buys a stock?
A. Yes.

Q. And how does it do that?
A. Well, it effectively does it by -- well, it's all in the components in the formula, but the current price reflects what those expectations are combined with the current dividend.
Q. So an investor -- does an investor expect, hope to receive a part of his return through an increase in the price of the stock?
A. Well, the expectation might be for a decrease in the price of the stock, but that's -- whatever the expectation is, it's a combination of the dividend yield plus the growth.
Q. We talked earlier about the six publicly traded water utilities in Staff's proxy group. Do you recall that?
A. Yes.
Q. Are the stocks of those public utilities considered a liquid investment?
A. Yes.
Q. In other words, they could be quickly sold in the market if an investor decided that he no longer wished to hold the shares of that company's stock, right?
A. Yes.
Q. Because they're all traded on a national stock exchange, correct?

A. Yes.
Q. If an investor became concerned about the future earnings of one of those companies, say, California Water Service, how long would it take, you know, roughly, for an investor to sell his stock and convert the stock into cash?
A. Well, assuming there are market-makers for the stock, it's pretty much instantaneous.
Q. So the bottom line is securities that are traded on a major stock exchange are considered to be highly liquid; is that correct?
A. Yes.
Q. All right. Now, suppose that American States decided to sell its stock in Chaparral City Water due to low earnings. Is there a ready market for Chaparral City's stock?
A. I don't believe that's traded on the exchange.
Q. So there isn't a ready market for Chaparral City's stock?
MS. MITCHELL: Can I object to this line of questioning? I'm not seeing how that fits in with Mr. Fox's testimony on methodologies used to calculate operating income and fair value rate of return and whether there's a ready market for Chaparral's stock to be sold. I'm just kind of wondering where Mr. James is going.

ALJ WOLFE: Mr. James.

MR. JAMES: Let me find -- there's a discussion of this in Mr. Bourassa's testimony. I can refer counsel to it.

MS. MITCHELL: That's Mr. Fox up there testifying.

ALJ WOLFE: Let's wait just a minute and see what it is.

MR. JAMES: Yeah.

ALJ WOLFE: Then I will ask you, Mr. James, to make the connection between what it is you're going to show us and Mr. Fox's testimony.

MR. JAMES: That's fair, Your Honor.

I suddenly can't find it. Basically, where I'm going -- and I apologize, Your Honor. I should have known where it was more quickly. It's basically discussed in Mr. Bourassa's rebuttal testimony on Pages 27 and 28.

And as Mr. Bourassa discusses, Staff's recommendation ignores the liquidity risk associated with holding assets as opposed to holding stock that can be readily sold on a market.

As we just discussed, as Mr. Fox just acknowledged, if a disgruntled shareholder decides to sell the stock of California Water Service, he can do so. In contrast, there's no market for the assets of a water utility. So the whole notion that the company benefits through this accretion allowance ignores the fact that you're also stuck if the investment turns bad. And it's discussed in more detail in Mr. Bourassa's testimony.

ALJ WOLFE: Okay. So do you want to ask Mr. Fox a question about how the lack of -- alleged lack of liquidity affects his accretion calculation?

MR. JAMES: No. Actually, I was just finishing up. And I think I just had a couple of more questions, and I was actually going to turn to a slightly different subject.

ALJ WOLFE: And you're going to do that now?

MR. JAMES: Yes. Would you like me to stop now, or do you want to take a break for lunch now?

ALJ WOLFE: Do you have another hour? How long do you have?

MR. JAMES: Well, it might be. I'm not sure I really have much more at all, but it might be a good place to stop. I may come back and have no questions if we could take a break now. I will have very few questions either way.

ALJ WOLFE: What is your preference, Staff?

MS. MITCHELL: We're fine to take a break, Your Honor.

ALJ WOLFE: Okay. Sounds good. We'll come back here, then, at 1:00.

(A recess was taken from 11:49 a.m. to 12:56 p.m.)

ALJ WOLFE: Let's go back on the record.

And Staff counsel has stated that she wants to address something procedural in the record.

MS. MITCHELL: Well, yes. You know, I mentioned earlier this morning that in this ongoing investigation that I would provide to the docket some updates, and I actually have an update already.

ALJ WOLFE: All right.

MS. MITCHELL: I received an e-mail from the assistant general counsel at the California PUC who had indicated that the company had some concerns with the negotiation of a confidentiality agreement between the California and Arizona Commission with respect to the documents that they had submitted in that ongoing investigation under a confidentiality agreement.

And I've talked with Mr. James and Mr. Switzer, who is with the company, and, you know, they're trying to work out that portion of their concerns with the CPUC possibly releasing the documents to us. And Mr. James and Mr. Switzer have assured us that as we speak they're gathering documents to be responsive to the Staff's data request.

So hopefully, you know, by Monday when we meet with the company this will all be resolved, but I just wanted to note in the record that should we have some difficulties in obtaining further documents from California based on, you know, the company's objection, you know, we may have to take further action and it may delay, you know, further status reports from Staff. Thank you.

ALJ WOLFE: All right. I would expect both parties, all parties to keep us posted of things that come about, anything that would cause a delay in that January 29 date.

MS. MITCHELL: Yes.

ALJ WOLFE: Mr. Fox, you're still under oath.

And Mr. James?

MR. JAMES: No further questions.

ALJ WOLFE: Do you have redirect for Mr. Fox?

MS. MITCHELL: Just a couple of questions, Your Honor. Thank you.

REDIRECT EXAMINATION

Q. (BY MS. MITCHELL) Now I'm all confused, but I believe it was Ms. Wood who may have asked you a question concerning a portion of Mr. Chaves's testimony using treasury -- inflation-protected treasury something versus using noninflation protected, and I believe that that was not the focus of your testimony. Is there another Staff witness that maybe would be more responsive to that portion of that question?

A. Yes. I think Mr. Parcell is the Staff witness to ask those questions of.

Q. And in your experience here at the Commission, has Commission Staff hired consultants to provide cost of capital?

A. Yes. It's a pretty frequent event for Staff to hire outside consultants, especially for the energy rate cases and occasionally for other issues.

Q. And finally, with respect to cost of capital, would you agree with me that developing cost of capital recommendations are more of an art rather than a science?

A. Well, there certainly is an aspect that goes beyond just mathematical calculations that is necessary to take into consideration, so the answer is yes.

MS. MITCHELL: Thank you.

ALJ WOLFE: Ms. Wood, do you have recross on those issues?

MS. WOOD: No, Your Honor, I don't.

ALJ WOLFE: Mr. James?

MR. JAMES: Yeah. A couple of questions just to follow up.

RECROSS-EXAMINATION

Q. (BY MR. JAMES) Mr. Fox, you indicated that the Commission does from time to time hire outside consultants to provide testimony in rate cases.

A. That's correct.

Q. When was the last time that you can recall the Commission hiring an outside consultant to provide cost of capital testimony in a water or wastewater utility rate case?

A. I'm probably forgetting some, but I don't recall any in the last couple of years.

Q. Okay. You also were asked a question about whether -- and I may misstate this -- but developing or estimating the cost of equity is an art rather than a science. Do you recall that?

A. Yes.

Q. I think you would agree, though, and I think you may have suggested this in your prior testimony, that there are still basic financial principles that should be correctly used when you estimate the cost of equity, correct?

A. I think the financial principles have to provide a basis for the overlay of the overall assessment of the cost of capital. When you say should be used, I think that's a little more exacting than is necessary to really grab what is necessary.

Q. Well, what I'm getting at is I can recall testimony in prior cases where, for example, Staff cost of capital witnesses have indicated that, you know, according to Professors Brealey and Myers, for example, the appropriate way to estimate something is X. You understand what I'm getting at?

A. Yes.

Q. And again, I think we agree that there are basic foundational principles that should be adhered to absent some sort of extraordinary circumstance; is that fair?

A. Well, I think it's more of there needs to be an explanation of why there's a deviation, and I think that's a better way to explain that. I don't think that there's not to be -- not that there shouldn't be exceptions, but there should be an explanation for those exceptions.

MR. JAMES: Fair enough. Thank you.

ALJ WOLFE: Anything further, Ms. Mitchell?

MS. MITCHELL: Just one question as a follow-up.

FURTHER REDIRECT EXAMINATION

Q. (BY MS. MITCHELL) Mr. Fox, are you aware that Mr. Parcell has testified on behalf of Staff in the

Chaparral remand decision?

A. Yes, I am.

Q. And so would you agree that's a water case where Staff hired an outside consultant to provide cost of capital testimony?

A. Yes.

MS. MITCHELL: Thank you.

ALJ WOLFE: Mr. James?

FURTHER RECROSS-EXAMINATION

Q. (BY MR. JAMES) Mr. Fox, are you familiar with the subject, the actual testimony that was provided by Mr. Parcell?

A. I've reviewed it, yes.

Q. In fact, you actually have some testimony, I think, in your direct testimony about this. Do you recall that Chaparral City appealed the decision authorizing a 9.3 return on equity in its last rate case?

A. I recall that, yes.

Q. And as you discussed in your testimony, that was affirmed by the Court of Appeals, correct?

A. That's correct.

Q. And that wasn't an issue on remand, was it?

A. You want to ask it again, please?

Q. Well, the remand, what we've been loosely referring to as the remand proceeding, was the result of an issue being remanded by the Court of Appeals back to the Corporation Commission for further decision-making, correct?

A. Yes.

Q. The company as part of its appeal had appealed the 9.3 percent cost of equity set in the last case, but that was affirmed by the Court of Appeals, correct?

A. Correct.

Q. And so the issue of whether the methodology used to set the 9.3 percent return on equity was not an issue during the remand proceeding; correct?

A. That's my understanding, yes.

MR. JAMES: Thank you.

ALJ WOLFE: Anything further?

MS. MITCHELL: No, thank you, Your Honor.

ALJ WOLFE: Thank you for your testimony, Mr. Fox. You're excused as a witness.

Mr. James, did you want to do anything with any of these exhibits?

MR. JAMES: Yes. I believe I submitted Exhibits A-16, 17, and 18, and I think A -- and I guess I need to ask Your Honor what you would like to do. A-18 is Mr. Bourassa's supplemental rejoinder testimony. Would you like me to wait for Mr. Bourassa to testify or move to have it admitted at this time?

ALJ WOLFE: We might as well wait until Mr. Bourassa testifies.

MR. JAMES: So I move for the admission of Exhibit A-16 and A-17.

ALJ WOLFE: Okay.

MS. MITCHELL: Your Honor, we would like to object to the admission of the company's Exhibit A-16. It's the direct testimony of Mr. Chaves. I don't think there's been enough foundation laid for the introduction of this testimony. To the extent that during Mr. Fox's testimony he did read portions of Mr. Chaves's testimony into the record, we don't have an objection to that portion being included, but for the entirety of the exhibit we do have an objection.

ALJ WOLFE: I'll listen to what the company has to say in response to that, but it's my understanding that Mr. Parcell -- that there have been some exhibits filed in which Mr. Parcell has gone through the testimony.

MS. MITCHELL: That's correct.

ALJ WOLFE: And that was the direct testimony.

MS. MITCHELL: And he has adopted portions of it, that's correct.

ALJ WOLFE: Okay. That being the case, I really don't see why A-16 should not be admitted. It's been docketed, it's a part of this case, and it's a public document. It will be admitted and it will be given the consideration that it should be given. So A-16 and A-17 are admitted.

(Exhibits A-16 and A-17 were admitted into evidence.)

MR. JAMES: I think that's it. I didn't miss anything, did I, Judge?

ALJ WOLFE: No, you did not.

MR. JAMES: Thank you.

ALJ WOLFE: The next witness that I have on the roster is Mr. Abinah.

MS. MITCHELL: That's correct. Staff would call Elijah Abinah to the stand.

ELIJAH O. ABINAH,

called as a witness on behalf of ACC Staff, having been first duly sworn by the Certified Reporter to speak the truth and nothing but the truth, was examined and testified as follows:

DIRECT EXAMINATION

Q. (BY MS. MITCHELL) Could you please state your

name and business address for the record.
A. My name is Elijah Abinah.
Q. Your address?
A. 1200 West Washington, Phoenix, Arizona, 85007.
Q. And by whom are you employed and in what capacity?
A. Arizona Corporation Commission, Utilities Division, Assistant Director.
Q. And could you briefly describe your job duties as assistant director?
A. My responsibility is to review all of the application filed and make recommendation to the director.
Q. And did you prepare testimony and prefiled testimony in this case?
A. Yes.
Q. I think you have in front of you what's been marked as Exhibit S-5.
A. 6.
Q. 6?
A. Yes.
Q. Could you please identify it for the record.
A. Surrebuttal testimony of Elijah O. Abinah.
Q. And do you have any additions, corrections, or modifications to make to your testimony?
A. No.

Q. And do you adopt S-6 as your sworn testimony today?

A. Yes.

MS. MITCHELL: Your Honor, at this time I would like to move for the admission of Staff Exhibit S-6.

ALJ WOLFE: There having been no objection made at the prehearing conference, S-6 is admitted.

(Exhibit S-6 was admitted into evidence.)

Q. (BY MS. MITCHELL) Mr. Abinah, were you in the hearing room this morning when Mr. James was questioning Mr. Fox concerning the hiring of the cost of capital witness Dave Parcell?

A. Yes, I was.

Q. And I suppose you must be the one that's higher up on the food chain that Mr. James alluded to as making the decision; would that be correct?

A. Actually, that would be Mr. Johnson, but my job is to make recommendations to Mr. Johnson. So Mr. Johnson made the decision to hire a consultant based on my recommendation after consulting legal staff.

Q. Okay. And could you just, you know, since it's an issue here in this case, just provide a little background on why Staff sought to hire an expert consultant for cost of capital in this case?

A. Sure, I'll do that. I believe Staff filed direct testimony on October 3. Right after we filed testimony, there was some event on Wall Street. I believe the stock tumbled for a couple of days. And based on that, we believed the event would have a broader issue on all cases before the Commission. So with this, I had to take a pause and analyze what is going on. And actually, I can tell you it would be irresponsible of Staff not to take a pause and look at how that issue will affect the ratepayers and the stockholders.

So based on that, I recommended to the director that we should hire somebody that has vast experience on this issue, so I recommended that we would hire Mr. Parcell after our regular RFP process.

Q. Thank you. And I'm going to recall days gone by. At the previous part of this hearing that was held when Mr. Millsap testified on behalf of Staff -- and I don't know if you were present for his testimony -- but he testified that there was a policy decision made to change the Staff position on the treatment of the Fountain Hills Sanitary District settlement. Do you recall any of that?

A. I recall his testimony. And I wasn't present in the courtroom, but I was listening upstairs on the Listen Line.

Q. And as a policy -- and I'm assuming that it may be you or Mr. Johnson, or the complete director's office, that made the policy decision along with Mr. Millsap to change Staff's position, because that was an issue.

A. Actually, Mr. Millsap was not part of the discussion. It was Mr. Johnson, myself, and with consultation with other staff members, legal staff members, that we decided to change our recommendation.

MS. MITCHELL: All right. I don't have any other questions. Mr. Abinah is available for cross-examination.

ALJ WOLFE: Thank you.

Ms. Wood, do you have questions for Mr. Abinah?

MS. WOOD: I do, Your Honor.

CROSS-EXAMINATION

Q. (BY MS. WOOD) Good afternoon, Mr. Abinah.

A. Good afternoon, Ms. Wood.

Q. In your surrebuttal testimony, Staff is recommending from a policy perspective that the Commission or the Judge consider what you would define as Method 1?

A. That's correct.

Q. And you acknowledge that when RUCO performed its analysis of cost of capital it did use Method 1, correct?

A. I believe so.

Q. And as a result of the policy recommendation in the surrebuttal testimony regarding Method 1, Staff recommended a decrease in revenue of -- required revenue of 318,000?

A. Well, if you are referring back to Mr. Fox's testimony, we have Method 1 and Method 2. Method 1 produced a revenue requirement, a revenue increase, and Method 2 did the same thing. The difference between Method 1 and Method 2 is what I'm recommending, the 318, I believe.

Q. Okay. And then according to your surrebuttal testimony, utilizing Method 1 the Staff's recommended revenue increases 1,417,265?

A. I believe that is the number.

MS. WOOD: All right. Thank you. Thank you very much.

THE WITNESS: You're welcome.

ALJ WOLFE: Mr. James.

MR. JAMES: Thank you.

CROSS-EXAMINATION

Q. (BY MR. JAMES) Good afternoon.

A. Good afternoon.

Q. Just so I'm clear, your testimony, I think, indicates that you believe that the Commission should consider what we're calling Method 1?

A. That's correct.
Q. But Staff hasn't changed its recommendation that Method 2 be used in this case; is that right?
A. Well, if you refer back to Mr. Fox's testimony, we have Method 1 and Method 2, and Mr. Fox's recommendation was Method 2. But my job is to make sure that the Commission consider all options, the ALJ and the Commission consider all options. So we believe that Method 1 should also be on the table.
Q. And that's what RUCO is recommending, isn't it?
A. Well, RUCO recommended Method 1, but a different revenue requirement or revenue increase.
Q. I see. So you felt it was necessary to provide some additional testimony to indicate what Staff's recommendation would be if Method 1 were employed?
A. I don't believe it's additional testimony. It's just to reinforce the fact that Method 1 should be considered by the Commission and the ALJ.
Q. But there's no -- you don't have any problem or any disagreement with Mr. Fox's testimony and his recommendations for Staff, do you?
A. I don't believe there's a reference in my testimony to that effect.
Q. I just wanted to make sure.
Does the company's fair value rate base consist

of the average of its original cost rate base and its reconstruction cost rate base?

A. If I can refer you back to Page 2 of my testimony, Mr. James.

Q. Yes.

A. On Line 9, question: Are you providing testimony as to financial and technical analysis?

My answer is no. I believe that question would be appropriately addressed to either Mr. Fox or Mr. Parcell.

Q. Okay. So you don't understand how rates are being proposed?

A. I do understand, but I'm saying my testimony did not address that.

Q. I understand that. That's why I was asking you the question. What I'm trying to understand is if you don't -- if you're unable to answer questions about the company's rate base and how its cost of capital is determined, how can you make a recommendation as to either Method 1 or Method 2?

A. Like I said, when it comes to mathematics analysis and technical and financial, I defer to Mr. Fox. And by the way, I do understand how rate cases have been processed, but I'm saying my testimony today is on policy issues. And in order to address that adequately, and the person that performed those analyses, that was done by Mr. Fox and Mr. Parcell.

Q. Okay.

A. So my deal is just to remind the Commission or to reenforce that Method 1, which is one of Staff's options, should be considered by the Commission and the ALJ.

Q. So the analysis -- what you're saying, then, is the analysis was done by Mr. Fox, Mr. Parcell, and other Staff people, not by you, then?

A. That's correct.

Q. So you're not really in a position to make a recommendation. You just want to make sure that the Commission is aware that Method 1 is out there?

A. That's correct.

MR. JAMES: That's all I have, Your Honor.

ALJ WOLFE: Thank you.

Is there any redirect?

MS. MITCHELL: No, Your Honor.

ALJ WOLFE: Thank you for your testimony, Mr. Abinah. You're excused as a witness.

And now I believe it's time for Mr. Bourassa; is that correct?

MR. JAMES: That's correct, Your Honor. We call Mr. Thomas Bourassa to the stand. It may take us a moment to locate his testimony.

ALJ WOLFE: That's fine. We'll go off the record.

(A brief recess was taken.)

ALJ WOLFE: Back on the record. The company was locating the testimony and some exhibits for Mr. Bourassa.

Mr. Bourassa, you're still under oath. Did you testify earlier in this proceeding?

THE WITNESS: Yes, Your Honor.

ALJ WOLFE: You're still under oath.

THE WITNESS: Thank you.

THOMAS J. BOURASSA,

recalled as a witness on behalf of the Applicant, having been previously duly sworn by the Certified Reporter to speak the truth and nothing but the truth, was examined and testified as follows:

DIRECT EXAMINATION

Q. (BY MR. JAMES) Good afternoon.

A. Good afternoon.

Q. And as Judge Wolfe had indicated, you previously testified in this rate case; is that right?

A. Yes.

Q. You presented testimony on the company's rate base, income statement, and rate design issues previously; is that right?

A. That's correct.

Q. You also prepared testimony in this case that deals with the cost of capital?

A. Yes.

Q. And I should say cost of capital and issues related to the cost of capital such as whether there should be an adjustment to the cost of capital to take into account inflation. You addressed that as well in this testimony, correct?

A. Yes.

Q. You should have before you, Mr. Bourassa, marked as Exhibit A-19 a copy of your direct testimony, which is labeled as direct testimony of Thomas J. Bourassa, cost of capital; is that right?

A. Correct.

Q. Is that a complete and accurate copy of your direct testimony on cost of capital?

A. Yes.

Q. And was that testimony prepared by you or under your direction?

A. Yes.

Q. And do you have any corrections to Exhibit A-19 at this time?

A. Yes, I do. On Page 21, Lines 5 and 6, referring to the company's capital structure, Line 5, the 36.3 should be replaced with 23.4. And on Line 6, the 63.7 should be replaced with 76.6.

Q. Do you have any other corrections?

A. No, I do not.

MR. JAMES: With that, I move that Exhibit A-19, Mr. Bourassa's direct testimony on cost of capital, be admitted.

ALJ WOLFE: There having been no objection at the prehearing conference, A-19 is admitted.

(Exhibit A-19 was admitted into evidence.)

Q. (BY MR. JAMES) Mr. Bourassa, there should also be before you a copy of what has been marked as Exhibit A-20, which should be a copy of the rebuttal testimony on cost of capital that you provided.

A. Yes.

Q. Now, is that a true and complete copy of your rebuttal testimony?

A. Yes.

Q. Now, just so it's clear for the record, the exhibits that are attached to your rebuttal testimony do not include all of your rebuttal schedules that relate to the cost of capital; is that right?

A. That's correct. They were included along with my rebuttal testimony on the rate base and income statement.

Q. Okay. So those are the schedules that are labeled D as in dog?

A. Correct.

Q. And those schedules would have been attached to Exhibit A-5, which would be your rebuttal testimony on rate base, income statement, and rate design; is that right?

A. Correct.

Q. Do you have any corrections to Exhibit A-20?

A. I see that this copy is marked as corrected and that an errata was filed. So yes, it's the correct copy.

MR. JAMES: And for the record, Your Honor, the notice of errata that we filed, we have made the changes into the exhibit, so they're all incorporated into that document.

ALJ WOLFE: Thank you.

Q. (BY MR. JAMES) And was Exhibit A-20, Mr. Bourassa, prepared by you or under your direction?

A. Yes.

MR. JAMES: Your Honor, I ask that Exhibit A-20 be received into evidence.

ALJ WOLFE: A-20 is admitted.

(Exhibit A-20 was admitted into evidence.)

Q. (BY MR. JAMES) Mr. Bourassa, there should also be before you a copy of your rejoinder testimony, dated December 4, 2008, on cost of capital marked as Exhibit A-21.

A. I have that.

Q. Was this document prepared by you or under your direction, Mr. Bourassa?

A. Yes.

Q. Do you have any corrections to the document?

A. Not at this time, no.

MR. JAMES: Your Honor, I move that Exhibit A-21, Mr. Bourassa's rejoinder testimony, be received into evidence.

ALJ WOLFE: There was no objection at the prehearing conference, so A-21 is admitted.

(Exhibit A-21 was admitted into evidence.)

Q. (BY MR. JAMES) Okay. Finally, Mr. Bourassa, there should be in the stack of documents to your left a copy of your supplemental rejoinder testimony, which has previously been marked for identification as Exhibit A-18.

A. I have that.

Q. And that document, so it's clear for the record, that document has also been corrected; is that right?

A. Yes.

Q. But I believe there are some additional corrections or maybe a correction you need to make?

A. Yes. That correction would be found on Page 5, Line 2. 2006 should read 2008.

Q. So the yields shown in the table on Page 5 are as of December 18, 2008; is that right?

A. Yes.

Q. Okay. Do you have any other corrections?

A. No.

Q. And was Exhibit A-18 prepared by you or under your direction, Mr. Bourassa?

A. Yes.

MR. JAMES: Your Honor, I move that Mr. Bourassa's supplemental rejoinder testimony, Exhibit A-18, be received into evidence.

ALJ WOLFE: Is there any objection.

MS. MITCHELL: No objection.

ALJ WOLFE: A-18 is admitted.

(Exhibit A-18 was admitted into evidence.)

MR. JAMES: And with that, Your Honor, Mr. Bourassa is available for cross-examination.

ALJ WOLFE: Thank you. Ms. Wood?

MS. WOOD: Yes.

CROSS-EXAMINATION

Q. (BY MS. WOOD) Good afternoon, Mr. Bourassa.

A. Good afternoon.

Q. I want to start with some things upon which we don't disagree. With regard to capital structure, you did not have any significant disagreement with RUCO staff with regard to the determination of the company's capital structure, did you?

A. I think that all of the parties are in the range of 24 to 25 percent debt, 76 to 75 percent equity.

Q. So your answer is yes?

A. Yes.

Q. And you didn't -- with regard to the cost of short- and long-term debt, you did not in your analysis have a significant disagreement with RUCO's determination that the cost of short-term debt was 2.71?

A. I think it's better to say that all of the parties have approximately the same cost of debt in the capital structure of roughly 5 percent.

Q. You didn't derive figures for both cost of long-term debt and short-term debt? Weren't your figures 2.88?

A. I did. I was looking for the schedule to compare your stated --

Q. Subject to check, would you say that they were, respectively, 2.88 and 5.34?

A. Subject to check, yes.

Q. Okay. You would agree with RUCO that the cost of equity may be determined by both discounted cash flow analysis, DCF, and the capital asset pricing model or CAPM?

A. Those are methods used to determine the cost of equity.

Q. Now, with regard to points of disagreement, one of the points of disagreement in your testimony on Page 27, 28 of your -- I believe it was your rejoinder testimony, if you could turn there. That's Exhibit A-21.

ALJ WOLFE: What pages again, Ms. Wood?

MS. WOOD: Pages 27 and 28.

Q. (BY MS. WOOD) Are you there, Mr. Bourassa?

A. I am.

Q. Okay. On Page 27 and 28, you exhibit some concerns with regard to RUCO's use of Southwest Water Company in its proxy water sample because Southwest Water Company has 45 percent of its revenues derived from regulated activities. Is that one of your concerns?

A. That's one of them.

Q. Okay. I'm going to hand you what I'm going to mark as Exhibit R-12. Okay. Do you know what this document that I have handed you is? Are you familiar with this?

A. Yes. These are printouts from the Value Line

investment survey ratings report.
Q. Okay. On the Water Utility Industry, and it's dated October 24, 2008, correct?
A. Yes.
Q. Can you turn to the fourth page of the exhibit.
A. Okay.
Q. In this report, is it the habit of Value Line to actually report on the actual nature of the business of a company? That's kind of a standard part of this report?
Let me point your attention to the middle of the page, the horizontal strip running down the middle part of the page.
A. Yes, I see that.
Q. Okay. It says "business," correct?
A. Yes.
Q. And in there they describe what Southwest's business is, right, from their perspective?
A. Yes.
Q. Can you read for us what the description from Value Line is of the Southwest Water Company's business?
A. Southwest Water -- you want me to read the whole section?
Q. Up until the address that you see.
A. Southwest Water Company provides a broad range of services, including water production, treatment and

distribution; wastewater collection and treatment; utility billing and collection; utility infrastructure construction management; and public works services. It operates out of two groups, utility and services. Utility owns and manages rate-regulated public water utilities in California, New Mexico, Oklahoma, and Texas. Services does mostly maintenance work on a contract basis.

Q. Okay. Within that description of the business of Southwest Water Company, can you see anything there that Southwest Water Company performs that Chaparral does not also perform under the auspices of its regulated activities?

A. Well, of the utility group, Chaparral provides water services similar to Southwest Water, although Chaparral City does not perform any wastewater collection and treatment. It's not -- Chaparral doesn't do that as part of their regulated business.

But Chaparral does not do contract work, contract maintenance work for others. And I'm not sure what exactly -- based upon the way I'm interpreting this, I'm not sure what that means, maintenance work, but Chaparral City does not perform any contract maintenance work that I'm aware of to third parties.

Q. All right. Now, did you use in your proxy, your water sample, did you use American States?

A. Yes, I did.
Q. That's the parent company, correct?
A. Yes.
Q. I want to give you what's been marked -- what we'll mark as Exhibit R-13, I think is where we're at.
In front of you are excerpt pages from American States Water Company's 2007 annual report. Do you have a copy of that?
A. I have what appears to be pages from the American States Water Company 2007 annual report.
Q. Okay. Can you turn to the -- let's see. I think it's the third page of the exhibit, please.
A. I have that.
Q. In this document, American States describes, in part, the function of its company, correct?
A. What this page describes is a little bit about the people employed and about the population served and in what states.
Q. And it's talking about its provision of services, which includes, if you read the last four or five lines, it says: We are the people of American States Water Company and we're in the service of delivering water that meets all federal and state standards, reliable power and, of course, so much more. Correct?
A. Correct.

Q. Now, you're sufficiently familiar with the parent company to know that in addition to providing water services, they also provide electric service, correct?
A. They have a very small division that provides electrical utility service, correct.
Q. That's not something that Chaparral does, correct?
A. No.
Q. Okay. And in addition to that, they also provide contract services for the military bases throughout the United States in several different states, correct?
A. Correct.
Q. And what other services do they provide those military bases?
A. I don't know, unless you can direct me to a document.
Q. All right. Can you turn to -- these pages, unfortunately, don't appear to be numbered, but I'm looking at the page that says, "In the Service: Terrapin Utility Services." And it would be, "Project Name: Andrews Air Force Base, Maryland," and it would be approximately the ninth page of the exhibit.
Are you on that page?
A. One moment. Just so that we're both on the same page, it says, "In the Service: Terrapin Utility

Services."

Q. And under that it says Project, Andrews Air Force Base, Maryland. Correct?

A. Correct.

Q. Okay. Well, here it talks about Terrapin Utility Services, a subsidiary of American States Utility Services, Incorporated, is proud to add the water and wastewater systems to Andrews Air Force Base in Maryland.

That's the service they provide there according to this report?

A. Yes.

Q. And that would be similar to what Southwest Water does, correct?

A. Yes. But before we go further, the distinction -- all of the companies in the sample group that I use and in the sample group that Staff uses have some level of unregulated services. That's not the issue that I have with Southwest Water. The issue I have is that the majority of Southwest Water's business is in unregulated activities. In fact, per the Value Line report, it's 43 percent of their business is in regulated activities, whereas American States Water, per the AUS utility reports, provides over 82 percent, or around 82 percent of their business is comprised of -- or revenues are comprised of regulated businesses.

Q. Well, that may be true. It's also true that the types of services provided by American States in its regulated capacity are very similar to the services provided by Southwest Water in its unregulated capacity.

A. Could you repeat that question?

Q. It is true that American States provides services, as you say, in a regulated function are very similar to the types of services that Southwest Water Company provides in its, as you call it, unregulated function.

A. No. Chaparral City does not provide maintenance contract work to any third parties, which is the majority of Southwest Water's unregulated business.

Q. I just said American States. If I didn't, let me --

A. Or even American States. Again, American States has less than 18 percent of its operating revenues derived from unregulated activities.

Q. Let me apologize, Mr. Bourassa. I'm not being terribly clear with you. Let me rephrase again.

I'm not talking about the percentage of the services. I'm talking about the nature of the services. Regardless of whether or not they're regulated or unregulated, the types of services these two companies provide to their customers is very similar, correct?

A. No. Frankly, I can't give you a complete answer. Because as I said before, I'm not quite sure what maintenance contract work involves.

And in this -- per the Value Line report on Southwest Water, and per the description in the American States Water Company, they provide water and wastewater services. So the unregulated portion of Southwest I'm not sure really relates to the American States unregulated. Now, the regulated portion does. The 43 percent of Southwest Water's business appears to be similar to that. But here we have unregulated business versus Southwest's 43 percent regulated business. So they're kind of -- they're different.

Q. Okay. American States, as you have just read together with me on Page 9, is offering water and wastewater systems?

A. Correct.

Q. Okay. In your description on Page 4 of Exhibit A-12, it says that the business of Southwest Water Company includes wastewater collection and treatment, correct?

A. Yes, and I think I just said that.

Q. Thank you. Okay. So that's similar -- the nature of that business is similar --

A. Yes.

Q. -- setting aside the regulated issue. Okay.

You would not disagree that American States also provides water production, treatment, and distribution, do you?

A. I didn't dispute that.

Q. You would not disagree that the services of American States includes utility billing and collection, utility infrastructure, construction management, would you?

A. Well, I don't know, because the description in the annual report does not specifically state that they provide utility infrastructure construction management and public works services.

Q. I didn't ask you that question, Mr. Bourassa. Let me back up one more time.

Is it your position that American States operates a utility that does not include its own construction? That it doesn't construct things within the auspices of its own public service corporation?

A. Well, utilities often build plant, but they hire engineers and contractors to perform that construction. They don't necessarily manage -- are on site managing the project. They will inspect and do final inspections to accept the project, but it's typically run -- managed by outside engineers.

Q. At the behest of the company?

A. Sure.
MS. WOOD: Thank you.
Your Honor, I would like to move in Exhibit R-13 and Exhibit R-12.
ALJ WOLFE: Is there any objection?
MR. JAMES: No objection.
(Exhibits R-12 and R-13 were admitted into evidence.)
ALJ WOLFE: R-12 and R-13 are admitted.
Q. (BY MS. WOOD) You would agree that American States provides contract water services to military bases in Texas, New Mexico, Maryland, Virginia, South Carolina and North Carolina, correct.
A. Subject to check, yes.
Q. Okay. You have asserted that the use of the gas companies in RUCO's proxy is inappropriate because the -- I guess you get -- you can state this more clearly if I fail to -- but that the gas companies have significantly lower betas and, in your opinion, are less risky than water utilities?
A. Have significantly less market risk, yes.
Q. Now, beta is only one element that you would consider in determining the cost of equity, correct?
A. It's one of the inputs used in one of the models, specifically the CAPM.

Q. Would you define the term "beta".

A. Beta is a measure of a security's risk compared to the overall market. It's actually a measure of the deviation, the standard deviation of the security's returns to the market's return.

Q. Now, what betas -- or what companies have, in your mind, betas that are not reflective of -- appropriately reflective of the market risk that should be considered in this case?

Is it all of the gas companies? Is it some of the gas companies? What is your point?

A. My point is that the average beta of the gas utility sample group is significantly lower than that of the water utility sample group, indicating that the gas companies have significantly less market risk.

Q. All right. Let's look at --

A. And therefore are not comparable.

Q. Can we look at your rejoinder Schedule D-4.11.

A. Okay.

Q. All right. What is the market beta for -- I guess your proxy, is it number 5 in your water sample? It's Connecticut Water.

A. .8.

Q. What is the market beta for the company -- I guess it's Middlesex is one of your samples?

A. .9.
Q. And then American States, the parent company, that's beta is?
A. .95.
Q. Now, can we look at Mr. -- do you have a copy of Mr. Rigsby's testimony up there?
A. No, I do not.
MS. WOOD: I apologize, Your Honor. Are the exhibits here available for the witness to use or should I bring a copy up to him? Is there a copy of Mr. Rigsby's testimony?
Your testimony has not been admitted yet. Actually, I think we did admit it, and we did admit it when he testified on his rate case expense.
ALJ WOLFE: Exhibit R-7 was Mr. Rigsby's surrebuttal testimony on rate case expense and cost of capital. Is it the surrebuttal testimony that you're looking for?
MS. WOOD: I think it's the direct, Your Honor.
ALJ WOLFE: That has not been admitted.
MS. WOOD: Then let me get it. Mr. James, would you have an extra copy of that that I could provide to the witness? I'm sorry. I thought that had already been admitted.
MS. MITCHELL: We actually have a copy. You can

use it. Staff has a copy of it.

MS. WOOD: Thank you. I appreciate it.

I apologize, Your Honor. I thought that the direct had already been admitted.

Could we -- I don't know procedurally how I should do that. Should I have that be marked, Your Honor, as Exhibit R-14 so that for the record we're all dealing with the same thing or --

ALJ WOLFE: You may if you want to, but it really doesn't matter. You just need to have the witness identify it if you're going to ask him questions about it.

MS. WOOD: And during the next break I'll make sure to make extra copies. For some reason I thought those were already admitted.

Q. (BY MS. WOOD) Could you turn to what I'm going to refer to as Exhibit R-14, Schedule WAR-7, Page 2 of 2.

A. Okay.

Q. Now, the gas utility proxy which you are disagreeing with is located on, I guess, Lines 6 through 15, correct?

A. Correct.

Q. Okay. Now, looking over at the Column A, which is beta, correct?

A. Uh-huh.

Q. Starting with Line 6, and with the exception of

Line 11, which is the utility known by the stock symbol of NWN, all of these gas utilities have market beta between .80 and .90, correct?

A. Correct. And the average of your water utility sample, according to Schedule WAR-7, Page 2 of 2, is 1.05, compared to the natural gas sample of .82. That's a significant difference in betas.

Q. Thank you for that additional information.

A. You're welcome.

Q. Going back to the gas sample, though, the betas are, with the exception of Line 11, between .8 and .9, correct?

A. Correct.

Q. And those are the same market betas that you used in two of your water proxy samples, correct? Connecticut and Middlesex?

A. Connecticut and Middlesex, correct.

Q. Thank you. Now, you have also used companies in your water sample that have market betas between 1.1 and 1.5, correct?

A. Yes.

Q. And the use of these companies in your sample has the impact of elevating your cost of equity because the high market beta reflects rate of volatility and, therefore, elevate your cost of equity, correct?

A. Well, I don't include them to elevate my cost of equity.

Q. While you may not have done it for that purpose, you will agree that was its impact.

A. I agree that if I had excluded them that the average beta would have been lower and my sample would have been smaller, yes.

Q. And what would have been the impact on your cost of equity?

A. It would have impacted the cost of equity and made it lower.

Q. Thank you.

A. Had I excluded the two lower betas, I would have had a higher beta and a higher cost of equity.

Q. Now, going on to your testimony with regard to historic market risk premium. And I may paraphrase you, and if I'm incorrect in the way I'm paraphrasing, correct me. But you seem to disagree with RUCO's historic market risk premium, arguing that it's not reliable because it was based on a geometric mean average, which should not have been used to estimate historic market risk premium because it doesn't account for the variability in the historic return.

Is that a summation of your disagreement?

A. Could you point to my testimony?

Q. It's in your testimony. I'm looking at your rejoinder testimony. I believe it's on Page 24.

ALJ WOLFE: Do you want to go ahead and ask your question, Ms. Wood?

Q. (BY MS. WOOD) Are you there?

A. I'm on Page 24.

Q. What is the nature of your dispute with regard to RUCO's determination of historic market risk premium?

A. I don't believe that's on Page 24.

Q. Where is it?

A. I believe that testimony regarding the geometric mean and its appropriateness begins on Page 25.

Q. Okay. And it proceeds on from Page 25 --

A. Through --

Q. 27?

A. Through 27. Sure.

Q. Okay. Now, is it true that your disagreement with RUCO's historic market risk premium is because you're asserting that RUCO should have used other than a geometric mean to calculate it?

A. Yes. The statistical measure that should be used for a prospective estimate of the return is the arithmetic mean.

Q. And in support of that you looked at a text which you refer to as "Valuation: Measuring and Managing the

Value of Companies," Fourth Edition, McKinsey & Company; is that correct?

A. I refer to a cite provided by Mr. Rigsby -- if this is the cite you're talking about -- valuing, measuring, and managing the value of companies, on or about Page 6 -- or on Page 6, about Lines 19 through 24.

Q. Okay. And I'm going to give you a copy of that text, which has been marked as Exhibit R-15.

Do you have a copy of what's been marked as R-15 in front of you?

A. Well, it's not marked, but I'll do that for you. But now I do.

Q. All right. This is an excerpt from, "Valuation: Measuring and Managing the Value of Companies," Fourth Edition. The authors are Tim Koller, K-O-L-L-E-R, Marc Goedhart, G-O-E-D-H-A-R-T, and David Wessels, W-E-S-S-E-L-S.

A. Correct.

Q. Okay. Can you turn to Pages 305 and 306.

A. First full paragraph?

Q. First full paragraph on Page 306, the authors parrot, basically, your disagreement with Mr. Rigsby's calculation of historic risk premium when they say that although many in the finance profession disagree about how to measure market risk premium, the authors say, we believe 4.5 to 5.5 percent is an appropriate range. Historical estimates found in most textbooks, and locked into the mind of many, which often report numbers near 8 percent, are too high for valuation purposes because they compare market risk premium versus short-term bonds, use only 75 years of data, and are biased by the historical strength of the U.S. market.

That's what it says there on Page 306, correct?

A. That's what it says on Page 306, although I can point to Ibbotson data that would contradict that 4.5 to 5.5 percent.

Q. I'm sure you could.

A. And that's based on 82 years of data.

Q. My next question for you is looking at your historical market risk premium on your Schedule D-4.13.

Now, are you on the rejoinder, Schedule D-4.13?

A. Yes.

Q. On Line 3 of this page, of this schedule, is where you complete your analysis and identify your historical market risk premium, CAPM, right?

A. Yes.

Q. And under RP, for risk premium, you have identified a risk premium of 7.5 percent, correct?

A. Correct.

Q. Your 7.5 percent historical market risk premium exceeds the historical market risk premium estimates found to be reasonable by the authors of the text you referenced in your rejoinder testimony, correct?

A. I want to make sure that we're comparing apples to apples here.

Q. Okay.

A. This historical market risk premium is based on the intermediate horizon equity risk premiums as reported in the Morningstar or Ibbotson 2008 yearbook, and it's matched to the intermediate horizon risk-free rate in that formulation. I don't know on which basis the 4.5 to 5.5 percent is computed, but the numbers are different.

Q. Meaning that your risk premium is 7.5 percent, and the authors' recommended risk premium is 4.5 to 5.5, correct?

A. Well, there's certainly a difference in the risk premiums that are stated in each. I'm not sure if this is a long-term horizon risk premium or an intermediate horizon risk premium. If this 4.5 to 5 percent was matched with a long-term treasury rate as the risk-free rate like a 30-year or 20-year, which are higher than the intermediate treasury rates, then we might still come out to a similar cost of equity.

Q. Could it be that Ibbotson is one of the historical textbooks referenced by the authors in their criticism that historically these textbooks marry themselves to an 8 percent rate which is simply too high?

A. It certainly could be. However, I have never heard of Tim Koller, Marc Goedhart, and David Wessels, but I have certainly heard of Ibbotson and Morningstar's SBBI yearbook.

Q. Thank you. Now, looking on that same schedule, rejoinder schedule D-4.13, you have identified a current market risk premium CAPM of 19.4 percent?

A. The result of my current market risk premium CAPM is 19.4 percent.

Q. All right. Can you turn back to Exhibit R-12, which is the market line -- excuse me -- Value Line quarterly report for Water Utility Industry, dated October 24, 2008.

Do you have that exhibit in front of you?

A. Yes.

Q. Looking down in the report, the report provides composite statistics for the water industry, correct?

A. Yes.

Q. And one of the composite statistics is a projection for the return on common equity for a five-year period, correct?

A. Correct. That's a book return.

Q. And the return on common equity as estimated by

Value Line on October 24, 2008, for the five-year period through 2013 is what?

A. It is 7.5 percent.

Q. Okay.

A. Mind you, the Value Line Water Utility Industry composite is made up of a number of other companies like American Water Works, Southwest, that have varying degrees of regulated services and varying financial results historically. So this is a composite that is not reflective of the six water utility companies that have been historically used by this Commission to estimate the cost of equity for water utilities.

Q. The difference between your current market risk premium CAPM and Value Line's composite estimate for return on common equity is about 1,190 basis points, isn't it?

A. Can you repeat that question?

Q. The difference between your expected rate of return using the current market risk premium CAPM and Value Line's composite statistic for return on common equity is approximately 1,190 basis points, isn't it?

A. Correct.

Q. Thank you. How long have you been providing consulting services on cost of capital issues? And I know everybody else knows the answer to that question, perhaps because I've not been here before, but just for my edification.

A. Repeat the question. How long?

Q. Yeah.

A. 10 years, 10, 12 years.

Q. On cost of capital issues?

A. Right. I began assisting a gentleman by the name of Mr. Ronald Kozoman who practiced before this Commission for some 25 years back in the mid-'90s, and began my, quote/unquote, education in this field with him back in the early '90s and began helping him prepare the cost of capital schedules and testimony back in the late '90s.

Q. Okay. How long have you been providing testimony independent of him?

A. Since about, I'm guessing, 2003, 2004 time frame.

Q. All right. And in that time period, how many times have you testified on those cost of capital issues? 10? More than 10, less than 10?

A. More than 10.

Q. Okay. Now, on Page 22 of your testimony, if you'll go with me, and I'm looking at Lines 7 through 10.

MR. JAMES: I'm sorry. Which page again?

MS. WOOD: Page 22 of his rejoinder testimony, which is Exhibit A-21.

MR. JAMES: Page 22. Thank you.

Q. (BY MS. WOOD) In your testimony, I think it's basically Lines 6 through 10, you state that RUCO's weighted average cost of capital is too low given that long-term cost of debt is 5.34, and the interest rate on investment grade Baa bonds, corporate bonds, is 9 percent; is that correct?

A. I provide the current interest rate on investment grade bonds as a backdrop or a benchmark to compare to the weighted average cost of capital that RUCO recommends, as well as the company's current long-term debt, again, as a comparison or benchmark.

MS. WOOD: Okay. I'm going to give you what I believe -- are we on Exhibit R-16 now?

ALJ WOLFE: Yes. Ms. Wood, would you mind if we take our afternoon break right now since you're just starting another topic?

MS. WOOD: I have one question on it, Your Honor.

ALJ WOLFE: And that's it?

MS. WOOD: Yes.

ALJ WOLFE: Okay, we'll do that then. And yes, it is R-16.

MS. WOOD: Thank you.

Q. (BY MS. WOOD) Let me wait until everybody has a copy.

You have in front of you a copy of what's been marked as R-16, the Value Line Investment Survey, dated January 9, 2009, Pages 3753 through 3760. This is an excerpt which includes just page 3757; is that correct?

A. Correct.

Q. And looking on Page 3757 of this exhibit, the Value Line provides a specific statistic for utility bonds, correct?

A. Correct.

Q. And looking at the line under corporate bonds under the category of utilities, 25-, 30-year grade Baa, slash, BBB, what is the most recent yield?

A. On the utility --

Q. Yes.

A. -- Baa, BBB?

Q. Yes.

A. Is 6.58.

Q. Okay. And the yield three months ago was?

A. Was 6.61.

Q. Okay.

A. The yield I refer to is published in the Federal Reserve Statistical Release, if you'll refer to Exhibit A-17.

Q. And referring to that exhibit, that does not break it down by utilities, does it? It includes all corporate bonds.

A. No, it doesn't.
Q. Thank you.
A. And neither is Chaparral of the same -- because it doesn't have a bond rating, it's unlikely that Chaparral City could borrow at a utility Baa, BBB rate.
MS. WOOD: Your Honor, I have an additional question, but I'm going to wait until after the break, if you want to do that.
ALJ WOLFE: Okay. We'll come back here at 2:45.
(A recess was taken from 2:26 p.m. to 2:45 p.m.)
ALJ WOLFE: Back on the record.
Ms. Wood.
MS. WOOD: Thank you, Your Honor.
Q. (BY MS. WOOD) Mr. Bourassa, just a couple of more questions regarding Exhibit R-13, if you have that in front of you. It's the Water Utility Industry report, dated October 24, 2008.
ALJ WOLFE: R-12.
MS. WOOD: Oh, sorry.
THE WITNESS: Okay.
Q. (BY MS. WOOD) I stand corrected. It's R-12. Do you have that?
A. Yes, I do.
Q. I wanted to just review a few more statistics from the composite statistics in the bottom left-hand

corner of this front page of this report.

For 2008, what is the composite statistic for the water utility industry as reported by Value Line for return on common equity?

A. 6 percent.

Q. And for 2009?

A. 7 percent.

Q. And the percentage roughly of Chaparral's -- in their capital structure, 75 percent is common equity, correct? Or excuse me. Equity, correct? What is the capital structure?

A. Yeah. I'll agree it's approximately 75 percent equity.

Q. And your estimate of cost of capital is -- what is your estimate for cost of capital?

A. The result of my models?

Q. I'm sorry. What is your estimate for cost of equity?

A. Based on my supplemental rejoinder, my cost of equity estimate is around 12.7 percent, and my recommendation is -- or the company's request is 11.5 percent.

I remind you that these returns on equities are earned returns on book equity, not market returns. This Commission has historically rejected comparable earnings based on book returns. And second of all, these are not the authorized returns of commissions. And as an example, with this company the amounts earned by this company are significantly less than its authorized return --

Q. Thank you.

A. -- historically.

MS. WOOD: Your Honor, at this point I would like to ask for the admission of the exhibits that I submitted today. I believe they're marked R-12 through R-16. Would that encompass them?

ALJ WOLFE: Yes. We've admitted R-12 and R-13, but R-14, 15, and 16 have not yet been moved. Is there any objection to R-14, 15, and 16 being admitted?

MR. JAMES: No, Your Honor.

MS. WOOD: Thank you.

ALJ WOLFE: No objection being heard, R-14, 15, and 16 are admitted.

(Exhibits R-14, R-15, and R-16 were admitted into evidence.)

MS. WOOD: Ms. Mitchell, do you have questions for this witness?

MS. MITCHELL: Yes. I wasn't sure if Ms. Wood was finished. I kind of spaced out there for a minute.

CROSS-EXAMINATION

Q. (BY MS. MITCHELL) Good afternoon, Mr. Bourassa.
A. Good afternoon.
Q. I believe Ms. Wood asked you about how many previous cases you filed testimony in on the cost of capital, and I think you indicated somewhere more than 10.
A. Yes.
Q. Were all of those cases in Arizona?
A. Yes.
Q. And are there any previous Commission cases, Arizona cases, in which the Commission adopted your cost of capital recommendations?
A. No.
Q. And have you ever testified on the issue of cost of capital on behalf of any Commission staffs in any other jurisdictions?
A. No.
Q. And have you ever written any books or published any articles on the subject of cost of capital?
A. No.
Q. Had you testified in the previous Chaparral rate case that was Docket 04-0616?
A. Yes.
Q. Did you testify on cost of capital?

A. No.
Q. And who was the cost of capital witness in that case?
A. Dr. Zepp.
Q. And between Dr. Zepp's recommendations and your recommendations, are there any differences in the models and approaches that Dr. Zepp used versus what you have used in this case?
A. Yes.
Q. And could you just tell me what those are?
A. As I recall, Dr. Zepp did not use a CAPM to estimate cost of equity. He used a risk premium approach. And for the DCF, I believe he used the FERC method for estimating the cost of capital or cost of equity.
Q. And do you know if he used spot data for stock prices and treasury bond yields?
A. You know, I don't recall. I believe he used average -- frankly, I don't recall. I would have to go back and check.
Q. Subject to check, if I told you that he did, would you accept that?
A. I would accept it subject to check.
Q. All right. Thank you.
A. That's what I thought.
MR. JAMES: I'm sorry. That he did? That he did

use spot rates or he didn't?

MS. MITCHELL: Yes, spot data for stock prices and treasury. Did he use averages or -- he did not use spot. I got it all confused. I'm sorry.

THE WITNESS: Spot -- which spot?

Q. (BY MS. MITCHELL) You used the spot, but he did not?

A. For the stock prices?

Q. The stock prices and the treasury bond yields.

A. I will accept that he did not, subject to check.

Q. All right. Thank you. I got that all confused.

Now, in your rejoinder testimony, are you saying that perhaps Mr. Zepp was incorrect in his methodologies and that your methods are more preferable?

A. No. I guess what I would say is that the Commission has adopted cost of capital for water and wastewater utilities consistently using spot prices. And my attempt in this case with my approach to cost of capital is to use spot prices to be consistent and to try to eliminate disputes with Staff.

Q. All right. And so in the differing uses of methodologies, I suppose there are lots of ways, then, to calculate cost of capital since you and Dr. Zepp have different methodologies within the same -- for the same company?

A. There are a number of methods that can be employed for estimating the cost of capital. This Commission has typically accepted methods using the DCF and the CAPM.

Q. In your rejoinder testimony, I believe you criticized Staff for using the geometric mean as an input in the CAPM analysis. Is that an accurate statement of your criticism of Staff?

A. I'm a little confused. Are you talking about Mr. Parcell's use of geometric mean?

Q. Yes.

A. Yes.

Q. He's the Staff witness so --

A. Okay.

Q. -- he's Staff for us today.

Are you aware that Staff witness Parcell proposes to use both arithmetic and geometric means in the CAPM analysis?

A. Yes.

Q. I'm going to switch subjects just a little bit.

On the date of your rejoinder testimony in December, I think you filed your testimony on December 4, 2008, do you know what the LIBOR rate was on that date?

A. On December 4, no.

Q. Are you proposing the use of a spot rate for

LIBOR?

A. In my prefiled testimony, I used a spot rate consistent with the date I used the spot prices for stocks and the yields for treasuries. So yes, I did use the spot.

Q. Thank you. The date that you filed your supplemental rejoinder, in your supplemental rejoinder testimony did you update the LIBOR rate in that testimony?

A. Well, my supplemental testimony I updated my cost of equity estimate, and I did not prepare a weighted average cost of capital estimate. I believe there was not a significant change in the LIBOR rate from my rejoinder testimony to my rejoinder supplemental, but I don't have data in front of me to confirm that. So if you have such data, I can confirm or -- but my rejoinder supplemental was related to the cost of equity, not the weighted average cost of capital.

Q. Do you know what the current LIBOR rate is?

A. No.

Q. During Mr. James' cross-examination of Mr. Fox, I think he asked him a couple of questions about beta, and I believe he said that there was some testimony that was elicited that said water companies' beta had increased, which means the stock is riskier.

Is that the outcome when beta increases? Does

that mean that the stock is more risky?
A. That the stock is more risky relative to the market?
Q. Yes.
A. Yes.
Q. And I think you have in front of you what is marked as RUCO's Exhibit R-12, and it's the water industry -- Water Utility Industry quarterly report from Value Line. Do you have that?
A. Yes.
Q. There on the very first page of that, which this is Page 1415, could you read the first two sentences of that for me into the record.
A. First column?
Q. Yes.
A. Top of the column?
Q. Yes, thank you.
A. The water utility industry has held up relatively well over the past few months. Although the broad market has been sent into a tailspin by growing economic uncertainties and a tightening credit market, water utility stocks have given little, if any, ground, and thus have jumped into the middle of the pack of the Value Line investment survey for timeliness.
Q. Thank you. I just have a couple of more

questions.

Is the economic condition of the Chaparral service area in any worse condition now than at the time of the application?

A. I wouldn't have any information to make that determination.

Q. In general, would you say that market conditions and economic conditions are the same now as they were when Chaparral filed its application in 2007, given what we know about the financial markets that's been everywhere in the news?

A. No. I think that the economic conditions have changed since the company filed its initial application. The market is always changing, and I'll give you an example. Back in the 2001 to 2002, 2003 time period, we also had a recession where the market took a plunge. We had the tech stock bubble burst and 9/11. During that period of time, rate cases were being filed and Staff was performing its cost of capital estimates under those market conditions.

As a comparison, as I stated in my testimony, Staff's current market risk premium back in a rate case in 2003 was -- current market risk premium was 13.1 percent. When it did its analysis in August, that current market risk premium was 12.7 percent or thereabouts. So we aren't talking about -- at least when Staff did its cost of capital analysis in August, it didn't particularly have an extremely high current market risk premium compared to what transpired in the past.

What the difference is between now and then is that betas are much higher than occurred in 2003. But the market was volatile, the market took a dive, and interest rates went down as they have gone down now. The real difference is that betas have gone up significantly, and that's why Staff's overall result is much higher this time around.

Q. I'm going to read you a statement that was made by a gentleman named Mark Gertler who worked with our now Federal Reserve Chairman Ben Bernanke. And this is out of an article in the Wall Street Journal, dated September 18, 2008: This is the worst financial crisis since The Great Depression, there is no question about it.

Now, against that background, are you saying that the events that occurred in 2001 are comparable given this statement by a senior economist who works with our Federal Reserve Chairman?

MR. JAMES: I'm going to object. And the reason I'm objecting is there's all sorts of statements like that in the media, Your Honor, but it's being presented today as if that is evidence. Yes, we're in a depression -- or a recession, excuse me. Calling it The Great Depression, there are no bread lines. There are people in line at Starbucks, but I haven't seen people in line trying to get bread. I'm not trying to marginalize or minimize it, but, you know, talking about doomsday scenarios and treating that as if it is a foregone conclusion, we object to that.

ALJ WOLFE: I like the contrast here, just so you know.

MS. MITCHELL: I know. The Starbucks and the bread line did kind of say something to me, too. But I think it's a given that, you know, unemployment is at an all-time high. You know, the government back in 2001 did not infuse 700, you know, billion dollars into the economy. There was no bailout for the automakers.

So I think these -- you know, the conditions speak for themselves. To liken it to 2001 may be just a bit disingenuous.

ALJ WOLFE: I wasn't asking for your testimony, but you certainly could preface a question to the witness with those statements, I believe, if you would like to. Maybe Mr. James wouldn't object.

Q. (BY MS. MITCHELL) All right. So Mr. Bourassa, are you saying that the conditions in 2001 are the same as the conditions that we face in the market today?

A. No, just as the conditions of the market in other recessions are caused by different things. So no, they're not exactly the same.

Q. And so is it Chaparral's position, then, that its ratepayers should pay a higher rate to the company because of the recession?

A. No. The company should be afforded an opportunity to earn its cost of capital under the market conditions expected to be present when -- or in existence when rates are in effect. And so it has to -- you know, that fair return must reflect or meet the standard of Bluefield and Hope, which is it must provide for the financial integrity of the utility, provide for the utility's ability to maintain its credit, and, just as important, for the company to attract capital or to earn a return of comparable risk firms.

The models that are being used and have been used historically largely reflect historical information. We do base it on spot price to take a -- to get a gauge of the equity costs in the market because that's our -- you know, that's why we do a cost of capital on every case, because there are different conditions occurring at that time. Part of that analysis and part of my analysis has been to reflect a current market risk premium in the CAPM to reflect -- to also reflect the current market conditions.

Q. In your direct testimony, on your average results of your DCF and CAPM results, you stated that your average result was 11.11 percent?

A. Yes.

Q. And that was in 2007. So if we look at your supplemental rejoinder that was filed December 23, 2008, I believe your average result was 12.7 percent. So there was an increase?

A. Yes.

Q. So it seems to me that that may suggest that in recession ratepayers should pay more?

A. When the market conditions reflect investors' -- higher equity return expectations from investors, then that needs to be reflected in the cost of capital.

So regardless of whether it's a recession or some other market condition, the company still needs to be able to attract capital and maintain its credit and earn returns commensurate with returns of comparable risk companies, and that's reflected in the current market conditions.

MS. MITCHELL: I don't have any other questions. Thank you, Mr. Bourassa.

ALJ WOLFE: Do you have redirect, Mr. James?

MR. JAMES: I do. Thank you, Your Honor.

REDIRECT EXAMINATION

Q. (BY MR. JAMES) Let me start with the last topic, this notion that somehow the company is trying to take advantage of current market conditions.

First of all, Mr. Bourassa, and as you have indicated, you have testified in a number of rate cases here at the Commission over the last seven or eight years; is that right?

A. Yes.

Q. Is it relatively common for the company to file an application and then by the time the company files its rejoinder testimony that the cost of capital has changed because of the length of time involved in a rate case?

A. Yes.

Q. So in this particular case, in your direct testimony -- well, first of all, let's go back and talk about the models for just a second just generally.

You didn't change the models that you used or the inputs that you used during this case, did you?

A. I updated them.

Q. You changed the inputs in the sense of updating to use current financial data?

A. Yes.

Q. But in terms of selecting, for example, a spot rate versus using a three-month average stock price, or using an average bond yield in the CAPM, those sorts of things, you didn't change the methodology that you used?

A. No.

Q. Now, in the direct testimony, your models produced -- and you just answered a question from Staff counsel -- your models produced a cost of equity of about 11 percent; is that right?

A. Yes.

Q. In your supplemental rejoinder testimony, your models produced a result of about 12.7 percent for the cost of equity?

A. Correct.

Q. And what is the company requesting as its cost of equity?

A. 11.5.

Q. And in the testimony of Staff that was filed on October 3, 2008, what was Staff's basic or unadjusted cost of equity produced by its models?

A. 11.8.

Q. Okay. So the company is at least -- is not simply trying to take advantage of the current market conditions. It's trying to be reasonable; is that right?

A. Correct.

Q. The company has not asked for the highest

possible cost of equity it could justify, correct?
A. That's correct.
MR. JAMES: Your Honor, we would like to introduce an exhibit, and I can't remember where I left off. A-22, I believe, Your Honor.
ALJ WOLFE: That's correct, yes. That's the next number.
MR. JAMES: Is it A-22?
ALJ WOLFE: Yes.
MR. JAMES: I'm missing one. Okay. That's always dangerous.
Q. (BY MR. JAMES) Mr. Bourassa, before you marked as Exhibit A-22 is a two-page document that I believe you obtained from Yahoo Finance. Could you describe this document for the record?
A. Yes. Page 1 of the document is a graph of the S&P 500 Index for 1998 through -- it looks like about January 5, 2009.
MR. JAMES: And let me interrupt you.
For the record, Your Honor, the reason there are two pages is that first page may distort a bit the line because of the way it's printed, so the second page is really the key page here. So I just want to make sure that everybody recognizes that.
Q. (BY MR. JAMES) What is depicted, Mr. Bourassa,

on Page 2 is the same as what is depicted on Page 1 with respect to the S&P 500 Index, correct?

A. Yes. Thank you for that clarification, because I don't see that on the title, but I see that it does -- it looks like it's just an expanded version of that same chart.

Q. And what are the time frames on the -- let's focus on Page 2 to avoid the distortion that appears on the first page.

Do you see the time period down in the corner?

A. Yes. January 5, 1998 through June 5 -- or excuse me -- January 5, 2009.

Q. Okay. Now, you had testified in response to some questions by Staff's counsel, I believe, about the impact of the dot-com bust, 9/11, et cetera, during the 2002/ 2003 period. Is that depicted on this graph?

A. Yes. You see the -- you can actually see the dip just before the graph line for 2002. The sharp dip there was the 9/11 occurrence, and shortly thereafter was the dip -- the significant dip in the markets in the middle of 2002 to middle of 2003 time frame.

Q. And when you're referring to, for example, Staff's CAPM analysis utilizing a current market risk premium of 13.1 percent, do you recall testifying about that?

A. Yes.

Q. Okay. That would have been during the dip that is shown on this graph between 2002 and 2004?

A. Yes.

Q. And during the period when you have been testifying here at the Commission, so over the last seven or eight years, has Staff consistently used the same methods and types of inputs in estimating the cost of equity capital, Mr. Bourassa?

A. Yes.

Q. Did Staff use different methods during 2002 and 2003 to account for the fact that there was a plunge in the stock market?

A. They used the same basic approach to their DCF and their CAPM. For the DCF, they used a constant growth version and a multistage version; and for the CAPM, a historical market risk premium CAPM and a current market risk premium CAPM. The same method that was used to estimate the current market risk premium was used in that time frame as now, so no. I mean, so yes, the models are basically the same; the inputs are basically the same.

Q. So the method that was used by Mr. Chaves in his testimony filed on October 3, would have been -- again, referring now -- obviously, the inputs are going to change right?

A. Yes.

Q. I mean, the spot prices change, the spot yields and treasuries would change, right?

A. Yes.

Q. But in terms of the basic methodology, Mr. Chaves's cost of equity estimate is the same as the cost of equity estimate that would have been used by Staff four or five years ago, correct?

A. Correct.

Q. And I take it that the current market risk premium component of Staff's CAPM estimate would have changed depending upon how much volatility there was in the financial market at the time?

A. Correct.

Q. When was -- and looking at the graph, Mr. Bourassa, can you give us an indication of perhaps how the current market risk premium might have changed in the prior rate cases that you're familiar with?

A. Yes. I can give you a couple of examples. The Black Mountain Sewer Company case in '06 and the Gold Canyon Sewer case in '06 and '07, the current market risk premiums were fairly low in those cases.

Actually, between those two cases, the current market risk premium was higher in the Gold Canyon case than it was in the Black Mountain case, resulting in different overall cost of equity estimates. I believe in the Black Mountain Sewer case the unadjusted return on equity overall was always 9.6 using Staff's methods. In the Black Mountain -- or in the Gold Canyon Sewer case, the overall result was 10.2. It was largely the result of the change in the current market risk premium that occurred. And these cases, by the way, were just a few months apart in terms of -- you know, maybe three or four months apart in terms of the timing of their cases.

Q. For example, so that would affect when the testimony was filed and, therefore, when the cost of capital analysis was performed?

A. Exactly. The updates to the cost of capital or cost of equity in each of those cases were done at different times.

Q. But in both cases, I assume, the current market risk premium would have been substantially less than the 13.1 percent discussed in your testimony for Arizona Water Company?

A. Yes.

Q. Let's turn to RUCO Exhibit R-12, which is the Value Line Water Utility Industry. First of all, let me ask you a few follow-up questions about RUCO's use of Southwest Water.

First of all, Mr. Fox had testified earlier that

Staff has consistently used a sample group of six publicly traded water utilities. Do you recall that?

A. Yes.

Q. And those are the same six publicly traded water companies that you have used in your analysis?

A. Yes.

Q. RUCO did not use Connecticut Water, Middlesex Water, or SJW Corporation; is that right?

A. That's correct.

Q. RUCO did use American States Water, California Water Service and Aqua America; is that right?

A. Yes.

Q. And RUCO also added Southwest Water. And so it used four water utilities with Southwest Water, rather than the six companies that you used and Staff used, right?

A. Correct.

Q. Now, turning to the information on Southwest Water, Southwest Water, according to the fine print there in the middle of the page under the heading of business, among other things, supposedly it provides utility infrastructure construction management.

Does Chaparral City provide that service?

A. No.

Q. To your knowledge, Mr. Bourassa, does American

States provide utility infrastructure construction management?
A. Not to my knowledge.
Q. Do either Chaparral City or American States provide public works services?
A. I'm not sure what that means.
Q. Okay.
A. Perhaps you can clarify that.
Q. That's fair enough. The Value Line also says that 43 percent of its revenues were generated by its, quote, utility group in 2007, and 57 percent were generated by its, quote, services group.
Do you see that?
A. Yes.
Q. Okay. If you continue, Value Line goes on and says, quote, utility -- I assume referring to the utility group -- owns and manages rate regulated public water utilities, and it lists several states.
A. Yes.
Q. Is managing a rate regulated water utility the same as actually owning and operating a rate regulated water utility?
A. Well, there is a difference between a contractual arrangement to manage a water utility or wastewater facility and owning and managing it. So yeah, there's a

distinction there.

Q. So your revenue in that case would be derived based on contractual payments for management services provided, presumably?

A. Correct. And those contractual services arrangements would be unregulated revenues.

Q. So it appears that the 43 percent of revenue in 2007, some of that -- the 43 percent of the revenue derived from the, quote, utility group, may actually include revenue derived from nonregulated activities as well?

A. I would agree with that.

Q. Now, let's look up the page here and -- well, let me -- sorry. Let me back up.

According to this description, it also says that the services group does maintenance work on a contract basis. To your knowledge, Mr. Bourassa, does American States Water perform maintenance work or similar types of work for other entities?

I should qualify that. Obviously, it has to maintain its water systems it owns. I'm talking about service, the service group.

A. I'm not sure. I don't know. I'm not familiar with what the contractual arrangements to run the military base water and wastewater facilities entails, whether or not that there is within that contract an expectation of maintenance of facilities.

Q. Well, let me ask it a different way. What is your understanding of the nonregulated revenue generating activities that American States is involved in?

A. My understanding is that they run, manage, operate the water and wastewater facilities on a contractual basis. The government owns the facilities, and the company operates and manages those facilities.

Q. Looking up on Southwest, the Value Line page here on Southwest Water, what did Value Line -- what return on book common equity did Southwest Water earn in 2007?

A. About 3.5 percent.

Q. And what is the projected return on book common equity in 2008?

A. 3.5 percent.

Q. And the return projected for 2009 is?

A. 5 percent.

Q. And what is the intermediate term projection?

A. 8.5 percent.

Q. Those don't appear to be particularly good earnings compared to the other companies in this handout.

A. Again, those are projected actual earnings. They don't reflect what is authorized. Again, if you look historically at this company, what it's been authorized and what it's actually earned is significantly less. So if we were to authorize an 8.5 percent rate of return, the company would probably, based on history, would earn 3 percent in actual earnings. So they're not the same.

Q. Are you talking now -- when you say the company, you're talking about Chaparral City?

A. Chaparral City, right.

Q. So what you're suggesting is that the authorized return is one thing and the actual earnings are another thing?

A. That's correct.

Q. But aren't the projected returns on common equity for the other companies -- well, for example, let's turn to the last page here, Aqua America.

What is Aqua America projected to earn on book common equity in 2008?

A. 10 percent.

Q. And how about 2009?

A. 11.

Q. And how about during 2011 to 2013?

A. 11.5.

Q. So based on what you know -- and let me just sort of sum this up here, Mr. Bourassa. Based on what you know about Southwest Water, why would it be inappropriate to include Southwest Water in the sample group?

A. Because it appears to be in financial distress and should be excluded like an outlier. We have to be careful about -- if we decide we have to be careful about historical data and including companies in a sample group that might be under financial stress is that we then provide or estimate lower returns, which is sort of circular. You're authorizing a lower return, financial distress continues or gets worse, and so it sort of feeds upon itself. So if you keep on the track, you're eventually going to run the companies into the ground. It's circular in nature.

Q. Well, let's talk for a few minutes about the gas companies that RUCO has proposed to use as an additional sample group, and let's start with beta.

Is beta, in addition to being an input into the CAPM model, the beta is also an independent way of estimating the relative riskiness of a stock, isn't it?

A. Yes.

Q. In other words, beta is useful regardless of whether you accept the tenets of the CAPM, beta is useful in comparing and analyzing the riskiness of an investment, isn't it?

A. Yes.

MR. JAMES: Now, Your Honor, I would like to show the witness Exhibit A-9, which actually goes back to the initial phase of this case.

ALJ WOLFE: Do you have a copy of it to show him, or did you want the court reporter to --

MR. JAMES: I was hoping that the court reporter could provide him with the marked copy.

ALJ WOLFE: I couldn't tell you we were looking for it, because the court reporter was looking for it. Here it is.

MS. MITCHELL: Is Mr. James going to remind me what A-9 was?

ALJ WOLFE: I'm sorry. I can tell you. I have it here.

MS. MITCHELL: I don't remember.

ALJ WOLFE: It's a copy of Decision No. 66849.

MR. JAMES: Thank you, Your Honor. I was going to identify it for the record. Exhibit A-9 is a copy, as you have indicated, of Decision 66849, which was issued in Arizona Water Company's Eastern Group rate case.

Q. (BY MR. JAMES) All right. Mr. Bourassa, if you would, turn to -- first of all, let's turn to Page 20, if you would. And at the bottom of Page 20, you'll see a paragraph that begins: Mr. Reiker testified that the CAPM model provides a measure of the expected return on an investment.

Do you see that?

A. Yes.

Q. And it goes on and discusses the inputs into the CAPM model; is that right?

A. Correct.

Q. What is the average beta for the six proxy water companies identified in that paragraph?

A. .59.

Q. Okay. Now, if you turn the page, Mr. Bourassa, there's also a discussion about estimating the current cost of equity for a group of proxy gas companies. There's a paragraph that begins on Line 13 of Page 21.

Do you see that?

A. Yes.

Q. And so it's clear, Mr. Bourassa, why don't you read into the record what that paragraph says.

A. Staff also averaged the DCF and CAPM results for the proxy gas companies, which resulted in an equity cost estimate of 10.3 percent for those companies. Staff claims that the sample gas companies are more risky than the sample water companies, as evidenced by average betas of .59 and .69 for the water and gas companies, respectively.

Staff claims that because the cost -- the equity cost for the sample gas companies is approximately 100 basis points higher than the water company's, a downward adjustment must be made to reflect the cost of equity for a water company such as Arizona Water. Therefore, Staff adjusted the results of its DCF and CAPM analysis downward from 9.2 to 9 percent.

Q. All right. Referring now to the testimony you were referring to with RUCO's counsel, do you still have that up there? Mr. Rigsby's direct testimony?

A. Yes.

Q. Okay. Do you recall looking at Schedule WAR-7?

A. Page 2 of 2?

Q. Page 2 of 2. I believe that's what you were looking at. Either one works, actually, so let's look at 2 of 2.

Now, back when this case was decided, the Arizona Water case was decided, the gas company sample, as you just read, the average beta was .69. What was the average beta of the gas sample that Mr. Rigsby used?

A. .82.

Q. So it's gone up a little bit?

A. Yes.

Q. How about the average of the sample water companies that Mr. Rigsby used? What is the beta, the average beta?

A. 1.05.

Q. Now, in the Arizona Water Company case, the

average beta was .59, correct?
A. Correct.
Q. Mr. Bourassa, is that a significant increase -- or suggest a significant increase in riskiness in the water utility industry relative to, for example, the gas industry, or, actually, relative to any other stock?
A. Yes.
Q. And if we were to use the water -- or excuse me. If we were to use the gas company samples -- well, strike that. Let me back up.
As you read, Staff argued in the Arizona Water Company case that the difference between the water utility's average beta of .59 and the gas company's average beta of .69 amounted to 100 basis points, correct?
A. Yes.
Q. Looking at the relative differences in risk today, what sort of risk premium would have to be used in order to equalize the differences in risk indicated by the average betas we see today?
A. I believe about 190 to 200 basis points. And I believe if you look at my --
Q. Would that be Exhibit A-21, your rejoinder testimony? Is that what you're looking at?
A. That's what I'm looking for. Thank you.
Yes. On Page 30, of my rejoinder, I did such an

analysis to determine the risk differential between the water and gas company samples.

Q. Based on the relative differences in beta?

A. Correct.

Q. And so if a gas company were entitled to a cost of equity -- or its cost of equity currently was determined to be 10 percent, that would suggest that a water utility's investment risk would be close to 12 percent; is that right?

A. Yes.

Q. In other words, we would have to add -- we would have to make some upward adjustment to account for the additional risk associated with the water industry at the present time?

A. Correct.

Q. Now, during the cross-examination by RUCO's counsel, you were asked questions about your method of implementing the CAPM as opposed to RUCO's method of implementing the CAPM. Do you recall that?

A. Yes.

Q. Did you have occasion to analyze RUCO's CAPM estimate during the course of your analysis in this case?

A. Yes.

Q. And in your opinion, Mr. Bourassa, is RUCO correctly implementing the CAPM model?

A. Other than my opinion that geometric means should not be used?

Q. Yeah. Let me be more specific. Is RUCO using the correct risk-free rate?

A. I believe he has a mismatch between his risk-free rate and his long-term equity risk premium. He uses a five-year treasury as his risk-free rate, but computes his risk premium, market risk premium, based upon long-term government bonds.

Q. Well, let's look at Page 30 of Mr. Rigsby's direct testimony. You have that there. By the way, hang on to that schedule. Keep your finger there. Let's look at Page 30 of Mr. Rigsby's testimony. Do you have that?

A. Yes.

Q. And you see, beginning on Line 8, the CAPM formula set out?

A. Yes.

Q. Is that the correct formula?

A. Yes.

Q. Now, the risk-free rate, RF, is identified in that formula. That's what you're talking about, correct?

A. Yes.

Q. Okay. And under this formula, the cost of capital equals the risk-free rate plus beta times the market risk premium, right?

A. Correct.

Q. And the market risk premium is equal to -- well, you explain it. What does RM minus RF equal? What is that?

A. Well, it's the difference between -- it defines it on Page 33 of his testimony. The difference between the historical returns on the S&P 500 Index from 1926 to 2007, less the yields of long-term government bonds for the same period.

Now, he's got two different measures, one is the geometric mean and one is the arithmetic mean. I believe his -- both means used, however, do not use the long-term government bond income returns but rather the long-term government bond total returns. And I addressed this in my testimony that long-term government bond total returns are the incorrect input for computing the market risk premium.

Q. Well, okay. Referring to Page 33 where you referred us there, on Lines 9 and 10 --

A. Yes.

Q. -- there's a calculation of the arithmetic mean, which is shown as being 6.5 percent. Do you see that?

A. Correct.

Q. The calculation is 12.3 percent minus 5.8 percent. Do you see that on Line 10?

A. Yes.

Q. Now, if we go back to schedule WAR-7, and we can look at both pages, but let's start on Page 1. Well, excuse me. I've got to use Page 2 to match it up, so let's go to schedule WAR-7, Page 2 of 2. Okay.

Do you have that?

A. Yes.

Q. What is the risk-free rate shown on that schedule?

A. 2.95 percent. And that risk-free rate is the five-year constant maturity U.S. Treasury.

Q. So there's two different risk-free rates being used here; is that right?

A. Yes.

Q. And that's not appropriate under the CAPM model, is it?

A. Well, it's not internally consistent, correct.

Q. Right. You were also asked some questions suggesting that you had excluded -- well, strike that.

A. Before you move on, back to my point about long-term government bond total returns versus income returns used by Mr. Rigsby, his computation of the arithmetic mean on Line 10 there using long-term bond -- government bond income returns would be higher by 60 basis points had he used income returns rather than total returns. The formulation would have been 12.3 percent

minus 5.2 percent, with a result of 7.1 percent.
I have a discussion of this in my supplemental rejoinder as to why government bond income returns should be used in the determination of risk premium. And I won't repeat that, but just want to reference that so you can go back and read that testimony.
Q. What page is that on, Mr. Bourassa?
Page 19 perhaps?
A. Thank you. It starts on Page 19 at Line 12 of my testimony. And I have included pages from the Morningstar or Ibbotson Value Line Valuation Edition, 2008 yearbook, which discusses in-depth why income returns should be used rather than total returns.
Q. Should be used as the risk-free rate?
A. Right. Because if you don't, if you use total returns, you inject additional or inappropriate risk into the determination of the market risk premium.
Q. Because it's supposed to be a risk-free rate?
A. That's correct.
Q. All right. Since you're referring to your supplemental rejoinder, I noticed that the historical market risk premium that you used was 7.5 percent; is that accurate?
A. Correct.
Q. And if I recall correctly, that's also the same

historic market risk premium that Staff used, Staff calculated?

A. Yes. Well, they don't have to calculate it. They actually come from the SBBI Valuation Edition yearbook for 2008.

Q. But putting aside -- I mean, again, you talked a moment ago that the risk -- at least the historic risk premium is based on total returns earned on the market over a historical period, right?

A. Yes.

Q. Less the risk-free rate?

A. Correct.

Q. And I believe the attachment that you have at Tab 4, you show that -- you show those figures, correct? That's the excerpt that you attached from Morningstar?

A. Correct.

Q. But it shows how those numbers -- how the total return is calculated?

A. Yes.

Q. Okay. Do you need some water?

A. No, I'm good. Thank you.

Q. Do you recall being asked some questions about bond yields and bond interest rates at the present time?

A. Regarding the Value Line?

Q. Yes.

A. Or the Federal Reserve Statistical Release?
Q. Yes.
A. Okay. Or both?
Q. Well, let's look at both.
A. Okay.
Q. Let's look at both.
A. Sure. I think you're referring to Exhibit A-17.
Q. Exhibit A-17 and Exhibit R-16.
A. Sure.
Q. And I have to confess, I'm a little bit confused by the interest rates that are reported in Exhibit R-16. Have you seen anything that's reported interest rates on corporate and utility bonds that low, Mr. Bourassa?
A. Can you clarify? When you say corporate and utility bonds, are you talking about corporate --
Q. I'm talking about the yields that are -- or interest rates that are reported under the heading corporate bonds on Exhibit R-16.
A. Okay.
Q. Are those interest rates consistent with other reports that you have seen?
A. Well, I want to make sure that we're comparing apples to apples and not apples and oranges. It's certainly -- the data listed in the Value Line report or selection and opinion page, certainly is different than

the Moody's seasoned bonds listed in the Federal Reserve Statistical Release.

Q. I have also provided to you, Mr. Bourassa, marked as Exhibit A-23, a copy of a press release that American Water Works recently issued announcing the issuance of bonds -- or excuse me -- senior notes at an interest rate of 10 percent. You were aware of that, weren't you?

A. Yes.

Q. You have reviewed this previously?

A. Yes. In fact, I have referred to it in my testimony.

Q. In terms of investment risk, would Chaparral City be likely to have less investment risk than American Water Works?

A. Have less investment risk? No. More investment risk. Now, American Works is the largest and best-run utility in the United States. It has operations all across the United States, where compare that to Chaparral who has a very limited service territory and is much, much smaller than American Water Works.

Q. Do you have any other information that might be relevant to this proceeding relating to current debt costs for water utilities?

A. Well, I believe that the company's parent in a recent case, or in a pending decision, has been -- in that pending decision is an authorization of rates for new debt of 8.3 percent. That's the company's parent -- or the company's subsidiary, Golden State Water. I believe a rate case for Golden State Water has that in a pending decision.

Also in that pending decision is a balancing account. So if debt is issued at greater than 8.3 percent, the company can recover the difference. Obviously, if it's less than 8.3 percent, it can recover the difference. The point being is that, one, 8.3 percent on Golden State Water, which compared to Chaparral City is, again, much, much larger and much -- far greater number of customers, and the fact that the company has minimized risk on that debt because of this balancing account sort of thing.

Q. So it's clear for the record, Golden State is the major water affiliate of American States Water?

A. Correct.

Q. Okay. Also, I wanted to ask you and I neglected to do this, Mr. Bourassa. I had a couple of questions about Exhibit R-15. Do you have that?

A. Yes, I do.

Q. Okay. That's the excerpt from a book called "Valuation," written by Tim Koller, et al.?

A. Yes.

Q. Okay. And, obviously, you have reviewed -- you had reviewed this excerpt before?

A. Yes.

Q. Okay. On Page 298, what do the authors highlight in regard to how the historical market risk premium is calculated?

A. Well, it says on Page 298, and I refer to about the middle of the page under the bold heading of historical market risk premium.

To best measure the risk premium using historical data, follow these guidelines: Calculate the premium relative to long-term government bonds; use the longest period possible; use an arithmetic average of longer-dated intervals such as five years; and, finally, adjust the result for econometric issues, such as survivorship bias.

Q. Now, in this particular case, we haven't been using long-term bonds in this jurisdiction. We've been using intermediate-term bonds, at least for the historic risk premium calculation; is that right?

A. Right. And I think that's a reflection of the view that the investors' holding period is, you know, five years.

Q. Five to 10 years?

A. Five to 10.

Q. An intermediate period?

A. Yes.
Q. And that's been the position Staff has taken in prior cases and the Commission has adopted?
A. Yes.
Q. On the following page, 299, the final paragraph there, Mr. Bourassa, what does it say about using -- or about -- again, about calculating the risk premium?
A. Well, let me just read it for you.
So which averaging method on historical data best estimates the expected future rate of return? To estimate the mean, the expectation, parentheses, for any random variable, well-accepted statistical principles dictate that the arithmetic average is the best unbiased estimator. Therefore, to determine a security's expected return for one period, the best unbiased predictor is the arithmetic average of many one-period returns.
Q. So if we're looking at trying to predict or estimate what is going to happen in the future, an arithmetic mean is the correct approach to use; is that right?
A. Yes.
Q. Now, the geometric mean is useful, but it's useful for other purposes, isn't it?
A. To compare past performance.
MR. JAMES: That's all I have, Your Honor.

ALJ WOLFE: Is there recross on those issues?
MS. WOOD: None, Your Honor. Thank you.
MS. MITCHELL: None from Staff.
ALJ WOLFE: Thank you. Thank you for your testimony, Mr. Bourassa. You're excused as a witness.
THE WITNESS: Thank you.
ALJ WOLFE: And we won't be putting on any more witnesses today. We'll start tomorrow morning with Mr. Rigsby. We're scheduled to start at 9:00 a.m. Is that okay with everyone?
MR. JAMES: You're the boss, Your Honor.
ALJ WOLFE: Well, we'll start at 9:00 a.m. tomorrow morning, then.
And I don't think that we discussed actual dates for final schedules, did we?
MR. JAMES: I think that we've discussed schedules. And I'll have to pull my other notes out, Your Honor, but I think we discussed schedules for briefing on non-cost of capital issues, but not cost of capital issues. That's my recollection.
ALJ WOLFE: All right. The issue that raises for me is given that there's the status report that's due in three weeks, is that going to cause -- is there a possibility that that will cause a change in the briefing? And I won't ask you for an answer today. I just want to

hear about it tomorrow, what the parties think about that.

MS. MITCHELL: Okay.

ALJ WOLFE: Do you understand what my issue is?

MR. JAMES: Your Honor, also, someone smarter than I has reminded me that I did not move to admit Exhibits A-22 and A-23. I would like to do so. I apologize.

ALJ WOLFE: That's not a problem. So A-23 was the --

MR. JAMES: A-23 was the press release, and A-22 was the graph from Yahoo Finance.

ALJ WOLFE: Is there any objection to A-22 or A-23.

MS. MITCHELL: No.

ALJ WOLFE: A-22 and A-23 are admitted.

(Exhibits A-22 and A-23 were admitted into evidence.)

MR. JAMES: Thank you, Your Honor.

ALJ WOLFE: And we'll reconvene tomorrow at 9:00 a.m. Thank you. Have a good evening.

(The Hearing recessed at 4:10 p.m.)

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

I, MICHELE E. BALMER, Certified Reporter No. 50489 for the State of Arizona, do hereby certify that the foregoing printed pages constitute a full, true and accurate transcript of the proceedings had in the foregoing matter, all done to the best of my skill and ability.

WITNESS my hand this 21st day of January, 2009.

Michele E. Balmer

MICHELE E. BALMER
Certified Reporter
Certificate No. 50489