BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant,	)	
vs.	)	DOCKET NO. UE-991606
AVISTA CORPORATION Respondent.	)	
THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant,	)	
vs.	)	DOCKET NO. UG-991607
AVISTA CORPORATION, Respondent.	)	VOLUME VI Pages 651 - 847

A hearing in the above matter was held on March 30, 2000 at 9:30 a.m., at 1300 South Evergreen Park Drive Southwest, Olympia, Washington, before Administrative Law Judge MARJORIE R. SCHAER, Chairwoman MARILYN SHOWALTER, Commissioners RICHARD HEMSTAD and WILLIAM R. GILLIS.

The parties were present as follows:

THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, by MARY M. TENNYSON and GREGORY J. TRAUTMAN, Assistant Attorneys General, 1400 South Evergreen Park Drive Southwest, Post Office Box 40128, Olympia, Washington 98504.

AVISTA CORPORATION, by DAVID J. MEYER, General Counsel, East 1411 Mission, Spokane, Washington 99202.

THE PUBLIC, by SIMON J. FFITCH, Assistant Attorney General, 900 Fourth Avenue, Suite 2000, Seattle, Washington 98164-1012.

Kathryn T. Wilson, CCR
Court Reporter

INDEX OF EXHIBITS

EXHIBIT:	MARKED:	OFFERED/ADMITTED:
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P R O C E E D I N G S

JUDGE SCHAER: Today is March 30, 2000, and we are convened for the fourth day this week for presentation of the Avista Company's direct case and cross-examination of that case, the hearing dockets No. UE-991606 and 991607. Appearances are the same as they were yesterday. Would you like to call your next witness, please, Mr. Meyer.

MR. MEYER: I call to the stand Mr. William Avera, please.

(Witness sworn)

EXHIBITS FOR WILLIAM E. AVERA

T-101, Direct Testimony WEA-17T; 102, Supporting Schedules and Appendices WEA-18; 103, Value Line Selection & Opinion, July 23, 1999 Article: "The Value Line Industrial Composite" (Staff Cross Exhibit); 104, Economic Report of the President Transmitted to Congress February 2000 (Staff Cross Exhibit); 105, Response to Staff Data Request No. 89 (Staff Cross Exhibit); 106, Response to Staff Data Request No. 90 (Staff Cross Exhibit); 107, Response to Staff Data Request No. 91 (Staff Cross Exhibit); 108, Response to Staff Data Request No. 92 (Staff Cross Exhibit); 109, Response to Staff Data Request No. 123 (Staff Cross

Exhibit); 110, Response to Staff Data Request No. 124 (Staff Cross Exhibit); 111, Response to Staff Data Request No. 127 (Staff Cross Exhibit); 112, Response to Staff Data Request No. 128 (Staff Cross Exhibit); 113, Response to Staff Data Request No. 129 (Staff Cross Exhibit); 114, Response to Staff Data Request No. 130 (Staff Cross Exhibit; 115, Response to Staff Data Request No. 131 (Staff Cross Exhibit); 116, Response to Staff Data Request No. 137 (Staff Cross Exhibit); 117, Response to Staff Data Request No. 138 (Staff Cross Exhibit); 118, Response to Staff Data Request No. 150 (Staff Cross Exhibit); 119, Avista Response to Public Counsel Data Request No. 45 (Public Counsel Cross Exhibit); 120, Weighted average cost of capital exhibit (1 of 2) (Public Counsel Cross Exhibit); 121, Weighted average cost of capital exhibit (2 of 2) (Public Counsel Cross Exhibit); 122, Avista Response to Public Counsel Data Request No. 24 (Public Counsel Cross Exhibit); 123, Avista Response to Public Counsel Data Request No. 33 (Public Counsel Cross Exhibit); 124, Avista Response to Public Counsel Data Request No. 43c (Public Counsel Cross Exhibit); 125, Avista Response to Public Counsel Data Request No. 43b (Public Counsel Cross Exhibit) (withdrawn); 126, Avista Response to Public Counsel Data Request No. 36 (Public Counsel

Cross Exhibit); 127, Avista Response to Public Counsel Data Request No. 49 (Public Counsel Cross Exhibit); 128, Response to WUTC Data Request No. 92 (Staff Cross Examination Exhibit); 129, Response to WUTC Data Request No. 95 (Staff Cross Examination Exhibit); 130, Response to WUTC Data Request No. 104 (Staff Cross Examination Exhibit); 131, Response to WUTC Data Request No. 111 (Staff Cross Examination Exhibit); 132, Avista Corporation, Form 10-Q for quarter ended 9/30/99 (Staff Cross Examination Exhibit); 133, Response to Public Counsel Data Request No. 25 (Staff Cross Examination Exhibit); 134, Response to Staff Data Request No. 117 (Staff Cross Examination Exhibit).

DIRECT EXAMINATION

BY MR. MEYER:

Q. Have you sponsored Exhibit T-101 as marked for identification?

A. Yes, Mr. Meyer, I have.

Q. For the record, we have passed out an errata sheet correcting for some exhibit references. With that errata having been noted, would your answers be the same if asked the same questions?

A. They would be.

Q. Are you also sponsoring what has been marked

for identification as Exhibit 102?
A. Yes, sir.
Q. Was that exhibit prepared by you or under your direction or supervision?
A. It was.
MR. MEYER: With that, Your Honor, I move for admission of Exhibits T-101 and 102.
JUDGE SCHAER: Are there any objections? Those documents are admitted. Let's go off the record for a few minutes at this point. Commissioners are tied up in another meeting, and as soon as they are able to join us, we will proceed.
(Discussion off the record.)
JUDGE SCHAER: The Commissioners have joined us now. You had tendered the witness, I believe, Mr. Meyer.
MR. MEYER: I had, Your Honor.
JUDGE SCHAER: Go ahead, Ms. Tennyson.

CROSS-EXAMINATION

BY MS. TENNYSON:
Q. Good morning, Mr. Avera. Am I pronouncing your name right?
A. You are indeed.
Q. Referring to your testimony, which has been

admitted as Exhibit T-101, on Page 2, you tell us that the purpose of your testimony is to determine what constitutes a fair overall rate of return for Avista's jurisdictional, electric, and gas utility operations; is that correct?

A. Yes, it is.

Q. By "jurisdictional," are you referring to regulated operations?

A. Yes, jurisdictional to this Commission.

Q. So Washington regulated operations in particular.

A. That is correct.

Q. In reading your testimony, I didn't find a single analysis that you made using Avista's own data to assist you in determining what constitutes a fair rate of return on common equity capital for Avista's jurisdictional operations. Is that a fair statement?

A. I don't think it is. I looked at the industry in general, and for reasons stated in my testimony, I elected to use a group of comparable utilities to determine the appropriate capital structure and for the purposes of the cost of equity.

As to the cost of debt and preferred securities, I use the Avista information, and throughout the analysis, I compared Avista information

with the industry so I think in my analysis incorporated an understanding of Avista and comparisons of Avista with the industry.

Q. The question that I asked talked about the fair rate of return on common equity capital, not the cost of debt.

A. As to the fair rate of return, I think my answer would have to be refined a little bit. I did look to the comparable companies, but I did a fundamental analysis of Avista to determine that it was similar to the comparable companies, or more correctly, that the comparable companies were similar to the Avista.

Q. Did you look at the Company's actual capital structure?

A. I recorded the Company's actual capital structure in my testimony.

Q. You didn't do a discounted cash flow or DSF type analysis on Avista itself; correct?

A. No, I did not. I used the 12 comparable utilities.

Q. Is one of the reasons you did not do that for Avista itself is that it has such a high percentage of its total revenues and operating income capital expenditures accounted for by its non-utility

operations?
A. That's one of the reasons. Another reason is because Avista recently cut its dividend, and since the DCF Model is driven by dividend yield, when you have a disruption of the dividend, it's outside the assumptions of the model, so both as to the revenue, which I talk about in my testimony, and as to the dividend change that I talk about in my testimony, I elected not to do a DCF for Avista.
Q. Is it fair to say that for the 12 companies you selected as comparables for this study that their percentage of total revenues accounted for by non-utiulity operations averaged about six percent?
A. That sounds approximately correct. I could check that.
Q. Would you accept that subject to check?
A. Yes, I would.
Q. And the corresponding percentage of Avista is about 72 percent; isn't that correct?
A. That is correct.
Q. Could you give us an idea of what the average percentage of operating income assets and capital expenditures are for non-utility operations for the 12 companies that you analyzed?
A. I can't give you exact numbers.

Q. Would you be able to provide those if I made a records requisition?
A. I would need a clarification of what you want. You mean for the year 1998? Because that would be the most recent year for which we have 10-K information.
Q. That would be the year that we would be looking at, yes.
A. The parameters you want are operating income?
Q. Yes, assets and capital expenditures for the non-utility operations.
A. I might have some difficulty, because these companies do not consistently break out by lines of business. The reporting to the SEC is subject to general rules, but the companies can decide how they are going to do their segment reporting. For example, Avista has changed its segment reporting over time.
Having not looked at that specifically for these utilities, I can't be sure that they provide in their public documents a breakout of net income, capital expenditures, and assets by business line, so I can look, and to the extent it is reported in the 10-K's, I can provide that, but I can't guarantee that it will be available for all or any of the companies.
Q. To the extent that it is available in public

documents, I would ask that you provide -- I would make a records requisition for the average percentage of operating income, assets, and capital expenditures for non-utility operations for each of the 12 companies that you analyzed for the year 1998.

A. I will endeavor to do that.

JUDGE SCHAER: That will be Records Requisition 22.

Q. Is it fair to say that you believe the overall risk of the 12 combination companies that you selected for analysis purposes is far more comparable to the risk of Avista's jurisdictional utility operations than it is over Avista's overall risk?

A. I'm not sure about the "far more." In my opinion, the risk of these companies is comparable to the jurisdictional utility risk. I think when we encompass the entire business of Avista, I think there is some similarities because many of these companies are in similar businesses to Avista.

Q. You had indicated earlier that you haven't made a DCF analysis of Avista's cost of equity capital similar to the analysis you made for the 12 companies; correct?

A. No, I have not, for the reasons we discussed earlier.

Q. If you haven't made that kind of study for Avista, how do you know it's more risky than your group of 12 combination utilities?
A. I don't think I made that statement. The statement I made was, I believe, as to the utility operations, that the risk of the utility operations is similar. I think as to the non-utility operations, I think there is less similarity.
Now, I only did a DCF analysis for the utility operations, assuming that since they are comparable in risk, the required return would be the same, so that's as far as I can go in the comparisons based on the work I have done.
Q. Is it your testimony that the overall risk of Avista's non-utility operations, if they were standing alone, would be greater than the overall risk of utilities' operations if the utility operations were standing alone?
A. I have not done a quantitative study of that. My belief is that there may be some greater risk in some of the businesses. I think the fact that the businesses are in a portfolio and their relative sizes are changing, I think it's very difficult to get a handle on exactly how the risk would line up.
The way that I approach this case in terms of

looking at the utility operations and then comparing those to similar utility operations, it was not necessary to cross the bridge as to what the risk of Avista's other operations were. We were able to avoid it by doing an oranges to oranges comparison.

Q. So when you looked at Avista's utility operations, the regulated utility operations, in essence, in isolation from the rest of the Company?

A. In isolation in the sense that I believe these 12 companies are similar in risk because they are impacted by the same types of business conditions as Avista's operation. They are in the electric business. They are in the gas business. According to the rating agencies, they are rated single "A." They are affected by the national trends of consolidation and deregulation and dramatic change in the industry, so I believe that these 12 companies are an indicia that we can use to look at the risk and required return for the utility operations of Avista.

Q. You devote a fair amount of your testimony to describing the risks faced by Avista's utility operations, don't you?

A. Yes, I do.

Q. One risk factor that you indicate is Avista doesn't have a PCA, or power cost adjustment, mechanism

in Washington as it has in Idaho; correct?
A. That is correct. That is significant. It was mentioned in many of the rating agency reports I looked at, many of the equity analyst reports, so the absence of a PCA in Washington is a material factor that investors look at when they evaluate the jurisdictional utility operations of Avista.
Q. And the PCA only applies to the electric part of the Company; isn't that correct?
A. That's correct.
Q. You tell us that the competition in the electric utility industry is being increasingly promoted at the federal and state levels. Does this apply to Avista's Washington utility operations?
A. It certainly does at the federal level because the initiatives of the Federal Energy Regulatory Commission, the initiatives in congress by Representative Martin, those kinds of initiatives that investors are concerned about would affect Washington operations as they would affect utilities throughout the country.
My understanding of the deregulation conversations in Washington are that there have been a number of studies over time. This Commission, I understand in its legislature, is taking a deliberate

approach to evaluating deregulation, so unlike some other states that have already stepped out and have explicit legislative charters for deregulation, my impression is that generally in the Northwest, deregulation is proceeding less rapidly, but the deregulation conversations, I understand, are still on the table and are still part of the environment that investors would have to consider, and I would also remind you that the comparable companies that I looked at span the nation, and in those jurisdictions, there are definitely state deregulation issues.

Q. You discussed deregulated pricing, recovery of stranded investment, and market entry restriction on Page 13 of your testimony. Do these risks apply to Avista's Washington utility operations?

A. Yes. I think they are potential risk because there is a possibility in investors' minds that Washington could proceed to kind of deregulation structure that other states have, and those issues of stranded costs, the entry of competitors, the structural framework for deregulation, I think is very much on investors' minds. The fact that it's not proceeding as rapidly in Washington and not an imminent as other places I don't think completely removes it from the radar screens of investors.

Q. Do you believe that Avista's utility risk is rising due to its increased reliance on purchased power?
A. I believe that there is a risk with purchased power. There is risk with building and owning generation facilities, but I think the kind of market swings that we've experienced in the last several years in market prices of purchased power is very much on the minds of investors and is one of the why reasons they regard the absence of a PCA in this jurisdiction as a significant factor.
Q. Are Avista's risks also rising in the gas distribution portion of its operations?
A. I think generally the perception of risk in the gas distribution is increasing over what it was in the past. I don't think the general pace of change in the gas industry at this moment is as much on the mind of investors as it is in the electric industry, but there have been structural changes. The big structure change at the transmission level occurred several years ago, but now we are seeing that being worked through the local distribution company operations.
Q. Given the rising risks facing Avista's electric and gas utility operations that you described in your testimony, how do you know that Avista's cost

of equity capital is higher than that of its jurisdictional utility operations if you haven't done a study of Avista's cost of equity capital?

A. I don't think -- did I make that statement? I think my statement was that rather than look at Avista in total, I made the selection to look at the jurisdictional utility operations by means of a comparable group who I thought had similar risk, and then I made an estimate of their cost of equity and made the inference, which I think is a reasonable one, that that cost of equity would be a good proxy for Avista utility operations. Proceeding in that way, we didn't have to answer the question about the risk and rate of return of Avista Corporation as a whole.

Q. You don't know whether it's lower, do you?

A. I don't know. A few minutes ago, you asked me to speculate, and I speculated a little bit, but I have not done an analysis to speak definitively on the difference in risk and the difference in rate of return because I went directly to answer the question that I thought was important for this jurisdiction, which is what is the cost of capital employed in utility operations.

Q. Dr. Avera, on how many occasions have you testified on behalf of an electric or combination gas

and electric utility where you contended that the risks of the company's utility operations were decreasing?
A. I would really have to think. I have probably testified on behalf of electric, gas, or combination utilities possibly 80 times in 25 different jurisdictions, including Canadian jurisdictions and federal jurisdiction on top of the 25 state jurisdictions, and at this stage in my life, I don't have all of those experiences on my random access memory. I would have to just think about it, and if you want me to think and noodle here a little bit, I could.
Q. Do you recall at this time ever having testified about the risks of an electric or gas electric utility operation's risk decreasing?
A. One example of a case I've been involved in on several occasions is El Paso Electric Company, who has operations in Texas and New Mexico, and El Paso Electric Company has gone through quite a traumatic history in the '70's through the '90's, which involved reorganization, bankruptcy, merger, failed merger, spin-offs, and I think I have testified; in fact, I have testimony filed, but the case was settled in New Mexico, that referenced a declining risk of El Paso Electric that now those kind of events are out of its

life and it's back to a stand-alone electric utility. So my recollection as I sit here today is I have probably, in the specific case of El Paso Electric, said that its risk had declined as a result of the stabilization of its ownership structure.

Q. So if I'm understanding correctly, if the Company were facing bankruptcy and now it's back to a more stable operations, its risk would have decreased.

A. Yes. That's one particular example out of 80 or 90 I've testified. There may be others. I just can't tell you right now going back over that many cases in approximately 25 years of testimony.

Q. Can you recall on how many occasions you've testified on behalf of an intervenor or a combination gas electric utility where you contended risk to the company's operations were increasing?

A. I testified on several occasions as an intervenor and on many occasions as a staff witness, and I assume you would put the staff witness in the same category as an intervenor.

Q. Yes.

A. As being not from the company. I'm not saying the company and staff are the same.

Q. I would categorize it that way for purposes of this question.

A. I believe in my experience I have talked about the risk going both ways, changing over time as events have changed. My testimony career in electric and gas utilities began in 1977, and that encompasses a time in the late '70's of very volatile energy prices, and at the beginning of that period, the kind of mechanisms we have now to adjust for cost of fuel and fuel mix were not present.

It also encompasses a period of time of the building of investment in nuclear plants, which for many years never seemed to get finished, and it was doubtful if they would ever be operational and many never became operational, and in the mid to late '80's, there was a number of those cases where the state of the nuclear plant was resolved, and as a result of the nuclear construction risk being over, I think the risk declined on some occasions when I was a witness.

Q. Over the last five years, would you say your testimony has generally contended that the risks of a company's operations were increasing?

A. As to electric and gas companies it has, because I think that's the way investors view these industries, as industries of increasing risk in the last five years.

Q. That's what you've testified to?

A. I believe so. In the case of El Paso Electric, there may have been specific circumstances about a specific utility that causes its risk to go down relative to its past. But I think, and I believe there are statements to this effect in my testimony, that in general, the industry has been in an environment of increasing risk, both electric and gas, in the last five years because we have these major structural changes in the market, federal initiatives, driving those technology, driving those -- so I think that's the environment we've been in of increasing risk in these industries.

Q. I take it you believe that Avista's nonregulated businesses are riskier than its regulated operations?

A. I made that speculation kind of as a generalization. I wouldn't want to be held to any specific statement, because within the portfolio of businesses, there are a lot of different kinds of businesses, and I think they are changing over time as the Company changes its focus in these unregulated businesses, so I didn't do a study of the specific businesses and haven't found a conclusion as to those. I just shared with you a general impression.

Q. If you could refer to Page 12 of your

testimony, and I'm referring in particular to Lines 22 to 25 where you quote from a Duff and Phelps publication dated August 13, 1999, that indicates that it's downgraded Avista's long-term debt from "A" to "A minus" because of Avista's aggressive growth strategy that emphasizes the inherently riskier nonregulated businesses, especially Avista Energy, Incorporated. Is that your testimony?

A. That statement was included in my testimony. I believe that's a correct rendition of what Duff and Phelps said.

Q. Do you agree with that?

A. I agree that that's one of the reasons that Duff and Phelps stated. They stated others about the reason they elected to downgrade. I can't tell you what's in Duff and Phelps mind. I can just tell you what they reported when they announced the downgrading of their bond rating for Avista.

Q. Then is it your position that Avista's jurisdictional ratepayers should pay for the higher cost of debt it will face in the future because of an aggressive growth strategy?

A. I'm not sure there is a necessary linkage between what the future cost of debt will be and this particular downgrading. In August of '99, both Duff

and Phelps and Standard and Poor's downgraded Avista. Standard and Poor's in their downgrading specifically talked about the lack of a power cost adjustment mechanism in Washington, so that was a contributing factor in their mind. That downgrading affected debt funds that go to both the regulated and unregulated business, so I don't think you can trace the money and trace the effect at precisely as your question might suggest.

Q. And downgrading the debt or downgrading the rating would mean the Company would generally pay higher to borrow money or more to borrow money; is that correct?

A. It may mean that in the future. It has no effect on the debt you currently have outstanding, and its effects on the future depend in part upon the financial strategy the Company undertakes, the other kind of security and features it can give to the debt. I think we can agree that as a general rule, companies with higher credit ratings borrow more cheaply than those with lower.

Q. You had referred to the absence of a PCA in Washington. How long has Avista not had one in this state?

A. I don't believe Avista has ever had a PCA in

Washington. I believe it asked for one in 1988, and it was not granted. It has had a power cost adjustment in Idaho, but I can't speak since 1889, but I'm not aware of one.

Q. Do you know of when Avista got a PCA in its rates in Idaho?

A. I believe it was in 1989. I think Avista tried to get power cost adjustments in both states at approximately the same time.

Q. I'd like to refer to Exhibit 102, and it is Schedule 5. In Exhibit 102, you have an Appendix A and B and C, but before those three appendices, you have a series of schedules.

A. I have it now. 101 is the text of my direct testimony and 102 are the exhibits.

Q. I'm referring to what's marked at the top, WEA-5, Page 101. In the middle column under the heading "component costs," the first item is 7.83 percent, and referring over to the left, that's for debt.

A. That is correct.

Q. Is that 7.83 percent cost of debt for Avista as a whole or just its utility operations?

A. That is the Avista debt as a whole.

Q. Does this figure exclude short-term debt?

A. The capital structure excludes short-term debt.
Q. That you used and analyzed here?
A. Yes, it does. The actual calculation of the cost included the cost of short-term debts, which is significantly less than long-term debts, so there is a reduction that results because of the inclusion of short-term debt and the weighted average debt cost.
Q. Since 1996, has Avista been able to finance all of its capital requirements for its utility operations from internal sources of capital?
A. I'm not sure. During this period of time, Avista has been investing. I think some of the other witnesses here talked about the increased investment in gas and electric distribution. Its debt has been maturing. It has been issuing various issues. It has a short-term debt program that has none but sometimes builds up to over 100 million, so the Company has been active in raising funds and investing funds in both its unregulated and regulated business.
Q. So what is the answer to the question?
A. The answer is, I don't know, because in the materials I've seen, I haven't seen anything that specifically talks about the internal generation of the utilities versus the raising of funds.

Q. So would it be your testimony that Avista will or won't in the future be able to finance all of its capital requirements in the future from internal sources of capital?
A. I don't know. First of all, nobody knows what its capital requirements in the future are, and secondly, the financing is a Company-wide basis, so it's hard to source out where the dollars are coming from and where they are going.
Q. Let's refer back to your testimony, T-101. I'm looking at Page 15. In particular, Lines 407, you tell us here that effective with the December 1998 payment, Avista reduced its quarterly dividend from 31 cents to 12 cents per share?
A. Yes.
Q. You suggest that one of the reasons for the dividend reduction was to due to higher growth opportunities; correct?
A. Yes. That's one of the reasons the Company stated, and the cutting of the dividend is consistent with what many utilities are doing to have more funds available for internal projects and less cash flow out in payments.
Q. So Avista decided to use the funds freed up by dividend reduction to increase its investment in

non-utility endeavors?
A. Again, the money was available, and it could be used for whatever purposes Avista -- at the time, they were investing more in certainly utility property, and they were also investing in unregulated activity, so it's very difficult to trace exactly where the dollars came from.
Generally, when we teach finance, we say there is the left-hand and the right-hand side of the balance sheet, and you can't, in general, match the assets and the liabilities. You assume the liabilities support the assets as a whole.
Q. You are not telling us that the Company used none of those funds to finance non-utility operations, are you?
A. No. I'm trying to tell you I don't know. You cannot trace the funds to their particular uses. They were just available to the Corporation because fewer of the funds were mailed out to their shareholders; therefore, they stayed within the Company and could be used for corporate purposes.
Q. Is it your testimony that Avista's cost of capital is reduced because of the dividend reduction?
A. I haven't done a study of the effect of cost on capital. I think the bond rating agencies look very

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favorably upon the dividend reduction, and all three rating agencies commented favorably upon the reduction because it kept more funds in the business that would be available to meet the obligation to bond holders.

Again, when we teach finances, we talk about the signaling effect of a dividend reduction or dividend change that usually the corporation is not just changing the way it pays its shareholders. It's also announcing its expectations about its business, whether it's a higher growth business or lower growth business; whether they are harvesting the cash out of the business or they want to reinvest because they believe the growth prospects are very high, so it's extremely difficult to just take the fact of a dividend reduction and say the risk has gone up or down.

Sometimes a dividend reduction occurs when a company is in distress because they are running out of cash, and then you have the information of the dividend reduction at the same time the company is telling the market that we have a real problem here, and so often times when you have a dividend reduction, you have a significant drop in price, but it's not solely because of the dividend reduction. It's because of the information the investors got about the trouble the company had.

Q. And drop in price, you are referring to stock price?
A. Yes.
Q. Around the subject of growth or use of money, is it your opinion that once deregulating and restructuring are completed in the electric and gas utility industries that there will be more faster growth in kilowatt generation, or the MCF cubic foot sales will be faster than it was under regulation?
A. No. I think that's difficult to know because there are too many other variables. For the purposes of my DCF analysis, I assume that the regulated sector would grow at the approximate rate that the regulated sector grew earlier in the last decade in the '90's when utilities generally had about a 3.5 percent growth. So I think investors are thinking in terms of earnings that after the transition, the utility side of business will go back to its long-term trend.
Now, the growth in earnings doesn't really tell you what's happening to kilowatt hour sales or MCF gas sales because the price could be going up; the volume could be going down; you could be changing the way you are delivering the service, so I think it's very difficult to jump from investors' expectations about growth to what they expect about kilowatt hour

sales or gas consumption.
Q. So you are not saying there is a positive or negative correlation in terms of actual growth in sales?
A. That is correct. I don't think you can use growth in sales. In fact, that's really why the two-stage model that the Federal Energy Regulatory Commission used for awhile that was based on growth in sales has fallen into disrepute because I think people realize that investors don't key on sales. They key on how much goes to the bottom line and how much growth there is in earnings.
Q. Do you believe that Americans will use more electricity and gas per capita as a result of deregulation and restructuring?
A. No, I don't know, because I think superimposed upon the change in the structure of the industry will be the prices of the commodities, the elasticity as consumers react to higher prices. You also have technological change that can affect the amount of usage. For example, distributed generation may dramatically eliminate the loss due to line transformation, so you could have less generation, fewer kilowatt hours generated and more kilowatt hours delivered to the customers, so I think there are just

too many moving parts to say what's going to happen to usage.
Q. Referring to Appendix B of your testimony, it's within Exhibit 102. Although this is attached as an exhibit, this is additional testimony; correct?
A. This is the nuts and bolts of how I do my multistage model.
Q. So you wanted to give us kind of a more an abbreviated picture in the first and put the boring stuff in the appendix.
A. That would be of interest to those only who are caught up in the details.
Q. Unfortunately, that's me at the moment.
A. Yes. I think that's the nature of the process, but I thought to segregate out some of the detailed description from the flow of the testimony.
Q. And you have marked the pages in the appendices with B-1, and I'll refer to them in that way. On Page B-1 of your testimony, you tell us here that your multistage DCF Model presumes that electric utilities operations will ultimately be separated into regulated distribution and transmission operations in deregulated generation activities; correct?
A. That's right. They will be in those two

segments. I'm not making a statement, and I don't think investors know whether they will be separated into different corporations or what, but I think the business as we know it today will be in two components that kind of have different economic characteristics.

Q. You go on to tell us on that same page that investors expect the deregulated regulation to be fully competitive in about 10 years; is that correct?

A. Yes.

Q. So it's your view that in about 10 years the electric utility industry will have a regulated segment with distribution and transmission and a competitive segment comprised of generation; is that correct?

A. I think that's the general view investors have. Everybody is confused about the future, so all investors can do when they look into the future is form reasonable expectations, and my discussions with investors, and I have a number of quotes from analysts' reports, I think that captures kind of the consensus view of what the future will you. You will have these two kinds of businesses.

Q. And this is about 10 years out we are looking at this point. You are saying this model makes that presumption.

A. That's right. It says we get from where we

are today to this future in about 10 years.
Q. Then going on on the same page, you state that the multistage DCF model is based on this assumption that investors expect each segment to grow at different rates, and the regulated segment will have this conventional growth, and the deregulated segment will have growth expected of a competitive firm.
A. That's right. More akin to what we see in the industrial economy, and this is growth in earnings. It doesn't speak to revenues or assets. This is the growth that's relevant, the bottom line, to investors. What kind of growth can you expect in the earnings of these businesses.
Q. So again, the regulated segment is transmission and distribution.
A. Generally.
Q. The deregulated segment you are referring to is, among other things, generation operations.
A. That is correct.
Q. What other activities are you including under the umbrella of the deregulated operations? You use the term "e.g.," for example, generation on Page 9. What other things are included in that?
A. There are other services that are related to generation, like providing network security, providing

network support, reserves, so the kind of services that are created by generating plants or similar assets that most investors' thinking will not be part of the regulated segment of the business.

Q. Is it fair to say that you are using the term "deregulated" interchangeably with the term "competitive"?

A. Yes. Because I think investors expect that ultimately there will not be a kind of rate of return regulation in that part of the business that we have traditionally seen in utilities. I don't think they knew exactly what the business will look like, and there will probably be some governmental involvement in it, but the earnings will not be limited to return on rate base the way many utilities are regulated today and all had been regulated in the past.

Q. In terms of your reference, again, to the "for example generation," are you referring to the type of nonregulated operations that Avista has, their Pentzer Corporation? Avista Power would be generation assuming that the plant is built, but Avista Advantage, all of these other?

A. We don't know, and there will probably be a variety of corporate structures that will hold generation. Generation may be a part of a widely

diversified corporation like Wal-Mart or Microsoft. It may be part of a network type operation like U S West. It may be associated with an industrial company like Motorola. I think what we see in the competitive world is what we will see in this part of the business; that different entities will try to put together a portfolio of businesses that make sense for them and create some kind of a strategic entree.

I'm speaking about the generation part of the business. It may be bundled with communications. It may be bundled with manufacturing. It may be bundled with real estate. I think the Avista model of the other businesses is one of many models we are seeing around the country.

Q. When you refer to the multistage DCF Model, presuming this separation into the two, does the model presume that within the nonregulated segment there will be things like the Avista Communications, Avista Labs, the Pentzer Corporation?

A. It doesn't presume one way or the other. Right now, the businesses are generally together in integrated utilities where you have transmission distribution and generation. There is clearly a migration of companies who are focusing on one of those businesses or another and who are also going out and

picking up other businesses.
What we are trying to do is to get inside the investors' mind when they buy the stock of these 12 utilities that now are integrated. What are they looking for in terms of the long-term growth of the businesses that are in those utilities? When we get out 10 years, those businesses may be in any number of corporate organizations, but when we know that investors pay so much for Peco or so much for Aliant, we've got to know what they have in their mind in terms of future growth expectations to implement the DCF Model, but we don't have to draw a picture of what that future is because what's relevant for the DCF Model is only the growth expectations that they build in when they are willing to pay $55 for a stock that yields 5.6 percent, what do they expect in the next 10 years to give them an internal rate of return?

Q. In terms of the growth expectation then, you are saying for the deregulated segment they would have higher growth expectations because it's in a competitive realm?

A. That is correct. If we look at what investors expect and what their expectations are, their expectations for growth in the competitive sector is generally about 10 percent. Their expectation of

growth in the regulated sector is more like three-and-a-half percent. So if we have a business that has both together, we have to give some weight to both types of growth.

Q. Within the competitive segment then, are you saying investors are expecting more than just generation to be within that segment of competitive activities?

A. They probably do, but for purposes of modeling their behavior with the DCF, we don't have to know what they expect other than the bottom line in terms of the growth they expect, and I think what they expect is that the businesses that own generation will look a lot like the businesses that own other competitive firms, and the growth expectations will be in line, so all we are saying is the growth expectations will be similar to what they now expect for competitive businesses, and that's consistent with the discussions that I quote from investment analysts of how they are telling investors to look at this industry now.

Q. If generation were the only competitive activity, are you saying that investors would expect that to grow at the 10-percent rate?

A. I will answer your question yes, but let me

explain the context in which I have to answer it, and that is if investors thought there would be the generation company that would be in the generation business, the generation business alone, I think they would expect that company to have to have growth about 10 percent to justify it competing with funds from investors in other competitive businesses, because investors can invest in the generation company or the aluminum company or the forest products company, and if they think the risks were approximately the same amount for the same amount of investment, they would expect to see the same amount growth.

Q. When you refer to growth in the deregulated segment, are you talking about growth in earnings per share or dividends per share or both?

A. Growth in both, because as I mentioned in the testimony, under the DCF paradigm, when you get to the steady state and constant growth, both dividends and earnings are growing at the same rate. That's an assumption of model, and I think if you look at the long stretch of history, looking back, that's a pretty accurate representation of what happens over the very long run for most companies. It's certainly what happened for the utility industry before we began this transition.

Q. As I understand it, you believe the long-term earnings per share and dividends per share of growth in deregulated segment and the regulated segment will be three-and-a-half percent per year.
A. That's right. The regulated sector will be three-and-a-half percent. That's what investors will expect on those kinds of businesses.
Q. And that will be 10.4 for the competitive segment?
A. That is correct. In thinking about these businesses, they will say that the regulated wires business and the delivery business is one of those that has a high dividend and low growth. The generation business is like competitive businesses that have low dividend and high growth.
Q. In your Exhibit B on Page 5, you go on to give a weighting to these, and you give a 50-percent weight to the three-and-a-half percent growth rate in the regulated segment and a 50-percent weight to the 10.4 percent competitive segment growth rate to come up with an average of 6.95; is that correct?
A. That is correct.
Q. And you later rounded that to seven percent?
A. That is correct.
Q. So on Page B-5, you tell us the fifty-fifty

weighting scheme reflects investors' widespread belief that generating assets comprise at least one half of the electric utilities' total assets.

A. Yes, and I document that with quotes from various investment analysts.

Q. If quotes from investment analysts -- you haven't done a survey of investors' beliefs in this regard, have you?

A. No. I try to follow the literature that investors look at, which are the reports by AIMR and Value Line and other investment analysts, and I often talk to investment analysts, and I think it is representative of the consensus that the business is about fifty-fifty. You might find an investor that says 70/30, and you might find one that says 40/60, but I think the expectation that's driving the market is approximately fifty-fifty.

Q. In the article that you quote on that page, isn't it true that the author states that generation currently accounts for about 59 percent of the book value of investor-owned utilities and about 70 percent of revenue?

A. Yes.

Q. That quote doesn't say anything about investor beliefs, does it?

A. No. That's that particular analyst telling investors how the analysts look at the industry, and that one says 59 percent. There are others that have different percentages. I thought that kind of the representative number would be the fifty-fifty.
Q. You haven't made any study of expectations regarding the proportion of assets investors believe any of the 12 utilities you studied will have that will be devoted to regulated versus competitive operations, have you?
A. No. The study I've made is to look at the literature investment looked at. I've talked to a lot of investment analysts who either buy securities for investors that work for mutual funds or banks. I also talked to sale-side analysts who help investors make decisions and help their company sell securities to analysts.
My belief is this fifty-fifty is pretty much a benchmark that investors who look at the business have in their minds. I might add that this particular model was first developed in the Public Utility Commission of Texas by the staff, and they use fifty-fifty, and I saw no reason to deviate from it.
Q. Do you know when they developed that?
A. I think they developed it in the mid '90's

probably, 95 or '96.
Q. Going back to your direct testimony, T-101, and I'm looking at Page 9, you show on that page, don't you, that in 1998, 62 percent of Avista's total assets were utility related?
A. That is correct.
Q. What's the corresponding average percentage for the group of 12 utilities on which you performed the DCF cost of equity analysis?
A. I think that's part of the request that you made earlier that I calculate, but let me make sure the record is clear. This is as to the utility, which would include both distribution transmission and generation, so in the utility bucket are all the businesses that we were talking about earlier in the B Appendix.
Q. One of the criteria that you used to select your group of 12 utilities was that at least 80 percent of their total revenues were accounted for by utility revenues; is that correct?
A. That is correct.
Q. For each of the 12 utilities you reviewed, your multistage DCF analysis assumes that every one of them will achieve a 10.4 percent earnings per share dividend per share growth in their competitive segments

beyond 2008.
A. That is correct, because my belief was that as investors look over the horizon to the very long term that the individual differences in the utilities blur and they kind of look at industry averages, so they converge to 3.5 for the regulated segment of the industry and the 10.4 for the nonregulated.
Q. So they will all have the same earnings per share in 2008?
A. The same growth rate. In my model, I actually track how the earnings per share will change from now, use the Value Line explicit forecast that they make in the Value Line sheet and then have a transition period, and then we have the equilibrium 10 years out, so it's key to the earnings of each particular company, but as to the growth rate of that company, we assume convergence to these industry averages.
Q. So it's your testimony that as we speak, we've got investors in these 12 utilities, and they are paying the price they are for the common stock on the expectation that after 2008, then the utility will have a 10.4 percent growth in earnings per share on its competitive operations, and that those operations will account for fifty percent of the total assets of the

company.
A. Right. I think that is a representation of what investors -- there are a thousand stories in the night. Each investor has their own belief. Many investors think they are going to make a lot more money, have different growth expectations. Others are less sanguine.
What we are trying to do in the DCF model is take market information and try to infer from the price we can observe, which is the only thing we can observe in the market is what people actually pay, but we are trying to back into, given reasonable beliefs about what they believe, what they must have expected as a return when they paid that particular price in the marketplace.
Q. I notice one of the criteria you used in selecting the group of 12 utilities is that they had gas operations as well as electric.
A. That is correct.
Q. What is the counterpart in the gas distribution business to electric generation assets that you say will be categorized as competitive assets?
A. I think those will be transmission assets in the gas industry, gathering assets, assets that are not part of the local distribution company.

Q. So would it be fair to say that virtually all the gas operations of a combination utility, such as the one you studied, will remain regulated or not?
A. Most of the gas operations will remain regulated in terms of the investment for most utilities. Most gas utilities are pretty much now focused on -- their investment is in the distribution part of the business. Many like Avista have some transmission involvement.

I think one of the realities about the relative capital intensity is that the electric business generally requires a lot more investment to serve a customer than the gas industry does, so if you have a combination utility, my experience is that you will find most of the investment on the electric side. I think that's the case for Avista here in Washington, and that's pretty much my experience throughout the country. So when we talk about assets, we are generally talking about the electric assets.

Q. Have you made any study about what percentage of total utility assets investors in combination electric and gas utilities believe will be accounted for by electric transmission and distribution assets plus gas distribution plants?

A. I have not made a study other than what I've

reported here. I think investors in looking at combination companies, just like pure play electrics, they generally look at this fifty-fifty split because they don't look at whether you have a gas operation or not as having a material impact on the fifty-fifty split that they use for looking into the future.

Q. So the expectation referred to as the fifty-fifty split would be that assets include both the gas and electric utility assets.

A. That is correct. But it's largely driven by the electric assets.

JUDGE SCHAER: Ms. Tennyson, are you coming to a point where it would be a good time to break?

MS. TENNYSON: Yes, this would be a good time to break.

JUDGE SCHAER: Let's take our morning recess at this time. Please be back at no later than eleven o'clock by the clock in this room. We are off the record.

(Recess.)

JUDGE SCHAER: Let's be back on the record after our morning recess. Did you have more questions for this witness, Ms. Tennyson?

MS. TENNYSON: Yes, I do.

Q. (By Ms. Tennyson) Dr. Avera, could you refer

to your Appendix B once again, which is part of Exhibit 102, and I'm looking at Page B-4. You derived the 10.4 percent per year earnings per share growth rate that you applied to the competitive segment from two different sources, didn't you?
A. That is correct.
Q. And those were the S and P 500 index, and the second is Value Line's industrial composite, which you say consists of 875 industrial retail and transportation companies; correct?
A. That is correct, and the sources of the growth rate were from two different sources. For the S and P, it was the IBES estimate, and for Value Line, I used the Value Line estimates.
Q. And IBES is, for the record, Institutional Brokers Estimate Service?
A. That is correct.
Q. I'd like to refer you to Exhibit 103, which is one of our cross-examination exhibits. My question is, is this what you are looking at in the Value Line industrial composite?
A. Yes, it is.
Q. And these are pages taken from your work papers?
A. Yes.

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Q. You also tell us that the IBES growth rates published in the S and P earnings guide for July 1999 you applied an average growth of the S and P 500 of 13.3 percent over the next five years; is that right?
A. That's correct.
Q. When does this next five years end? What's five years from the time they are making that prediction?
A. IBES surveys security analysts, and say, among other questions, what do you think the growth will be for the next five years, so presumably, the analysts mean five years from what they surveyed, so if they were surveyed in July of '99, they are projecting out five years from that date, so it would be 2000, 2001, 2002, 2003, 2004.
Q. That's not 2008; correct?
A. No, it's not 2008.
Q. So you wouldn't characterize this 13.3 percent five-year IBES growth projections as a long-term growth expectation, would you?
A. It's as long as we've got. It's the longest term that is regularly published or surveyed, so the analysts, that's as far out they go is five years, so five years is not long-term. It's certainly not long-term in the DCF world, which is infiniti, so five

years, I hope, is not infiniti.
Q. I think we all hope that. The seven-and-a-half-percent projection that Value Line made, now, that was for the period 1996 to 1998, projecting forward to 2002 to 2004; isn't that true?
A. That's correct. The Value Line paradigm is they kind of have a fuzzy beginning and a fuzzy end, so it's anywhere from three to five years.
Q. Would you characterize that as a long-term earnings growth projection?
A. No. But it is as long as you can possibly get from the Value Line service. That's as far out as Value Line goes.
Q. You got your 10.4 percent growth rate by averaging the 7.5 percent and the 13.3 percent; is that correct?
A. That is correct.
Q. You would agree, wouldn't you, that making long-term earnings per share growth projection based on short-term experience can be dangerous.
A. I think it can be dangerous, but I think in the absence of any information to the contrary, my experience is most investors think the world will continue for as far out as they can think they can look, but if you think there is a dramatic difference,

as we think with the electric utility industry, I think you ought to try to dial in what you know about their over-the-horizon expectations.

Q. I gather you didn't rely on the longer-term historical growth and earnings per share for the S and P 500 index as a basis for making earnings growth projections; is that correct?

A. No. Because I wanted to use the expectations that investors have, and while investors know history and look at history, their future really incorporates both their knowledge of history and their beliefs about all the other dynamics that will be impacting in the future.

Q. Would you agree that our economy has been in expansion mode for the last nine years or so?

A. Yes, it has. There have been a few bumps along the road, but as some of the politicians remind us, it has been an incredible run.

Q. Do you think the rate of recent earnings per share growth is indicative of the long-term future?

A. If we look out in the history, there will be better times and there will be worse times. I think we are not really looking at today's earnings growth. What we are asking investors to tell us and what Value Line is telling its subscribers is what they think as

they look out in their crystal ball as to the future.
Q. Would you agree that there is a large variation in the historical earnings per share growth among the different companies in the S and P 500?
A. Absolutely. There are winners and losers.
Q. There is many different industries within the S and P 500 group; correct?
A. Yes.
Q. What studies have you made or relied on to support your view that the competitive segment of the 12 utilities studied will, for the long-term future, enjoy a growth rate equal to the average of projections made by combining the S and P 500 and Value Line?
A. The studies are the ones I mentioned in my Exhibit 101 and this 102, which is what analysts say about how they view the industry and when they advise investors as to how they should view the industry; that the generation part will look a lot like the rest of the competitive sector, and the regulated part will look a lot like the classic utility, in terms of its growth expectations.
Q. So if the analysts are wrong, this whole projection falls apart; right?
A. One thing we can agree on, and Dr. Lorito, we can agree on, the analysts will be wrong. Nobody can

predict the future, but I think this is the best they can know about the future, and that's all they can do when they plop their money down to buy stocks is rely on these estimates.

Q. In selecting utilities to use to determine the cost of equity for Avista's regulated operations, why didn't you select companies that already show a significant amount of diversification, such as Avista has?

A. Looking for the lost keys where there isn't a light bulb. It's very difficult in these companies that are already in the transition and have diversified their operations to look at the whole and try to infer what the part is, what the utility part, which is what this Commission has to decide a fair rate of return on.

So instead of looking at other companies that are well along the path of diversifying, we tried to pick a group of utilities that are still in the relatively pure play state, where the predominant part of their business is electric and gas service. So we try to look at a sector of the industry that still is relatively pure and use that as the benchmark for the cost of equity, and ultimately, the cost of capital to the pure utility part of Avista's operations in Washington.

Q. Have you made any studies or have you reviewed any studies that examine the question of whether the common equity ratio of electric and combination electric and gas utilities increases as the percentage of its revenues or assets or net income decreases?
A. I have a little bit of difficulty -- the study I presume in my testimony is to show that the equity ratios of the industry and these pure play participants in the industry has been relatively stable. If there is any trend, it's slightly more towards equity, but this is as to the pure play companies. I don't remember doing any analysis that relates the equity structure as to the corporate performance, which I think was the thrust of what you were asking me, wasn't it?
Q. What I'm looking for is if as a company diversifies out of its utility operations, have you done any study of whether its equity rises or falls, of equity ratio rises or falls?
A. No. I think we could look at particular companies, and I think they go all over the map, because one of the things -- if you are very successful and you generate a lot of earnings and you are not paying out much in dividends, it follows that your

equity ratio will increase, but there are those stories, and then there are stories of people who experience losses and the equity ratio declines, but I have not done an attempt to try to correlate a subsequent performance with the equity ratio.

Q. Thank you. Could you turn to your Schedule 3, which is part of Exhibit 102. On Pages 2 and 3 of that schedule -- or 2 through 4, actually -- you show for 1999 different payout ratios for the 12 utilities. These are the 12 utilities you used as proxies or examples; correct?

A. That is correct. This is basically a printout of the computer algorithm we went through to calculate the implied cost of equity.

Q. The payout ratios, that would be in the column "P/O" for each of these?

A. That is correct.

Q. And for the year 1999, there is different payout ratios for all 12. Some are above 60 percent and some are below 60; is that correct?

A. That is correct.

Q. But for 2008, all of them you studied have the same 60-percent payout ratio. Could you tell us why that is?

A. That is correct. We assume kind of once you

get out to the distant future, what the investors expect is a convergence of both the growth rates and financial policies to an average of these two businesses, so the payout ratio will be the average of the high payout ratio for utilities and the low payout ratio for competitive firms, and the average of those two is 60 percent.

Q. So they will have the same projected earnings per share and earnings per share growth rate as well as seven percent?

A. That is correct. And again, that is the DCF world. In the DCF paradigm, the dividends and earnings all grow at the same rate, and the payout ratio is expected to be constant through infinity.

Q. So we hit 2008 and then every year there is the same growth.

A. That's what investors expect. Now, investors know, and the reason there is risk is that some companies will do good, and they will have higher earnings, and to maintain their dividend, the payout ratio will actually go down. Other companies will have bad years, and their payout ratio will go up, but when we are looking out to the distant future, investors have to model kind of a steady-state world. That's what the text books say in the DCF Model, and that's

what we've done here.
Q. Value Line didn't indicate that in 2008 all 12 utilities will have a 60-percent payout ratio, did it?
A. No. What we used was the actual Value Line's numbers for as far as they went, so the numbers on this page, where Value Line told us what they thought the EPS was going to be and what they thought the dividend was going to be, there is an applied payout ratio, and that's what appears here.
Then after we run out of the cover that Value Line gives us in terms of the projections, then we interpolate that all of the companies will converge towards this steady state, so those that are below 60 percent will go up, and you can see them stepping up, and those that are above 60 percent will step down.
Q. Have you made any assumption as to whether each of the 12 utilities you selected for study will have the same earned return on equity beyond 2008?
A. No. There is an assumption that it will be constant whatever it is because if it weren't constant, you couldn't have earnings growth and dividend growth, but we assume that the utilities will go from where they are today to where they are in 2014 in order to achieve this steady state, so the return on equity will

be whatever it has to be to reach this steady state.
Q. Will they have the same earned return on equity beyond 2008 or won't they?
A. They will not necessarily have the same earned return on equity. It will be whatever it is to maintain that steady state. I believe the math would probably work out that whatever the DCF return is in that future, there is a dividend over K minus G assumption that leads to the price. You can back out into the applied K in that terminal state for each company. I have not done that, but there is implicit a return on equity in there if you assume that there is a fixed market book ratio, but I haven't done that calculation, but it is imbedded in the mathematics.
Q. You are not saying they would each have the same. There could be variance between them.
A. Yes.
Q. Turning to the next schedule, your Schedule WEA-4, in this, you show the implied dividend yield for each of the 12 utilities in 1999; is that correct?
A. That is correct.
Q. The highest dividend yield is eight percent for Puget and lowest is 2.4 percent for Peco; is that correct?
A. That's correct.

Q. And that's a spread of 5.6 percent or 560 basis points?
A. Yes.
Q. According to your multistage DCF, by 2008, the dividend yields for these two companies are 4.82 percent for Puget and 3.97 percent for Peco; is that correct?
A. If you make an assumption about price, there is an implied dividend yield in there, but dividend yield is dividend divided by price, and the only price that appears in the model is the terminal price, the price in 2008.
Q. And don't you have that in Schedule WEA-3?
A. We have the 2008 price, but I thought you asked me 2004.
Q. No, 2008.
A. In 2008, there is an implied dividend yield.
Q. If you multiply that, the price, by the seven percent growth, you come up with the numbers I gave you for Puget, 4.82 percent, and Peco was 3.97 percent?
A. Subject to check. There is an implicit dividend yield because we have the price in the dividend. In your calculation, we were given the 2008 dividend, so we would be looking out. The dividend yield is the dividend in the coming year.

Q. So dividends per share times the growth rate divided by the stock price.
A. Right.
Q. This difference between Puget and Peco, 4.82 percent and 3.97 percent, is just a difference of 85 basis points; correct?
A. Right.
Q. We've got here by 2008 these companies you've indicated they are the same growth rate?
A. They are converging.
Q. They are like clones. Would that be a fair characterization?
A. Clones. I would say there is a convergence that what investors expect that any particular differences in their dividend payout and their relative performance will converge to kind of they will march to the same drummer in the long-term future. Again, investors know in truth there will be surprises out there, but when you are trying to guess how they are going to do, the best guess that investors can do is they will converge the industry average.
Q. In order to derive the implied cost of equity for each of the 12 utilities that you've got in your Schedule 3, you had to go through an iteration process, didn't you?

A. That's right. That's how you get an internal rate of return.
Q. What do you need to have in order to do solution by iteration?
A. You need to tell the computer, and some have built in and some you tell, to try different discount rates until they find the discount rate that will make the present value of the cash flows exactly equal to the price investors have paid for the stock.
So we are trying to balance the present value of the stream of cash payments, the dividend plus the terminal price. That is exactly equal to what investors are paying in the marketplace for the stock, and that's implicitly the rate of return they think they will get when they pay $23 for Puget Sound Energy stock and they get this cash flow. That's a realized return of 11.8 percent.
Q. So you really need to have a computer to do that, or it would take you forever; right?
A. Right. One of the big differences between going through graduate school today and when I went through in the 1960's, I spent a lot of time doing these kind of calculations.
Q. I have the same difference between a calculator I bought when I was in college and the one

my daughter has. I can't even work hers now. I notice that nowhere in your testimony do you discuss the current rate of return on common equity being earned by the 12 proxy utilities that are current market to book ratio --

JUDGE SCHAER: Off the record for a moment.

(Discussion off the record.)

JUDGE SCHAER: Go ahead, please, Ms. Tennyson.

Q. (By Ms. Tennyson) Nowhere in your testimony have you discussed the current rate of return on common equity being earned by your 12 proxy utilities in the current market to book ratio. Could you tell us why you are not interested in these financial parameters?

A. They are reflected on Value Line sheets, and they are implicit in some of the numbers, but what we are trying to do is replicate an investor's decision making. When the investor pays the current price for the stock, what cash flows the investor expects to get, then we can figure out by iteration, happily with the computer, what present rate of return will bring those cash flows back to the same present value as the price paid, and that return that the investor expects to get when they buy the stock today, we say is the required return or cost of equity because it is based on an

actual market transaction using actual real dollars where an investor bellied up and paid this amount of money for these future cash flows.

So we are getting into the investor's head of what the investor sees. When an investor buys stock, the investor does not get the rate of return the company earns on equity. The investor does not get the earnings of the firm. The only thing the investor gets is the dividends that come in the mail and whatever they are able to sell out of that stock for at some future date.

Q. Referring back again to your testimony, Exhibit 101. Now I'm looking at Page 51. In your testimony here, you indicate, don't you, that given your opinion based on your application of the DCF approach, the cost of equity for Avista's jurisdictional operation is 10.9 percent to 11.9 percent, and given the 5.6 percent current dividend yield that the implied long-term earnings per share growth rate for your group of 12 utilities is in the range of 5.3 to 6.3 percent. Is that your testimony?

A. That's correct.

Q. Can you point to any period of time five years or longer over the last 40 years during which earnings per share for the Moodys electric utility

group or the S and P electric utility group grew at five percent per year or more?
A. For the entire group?
Q. Yes.
A. In the past, I don't know of any, but I do have in my testimony a graph that shows the increasing expectation of growth, and I think what investors expect is after the transition as we go through the transition, the pace of earnings growth will generally increase, and that's what we are seeing in the IBES growth rates as illustrated on Page 45 of Exhibit 101.
Q. Those are expectations, not history; correct?
A. Those are expectations, but that's what investors are looking at when they buy today's stock. When you buy stock, you don't get history. The only thing you get is what happens to the business from this day forward and the growth and dividends and the ultimate growth in stock price from today on. So investors, the history is prologue, but what really counts, where the rubber meets the road, is what an investor is going to receive once they come on board the stock.
Q. You say the investors don't use the history to make their projections?
A. I said exactly the opposite. They do use

history to make their projections, but they look at what they expect in the future. A definite trend that we see in the utility industry is in olden times, most of the return came from dividend yield, and the growth rate we were arguing about in these cases was whether it was 2 percent or two-and-a-half percent or one-and-a-half percent.

We are now in a position where investors only get about 5.6 percent of their return up front in dividend, and we are arguing about whether the growth is four or five or six percent, so that shift from how much investors get in dividends from how much is in growth is clearly evidence in historical record, and I believe that the selection and opinion Value Line discussion talks about that change.

Q. When you are talking about investors, you are really talking about the analysts that have done these studies; correct?

A. The analysts are trying to help investors buy stock. The people that are buying the stock are investors. They are the ones that are putting today's dollars out of their bank account and hoping that those future dividends and future capital gain will justify giving up today's dollars, so we are trying to look at the investors' behavior, because who we want to be fair

to is the investors who invested in utility operations in this state, so we are looking at the world from investors' perspective. The way we try to understand what investors are doing is by looking to those analysts and those investment services like Value Line that try to help investors make these decisions.

Q. In your answer to two or three questions ago you said, "after the transition," so you are referring to after there has been this separation between regulated and deregulated operations?

A. That is correct. The institutional framework and the way the industry will operate has settled into a steady state. Again, no industry ever gets into a steady state, but in the assumptions of the DCF Model, you reach where investors are looking at the future in a more stationary way than they are now.

Q. Regarding your reasons for choosing each of the 12 utilities you analyzed, did you choose them because you believe their risk profile matched that of Avista's jurisdictional utility operations versus total operations?

A. Yes. That was my belief, so that's why I use the criteria that I set out to identify utilities that are more pure play than Avista but are similar in terms of their risk in business.

Q. Would it be your opinion that if you had selected utilities with larger nonregulated operations that the cost of equity of the group would be higher than that of the group of 12 you selected?

A. Let me just say this: I suspect the risk would probably be greater. The more you get away from utilities, the harder it is to measure the cost of equity, because the less of the return that is in the observable dividend yield and the more that's in this growth rate of where analysts here and elsewhere generally have very different views of what the growth rate is that's appropriate in investor decision making.

So it's harder. I think we can agree on first, it is harder to measure the cost of equity to non-utility firms than utility firms. It's hard enough for utilities. That's why I'm going to be here all day, but it's much harder for non-utilities, so I don't know what I would find if I tried to do it, but I suspect it would be less risk and more risk, and I suspect if you could do a really good job, you would probably get somewhat higher cost of equity.

Q. Is it your testimony that currently, investors are expecting each of these 12 utilities that you analyzed to continue to have a risk profile similar to Avista's regulated operations?

A. I think at present, they probably do. They know these companies will probably diversify and go into new businesses, but at that time, the price will adjust and their expectations will adjust to the new world. The best they can do now is look at the businesses they are buying and what their expectations are for those businesses.
Q. So are you saying that currently, the investors are expecting each of these 12 utilities to continue to have minimal competitive operations, or what expectations?
A. Generally, they are buying into the asset mix that's currently in the company, which is the mix of utility operations, the wires, and the generation, and that's their best expectation of the future knowing there will probably be some broadening, but I think that makes a material difference to their expectations.
Q. I'd like to refer at this point to your Appendix C, which is part of Exhibit 102. It may be easiest to start and go backwards. It's the last document under 102. The first page is headed "Appendix C, application of risk premium approach."
Dr. Avera, regarding your risk premium approach, starting at Page C-2, Line 23 and carrying over to C-3, here you tell us, don't you, that the

magnitude of the equity risk premiums are not constant. They tend to move inversely to interest rates; is that correct?
A. Yes. That is the state of evidence in terms of empirical studies that have been done to track the movement of equity risk premiums over time.
Q. You indicate that when implementing the risk premium approach, adjustments may be required to reflect the inverse relationship between risk premiums and interest rates if present interest rate levels have changed since the time the equity risk premiums were estimated; is that correct?
A. That is correct.
Q. I'd like a little clarification of what you are saying. I'm sure you would agree that if you are measuring equity risk premiums over a reasonably long period of time that it's likely that interest rates have changed over the period of the study.
A. Yes. Also in this appendix, I talk about three ways of estimating equity risk premiums. You can survey. You can ask investors what they are expecting when they pay this for a bond as opposed to how much more you have to get them to move to the risk of common stock, how much extra pay they need for the risk. You can do mechanistic estimates where you are trying to do

expectational models, like the DCF. In those two, you are taking snapshot looks at the risk premium, and if you are going to take that data and apply it to another period of time where the general level of interest rates is higher or lower, you need to make these adjustments.

There is a third way, and the third way is the historical approach where you look over a long period of time and say, People who bought bonds earned this, and people who bought stock earned this, so their experience is that the bond holders got this much less than the stockholder. If you use that approach, you are assuming that there is a stable relationship over time so there is no way to adjust.

Q. Let's use an example. Suppose you measure the equity risk premium each year from Point A to Point B, and let's say the average risk premium is five percent over that period.

A. You can't really measure the risk premium because the whole problem, and the reason we have to do all of this stuff is we can't observe the return on equity, what investors require. We can only observe things like what price they pay for the stock, what dividends they receive.

The risk premium estimate, we can observe

what bonds are paying, what their yield is, and if we somehow estimate what we think the equity return is, we can estimate the risk premium, and the two ways is we can ask folks what are you expecting to earn on your common stock, or we can go through something like a DCF to infer what we think they are going to earn, so we are not measuring risk premiums. We are estimating risk premiums over a particular period of time.

Q. So you want me to use the term "estimate" instead of "measure"?

A. I think it's very important because if you don't make that distinction, we lose the important truth that we are trying to measure something we can't observe. It's impossible.

Q. So suppose you estimate the equity risk premiums each year from Point A to Point B, and let's use the average risk premiums five percent over the period.

A. Over a period of time, yes.

Q. During that period from Point A to Point B, let's assume the average annual interest rate was eight percent?

A. You've got five percent, eight percent interest rate, so our return on equity was 13 during that period of time.

Q. Finally, suppose that current interest rates are only four percent as opposed to that eight percent. In this hypothetical world, would it be necessary -- you need to take notes, that's okay.
A. I want to make sure I have your hypothetical in mind.
Q. In this hypothetical world where current interest rates are now four percent, would it be necessary to adjust upward the five percent average equity risk premium because current interest rates are well below their eight percent average?
A. Yes. All the evidence is that as interest rates trend down that the split between interest rates and equity returns goes up. Now, equity returns go down with interest rates. They just trail. They are a lag behind the moving interest rates, so the difference would increase.
Q. So if the converse were true; that is, if current interest rates were, say, 10 percent, so above the eight percent we started with, then would you recommend a downward adjustment to the five percent equity risk premium?
A. Yes, I would.
Q. Could you refer to Appendix C, Table 3, which is the last page of Appendix C. Are the yields that

you show for the S and P single "A" rated public utility bonds the yields on newly issued bonds or on outstanding bonds?
A. That would be the estimate that S and P makes of seasoned bonds so it would take out the effects of newly issued bonds. They have a model when they report their bond yields that they derive a current interest rate based on observed bond prices and yields.
Q. Seasoned bond would be outstanding bonds; correct?
A. Correct.
Q. Why did you use outstanding bonds as opposed to newly issued bonds?
A. Because when a bond is first issued -- this is easier to explain today than it used to be because it's basically like an initial public offering. The public has not seen the bond before, so the underwriters look at current interest rates and they look at the characteristics of the bond, its coupon, its maturity, and they make an estimate of what they think a fair price would be, so you will see in the paper one of these announcements that General Motors has issued 10 million bonds with a coupon of 6.7 percent at a price of 101, and basically, the underwriters thought that given -- and they have to go

out and print the bond before they issue it so they lock themselves into an interest rate, so they try to hit current interest rates with an estimate by selling the bond, not for its par value of $1,000 a bond but a little bit more or less.

They are often wrong because they don't know how the investors are going to react to this new piece of paper, so by the end of the day, the price has gone up or down, and then for the next several days, you probably have some settling in of the price, so rather than look at a particular new bond where the price may be driven by what's going on that day or particular enthusiasm for General Motors or fear for General Motors, what the rating agencies generally do is look at a whole bunch of bonds that have been out there awhile and have been trading so they are what's called seasoned. Investors have had quite a while to react to this bond and buy it and sell it with each other. Based on the pricing of the seasoned bonds, they infer a yield that a bond would have if it were at pretty much at par.

Q. On Table 2 of Appendix C, which is the page just before that one, you estimate an equity risk premium by comparing the allowed return on equity for electric utilities with the average public utility bond

yield; right?
A. Yes.
Q. So you've taken A minus B to get C?
A. Yes.
Q. It's just straight subtraction. We don't have any iterations involved.
A. No. This is the simple part.
Q. Going back to Page C-1, so the first page of this Appendix C, starting on Line 6, you describe three different approaches to obtain proxies for equity risk premiums, and I think you've sort of highlighted this for us a few minutes ago. Expectational estimates of cost of equity, is that the mechanistic approach you referred to?
A. Right. That's why you have a DCF Model and you run it through time.
Q. Then the surveys, and then third is the realized rates of return. Under which of the three approaches you outline there does the method used on Table 2 of Appendix C fall?
A. Table 2 is the estimate surveys. We are essentially surveying utility commissions, and we are saying utility commissions are making an estimate of the cost of equity when they enter their rate orders, so they give us an observable estimate of what they

think the return on equity is, so we are not asking the commissioners, but they have told us because that's part of their regulatory responsibility.

Q. Is it your testimony the allowed return on equity is equal to the realized return on equity?

A. No. The allowed return is equal to -- did I say this was part of survey approach No. 2?

Q. Yes.

A. The allowed return is the commissions estimate of what the cost of equity is. In my particular rate order, I know from my own experiences of having been on that side of the table and on your side of table, there are a lot of things that go into what the cost of equity allowed return is, but it's all keyed off of some estimate of what the cost of equity is, and if we average them over all the rate cases in a particular year, I think that's a pretty good measure of what commissioners thought the cost of equity was for utilities in that year.

Q. The average public utility bond yield is a realized return, isn't it?

A. No. It is the return you get if you buy a bond today given its yield to maturity and hold it to maturity. That's what the yield of maturity is. You buy the bond today, and you hold it until you get your

thousand dollars back.
If you only hold it one year, interest rates have probably gone up or down, and you receive your coupon, but you probably have a capital loss or gain on the bond, so by looking at the yield, we are looking at an expected return of the bonds, not the realized return of the bonds.
Q. So is the average public utility bond yield a market return?
A. Yes. Going through this process, we talked about where the rating agencies have estimated what the yield of maturity on a bond if it were sold to the public at par value, what they would expect to yield on those bonds.
Q. On Page C-6 of your testimony, you discuss a study using the expectational approach to estimate the equity risk premium; correct?
A. Yes.
Q. A, B, and C are all in Exhibit 102. The study referred to here focused on the period 1971 through 1980; correct?
A. Yes.
Q. It purported to estimate the premium for electric utilities?
A. Yes.

Q. The methodology used by the authors of the study referred to, this can be replicated, can't it?
A. I believe it can. It's from a referee journal and they provide the data, and I think it could be replicated if you had the same data they had. They have some of the data in the article that you could use.
Q. You could use that same approach today to get the same analysis, or you could use that methodology used in that study with today's figures, couldn't you?
A. You could. By definition, it's a study that occurs over time, so you could do it for the last 10 years or for the previous 10 years. You could do a similar study. One of the things that would happen, because they used all the electrics, the population would change because we have fewer and fewer pure play electrics, so you have to make a decision, sort of how I made in picking my comparable group. How do we define electrics these days? For example, we would want to make sure Avista was not in our sample.
Q. So you could take a number of electric companies and do this same analysis for the last 10 years?
A. You could, yes.
Q. You did not do that?

A. No, I did not.
Q. Why didn't you do that?
A. Because the purpose here was to take what I think most authorities would agree is one of the classic articles that people refer to often and report the results of that classic article, which were conducted in a classic time period, in the time period before we began the transition, so it is as close as you can get in social sciences to a laboratory study.
If we try to replicate it today, we would have to make a lot of decisions, plus one of the things I wanted to do is make this -- I have several studies that are mine, but these are third-party studies. These are in the literature. I didn't do it. I didn't jiggle with it at all. It is part of the literature of finance.
Q. You are just reporting on this.
A. Yes.
Q. Do you find it appropriate to use a 10-year period of time to make estimates of the equity risk premiums?
A. I think it depends. You want a fairly homogenous period of time where there is not some exogenous event that is impacting your independent variable during that period of time. I think they

chose 10 years. There are other studies over longer or shorter periods of time.

I think how long a period you look is a function of the whole characteristic of the study. In any statistical study, you are assuming that there is a stable relationship that you can estimate stable population parameters, and sometimes, 10 years will give you a stable parameter, and other times five years, and other times 20 years.

Q. You refer to the influence of exogenous events. During that 1971 to 1980 period, wasn't there an era of oil embargo during that period of time?

A. Yes. And the purpose of this study was to see -- and it was a time of rapidly increasing inflation, and what the authors wanted to do was talk about inflation risk and regulatory life. They wanted to see if you took a period that started with very low inflation, like 1971, and go over to a period with very high inflation, like 1980, would you see that the experience of regulatory lag would change the relationship of risk premiums in the electric utility compared to what the finance literature believes to be the usual relationship, which we talked about earlier of the inverse relationship.

The hypothesis tested in this model was

that -- because utilities can't change their prices like other competitive companies as inflation starts accelerating, and they have to prepare a rate case, go before a commission. The commission has to have a hearing, and then you have an order, and then they can change their prices. The utilities would be disadvantaged in a period of time of increasing inflation, and 1971 to '80 is a classic period of increasing inflation, driven in part because of the Arab oil embargo in 1974.

Q. You are saying then that didn't affect risk premiums?

A. That was the question the authors addressed. Did it affect the risk premium.

Q. Did it?

A. What they found was that not withstanding the regulatory lag that there was a small inverse relationship. That was contrary to their prior expectation. They thought that utilities would not exhibit the inverse relationship because of the effect of regulatory lag on the way utilities have to change their prices.

JUDGE SCHAER: Ms. Tennyson, is this a good place we could break for lunch?

MS. TENNYSON: Yes.

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JUDGE SCHAER: We will take our lunch recess at this time. Be back and ready to go at 1:30 this afternoon, please. We are off the record.

(Lunch recess at 12:00 noon.)

AFTERNOON SESSION
(1:35 p.m.)

JUDGE SCHAER: Back on the record. Ms. Tennyson, would you like to continue with your questioning?

MS. TENNYSON: Yes, thank you.

Q. (By Ms. Tennyson) When we broke for lunch, we were talking about the CC and L study, and that dealt with the 10-year period, 1971 through 1980, and I'd asked you a question about the Arab oil embargo, and during that time period, 1971 through 1980, I believe you had referenced earlier there were nuclear plants being built by many utility companies.

A. Yes, there were. The nuclear crisis didn't come until after 1979 when you had the Three Mile Island incident on March 28th, 1979, and the regulatory response of that over the next several years.

Q. My question is, did the Arab oil embargo or the nuclear building that was going on during the period in this study, did those events affect the level of the risk of premium in the CC and L study?

A. I would assume they would have some effect on the risk premium. The effort was made to look and see how the risk premium changes as a function of interest

rates. The risk premium reflects what's going on in the industry, and the Arab oil embargo would have been part -- I don't think the nuclear construction was perceived as a major risk factor during that period of time. It was later in the 80's that that particular risk factor became material.

Q. Then with the Arab oil embargo, did that affect the level of the risk premium? Is your answer yes or no?

A. My belief is that it would have been a factor affecting the level of risk premium.

Q. Did those events, the Arab oil embargo or the nuclear plant building, in any way affect your level of risk premium that you've come up with in this case?

A. I've used the information from the study which used that measure as one reading on the risk premium. The risk premium was measured over the entire period starting in 1971, which was three years before the Arab oil embargo and ending just as the Three Mile Island incident occurred.

Q. Can you refer at this point to what's been marked as Exhibit 104.

A. Yes. That's not the particular section -- it is not the economic report of the president that I referenced and have in my work papers, but I have

reviewed those pages.
Q. This is a passage from the year 2020 economic report of the president; correct?
A. Correct.
Q. The page that's been copied here -- obviously it's not the whole study. We have Pages 69 and 70 from that report.
A. Yes.
Q. At the top of Page 70, the Council of Economic Advisors says, and I quote, "The additional riskiness of stock returns over that of bond returns does not appear large enough to justify an equity premium of over seven percentage points unless investors are extraordinarily risk adverse or their investment horizon is very short."
A. I haven't found where you are reading.
Q. The first paragraph there. Then it continues on: "For this reason, economists have long been puzzled by the large excess returns that the stock market has historically offered." Do you agree with that statement?
A. I will certain agree that economist have long been puzzled.
Q. The entire statement in that paragraph, do you agree with that?

A. I have a little bit of a problem with the benchmark here because this is in reference to Jeremy Segal's, a long-term study of relative returns of stocks and bonds, which is different from the Ibbotson study that I used.

Q. I understand that. So the passage here compares stocks with government bonds; correct?

A. That is correct.

Q. The Council then wasn't referring to the equity risk premium for electric utilities, was it?

A. Right. It's a little bit of apples and oranges, but I read the statement, and I know that the relative performance of stocks in recent years has certainly been spectacular relative to bonds, and I think the general opinion of economists is that it is unlikely to persist over time.

Q. Is it your testimony, Dr. Avera, that the 7.47 percent constitutes a reasonable basis to estimate the equity risk premium that you used to determine the cost of equity for Avista's regulating operations?

A. I think you have to look at the risk premium in terms of today and today's level of interest rates, if you are going to apply it to today's -- one of the messages of my C-section of Exhibit 102 is the risk premium must fit the interest rate, so I've developed a

set of risk premiums to apply to the public utility interest rate and came up with a result that the spread over single "A" bond yields must be four to five percent.

Q. In your testimony, you refer again to the C, Appendix C, and I'm looking at Page C-7, Lines 6 and 7. You refer to them as applied equity risk premium of 7.47 percent for low-rated utilities?

A. Yes, and that was the finding of the CCL study.

Q. The authors who produced the study that we've been discussing, they have produced a second study which found an equity risk premium of 6.45 percent returns on investments and electric utilities and government bonds; isn't that so?

A. Yes.

Q. You noted on Page C-8 of your testimony of this appendix that in that second study by the same authors, who came up with the 7.08 percent zero risk premium, it produced a 6.45 percent equity risk premium for electric utilities when compared to U.S. Government bonds; correct?

A. That is correct.

Q. Based on that 6.45 percent risk premium, you then found a 12.23 percent cost of equity for Avista's

regulated operations; is that correct?
A. That would be what adjusting for the interest rate and applying it to current interest rates would be. Each of these studies results in a different number, and that's why I didn't use the full range. I narrowed the range to get to my four to five percent equity risk premium.
Q. Adjusting for the interest rate, that's like we discussed earlier before lunch. It goes up or down, and you have to add or subtract.
A. That is correct. To make it fit the current interest rate environment.
Q. You refer to the techniques used by the authors of these studies that we've been discussing as mechanistic. You didn't use the same mechanistic approaches used by the authors when you applied the multistage DCF in this case, did you?
A. No. I think my approach was not as mechanistic as theirs. They applied a DCF to the entire industry based on historical experience, and I think my approach -- first, I selected a subset of the industry, and secondly, I used a variety of inputs to the DCF, both the Value Line inputs and the IBES inputs, so I think my application of the DCF Model is a lot more specific to the companies than the way the CCL

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studies did when they were looking at all the electrics.
Q. You are applying the equity risk premium or the DCF approach here to a specific company; correct, and not to the whole group of companies?
A. You mean in my B appendix where I actually do the multistage?
Q. You came up with an equity risk premium in your study, and you applied that to Avista, to one company and not a whole range of companies; is that correct?
A. You are speaking of the risk premium? What I did in the risk premium is I looked at a set of studies. I think there are nine studies, two of which I did myself and seven of which are in the literature, and each implies an estimate of the risk premium. I adjusted those for current level of interest rates and got a distribution of risk premiums, and then based on judgment, evaluated and narrowed to a narrow set of risk premiums, which I said then is a good estimate of the risk premium for Avista's utility operations in Washington and applied that 47 percent risk premium to the current single "A" bond yield, and that's how I came up with my risk premium estimate of eleven nine twelve nine.

Q. I'm going to refer at this point to a chart you have on Page C-14 that's on Appendix C. There, you list each of the studies, and you've broken them down by mechanistic and survey and historical realized rates of return. In terms of the results and how you applied to get the risk premium, for the first one, the Carleton, Chambers study with the 5.32 percent indicated risk premium, the increase in the equity risk premium for each point of decrease in bond yields for that study was .17?
A. Yes, as I recall.
Q. Or 17 basis points?
A. That is correct.
Q. Then the second study, the 4.3 percent, was no adjustment, no increase.
A. That is correct.
Q. Then going on down, we have 3.79 percent, the Brigham, Shome, Vinson, is .11?
A. That's correct.
Q. And then the 6.97 percent, is that 63 basis points, or .63 percent increase in equity risk premium?
A. For every hundred basis point change, the level of interest rates change.
Q. The .63 is what the --
A. What the adjustment is from that study. In

every case, I took whatever the study found and applied it to the current level of interest rates.
Q. I understand. I'm just trying to get all this stuff on one page to make sure I'm applying this right. The 6.27 percent for the Harris study was .51?
A. Yes, that's correct.
Q. And then the five percent for the Benore investor was .28?
A. Yes.
Q. And the 4.12 percent for the RRA, authorized ROE, was .48?
A. Yes.
Q. And then the last two, we don't have that calculation.
A. That's correct, because these are the historical that assume it's measured where there is a stable relationship and no change.
Q. Thank you.
A. I misspoke a minute ago. I said nine, and the number of studies that are reflected here -- I believe nine is correct, but let me make sure.
Q. I count seven.
A. Carlton, Chambers and Lakonishok, and Brigham, Shome and Vinson each did two studies.
Q. And the Brigham, Shome and Vinson was --

A. -- 1980 to 1984. There are nine separate estimates of the risk premium. I did two of them. CCL did two, and Brigham, Vinson and Shome did two.
Q. Have you ever testified to a cost of equity using the DCF approach based on a projection of dividends that were derived from their growth over the past 10 years?
A. Yes. When I was first doing rate of return testimony, it was common for witnesses to use historical averages as one of their estimates of the growth rate because at that time, there was a continuity in historical growth rates, and projected growth rates were very close in magnitude, so the first testimony I did when I was on the Public Utility Commission of Texas staff, I generally had a five-year look and 10-year look in history and then I used the forecasting.
Q. That's the authors that we've been discussing did; isn't that the case?
A. Yes. As a matter of fact, during that time, Bill Carleton was a witness for Houston Lighting and Power in a case where I was a witness for the Staff, and we both used somewhat similar methodologies which included a 10-year historical return, so I think the model that was from the '71 to '80 period by the

authors is very consistent with what you would see in a hearing room, witnesses for companies and intervenors using.
Q. The CCL study, that appeared in 1983; correct?
A. Yes.
Q. On Page C-8 of your Appendix C, you mention two other articles that generated mechanistic estimates of equity risk premiums for utilities using a DCF Model. Did you use any of the DCF models used by Brigham, Shome and Vinson or by Robert Harris to arrive at your cost of equity estimates in this case?
A. Actually, the Brigham, Shome and Vinson article is very similar in spirit to my approach. The one difference is they just take the Value Line estimate for five years and do an internal rate of return compared to my approach where I go out further and use not only the Value Line estimates but the IBES estimates and then the industry estimates, but the format of finding an internal rate of return is similar.
Q. The Brigham, Shome and Vinson article appeared in 1985?
A. Yes.
Q. And the Harris article appeared in 1986;

correct?
A. Yes. The Harris article used the IBES growth rates and used the straight constant growth DCF, so dividend yield plus growth is the model Harris used.
Q. Did you update these two studies using data gathered since 1985 or 1986?
A. I have not. Several staff members from the Virginia State Corporation Commission have updated and found similar results, not as to risk premium but as to the inverse relationship, but I have not done such a study.
Q. That Virginia State Corporation Commission study doesn't appear in your testimony, does it?
A. I cite finding an order from Virginia for Bell Atlantic. It reflects the testimony that the staff members did, but it didn't include the study, per se, because it was never really published in the literature the way the other studies were, so I used the ones that are kind of the leading studies in the literature.
Q. Why didn't you do an update of these studies if you believe the articles provide important evidence about how equity risk premium should be estimated?
A. I think they provide important evidence for the time periods they study. One of the main thrusts

of my testimony here is that the simpler forms of the DCF Model were served so well in the '70's and '80's do not serve well in the '90's, so just like the DCF Model from the '70's that CC and L used is different than the DCF Model from the '80's that Harris and Brigham, Vinson and Shome use, they are not kind of the '90's addition of the model, so to take those models from the previous periods and apply them to '90's data would be a mismatch and would not reflect how people were estimating cost of equity in the 1990's.

Q. But you did rely on the relationship between the equity risk premium and interest rates in coming to the results you recommended here, didn't you?

A. I did, because my belief is, and I think the reason these articles are widely cited and republished is they did a very good job of mechanistically figuring out what the cost of equity estimate, a reasonable cost of equity estimate would have been in the decades that they studied compared to the observable bond yields.

The observe bond yields have the one constant in all of this. We have bond yields that we can observe, but what changes is the best way to estimate the cost of equity so that we can figure out the difference, which is the equity risk premium. I think each of these studies represents the best way of

estimating the cost of equity in the period of time they were conducted.

Q. We had referred earlier to your Table 3 that's part of Appendix C. It's the last page of Exhibit 102. Do you believe that the approach you took to estimating the equity risk premium that you set out in this table provides better estimates of the risk premium than what is found in any of the articles you discussed that use the expectational approach?

A. No. I think this is a better historical approach than the Ibbotson because that looks at the S and P versus bond utilities, and this goes to the question at bar, which is what is the risk premium of utility returns over utility bond yields, so I do think for present purposes this is a superior historical method, but I think there are three methods, the historical, the survey, and the mechanistic estimates because there are three different approaches, and I don't think you can say or I'm not willing to say that one is absolutely better than the other. They all give you some information, and that's why I've included representatives from each type in my analysis for this case.

Q. Let's go on to one we haven't discussed a lot of. Starting on Page C-10 of Appendix C, you discuss

the surveyed approach to the equity risk premium; is that correct?
A. Yes.
Q. You note there an often cited survey of equity risk premium is done by Charles Benore?
A. Yes.
Q. Mr. Benore was retained by utilities to testify on their behalf, was he not?
A. He was.
Q. And to your knowledge, did he ever testify on behalf of an intervenor in a public utility rate case?
A. None that I was in. I'm not aware of anytime he testified for an intervenor.
Q. You didn't personally experience that?
A. No. I experienced him testifying for companies.
Q. You tell us Mr. Benore surveyed institutional investors between 1975 and 1985 and asked them directly what their equity risk premium was for electric utilities versus double "A" rated utility bonds; is that correct?
A. That's correct.
Q. Is it your testimony that use of an 11-year period is of sufficient length to establish an appropriate risk premium?

A. I think it is a long period of time, and that's all the time we have. That is a window.
Q. It's what's there?
A. We can't have anything longer, so the only thing we could do is pare down and throw out some of the years that Mr. Benore made the survey in and publish the results.
Q. For this survey, again, this is for each percentage point in decline in bonds yields, the equity risk premium increased by 10 basis points.
A. That's correct.
Q. We've gone through the others, and I wrote on my copy where we are, so the BS and V study had a 63 basis point increase in risk premium for each percentage point in decline in bond yields; correct?
A. One of their studies. They had two studies. One is .63.
Q. And the .63 study was for a four-and-a-half year period from January 1980 to June of 1984; correct?
A. That is correct.
Q. So that BS and V study was inside of Mr. Benore's 11-year period from 1975 to 1985.
A. It was.
Q. The CC and L study, that one found the 17 basis point increase in the equity risk premium;

correct?
A. Right, interest rates decreased.
Q. That study covered the 1972 to 1980 period, did it not?
A. I think it was '71 to '80.
Q. I obtained that from your testimony, Page C-6.
A. C-6, Line 8?
Q. Line 13.
MR. MEYER: I show 72.
THE WITNESS: I'll have to go back and check that because I say '71 earlier. My memory tells me '71 is probably right, but I will certainly advise you which one is right.
Q. (By Ms. Tennyson) According to BS and V, over the 1966 to 1984 period that the equity risk premium rose 11 basis points for each one percentage point decrease in the bond yield; correct?
A. Yes.
Q. Looking at Table 2 of Appendix C -- that's the second to last page of Exhibit 102. On this exhibit, you show public utility bond yields for each year over the 1974 to 1998 period and risk premiums for each of those years; correct?
A. Yes.

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Q. Based on those data, by how many basis points does the equity risk premium increase for every one percentage point decreasing bond yields?

A. 47.8 basis points, 48 approximately.

Q. The study that you made shown in Table 2 of Appendix C, that relates allowed returns on equity or public utility bonds; correct?

A. Yes.

Q. And public utility bonds are market determined, aren't they?

A. Yes, they are.

Q. Is your testimony that returns on equity allowed by public utility Commissions are market determined parameters?

A. I think they are administratively determined estimates of market determined cost of equity. I believe what commissions are attempting to do is estimate the cost of equity. They take information from witnesses such as me, tested by attorneys such as you, and decide what they think the best estimate is, and that is the commission's estimate. That's why it's a survey approach. It's their guess as to what the market requires.

Q. And earned returns on equity are market determined, aren't they?

A. Earned returns.
Q. Yes.
A. You mean the return on book equity that a utility achieved?
Q. Yes. Just because a utility commission allows a certain rate of return means the company achieves that; right?
A. That is true. It's not a capital market determined. It's by what happens in the market for the utilities' goods and services and what happens to the cost and what the accountants do with the numbers, so I'm not used to thinking about that as a market determiner.
Q. You are thinking how they work to achieve that as to what actually happens. After your review of all the articles you referred to in Appendix C as well as the study you made, would you agree that the relationship between a given percentage point decreasing bond yields and the corresponding increase in the equity risk premium is not constant?
A. No. I don't know whether it's constant or not. I would say different studies that have made an estimate at different times using different methodologies have come up with different results. Now, whether the underlying economic structure is

constant or not, I don't think we can say with the evidence we have because again, we are trying to estimate something we cannot observe, so we must first estimate the cost of equity using one of these three methods, and then we measure how that estimate changes with interest rates. So we are trying to estimate a relationship involving an unobservable coefficient, so the fact that we come up with many different estimates I don't think should be surprising.

Q. So there is not a magic number that everybody agrees on?

A. No. There is definitely not a magic number that everybody agrees on.

Q. Let's look at the studies under the headings, "the mechanistic cost of equity estimates and surveys." Refer to Page C-14 for the listing. I just realized I already did this without referring to my notes so we don't need to go through this.

I do have a question related to the -- you referred a couple of times to Ibbotson and Associates and the 1999 yearbook. You were asked to provide a copy of that, and you provided just some excerpts; correct?

A. That's correct. It's a big, thick book, plus it's copyrighted and expensive, and I didn't want to

get in trouble by giving you a copy of the whole book.
Q. We don't have a copy of that. We just have your selected excerpts. I can't ask you questions about something I don't have in front of me; right?
A. I think I have presented to you the pages that have the numbers that I extracted off of that study.
Q. But it doesn't allow me to look at the rest of the study and ask about the methodology and things like that; correct?
A. No. I would be happy to copy parts that you would like. I would have to talk to counsel about the propriety of providing the whole book. The book is commercially available.
Q. There is part of the appendix in that study that gives a year-by-year listing of the equity risk premiums. Are you familiar with that?
A. There are a couple of sections you might be talking about. There is one that gives the year-to-year equity returns and bond returns, and there is another section where Ibbotson does present some estimates in the risk premium that he made. We did not use those, but they are in the book, as I recall.
Q. Would you be able to provide us the appendix of the first listing that you described, the earned

returns on equity and the earned returns on bonds?
A. Yes, we will try to give that to you. We will make some accommodation.
JUDGE SCHAER: So it would be Record Requisition No. 23.
Q. In your Exhibit 102 at Page C-13, you refer to the use of a beta coefficient. Is it your opinion that a beta is a meaningful measure of investment risk?
A. I believe it is a meaningful measure. As I talk in the testimony, there is some controversy over it being the total measure of investment risk.
Q. But the answer is yes?
A. Yes. I think it's meaningful as reported by Value Line, by Merrill Lynch, by Standard and Poor, so I think investors do pay attention to beta's, but I don't think it is the sole measure of risk that investors use.
Q. Have you ever relied on the capital asset pricing model, otherwise referred to as CAPM, approach to the cost of equity capital in any of the testimony you've presented before public utility commissions?
A. My recollection is in many if not most of the testimony, I have a capital asset pricing model estimate. I can't think of any testimony where it was the sole estimate because my belief has been there is

no perfect one-size-fits-all method. You have to apply a number of methods and evaluate their relative results.

Q. With respect to the capital structure you recommended be used to set rates in this case, you rely on the 1998 average capital structure for the 12 combination utilities you selected; correct?

A. That is correct.

Q. That capital structure contains 47 percent long-term debt, six percent preferred, and 47 percent common equity capital; correct?

A. Yes.

Q. In computing your capitalization ratios, you excluded short-term debt, didn't you?

A. I did.

Q. Can you tell us why you did that?

A. I did it because for most utilities, short-term debt is a seasonal accommodation. It's not a permanent part of the capital structure, so that when I think most people in this industry think about capital structure, they think about long-term capital, which would include only long-term debt and that current portion of long-term debt.

I think that is consistent with the way many of the rating agencies display and compute capital

structures, so that I believe that that is a common. It's not the only way. You see often presentations of capital structure that include short-term debt, but I believe that the most common way and really the most meaningful, especially for situations where short-term debt is a volatile part of capital structure, it should be ignored.

Q. I'd like to refer you to what's been marked as Exhibit 129. It's one of the ones we passed up this morning. Do you recognize this as a request for information that was presented to you and that you responded to?

A. Yes.

Q. Is this true and correct to the best of your knowledge?

A. It is.

Q. And this was the same question I just asked you; is that correct?

A. That's correct.

Q. Could you tell us what the capitalization ratios you show on Page 26 of your testimony would be if short-term debt were included?

A. I would have to go through the data for each of the 12 utilities and go back and put in short-term debt. In my work papers, I have the 10-K information

that we got off of Free Edgar on the Internet.
Q. So if I asked you to provide that, to do that calculation, you would be able to do that from the information that you have?
A. I believe I could. Again, subject to -- we might have missed a page that had the short-term debt on some of the companies because we weren't using it, but we can go back on the Internet and get those companies, so it's something we can do.
MS. TENNYSON: I would make that a record requisition.
JUDGE SCHAER: That would be No. 24.
Q. (By Ms. Tennyson) Could you provide us with your definition of short-term debt?
A. Short-term debt is a debt that is anticipated to be, or can be drawn down at the borrower's request or the lender's request, but the key thing is it's not permanent. It's not funded. It is like a line of credit or revolving credit arrangement where the amount goes in and out as opposed to a funded bond issue where there is a 10-million-dollar issue and that is sold to the public and stays in the public hands.
Q. Has a set time period.
A. Has a set time period and set schedule of repayment.

Q. On Page 28 of your testimony, you show the average common equity ratios over the period 1994 to 1998; correct?
A. Yes.
Q. Do those common equity ratios include or exclude short-term debt?
A. I believe they exclude; although, they are taken from RRA, and my belief is they exclude, but I can't say in every case they do because they were working from commission orders, and in some cases, it may be in some cases the commission orders did not include short-term debt.
Q. Would you be able to tell us what these ratios would be if short-term debt were included?
A. I'm not sure that that information is consistently reported by RRA. I could take a minute and look, but my impression is it is not consistently reported.
Q. Do you know what Avista's common equity ratio was at September 30th, 1999? One of the exhibits is the 10-Q?
JUDGE SCHAER: Mr. Meyers, your witness just referred to something you might be able to check to see if the data is reported. Could you have him check that at the break and let us know?

MR. MEYER: You don't want to do that now?
JUDGE SCHAER: The previous question had been about weather RRA included data on short-term debt.
MS. TENNYSON: I asked him another question and he's referring to Exhibit 132, I believe.
JUDGE SCHAER: He said he could look and see and I would like him to do that during the hearing.
THE WITNESS: The answer to the equity ratio at September 30, 1999, is 28.34 percent.
Q. (By Ms. Tennyson) Did you exclude or include short-term debt in making that computation?
A. I excluded it.
Q. If you included it, would you accept that it would be about 26-and-a-half percent?
A. Yes. It would go down because you are adding more debt and increasing capitalization.
Q. And the short-term debt is generally less costly, less expensive?
A. It is generally, but not always less expensive than other debt. It is always, I think, less expensive than common equity. I won't say "always" because we sometimes -- in my recent experience, it's less expensive than common equity.
Q. Referring to Exhibit 132, if necessary, can you tell us whether Avista had any short-term debt

outstanding at September 30th, 1999, and how much that was?
A. It had 103.5 million dollars of notes payable at September 30, 1999.
Q. And then the figure below that, there is "other." What's that amount?
A. The "other" amount is $8,894,000.
Q. So the record is clear, what are you referring to at this point, what page?
A. I'm referring to Page 6 of the form 10-Q for Avista Corporation.
Q. Could you read the heading that you are referring to?
A. "Consolidated statements of capitalization."
Q. What line did you find the numbers on? That's what I'm asking.
A. The line is, "notes payable (due within one year) to the refinanced."
Q. So within the heading, "long-term debt," the last paragraph, if you will, notes payable, that's the $103,500?
A. Yes, it is.
Q. Do you believe that the term "other," or what's included in "other" below is short-term debt or not?

A. It may be. My understanding, and I probably made an assumption here I should have made clear to you and also clarify an earlier answer that I gave to you today. The component costs that I've given you are the utility cost of debt. I understand that the "notes payable," the 103 million, are utility-related notes payable. There is another data request that lists the notes payable over time. I understand that what is in the "other" category is, in most likelihood, obligations of Avista capital, which is not related to the utility.

Q. Would those be short-term versus long-term?

A. I believe they probably would be, but I don't have any specific data on them since they weren't part of the utility, and I didn't pick them up in my looking at the numbers.

Q. At September 30th, 1999, Avista's long-term debt ratio was about 48 percent, wasn't it?

A. Is that including this 103.5?

Q. Yes.

A. If you've done the calculation, I'll accept that.

Q. And the short-term debt accounted for about 6.9 percent of Avista's total capitalization at 9/30/99?

A. Yes. If you add it into the capitalization and divide it, that's the approximate number you get.
Q. At 9/30/99, Avista's preferred stock and preferred securities accounted for about 25.2 percent of its total capitalization; correct?
A. Again, is that adding in the 103.5?
Q. Yes.
A. That sounds about the right number.
Q. In the capital structure that you recommended, preferred stocks and securities, accounts for only six percent of the capital structure; isn't that correct?
A. That is correct.
Q. And the weighted average cost rate for your preferred stock is about 8.14 percent?
A. Yes.
Q. So you're asking this commission to substitute a 12-and-a-quarter-percent cost of equity for an 8.14 percent cost of preferred stock for about 19 percent of Avista's actually capital structure; right?
A. No. That's not what I'm asking this commission to do. What I'm asking this commission to do is in this case, as this commission has done in other cases, to use a hypothetical capital structure

that's represented to the industries' use of debt preferred in common, and I think that is the appropriate capital structure to be applied to Avista's utility operations in Washington.

Q. You have told us Avista's nonregulated businesses have a greater risk than its regulated operations. Why has Avista chosen to operate its total company with a 26-and-a-half percent common equity ratio?

A. I think there is presumption in your question. I think I speculated that they may be more at risk. I have not done any study of the relative risk of the Avista capital operations compared to the utility operations.

Q. If we assume that the nonregulated business operations and the regulated are equally risky, would it be appropriate for the Company to operate with a 26-and-a-half-percent common equity ratio?

A. I think every company has to make its own decision about its capital structure to weigh the business risk and financial risk and decide what is in the best interest of its shareholders. Also, capital structures change, as we discussed earlier today, as a result of whether the company is earning or losing money, so that a company at any one time may be some

distant from its target capital structure.
So I believe that Avista management is making decisions about its capital structure consistent with its obligations to its shareholders. I believe those decisions should be decoupled from the decision that this commission is making as to the appropriate rate of return to allow for the utility operations. I think that's why this commission and many other commissions have used hypothetical capital structures because it separates the management decision about capital structure from the regulatory decision about fair rate of return, which I think is an appropriate division.

Q. So you think it's appropriate that even if the Company has only a 26-and-a-half-percent equity company wide that the Commission should then create a hypothetical capital structure, as you suggested, with a much higher common equity.

A. I believe in this circumstance the hypothetical capital structure which I believe is consistent with the industry, consistent with regulatory requirements, consistent with rating agency requirements is the capital structure that should be used, not withstanding the actual capital structure of Avista, which is very dynamic. It has changed, and I suspect it will continue to change, so this commission

can focus on a stable and more stationary benchmark, which is the hypothetical capital structure for utility companies, just as it has chosen to do in the ScottishPower acquisition and in other cases cited in my testimony.

Q. Do you think Avista had its debt downgraded because of its highly leveraged capital structure?

A. I think that may have been one of the factors. Again, the highly leveraged capital structure, the snapshot at September 30, 1999, is heavily influenced by the losses that Avista incurred in its trading operations in the earlier part of 1999, because your equity is made up of common equity and retained earnings, and when you have losses, it's a charge against retained earnings so your equity goes down.

Q. You had indicated earlier that you thought one of the reasons for the Standard and Poor changing its rating was the lack of a power cost adjustment in Washington. Is that as important as the capital structure of the company in this case?

A. Well, I can't get into the minds of Standard and Poor. I know they mention both, and Moodys in their evaluation of this company mentioned both.

Q. What downward adjustments to the cost of debt

and preferred would you use in this case, or that you used in this case would you make to account for the fact that Avista's debt was downgraded due to its capital structure?

A. I didn't make any adjustment. I don't think any adjustment is warranted. I believe the capital structure should be one that is representative of the industry, is representative of the requirements of investors, and that should be the benchmark that the Commission uses in determining a fair rate of return. The component costs are the ones that are specific to the utility operation, which is the imbedded costs that I had calculated in my testimony.

Q. You haven't made any study of the capital structure of combination utilities like Avista's or pure electric companies that have more than, say, 50 percent of their revenues accounted for by nonregulated businesses, have you?

A. No. Specifically, my capital structure study was based on the 12 comparable companies where the requirement to be in the group was at least 80 percent of your revenues from utility operations.

Q. Would it surprise you if electric utilities which have diversified significantly into nonregulated businesses have lower equity ratios than the 47 percent

that you recommended be used to set rates in this case?
A. It would not surprise me if it's different from this industry average, and it probably wouldn't surprise me if it's lower, because I think one of the things that happens when you go into diversification, you usually lead with equity and then come back when the businesses get more established when you finish debt.
Q. Could you refer at this point to the schedule WEA-2, and it's part of Exhibit 102.
A. Yes.
Q. Can you tell us which of those debt instruments listed on this schedule have an indenture or some other requirement regarding interest coverage to be able to issue more debt?
A. I do not know the specific indenture requirements. In my discussions with Mr. Eliassen, I was led to indicate that this was not a consideration. It was not a binding constraint. In my experience, there is usually some default provision in the indenture, but it's usually well below the requirements for rating agencies and corporate managements own standards so that it only comes into play when you are in an extreme situation.
Q. At September 30th, 1999, Avista had 264.6

million of convertible preferred stock outstanding, didn't it? I obtained this from the 10-Q.
A. That sounds correct, yes.
Q. You didn't include the cost of this convertible preferred stock in your cost of preferred, did you?
A. I used the cost as of June 30th, 1999.
Q. Did you use the convertible preferred stock? On your Schedule 2, do you show any?
A. I don't, no. I don't see where it's listed on Schedule 2.
Q. So the answer is no, you didn't include it?
A. The answer is no, I didn't include it.
Q. Then it is the case that if this amount of convertible preferred stock were considered common equity capital, would you accept subject to check that Avista's common equity ratio at September 30th, 1999, would you 42.8 percent?
A. Yes. If you can assume it's converted to equity, it would increase the ratio, and that number sounds in the ballpark to me.
Q. Why did the Company issue convertible preferred stock?
A. I believe that stock was issued in the context of the dividend cut.

Q. Do you know to whom it was issued then?
A. I think it was issued to shareholders who preferred to try to maintain their income.
Q. At the time when the Company issued the convertible preferred stock, did they contemplate that it would, in fact, be converted?
A. I think they contemplated it as a mechanism to maintain the income for those individuals who were adversely affected by the dividend cut, and I think subsequently, the stock has been converted.
Q. Do you know when it was converted?
A. I believe in February of this year.
Q. Do you have any records of that, or does the Company have records of that?
A. I'm sure the Company does. Since my capital structure was based on the industry hypothetical, and since I was using the component cost related to the utility, it was not picked up or relevant to my analysis.

In the materials that I have reviewed, the Value Line reports, the Merrill Lynch, the Goldman Sachs reports, the Moodys, and Standard and Poor reports, there is discussion of this transaction, so I was aware of the transaction, and it is something of interest to those that follow the Company, but for the

purposes of cost of capital where we are using the hypothetical industry capital structure and the component cost related to the utility, it just didn't figure.

Q. Is it your testimony that all of that convertible, the 264.6 million dollars of convertible preferred, that all of it was converted in February?

A. I really don't know. I haven't focused on it. I know there was a major conversion in the last several months. I don't know if it was all of it or matters of it or how it was executed.

MS. TENNYSON: If the Company could provide to us an indication of how much of this was converted, I would ask for that as a record's requisition.

JUDGE SCHAER: That would be No. 25. Is that something the Company can provide, Mr. Meyer?

MR. MEYER: We can do it.

Q. (By Ms. Tennyson) Dr. Avera, I would like you to review the remainder of the exhibits that we have presented. I believe they are all responses to data requests, and just let us know whether these are responses prepared by you or under your supervision or direction.

A. Does this include the ones that were indicated earlier as well as the ones you handed to me

today?
Q. Yes.
A. I believe they are. I looked at the ones -- with the expectation of the economic report, which we talked about.
Q. That's correct. Are these true and correct to the best of your knowledge?
A. Yes, ma'am, they are.
MS. TENNYSON: I would move the admission of Exhibits 103 through 118 and 128 through 134.
JUDGE SCHAER: Any objections?
MR. MEYER: No objection.
JUDGE SCHAER: Those documents are admitted.
MS. TENNYSON: I have no further questions of this witness at this time.
JUDGE SCHAER: Mr. ffitch, did you have questions for witness?
MR. FFITCH: I do have some questions. I would like to request a short recess at this time before we continue, with the leave of the Bench.
JUDGE SCHAER: Why don't we take our afternoon recess at this time. Please be back at 2:50. We are off the record.
(Recess.)

CROSS-EXAMINATION

BY MR. FFITCH:

Q. Good afternoon, Dr. Avera. My name is Simon ffitch. I'm the assistant attorney general with the Office of Public Counsel representing consumers in this case. Dr. Avera, I'd like to start out by asking if you agree with me that your testimony in this proceeding addresses two main areas: one, capital structure, including the imbedded cost of debt preferred stock, and two, the cost of equity capital.

A. Yes, Mr. ffitch, I can agree on that.

Q. We are off to a good start. I'd like to talk to you about the first area, capital structure, initially, but before I ask you about the specifics of your testimony, I'd like to ask you a general or hypothetical question about capital structure.

Let's say that we have two utilities, Utility A and Utility B, and they have identical business risk. They are the same size. They have the same generation characteristics and the same customer mix. Okay so far?

A. Yes, sir.

Q. Let's assume that Utility A is capitalized with more equity and less debt than Utility B; that is, Utility B has used more debt capital to finance its

assets. Are you still following?
A. So A has more equity, less debt. B has less equity, more debt.
Q. Right. You could assume that they have sort of the opposite amounts. My little chart that I made for myself shows Company A having six units of equity and four of debt; whereas Company B has four of equity and six of debt, just as an example.
A. Yes, sir.
Q. Am I correct to understand that in this hypothetical, Utility B has a higher cost of equity capital than Utility A?
A. In your theory hypothetical, that would be the case. The cost of equity to Utility B would be less than Utility A. We can't say as to what the weighted average cost would be, but just the equity component I think would unambiguously be higher for Utility B.
CHAIRWOMAN SHOWALTER: Wait a minute.
THE WITNESS: Utility A would have the lower cost of equity, given all the assumptions you've made. Utility B would have the higher cost of equity.
Q. (By Mr. ffitch) Thank you. Now let's turn to Exhibit 102 to your Schedule WEA 5. That schedule shows the capital structure that you are recommending

for this proceeding; is that right?
A. That is correct.
Q. In Exhibit 102, just for reference of parties and the Bench parties, it is midway through the exhibit, Page 1 of 1, Schedule WEA-5. That capital structure is the average capital structure of a sample of companies that have both gas and electric operations. I believe you testified earlier to that effect; right?
A. That is correct, and we also checked it against some other benchmarks, so it seems to be a pretty good industry representative capital structure.
Q. That capital structure that you recommended here is not, again, the actual capital structure of Avista, is it, Dr. Avera?
A. No, it is not.
Q. Was it your decision to utilize a sample group average capital structure in this proceeding, or did you present this testimony at the request of the Company?
A. I recommended that we do a hypothetical capital structure based on the industry. We had done it differently in Idaho, and I felt this was a better way to proceed, and the Company agreed with me.
Q. Although the percentages of capital that you

recommend for a ratemaking capital structure are not those of Avista -- I'm stool looking at WEA-5 here -- the imbedded cost rates are correct, and just again, sort of pointing to the exhibit, we are talking about the numbers under "component cost."

A. Yes. I'm glad you agree they are correct, and they are the numbers for Avista.

Q. Those are the cost rates that are Avista's, in other words.

A. Yes, Mr. ffitch.

Q. We just kind of keep our finger on this exhibit and go over to WEA-2, all still part of Exhibit 102. It's a few pages earlier, and I'm going to Page 2 of WEA-2, Page 2 of 6. We see that the imbedded cost rate of debt that you use, 7.83 percent, is actually Avista's imbedded cost rate for long-term and short-term debt at June 30th, 1999; correct?

A. That is correct for that that is associated with the utility.

Q. And that number appears in sort of the far bottom right-hand corner of this exhibit in the far right column opposite "total debt," just for location on the exhibit; isn't that right?

A. That is correct. The 7.968 is the long-term component, and then we averaged in the lower short-term

component, and the weighted average is 7.832 that I actually use.

Q. Now, if we look at going back even further to the front of this exhibit, WEA-1 -- again, still on Exhibit 102. We've seen this before in previous cross-examination -- we see the source of the capital structure that you recommended in this proceeding; isn't that correct?

A. Yes.

Q. Is the debt that you show there, the 47 percent, comprised of long-term and short-term debt? I think you've already answered this question.

A. I think I answered it in the negative that it is the long-term debt, not the short-term.

Q. And I just wants to get a clarification here. Again, there was previous examination on this point, but have you provided support on this issue in your work papers with regard to the components of debt from this combination utility group?

A. In my work papers, I have the pages from the 10-K that we got off the Internet from the Free Edgar service, and these numbers are drawn from those Internet sheets, that they were printed out off the Internet.

Q. If I recall, you had indicated you were going

to, if necessary, supplement that information to respond to a record requisition. Am I remembering correctly?
A. Yes. The request was what would those numbers be if short-term debt were included, and I haven't had a chance to look if in every case the pages I pulled off the Internet have sufficient information on the short-term debt to calculate this with a short-term debt included.
Q. Do you have those work papers in the hearing room today?
A. Yes, I do.
Q. I may just ask after we are off the record to just take a look at those so that we can help locate them within our own set.
A. Certainly.
Q. You were Avista's cost of capital witness in last year's rate case in Idaho; correct?
A. I was.
Q. And you addressed capital structure and the cost of equity in that proceeding as well; is that right?
A. Yes, I did.
Q. Now I'd look you to turn to our cross-examination Exhibit 119. This is a thick

exhibit. In that request, we asked the Company to provide a complete copy of your testimony in the most recent proceedings before the Idaho PUC as well as any PUC orders, and this was your response, is it not? You did, in fact, provide that testimony and that order?
A. Yes, sir, we did.
Q. The capital structure you recommended in Idaho was Avista's actual capital structure, and it was not based on a sample of firms; correct?
A. It was the actual utility capital structure.
Q. Of Avista Corporation; correct?
A. Yes.
Q. Was it your decision to use Avista's actual capital structure in that case, or did you present that testimony at the request of the Company?
A. At the time, we discussed with the Company what should be done because --
Q. Excuse me. Who is "we"?
A. The people in my shop, Adrian McKenzie, who worked with me closely on this testimony. When we had a chance to look at the capital structure for Avista, we noted to the Company that it was out of line with industry norms, and I indicate that on Page 23 of my Idaho testimony, but in discussing it with the Company, the Company said their preference was to be consistent

with what they had done in Idaho previously and go with the actual utility capital structure. In my written testimony, I noted it was out of line and that using this capital structure there should be some recognition of the capital structure being less equity and more debt than the comparable companies in determining the cost of equity.

Q. I'm sorry. You mention in your answer that in your testimony in Idaho, you stated that your testimony in support of actual capital structure was out of line; isn't that right?

A. No. My testimony was that the actual utility capital structure for Avista was out of line with industry norms.

Q. Let's get back to my question and make sure I understand. Your answer essentially is that you were directed by the Company to use the actual capital structure for Avista Corporation in Idaho; is that your answer?

A. That's not quite correct, Mr. ffitch. The correct answer is we discussed it. The Company indicated that they had a preference for using the actual capital structure and that that had been the practice in Idaho, so based on that, that's the way I proceeded. It was not like -- I guess in my military

background coming out, I determined the word "directed" meaning like there is an order. You shall provide us with what you think. I think the use of this capital structure was an agreement we reached with the Company that was mutual.

Q. Can you point out in your Idaho testimony where you state that setting rates on Avista's capital structure is a bad idea, or if you do state that in the Idaho testimony?

A. On Page 24 at Line 25.

Q. Is that in your direct testimony?

A. It is.

Q. Page 24, and that is Exhibit 119 in this proceeding, and that's your answer. That is where, according to your testimony here, you state that the use of capital structure is a bad idea; is that correct?

A. No. I say that it has more debt and less equity than the industry benchmarks, and then continuing on on Page 26, I discuss how hypothetical capital structures are used, and then finally on Page 27, I discuss the implication of using the requested capital structure.

Q. Now, the capital structure you recommended in Idaho was adjusted to remove the Company's investment

in unregulated operations, was it not?
A. Yes, sir, it was.
Q. Did you recommended that the equity capital of unregulated operations be removed from the ratemaking capital structure in Idaho because you believe that utility ratepayers should not be required to provide a return on non-utility equity capital?
A. No, sir. I did that because I was advised that that had been the practice of Avista in its presentations before the Idaho Commission --
MR. MEYER: I don't believe the witness is finished.
MR. FFITCH: I believe he answered the question.
MR. MEYER: Were you finished?
THE WITNESS: No, I was not, because in part of Mr. ffitch's question, there was an implication of the motivation for my taking out the unregulated subsidiaries equity, which was inconsistent with the facts.
MR. FFITCH: Your Honor, I asked a yes or no question.
JUDGE SCHAER: Mr. ffitch, would you read the question again, please?
MR. FFITCH: I believe I got the answer. I'd

be happy to: Did you recommend that the equity capital be removed from the ratemaking capital structure in Idaho because you believe that utility ratepayers should not be required to provide a return on non-utility equity capital?

The witness responded, to my recollection, "No. I did that because it was the Company's preference to reflect prior practice in Idaho." The witness then began to continue with an explanation. I would prefer those explanations, Your Honor, come in response, if at all, to redirect from Avista's counsel.

JUDGE SCHAER: I'm going to overrule your objection, Mr. Meyer. It appears to me it was a yes, no question, and there were any dozen of other reasons why the witness made the recommendation other than the one cited in the question, it will be perfectly appropriate for him to say no.

MR. FFITCH: Thank you Your Honor.

Q. (By Mr. ffitch) Dr. Avera, would it be fair to say that you do believe that utility ratepayers should be required to provide a return on non-utility equity capital?

A. No. I don't think that is the effect of what was done here.

Q. I'd like to refer you now to what has been

marked for identification as Exhibit 120. We are moving now out of the Idaho exhibits. Exhibit 120 was prepared by the Public Counsel office. This shows your recommended capital structure at the top, and the capital structure you recommended in Idaho last year at the bottom.

A. Mr. ffitch, I do not have a copy of this.

MR. MEYER: I'd be happy to provide one.

JUDGE SCHAER: Mr. Meyer, this is not the first time this has come up. Was this witness not provided with the cross-exhibits?

MR. MEYER: Your Honor, he has them. He has not numbered all of them since he arrived late last night.

JUDGE SCHAER: Okay. I just wanted to make sure you had them available for him when they came to you as closely as possible. Go ahead.

Q. (By Mr. ffitch) Just to start again, now that you've actually had a chance to look at what I'm talking about. The top of this exhibit, which was prepared by my office, incorporates two representations of the capital structure from your exhibits in this proceeding and the Idaho proceeding.

At the top of the page is the Washington capital structure recommended in this case, and bottom

is the capital structure you recommended in Idaho last year. We've taken the liberty of combining the long-term debt from the Idaho exhibit down below it as you will see where it says "debt, long- and short-term," so that visually, they are more easily comparable, and I'll give you just a little bit of time, if you need it, to confirm that these are sort of accurate representations from these two exhibits of yours.

A. Yes, sir.

Q. One of the things I notice when looking at your capital structure recommendations is that the cost rate for each type of capital debt, preferred stock, preferred trust securities, et cetera, are quite similar; would you agree?

A. That is correct.

Q. However, with respect to the amounts of each type of capital, the amounts are very different; for example, in Idaho, you recommended a ratemaking equity ratio of about 37-and-a-half percent. In Washington, you recommend 47 percent. The debt component for Avista you used last year in Idaho was about 52 percent, and in the instant cases 47 percent; is that correct?

A. That's correct.

Q. And also the amount of preferred stock and preferred trust securities you recommend in this case, based on the average of your sample group, is quite different than the actual amounts of the type of capital that Avista employs according to your testimony in Idaho; right?
A. It is.
Q. So in Idaho, you recommend that rates be set using more of the low cost capital. In Washington, you recommend that rates be set using more of the high cost capital or equity; isn't that right?
A. Capital structures were different and more equity in Washington than in Idaho.
Q. So my characterization was correct?
A. Yes. I didn't say high cost or low cost. I recommended different capital structures based on different approaches to capital structures in the two states.
Q. We see also that due primarily to the difference in capital structure that you recommended, the overall cost of capital for the same company is 9.447 in Idaho versus the 9.93 you recommend here; right, as shown on this exhibit also?
A. That's both the effect of capital structure and a change in the cost of equity as well, so the two

moving parts, capital structure and equity return.
Q. If we were to take the 9.93 percent overall return you recommend in this proceeding based on the average capital structure of a sample group of companies and plug it in down below as the overall return for Avista's actual capital structure you used in Idaho, it would just be a matter of algebra, wouldn't it, to figure out what return on equity would be applied?
A. To take the components from this case --
Q. You want me to walk through that again?
A. Yes, please.
Q. It's quite a bit in one mouthful. I'll just ask it again. We would take the 9.93 percent overall return that you recommend in this proceeding. You can see that number up in the top spread there of the Washington capital structure.
A. Yes, Mr. ffitch.
Q. And based on the average capital structure of a sample group of companies, plug it in down below as the overall return for Avista's actual capital structure used in Idaho, it would just be a matter of algebra, would it not, to figure out what return on equity would be applied?
A. You could do the algebra. There is an apples

and oranges since you are looking at two different points in time, and there is a change in the component cost.

Q. Right, but if you just did the algebra, would you accept subject to check that the return on equity that would be produced using Avista's utility-only capital structure shown on the bottom of this exhibit and the 9.93 percent overall cost of a capital you recommend here, the results of equity return would be 13.82 percent.

A. That algebra sounds correct. I don't think you can draw much meaningful inference from the algebra. I assume it's correct. I haven't checked it, but the order of magnitude seems correct.

Q. Subject to check, and that's more than 100 basis points higher than you testify is reasonable for the Company; correct?

A. No, sir. My testimony of the reasonableness is based on the capital structure that I used in this case. So you are applying a return from this case to a capital structure from an old case, and I think that's an apples and oranges exercise.

Q. My question was, if you do the algebra, however, that yields a 13.28 percent return on equity and that, in fact, is over 100 basis points higher than

the 12.25 percent?
A. 13 is higher than 12, but those are not equivalent numbers.
Q. The Idaho Commission accepted your recommended capital for ratemaking purposes in last year's proceeding, didn't they?
A. Yes, they did.
Q. But they did not accept your cost of equity recommendation, did they?
A. No, sir, they did not.
Q. And the Idaho Commission allowed the Company a 10.75 percent return on equity and the 37 percent equity ratio; correct?
A. Yes, sir.
Q. I realize you disagree with that assumption, but let's assume that the Idaho Commission was right on the money, and Avista's cost of equity capital with a 37.5 percent equity ratio is 10.75 percent. Can you follow that assumption? Do you have that in mind?
A. Yes, sir.
Q. If the Company's equity ratio increases from 37.5 percent to 47 percent, cost of equity should decline below that 10.75 percent level; correct? It's a matter of mathematics, is it not?
A. I don't understand. If you increase the

common equity and preserve the weighted average cost of capital? Hold that constant?
Q. No. Let me walk you through this again. Cost of equity capital -- let's assume that the Idaho Commission is correct; that the cost of equity capital with 37.5 percent equity ratio is 10.75 percent.
A. That they were correct in 1999 when they made that estimate in July.
Q. You have that assumption in mind. If the Company's equity ratio increases from 38-and-a-half percent to 47 percent, the cost of equity should decline below that 10.75 percent; right?
A. We would have to freeze this in time because they are all moving parts, but if the Idaho Commission had been correct in 1999 about the cost of equity, and if you made no other change other than change the amount of equity in the capital structure and reduce every other component of the capital structure and you preserve the rate of return, then as a matter of mathematics, the equity cost will go down.
Q. I'd like you to look at another cross exhibit. This is 121. It's the next page, and again, this exhibit was prepared by my office. At the top of that page is the capital structure you recommended in Idaho with one change. The component cost for common

equity is 10.75 percent, which is actually the amount adopted by the Commission. That's been plugged into the capital structure this time.
A. Yes, sir.
Q. Your capital structure, along with the Commission's equity award of 10.75, produced an overall return of 8.979; correct?
A. Yes, sir.
Q. That's shown on the top half of this exhibit. This exhibit also shows that if you use that overall return -- I'll call it 8.98 percent rounding up -- that's applied to the capital structure in imbedded cost rates you recommend in Washington, the allowed return on equity would have to fall to 10.23 percent; isn't that right?
A. That is correct. If you are going to freeze the rate of return, the weighted cost of capital, the only way you can get there is to drop the cost of equity if you freeze every other moving part.
Q. That's what this exhibit shows, does it not, if you take that 8.979 from the top half, bring it down below to the Washington section of the chart as the outcome, your outcome is given that it's 8.98 percent. If you back up your calculations, you have to come out with a 10.23 percent common equity, do you not?

A. Right. If you freeze the outcome, the only way to get there with a new capital structure is to change the one moving part, which is the cost of equity.
Q. I only have a couple more questions about capital structure and then I'll move on to cost of equity capital, but I'd like to look for a moment at the issue of Avista's utility-only capitalization. As we've already discussed, in your recommended capital structure in Idaho last year, you elected to remove the unregulated equity investment of Avista from a consolidated capitalization for ratemaking purposes; right?
A. Yes, sir.
Q. According to the testimony you provided here in Washington, that amounted to about 240 million dollars of equity out of a total consolidated capitalization of 1.6 billion, and I'm referring to numbers that are on your schedule WEA-1 if you need to check those.
A. You mean in the WEA-1 in the Idaho testimony?
Q. Yes. I apologize. I was referring to that.
A. Yes, sir.
Q. That's our Exhibit 119. I'd like you to look at Avista's response to Public Counsel Data Request 24,

and that's been marked for identification as Exhibit 122, so in the books, that's the exhibit right after the chart we went through, capital structure tables we were just looking at.

A. Yes, sir.

Q. Then if we could turn to the second page of that response, I'd like you to look at the right-hand column. That represents the amounts from the Company's consolidated balance sheet as of September 30th, doesn't it?

A. Yes, sir.

Q. Would you agree that if we took the total amount of common equity, which is 432 million dollars, and added that to the convertible preferred of 264.5 million which totaled 696.5 million -- I see you are reaching for your calculator so I'll let you punch those in. I think again we are covering some ground that may have been touched on before.

A. Yes.

Q. And that adds up to 1.628 billion, subject to check?

A. I lost you somewhere. We add the convertible preferred stock, which we should add that to equity. The equity balance is 432. I get 696.

Q. Right, and then we divide that by the total

amount of capital at 1.628 billion, which is just as the bottom of that column, and we come up with a consolidated equity ratio of about 43 percent; is that right?
A. Yes.
Q. That's for the consolidated operations of Avista, regulated and unregulated; correct?
A. Yes, but we have added in the notes payable to be refinanced so we have included the short-term debt in this calculation.
Q. Now I'll ask you to turn to Exhibit 123 marked for identification. This is the Company response to Data Request 33, and the document itself is the most recent Avista 10-K.
JUDGE SCHAER: What exhibit number, Mr. ffitch?
MR. FFITCH: Exhibit 123, Your Honor. What we were provided with was the 10-Q.
JUDGE SCHAER: So you asked for the 10-K and you got the 10-Q?
MR. FFITCH: That's what we've submitted with the exhibit, Your Honor, yes.
Q. (By Mr. ffitch) I'd like you to look at Page 5, and this exhibit is only admittedly excerpts from the entire 10-Q, and we've provided Page 5. The top

half of that page, we see under the heading, "other property and investments" an entry for "non-utility property and investments - net," which is 154 million dollars; correct? Do you see that figure? That's in the first --

A. This is Page 5 of the September 30, 1999, 10-Q?

Q. Yes. It's the first column of numbers under the heading September 30th, the category, "other property investments," second entry --

A. Non-utility net $154,055.

Q. Right, 154 million; correct?

A. Yes.

Q. This level of unregulated investments is lower than the amount you removed from equity capital in Idaho; correct? That amount was 240 million?

A. Yes.

Q. So Avista currently has a smaller unregulated investment than it had when did you your review in Idaho; is that right?

A. I think we want to make sure we have apples to oranges because it was a different time period, but also I would like to take a few minutes to make sure -- like the energy commodity assets, some of those may be in the unregulated energy trading activities, so I'm

not sure those are equivalent numbers.
Q. As far as the time frame of my question, I did ask you whether currently there was a smaller unregulated investment, but I accept the rest of your answer.
A. But I think this whole caption of other property investment, you have a caption for utility property and all of the things here are other than utility, so the non-utility property investment is one of the things that goes into the non-utility property.
Q. So you don't know for sure whether this is the extent of the unregulated investment shown on this balance sheet; is that right?
A. That's correct.
Q. If you will assume just for purposes of my question that that is the extent of the unregulated investment, and I understand you answered that you are not certain about that, but if you would assume that it is 154 million, we calculated a moment ago the current consolidated common equity ratio to be about 43 percent. If you removed 154 million of unregulated equity from that calculation to produce a utility-only capital structure -- this is some more math coming at you here -- would you agree that the result of that calculation would be an equity ratio of approximately

33 percent?
A. I could calculate that. Now remember in our exercise, we did not take out the short-term debt, so this 43 percent equity ratio includes the short-term debt in the capitalization before we start taking out this particular caption of non-utility properties. I think it's closer to 44 percent if we take out the short-term debt.
Q. The only thing we are changing here is we are starting with the 696 million that we had before in our prior calculation?
A. But I noted in the prior calculation we did not take out the 103.5 million of short-term debt.
Q. So it's your testimony that that needs to be done to calculate the correct equity ratio?
A. Yes, sir.
Q. Do these data indicate that Avista's utility operations are more leveraged now than when you filed your testimony in Idaho?
A. No, sir. I don't think we can draw that inference from the calculations that we've done.
Q. You testify in this proceeding that utility risk is increasing due to uncertainties attendant to retail competition. Do you believe it represents prudent financial policy to increase leverage during a

time when operational risk is increasing?
A. I think as I discussed earlier, the factors that go into the management's decision about leverage involve many considerations, and that's why it's prudent for a commission to decouple management's leverage decisions from the commission's fair rate of return decisions.
Q. You have taken issue with the hypothetical calculations that I have presented to you a moment ago, which resulted in a 33 percent equity ratio. Let me ask you, accepting your disagreement with that calculation but assuming a 33 percent equity ratio, do you believe that that represents a prudent financial policy for a combination gas and electric utility operation today?
A. I think it depends on the circumstances of the utility, their long-term objectives. I don't think it would be representative of the industry or representative of what the rating agencies require, and that's why I don't think it ought to be used for ratemaking purposes.
Q. So are you saying that that is not a prudent financial policy to be in that kind of a leveraged position?
A. I say my response, Mr. ffitch, is I can't say

just looking at those facts. I look at the whole situation. The best policy for the Commission is to get them out of the question of judging the prudency of the particular capital structure at a point in time and use a hypothetical which gets them out of that kind of necessary decision. Let management make the leverage decision.

Q. Do you disagree that highly leveraged company, the company carrying a high degree of debt is facing a higher degree of risk than a company with low leverage with a low debt load level?

A. No. It depends on all the other facts and circumstances. You can have a highly leveraged --

Q. I'm not asking about all the other facts and circumstances. Let's say all other facts and circumstances equally, a highly leveraged company faces more risks, does it not?

A. Well, if we assume that the business risk is the same and the company overlays that with more financial risk, then the end result is greater risk --

Q. Thank you --

A. -- but the business risk has to be the same.

Q. I guess I'm trying to -- given that answer, which what I'm trying to get at is, if we are, as you appear to be saying in your other testimony, if the

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utility companies, including Avista, are facing increasing risk in their environment, then is it a prudent decision for the utility company to place itself in a more highly leveraged position?
A. I don't think you can judge the prudency just on the information you've given in your hypothetical. I think it depends on the other circumstances the utility is looking at. So the capital structure that a utility has in a point in time is a function of their strategy, their earnings, what they anticipate their future earnings to be, what they anticipate their future securities issues to be, so I don't think you can just look at a change in leverage and say it implies that there has been imprudent behavior. I don't think that follows.
Q. So you are saying it depends.
A. It depends, yes, sir.
Q. So as a matter of fact, in an environment of increasing risk, it may, in fact, be prudent for a company to place itself in a significantly higher degree of financial risk through leverage. You are saying that's, in fact, may well be a prudent thing to do.
A. We may observe a prudent management doing that because their leverage at a point in time fits in

to some strategic objective that ultimately will lead the corporation into a better strategic position. I think a management who is trying to look at the leverage has to incorporate their strategy as to commercial growth, policy. All those kind of things go into a decision about the prudent leverage.

If a company has enormous opportunities that are not easily financed with equity or they were not financed equity at this point in time, it may be prudent for them to issue more debt to take advantage of those opportunities.

Q. If the utility management elects to increase the leverage then, as perhaps you are suggesting, related to its utility operations during a time when risks are increasing, do you believe it would be reasonable for regulators to ignore that shift in capital structure?

A. I think regulators need to evaluate whether that capital structure creates a problem, and I think they need to decide what capital structure they are going to use for ratemaking purposes. I think that's the reason that many commissions such as this one have chosen to use industry benchmarks for capital structure decisions so that they can decouple the effects of management from the ratemaking business of the

commission.
Q. So does that mean you are saying it would be reasonable for regulators to ignore that shift in capital structure?
A. No. I think regulators need to be mindful of what the capital structure is, but I believe in many cases it is a better regulatory policy, and in this case certainly a better regulatory policy, to base their fair rate of return findings on industry benchmarks rather than try to chase down the behavior of the particular corporation at a particular point in time.
Q. I understand that's your testimony. I'm asking you if you believe that it would be reasonable for regulators to ignore that shift in capital structure.
MR. MEYER: I object. The question has been asked and answered at least twice. He may not like the answer, but it's been answered.
MR. FFITCH: I'm willing to take answers I don't like, but I'm not sure I've got an answer to that specific question about whether it would be reasonable or not for regulators to ignore the shift.
THE WITNESS: My answer is regulators should not ignore what's happening with capital structure, but

that does not mean they need to use it determining a fair rate of return. It is usually best when you have a volatile capital structure situation to use a hypothetical benchmark for the capital structure decision in making a fair rate of return.

Q. After this rate case is over in calculating the achieved return on equity, will the net income which results from this case be applied to the level of Avista's equity capital which appears on its books or to a level of equity equal to 47 percent of the total capital?

A. I'm not sure in what context. What the investor will see is not what this commission orders. The investor will see the effects of the rates in Washington and the rates in every other jurisdiction and the costs on all the jurisdictions and what the accountants say the end result is.

The performance of the corporation is not solely a function of the findings of this commission. It's just one of the inputs that will determine ultimately what the realized rate of return on equity is for this corporation at any point in the future.

Q. I guess I'm asking about the application of the net income which results from this rate case?

A. The answer is no net income results from this

rate case. What will result from this rate case is a new set of rates that people will pay as they consume electricity and gas in Washington, and that will be part of revenue that Avista realizes, and then there will be cost, and the result of the revenues minus the cost and all the other expenses will bottom down to the net income that Avista will ultimately realize. This commission is not setting income. It's setting rates.

Q. So your testimony is that although residential ratepayers will see a 14 percent increase in their rates if the request is approved that there will be no net income to the Company?

A. No, sir, I'm not saying that. I'm saying the Commission is not setting the net income for this Company. It's setting the rates that residential, commercial, and other customers will pay, and the ultimate effect on the net income is determined by many factors other than the rates that are set by this commission.

Q. So there is net income. I thought you had said earlier there was no net income.

A. The Commission does not set net income. That net income is the end result of consumers paying the rates, their usage, the cost, and all the other factors that will ultimately determine the performance of this

corporation.
Q. We are perhaps a little at cross purposes here, but my question implies or assumes that there will be net income which results from this case. I did not say the net income which will be set by this commission. I just said the net income which results from this case be applied to the level of the equity capital which appears on the books or to a level of equity capital equal to 47 percent of total capital?
A. The net income will result in whatever the balance sheet says in that period that the net income is earned when you are calculating financial ratios like rate of return on equity.
Q. Now I'd like to turn to the issue of cost of equity capital. I don't have a large number of additional questions, just a couple of additional areas. You add 25 basis points to your cost of equity to account for the location costs; correct?
A. Yes, sir.
Q. You also add another 25 basis points to recognize management efficiency; correct?
A. Yes. As Mr. Dukich has recommended, the Company has demonstrated in their performance.
Q. So your bare-bones recommendation for cost of equity is 11.75 percent if you take out those two 25

basis point adders; isn't that right?
A. Yes, sir.
Q. I'd like to ask you to refer now to what's been marked for identification as Exhibit 124. That is the Company's response to Public Counsel Data Request No. 43.
MR. FFITCH: And at this point, Your Honor, just as a point of clarification, we had marked two exhibits for this same document, Exhibit 124 and 125 because of the subparts that go along with this request. I think that is unnecessary, and I would just like to clarify that we only really need to have this document identified as Exhibit 124, and we can simply withdraw or delete the identification for Exhibit 125. There is no separate document for Exhibit 125.
JUDGE SCHAER: I'll note then that you will withdraw Exhibit 125. Do you want 124 to be identified as Public Counsel Data Request No. 43B and C, or are you just getting rid of B?
MR. FFITCH: It could simply be response to Public Counsel Data Request No. 43.
JUDGE SCHAER: So we'll take out the subheading there. Thank you; go ahead.
Q. (By Mr. ffitch) In the question C on this data request, the Company was asked what the rate of

impact of the 25 basis point increase and the cost of equity would be, and you responded that that would raise rates approximately 1.28 million dollars annually. Do you recall that?

A. Yes, sir.

Q. If a 25 basis point addition to the cost of capital cost ratepayers about 1.3 million annually, then a 50 basis point increase will, I assume, increase rates approximately twice that or 2.6 million annually? Some pretty basic math there?

A. Yes. We can agree on that.

Q. We are still on the same exhibit, but we are going to ask about Sub Question B. There, you were asked if the Company has presented any evidence regarding its intent to issue common equity in the future, and the answer you gave here is no. This is Question B and Answer B and the answer is no; correct?

A. Yes, sir.

Q. Now I'd like to get you to turn to Exhibit 126, and that's the response to Public Counsel Data Request No. 36, and if could you look at Page 10, the second part of that, the first part is a Moody's report. The second part of that is a Standard and Poor's report, and I'm asking you to look at Page 10 of the Standard and Poor's report.

If you look at the center column near the bottom, first of all, there is a heading "capital structure." In that first paragraph under "capital structure" near the end of the paragraph is a statement that Avista is currently in the middle of a share repurchase program of up to 10 percent of its common stock over the next two years; do you find that?

A. Yes, sir.

Q. So even though the Company has presented no evidence that it intends to issue new equity and is, in fact, currently buying back shares of stock from investors, do you still believe it's reasonable to charge ratepayers 1.3 million dollars a year to cover the cost of issuing stock?

MR. MEYER: Object to the form of the question. It assumes a fact not in evidence. The Company is currently not buying back its stock.

JUDGE SCHAER: Do you want to phrase this as a hypothetical based on the statement in this exhibit, Mr. ffitch?

MR. FFITCH: I'd be happy to.

Q. (By Mr. ffitch) As a hypothetical question, assuming that the Company were to engage in a share repurchase program of the type described in the Standard and Poor's report, would you believe it would

be reasonable to charge ratepayers 1.2 million dollars per year to recover the cost of stock issuance also assuming no plans to issue new stock as reflected in your response to the data request?

A. Yes, sir. Because that is an adjustment to reflect the effect on past stock issues; that the stock could not be in the hands of the public and the investors without having incurred those costs to move the stock from the Company into the public's hands.

Q. Earlier at some length, we discussed your recent testimony on behalf of Avista in Idaho, and as we noted, the Idaho Commission awarded the Company an equity return of 10.75 percent, while you recommended an equity return of 12 percent; correct?

A. Yes. We did agree on the flotation adjustment. Both the Commission and my testimony recommended a 25 basis flotation adjustment.

Q. I don't think I asked you about that. I just asked you about the equity return of 12 percent; is that correct?

A. Yes, sir. We differed on the equity return.

Q. In the Idaho testimony, as do you here, you use the multistage DCF analysis along with other methods to estimate the cost of equity capital; correct?

A. Yes, sir.
Q. Even though the Idaho Commission elected to use a multistage DCF analysis, they rejected your particular version of the multistage DCF, did think not?
A. Yes, sir, they did.
Q. I'd like you to turn back to Exhibit 119, the first cross-examination exhibit, and the very first portion of that exhibit is the Idaho order. I'd ask you to turn to Page 23 in that order. If you could look at the second full paragraph and please read the first sentence beginning, "We are not inclined."
A. "We are no inclined to accept averse methodology as it can put too much weight on deregulated operations without assuring that regulated operations are not paying an excessive share of investor growth expectations for deregulated operation."
Q. Could you also read the next sentence, please?
A. "We are also uncomfortable come with the projection Avera uses to the 2008 to develop his recommended return requirements."
Q. Thank you. Now could you please turn to what has been marked for identification as Exhibit 127.

This exhibit is a copy of the Company's response to Public Counsel Data Request 49, is it not?
A. Yes, sir.
Q. In that request, you were asked to provide the most recent data available for regulatory research associates regarding authorized common equity ratio and return on common equity?
A. Yes, sir.
Q. You provided this attached document. It's true, is it not, that publication -- perhaps before I ask you this question we'll get to the numbers. I'll ask you to turn to the second page of the actual exhibit. That is a table of numerical values. The top of the page says "average equity returns authorized January '89 to December of 1999." I believe it shows a Page No. 2 in the upper left-hand corner. Do you have that in front of you?
A. Yes, sir.
Q. It's true, is it not, that that publication shows that the average allowed return on equity for 1999 for electric companies was 10.77 percent? That's in the very bottom band of the page?
A. Yes, sir, it does.
Q. And for gas companies, the average allowed return on equity was 10.66 percent?

A. Yes, sir.
Q. Thank you.
MR. FFITCH: I'd like to offer Exhibits 119 to 124 and 126 and 127 for the record.
JUDGE SCHAER: Any objection.
MR. MEYER: No objection.
JUDGE SCHAER: Those documents are admitted.
MR. FFITCH: I have no further questions. Thank you, Dr. Avera.
JUDGE SCHAER: Do Commissioners have any questions?
CHAIRWOMAN SHOWALTER: I do.

CROSS-EXAMINATION

BY CHAIRWOMAN SHOWALTER:
Q. If I ask you any questions which seem to assume an incorrect fact or premise, please correct me, because I'm asking these questions out of genuine curiosity and not with any particular assumptions or a knowledge base in mind.
A. Yes, Commissioner.
Q. You talked about the view of investors looking at companies as containing a regulated part and a nonregulated part, and I think the percentages given -- forgive me. I don't remember what this

represented -- a 3.5 percent and a 10.4 percent.
A. The regulated part would grow at a different rate than the nonregulated part; that the regulated part would grow at a 3.5 percent, which is what investors expected back when utilities are purer than they are now, and the 10.4 is more representative of what the investors expect competitive firms to grow at.
Q. Now I remember, and that was growth in earnings. Focusing now on the regulated portion of the business, I think there you provided either your own testimony or characterization of other investors' views that over time, transmission and distribution would remain regulated, and over time, generation would probably become competitive.
A. That's correct. In some shape, form, or fashion, but that's the general consensus view, I believe.
Q. Turning to the regulated part in the future of transmission and distribution, are you familiar with FERC Order 2000?
A. Yes, I am. I don't say that I'm conversant on it. I've tried to understand it, and I've talked to many others, and also 2008.
Q. To the extent that implementation of that order would result in companies turning over operation

of their transmission to some kind of regional transmission authority or operator, does the loss of control of the trends of the Company's transmission affect in any way the projection of the growth in earnings for that component of the regulated business?

A. I think it affects it because the belief is that however they decide the ownership of the assets and the RTO's and ISO's and these other things are going to sort out, that those assets will probably be limited to regulatory type returns, whether they are owned by the same people that own them now or they are contributed to some new entity that owns the RTO assets, and that in order to encourage investment in those assets and to bear the risk of owning those assets, there will be a return and there will be a growth over time, so that's where the 3.5 percent comes.

Those assets that are still under FERC or state jurisdictions or some combination, however it rolls out, will be limited in return to the kinds of regulatory returns that traditionally have been applied in the utility arena, so that's why those will be limited to the 3.5 percent growth.

Q. So the fact that the operation of the transmission assets may take on a different form won't

necessarily affect, in fact, you don't think will affect investors' expected returns or expected earnings growth on those assets?

A. No. I don't think so, because I think -- and I've just gotten a debriefing on some of the collaborative meetings that FERC has been holding around the country, but I think the parties have made pretty clear to FERC that these assets, for people to contribute them and for there continuing to be investment in transmission assets, and there is a lot of evidence that we've underinvested in transmission assets, it has to be attractive to investors.

So however they are run, the earnings on those assets have to be commensurate with the risk and sufficient to support the kind of growth that utilities have traditionally -- that investors who have supplied the money to utilities have come to expect in utility assets.

Q. Then I'd like ask a similar question about the distribution portion of the regulated portion of the business with respect to distributed generation and whether events there will have any effect, to the extent that the utility itself as part of its distribution responsibilities provides distributed generation to fulfill its distribution

responsibilities. I take it that would not necessarily imply any change in the kind of return or growth one would expect in the distribution business.

A. I wouldn't think so. Again, what's really relevant is not what I think but what investors perceive, but I believe the view is that distributed generation is really a substitute for investment and distribution and transmission facilities so that rather than building lines of sufficient size and reliability to make sure everybody can get electricity all the time, you have electricity created closer to the end user, and that relieves you of a lot of the investment in the distribution and transmission infrastructure, so the distributed generation is kind of in lieu of investment and distribution and transmission.

Q. Does it make any difference in that analysis whether it's the utility investing in the distributed generation to shore up its distribution system versus customers going out to a Costco type place and buying distributed generation, whether or not the utility had planned on that?

A. Well, in terms of investment, I don't think it matters. I think if we get a real large amount of distributed generation, to maintain reliability and safety, there is going to have to be some dispatch in

control to make sure that the output of distributed generators is harmonized with what is going on in the rest of the electric system because presumably, you will still have interconnected electric systems. So who actually makes the investment in the facilities I don't think is as important as that they are controlled as part of an integrated network, and I believe that's kind of what FERC is getting at.

Earlier this week, I was in Atlanta in a board meeting for Georgia Systems Operations Corporation. I'm outside director who manages the electric system for the 39 electric co-ops in the state of Georgia, and we spent three days talking about distributed generation and how we can encourage our cooperatives to invest in distributed generation but still control it in a way that insures the safety of the system and the reliability of the system.

Q. So from an investor's point of view thinking about investing in a utility, if you are aware that maybe the utility doesn't fully control at least who is buying distributed generation but maybe can control that interconnection and how this distribution operates, that as long as that's the case, an investor shouldn't expect any particular change in earnings of the distribution system because of distributed

generation?
A. I believe that's correct, because I think most investors expect that however distributed generation is integrated into the system, it's going to have to be under tight control and it's going to have to be consistent with the interest of all the people who rely on the electric system so that we are just kind of joined together. As long as we have an integrated electric system, and you introduce distributed generation in the nose of the interconnected electric system, that the investors know they will do this under a regulatory umbrella that they can expect the kind of returns that regulators will allow.
Q. My next question is changing your assumption, that there necessarily will remain an integrated grid. Supposing in some jurisdictions, probably not this one right away, distributed generation beats the grid in terms of price, and people go to Costco and buy their distributed generation as a stand-alone, get the fuel somehow, and get off the grid in some percentage, 10, 15, 20 percent. If that's the phenomenon, does that change an investor's point of view of the distribution system?
A. I think if it becomes a really big trend, I

think if we are talking about distributed generation in lieu of line extension so that you have distributed generators up in the remote Cascades where you don't have connection now, from an investor in the distribution and transmission assets, they just see that as less growth. They just don't extend into those more rural communities, but it would not affect the economics of those parts of the communities that are still interconnected to grid, and the grid still operates under some form of state and federal regulation, whatever form it may take after all the dust settles.

Q. What if distributed generation is looking even better, and people on the grid choose to use it instead of being on the grid in some significant measure, let's say, 10 or 20 percent?

A. That may happen, and I think that's why there has to be some risk in transmission and distribution assets; that even though the Commission may say, You have a monopoly. You will have the only grid in Western Washington, you can't make the customers use that grid. We have experience with monopolies like the street railways who nobody competed with them but they are gone because people got automobiles, so even if you are a monopoly and you have a blessing of the

government to be in the business, you've got to earn the business of the consumer to stay in the business, and that's why there is still risk even in regulated monopolies.

Q. But by and large, do you think that the kind of 3.5 percent earnings growth and the risk that most people are assuming now does not include that last scenario I gave you or includes maybe a small risk of it happening.

A. I think they probably have thought about that last scenario, but they probably give it such a small probability that it doesn't weigh very large. Unfortunately, the future of the small probability things are usually what happens, but I think in terms of looking at things now, they realize that could happen but they don't say that's a big part of their investment calculates.

Q. In the discussion about using a hypothetical benchmark, I follow the arguments as to why hypothetical benchmark might be better than actual, but now looking at what the hypothetical is based on, it's based on 12 or so or more companies. Am I correct on that? It's based on an analysis of a group of real companies; is that right?

A. It has three bases. It happens to be the

same as the average for those 12 companies, but then if you go and look at the Standard and Poor benchmarks for what they require, it's consistent with those benchmarks, and then if you go and look at what commission have allowed over the last five or six years, it is right in line with what commissions have allowed, so we happen to originally have gotten the numbers from those 12 companies, but we checked as to what the rating agencies say is required in this business, and then we check it against what commissions are generally allowing companies in terms of capital structure.

Q. I think I heard you say because Avista is in a fairly dynamic industry and is itself dynamic, it's safer to use this hypothetical than to look at Avista, at its actual structure; is that right?

A. I think it's more administratively convenient. I think you don't get into arguments in each rate case about where Avista has been and where it's going in terms of its actual capital structure. I don't think the Commission, because it has general responsibility for worrying about the interest of consumers, it can't completely ignore what Avista is doing if it really did something that it felt was endangering its ability to continue to serve the

customers.
But for that, except in those circumstances, if you decouple Avista's actual behavior from what you say, This is the industry benchmark. This is what utilities are expected to do around the country and pure-play utilities are doing, it gets the Commission out of the business of second guessing management each time they come in for a rate case.
Q. My question is on how reliable or stable the hypothetical benchmark is if all of those companies are also in this swirl of change in the electric industry, in particular, is it are we looking backwards at a benchmark that is much more stable than the future will be? Does that make any difference?
A. I think it makes a difference how stable it is, and that's why in my testimony I look at the historical capital structure for the 12 companies to make sure it's not bouncing around erratically, and I also look at the capital structures that commission are allowing to see that they are not bouncing around, so I think if the Commission says we are going to look to this benchmark and the benchmark is bouncing all over the place, you have not gained anything, so I wanted to do give the Commission some assurance that the benchmark, at least in the recent years, has been

stable, and that's why I included those exhibits in my testimony as to what's been happening with these 12 companies and what's been happening with the Commission allowances.

Q. I want to ask you a couple questions on the 25 basis point kickers. On the management performance one, on Exhibits 101 -- that's your testimony -- Page 6, you say this 12 percent is for a single "A" rated combination electric gas, and on Line 18, it does not incorporate any allowance for Avista's exemplary performance, hence, the 25 basis points in addition.

My question is whether there is, in fact, some kind of overlap, would you expect that a single "A" rated combination gas electric utility at the top of the range of 12 percent would be anything other than a well-managed company?

A. If you went to the top of the range, you are probably capturing well-managed companies.

Q. That's your 12.5?

A. If you go to the middle of the range, which is the 1175, then you are down there with perhaps the mediocre, and I think that having worked with commissions myself, I think the commission has a legitimate objective to send messages to the utilities when their behavior, they believe, is consistent and

supports the interest of the customers and negative messages when they think they are doing something adverse to the long-term interest of the customers, and in this case, I rely on Mr. Dukich's information about the relative ranking of Avista by independent studies and industry groups which indicate Avista is at the top of the class.

Q. So there wouldn't be any financial difference in going to the top of the range versus starting in the middle of the range and adding 25 basis points for exemplary management, but Mr. Dukich's point was if we isolated that, we'd be recognizing it in a way that the Company could show Wall Street, basically.

A. That is correct. I think it is advantageous from the point of view of Wall Street because you have a very tangible decision by the Commission to say we support what this utility is doing, but other commissions in other states achieve the same thing. I had an experience in Virginia where they go to the top, middle, or bottom of the range based on their perception of how the utility is performing its obligations.

Q. Then on the other 25 percent, explain to me what flotation cost is, and forgive my ignorance.

A. It's kind of a hard concept to understand. A

utility, in order to invest in transmission lines and distribution company, the assets and generators, has to raise money in the market, and it's not free to raise money. In the case of preferred stock and bonds, we keep up with how much the utility spends on accountants and lawyers and printers and investment bankers and putting ads in the paper when it issues bonds, and those are calculated and deducted from the proceeds so that when I calculate the imbedded cost of debt and the imbedded cost of preferred, it's built in the company will get back that money because those are legitimate expenses. You can't get money from the public unless you go through all the hoops of his filing with the SEC and so forth.

Common stock is a little different. You have to incur the same expenses, and generally, the expenses are much greater. In order to issue common stock, the amount of legal work and accounting work and underwriting commissions you have to pay and the effect on the market of issuing more stock is by all the studies even a greater percentage than with debt and preferred, but because of the accounting rules that we operate under, those costs are not preserved. They are just reflected as a deduction in the amount of money you raise, so you issue the shareholder a dollar's

worth of stock, but you only net back 94 cents to invest in the assets of the utility.

Now, that six cents is gone forever. It's in the hands of the accountants and the lawyers and the Goldman Sachs people and whoever else helped bring this stock to market, but the utility is earning on 94 cents. The investor says, I've got a security that I paid a dollar for. Well, the only way you can earn enough on 94 cents to satisfy the investors' needs on a dollar is to kick up the returns on those equity dollars, and in the discovery request, I have some textbook discussion of how you calculate how much extra you have to earn on the 94 cents to net back your return on equity to the market investors, and it turns out that if you put in an extra about 25 basis points, give or take -- it's probably more that's required -- then that will get you to parity, so what the equity investor is earning on the net proceeds in the business is equal to what the investor originally put up when they bought the stock out in the marketplace. So that 25 basis points accounts for the fact that it costs money to get stock in the hands of the public.

Q. Thanks. Can you turn to Exhibit 102, Appendix C. It's Table 2. This is the one that reads, "analysis of authorized rates of return on equity."

A. Yes, Commissioner.
Q. In Column A is allowed return on equity for the various years 1974 through 1998. Is that an average of the major case decisions, et cetera?
A. Exactly.
Q. So it could be read "average allowed"?
A. Yes. It's the average allowed for all the cases that were decided during that year that were recorded in RRA.
Q. By "average," do they just take 50 cases and divide by 50, the rate?
A. Exactly.
Q. So it could be a little case or big case or Rhode Island or California?
A. One case, one vote.
Q. Then is that true in Column B, "average public utility bond yield," is that the same thing in terms of how it was averaged?
A. It is the average price during that year, the average yield during that year.
Q. For bonds outstanding.
A. For all bonds that are rated -- all utility bonds.
Q. So that actually probably would not be per issuance. It would be per bonds out there.

A. Right --
Q. So the volume would make --
A. So in that case, a very big utility like Pacific Gas and Electric would have more influence than a small utility that has fewer bonds in the hands of the public.
Q. So Column B is more representative of dollar value, and Column A is more representative of a number of decisions made by commissions.
A. That is correct.
Q. I don't know if you can remember this question, but Mr. ffitch was asking you about something. You said that's only if business risk remains the same. He was asking you a hypothetical and trying to vary one component, and you said that would be true, but only the business risk remains the same. Maybe you can recall the situation and what it would mean to have the business risk remain the same or what you meant by business risk.
A. What I think I meant is, the original hypothetical that he started his cross with, we had Company A and Company B, and Company A and Company B are the same size; they have the same kind of customers, the same kind of generation mix. The things that would cause surprises in their business are

essentially the same.
Q. But one has more equity and one has more debt.
A. Right. If they have the same business risk, if one has more equity, it's rate of return on equity is going to be less because those customers are bearing less risk because there are fewer fixed charges in the form of payments to the debt holder, and also, the cost of debt will be less, so what you have is the company with more equity pays less for both debt and equity, but since equity is more expensive than debt, their total cost of capital may or may not be less than Company B that pays more for each component if they have less equity and more debt, but they have more of the cheap stuff and less of the expensive stuff.
So the capital structure decision is really a delicate balancing of, Well, if I have less equity, the equity is going to cost me more, but equity is more expensive than debt, so I would rather have more debt than less equity, so at least in financial theory we say in the textbooks, there is probably some optimal mix of debt and equity that causes the total cost of capital to be leased.
Q. But in those examples, there is no reason why those two companies couldn't or wouldn't have the same

business risk; that is, is business risk in general independent or dependent on your debt equity ratio? To use a term that we just learned in a previous case from an economist, are they orthogonal?
A. They are not orthogonal as you observe them in the world, and that's been a real problem with the empirical studies; that typically, industries that have little business risk, like the old-fashioned electric utility industry that we used to know and love, that industry had relatively less business risk, but we observed that it usually had more financial risk. The old utilities financed themselves with more debt and less equity, and then if we looked at a company in the computer business in olden times, we would observe that the old computer companies like IBM used to have very little debt and a lot of equity because they thought they were in a risky business, so the classic studies from the '50's, '60's, and '70's found it difficult because business risk and financial risk were not orthogonal. Usually companies had more financial risk when they had less business risk and less financial risk when they had more business risk to kind of balance each other out.
Q. So how is it now in the modern age?
A. In the modern age, it's even more confused

because you have a lot of companies that we think are very risky who use a lot of debt and a lot of companies who are very risky that don't use much debt, like the Internet and high-tech companies.

A lot of the high-tech companies have very little debt because they can't issue debt, but they can sure issue equity. Everyone is willing to buy up their IPO's, but we look at other industries that we think are the same, like some of the new cellular companies, and it ends up they have a whole lot of debt because banks are willing to lend it to them, even though it seems most of us would agree that many of those companies are very risky, so as a general textbook proposition, we usually observe business risk and financial risk kind of offsetting each other, but when we get down to a specific time and place in companies, it gets kind of confused.

That's why I had some problems with Mr. ffitch's lines of questioning where he said, Well, gosh, if the business risk has gone up, wouldn't we expect them to reduce the financial risk? It's hard to say that would be the prudent course of action because there is so much else that goes into your strategy.

Q. As long as you mentioned high-tech explosion, what effect, either short term or medium-term, does the

tremendous interest in high-tech stocks have on all other industries and their ability to raise capital? I think you said over time that most economists would say this is not going to last and maybe things will settle down, but to the extent that there actually is some kind of genuine discontinuous event in our economy due to technology, what effect does that have, or maybe I guess more to the point, what effect should it have, if any, on our decision in setting the figures for Avista?

A. There is so much disagreement about the new economy, Alan Greenspan, and I think Avista is a really good example, because I think Avista has gotten a lot of attention, and we've seen very volatile stock prices for Avista because you have the Bill Gates effect, and they have their Internet play because they have been so successful on the Internet front. There is a lot of excitement about the fiberoptic things they are doing so they've gotten a lot of interest out of that. There is a lot of interest about their fuel cell activity.

And that, I think makes the Commission's job a lot harder, because if you look at Avista and you look at its capital structure and its cost of equity, you've got to sort out all of those effects that are impacting Avista that management is trying to deal with, and I think that is probably why it is better

from an administrative standpoint for the Commission to look over in the maybe more stable arena of those utilities that haven't yet really gone into some of these new economy areas like, I believe, the 12 utilities that I've picked to be comparable companies, so that you can look and do a DCF on their stock price and dividends a lot easier than you could on Avista where you have dividend changes and dramatic changes in price, and you can also get a clearer reading on their capital structure than you do on Avista where there is a lot of other considerations going into the capital structure.

I guess the short answer to your question, Commissioner, is I think it's very hard for commissioners to kind of be on the leading edge of these uncertainties, and it's much easier to operate as a regulatory agency in a more stable environment where you can measure things a little closer and use historical benchmarks a little more readily, and I think that's why it is prudent to use things like comparable groups and hypothetical capital structures to get some distance from kind of the cutting-edge effects and the very difficult work of deciding what's fair rate of return for a company and what's in the interest of the ratepayers.

Q. I didn't mean should we or shouldn't we be looking at what Avista is doing in its nonregulated parts. What I meant was how is the whole investment world affected by it, and I suppose maybe what you are saying is if you look at a hypothetical structure, then those are examples, I take it, of where investors have made a decision to invest. Even though they could have taken their dollars and put them into Microsoft, some people aren't and that is somehow taken into effect in this hypothetical approach; is that correct?

A. Right. These companies are out there selling their stock, issuing their debt, and they are pretty much, for the most part, in the nuts and bolts business of providing electric and gas service so that you can get a better reading on when their costs are than you can in some of these rapidly evolving areas of the economy.

Q. I think the last question I have is on Exhibit 102, your Table 3, WEA-5, Schedule 5, Page 1 of 1. I think I just want to clarify something I thought you said. Mr. ffitch asked you a question of is this Avista as a whole or just its regulated activities, I think he asked you, and I think you answered Avista as a whole, and is that what you answered, and is that with respect to -- I don't know what you said there.

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Maybe the question is what universe is this page representing?
A. This is Page 5, one of one, that has the component cost?
Q. Right.
A. The universe is I have measured the debt that's associated with the utility operations of Avista. I've measured the preferred stock that is associated with the utility operations. I have not included that preferred stock that was issued for the investors that lost their dividend when the dividend occurred. I used the preferred securities that are associated with the utilities.
So these component costs are to the best I can identify them, the component costs associated with the utility operations of Avista.
Q. That's what I thought, and then I thought you said the other way around. So is the appropriate title at the top of this page, "weighted average cost of capital for Avista's utility operations"?
A. That would be a much better title, and I wish I had done that at the outset, and the 12.25 is the rate of return that goes with the utility operations. The 12.25 similarly that I estimated based on these comparable companies goes with the utility operations

equity.
CHAIRWOMAN SHOWALTER: Thanks. That's all the questions I have.
JUDGE SCHAER: May I interject just one follow-up? I also wrote down under the debt line here, which is 7.83, I wrote down, "company as a whole."
THE WITNESS: I think I may have misspoke earlier this morning, and I'm glad I clarified this.
JUDGE SCHAER: This is a change?
THE WITNESS: It is the debt and preferred associated with the utility operations.
JUDGE SCHAER: Is there redirect for this witness?
MR. MEYER: There is.

REDIRECT EXAMINATION

BY MR. MEYER:

Q. While we're on that page, same exhibit, same page, WEA-5, Page 1 of 1, that 7.83 percent component cost per debt, does that include short-term debt?

A. Yes. In terms of the rate of the debt, I did include the short-term debt even though that brought the number down to make sure the customers got the benefit of the cost of short-term debt.

Q. There were two other minor clarifications

before I get into more substantive matters. During the break, you were asked to confirm -- there was a reference in your Appendix C to Exhibit 102, the CC and L study, for the period 1971 or 2 to 1980. Which was it?

A. It was exactly as written. There are two studies. The first one started in '71. The second one started in '72, so the first reference is to '71 through '80 is correct, and the second reference of '72 through '80 is correct.

Q. Those references appeared on Page C-6 of Appendix C of Exhibit 102; correct?

A. Yes.

Q. The other items you were asked to check on had to do with some materials and whether -- go ahead.

A. I was asked whether the Regulatory Research Associates' information that we used to get the capital structure would allow us to include the effect of short-term debt, and I looked at the Regulatory Research Associates' data and it does not. It only records the equity ratio, so we cannot go back and adjust that for the inclusion of short-term debt.

Q. Thank for checking up on those. Let's turn to some more redirect. You were asked a series of questions that took you to the 10-Q for the quarter

ending September of '99. Do you recall that exchange?
A. Yes, I do.
Q. There was some discussion earlier in the session about whether one could derive an actual return on equity of 26 percent or whether that should be at some other level. Do you recall that?
A. It was an equity ratio --
Q. I'm sorry. Correct.
A. -- based on that balance sheet.
Q. Was the, what have been commonly referred to as the recon shares or the convertible preferred shares, were those, in fact, converted?
A. Yes, they were.
Q. It was a mandatory conversion program, wasn't it?
A. Right. I went back and looked at the footnotes from the 10-K which described the requirement that they all be converted prior to 2001.
Q. Were they all converted, to the best of your knowledge?
A. Yes. It's my understanding they were converted this year.
Q. So is it your testimony that such convertible preferred should be included for common equity ratio purposes?

A. Yes. Because it is going to go back to equity. It was issued in order to soften the impact on shareholders. When the dividend was cut, some people had budgeted that money for their own living expenses or whatever, so this was a mechanism the Company created so they could maintain their cash flow from their investment in the stock, but it was a transitional measure, and it should be included in equity. I went back and checked how Moody's and Standard and Poor's treated it for their purposes, and they included it in equity.

Q. So with that one adjustment, based on those September 30, 1999, number that you had referenced to earlier, what is the common equity ratio?

A. It goes to 45.7.

Q. Does that 45.7, is that without short-term debt?

A. Let me check and make sure.

Q. Two steps; before we adjust for short-term debt, just adjust for the mandatory conversion, what does the equity ratio become?

A. Let me make sure my numbers are correct here since I'm on the record.

Q. Would you agree subject to check that that's 42.78 percent, approximately 43 percent?

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A. Yes.
Q. What would that common equity ratio become if we were to subtract short-term debt?
A. If we take out the 103.5 million in short-term debt it become 45.7.
Q. Approximately 46 percent.
A. Yes.
Q. Again, after making those necessary adjustments, we are still dealing with actual equity ratios computed for that quarter ending September '99, aren't we?
A. Yes. Those are per books of the Company.
Q. As I understand, that's not the exercise you went through in putting your testimony together. You were relying on an actual, but on a hypothetical capital structure for your recommendation?
A. That is correct.
Q. And your recommended hypothetical equity component of your hypothetical capital structure was what?
A. 47 percent.
Q. You were asked by Chairwoman Showalter about the proxy or barometer group of 12 companies and whether those capital structure numbers for those companies were real and sustainable through time. Do

you recall that?
A. Yes, sir.
Q. Would you turn to your Exhibit 102. I believe it's Schedule 1, Page 2 of 2.
A. Yes, sir.
Q. Those are your proxy group, are they not?
A. That's correct. That's going back to the previous years to see how their capital structure lined up in those previous years.
Q. Actually, you are referring to Page 2 of 2 of that schedule, aren't you?
A. Yes.
Q. As do you that, would you explain how that capital structure component varies generally on average through the four years depicted?
A. Generally, it is fairly stable. You can see the debt percentage is 45, 43, 44, 45, so it doesn't vary too much from the 47 that we observe in year-end '98, and if you look down the column within the individual companies, you will see that while they are they vary year-to-year, they are pretty tightly grouped around the 40 to 50 percent range of debt and 40 to 50 percent common equity and four to eight percent of preferred.
Q. While we are with this same schedule, WEA-1,

let's turn back a page, Page 1 of 2. Much earlier in the day, you were asked about the impact of a PCA on risk. Do you recall that line of questioning?

A. Yes, I do recall that.

Q. Turning to that page and given those identified companies, and again, the question here is in relation to the impact of PCA on risk, do you know whether most of the proxy group companies have some form of field adjustment mechanism?

A. Yes. From checking the data sources and my own knowledge of many of these companies, they have so some way to deal with dramatic changes in the cost of fuel for electric generation.

Q. In much the same or at least in a concept similar to what the Company is proposing regarding this PCA.

A. Yes. I think those kinds of adjustments are generally acceptable to the regulatory community because there can be volatility or has been and continues to be volatility in especially short-term purchase power cost but also in the fuel mix and other drivers.

Q. Putting the pieces together then, what do you conclude, given your testimony about PCA's or PCA-like mechanisms with the proxy group and what the Company is

proposing here?
A. I believe that the capital structure and the equity cost estimate that I have made is consistent with a utility operation that has the benefit of a PCA mechanism, so that the financial part of my cost of capital testimony is consistent with the Company's request, and if the Commission were not to grant the PCA mechanism, then there would have to be some recognition of that in the capital structure or cost of equity for the Company.
Q. When you compare then Avista, and assuming Avista were granted a PCA in this proceeding and given what you've testified about the presents of fuel cost of adjustment mechanism for the proxy group, what does that say about the need to adjust downward for Avista the cost of equity based on a PCA?
A. Built in to my recommendation is comparing the cost of capital to Avista's utility operations with other utilities that have the benefit of a PCA-like mechanism, so if the PCA mechanism is part of the case, then the rate of return recommendation is consistent with that PCA mechanism.
Q. And is consistent with the barometer group.
A. Yes.
MR. MEYER: Thank you very much. That

concludes my redirect.
CHAIRWOMAN SHOWALTER: I just have a follow-up question on this table, Schedule 1.

FURTHER CROSS-EXAMINATION

BY CHAIRWOMAN SHOWALTER:

Q. Are you saying every one of these companies has a PCA or equivalent?

A. Not every one. I think most have some kind of PCA mechanism. Semper Energy, for example, operates in California at San Diego Gas and Electric, and they don't have an explicit PCA mechanism, but they get their energy through the PX in California, so in essence, there is a flow-through of price changes that doesn't affect the distribution activities of the utility.

So they don't all have exactly a PCA, but I think the effect is very similar in terms of the company does not very to worry about the kind of risk that Avista is exposed to because of dramatic changes from stream flow and purchase power cost.

Q. What is Puget's situation?

A. Puget is jurisdictional, and I understand they do not have an adjustment; that they had one for several years in the early '90's, but that has been

terminated. So not everyone, and this Commission knows better than I, that Puget does not.

CHAIRWOMAN SHOWALTER: Thanks.

JUDGE SCHAER: Anything further for this witness?

MS. TENNYSON: I have just have one point to follow up on Chairwoman Showalter's latest question. I'd like to submit a records requisition for which of the companies on WEA-1, Page 1, do have a PCA mechanism.

JUDGE SCHAER: Would you be able to provide that?

THE WITNESS: Yes. It's something I would have to work on at home, but we can provide it. I think we have 10 days.

JUDGE SCHAER: Record Requisition 26 then. Please provide information about what kind of PCA equivalent, or what kind of -- so we know what you are considering to be an adjustment for these companies shown on Page 1 of 2.

MS. TENNYSON: And I have nothing further.

JUDGE SCHAER: Mr. ffitch?

MR. FFITCH: I have one question, Your Honor.

FURTHER CROSS-EXAMINATION

BY MR. FFITCH:

Q. Dr. Avera, you were testifying a bit earlier that one of the advantages of the hypothetical capital structure is administrative convenience. Is the ultimate goal here fair, just, and reasonable rates, or is it administrative convenience?

A. It's fair, just, and equitable rates, but I think administrative convenience has to be a consideration when the Commission has limited resources and limited ability to handle exceedingly complex issues.

MR. FFITCH: Thank you. I don't have any other questions.

JUDGE SCHAER: Is there anything further for this witness?

MR. MEYER: There is not.

JUDGE SCHAER: Thank you very much for your testimony. You may step down. Let's go off the record for just a moment.

(Discussion off the record.)

JUDGE SCHAER: This is the end of our hearing for today. We will resume this hearing tomorrow morning at nine o'clock.

MR. FFITCH: We have provided an additional

cross-exhibit for Ms. Knox. Copies have been provided to her early this morning. We have the copies in the hearing room here that we could distribute now or first thing in the morning.

JUDGE SCHAER: Let's do it as she takes the stand, please, Mr. ffitch.

(Hearing recessed at 4:45 p.m.)