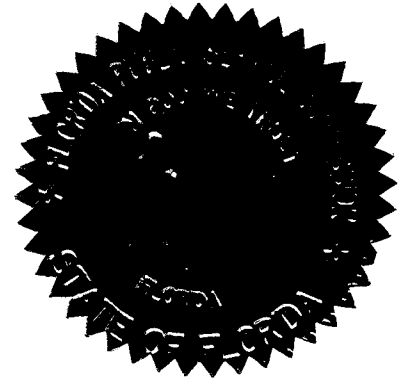


BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

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In the Matter of  
  
Annual Reestablishment of  
authorized range of returns on  
common equity for water and  
wastewater utilities, pursuant  
to Section 367.081(4)(f),  
Florida Statutes.  
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DOCKET NO. 990006-WS



PROCEEDINGS:           **WORKSHOP**

CONDUCTED BY:         **DAVID DRAPER**  
                          Division of Audit and Financial Analysis

DATE:                   **Friday, March 12, 1999**

TIME:                   Commenced at 9:30 a.m.  
                          Concluded at 11:25 a.m.

PLACE:                  **Betty Easley Conference Center**  
                          Room 152  
                          4075 Esplanade Way  
                          Tallahassee, Florida

REPORTED BY:           **H. RUTHE POTAMI, CSR, RPR**  
                          FPSC Commission Reporter

1 **IN ATTENDANCE:**

2 **WALTON HILL**, United Water Florida, and **FRANK**  
3 **HANLEY**, AUS Consultants.

4 **DON HALE**, **STEPHEN BURGESS**, Office of Public  
5 Counsel, and **MARK CICCHETTI**, appearing as a consultant  
6 to the Office of Public Counsel.

7 **TIM VACCARO**, FPSC Division of Legal  
8 Services.

9 **ANDREW MAUREY** and **DAVID DRAPER**, FPSC  
10 Division of Auditing & Financial Analysis.

11 **NEIL BETHEA**, FPSC Division of Water &  
12 Wastewater.

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1           **MR. HANLEY:** And Frank Hanley of AUS  
2 Consultants. I am here on behalf of United Water  
3 Florida.

4           **MR. BETHEA:** Neil Bethea, PSC.

5           **MR. CICCHETTI:** I'm Mark Cicchetti,  
6 Cicchetti & Company on behalf of the Office of Public  
7 Counsel.

8           **MR. BURGESS:** I'm Steve Burgess here for the  
9 Public Counsel's Office. Also with me is Don Hale,  
10 sitting behind us, with the Public Counsel's Office.

11           **MR. VACCARO:** Tim Vaccaro on behalf of  
12 Commission Staff.

13           **MR. DRAPER:** Dave Draper, Commission Staff.

14           I'd like to also point out that we have a  
15 sign-up sheet. I would appreciate if everybody would  
16 sign in so we can have a record of the persons in the  
17 room.

18           I'd like to open it, the discussion. I'd  
19 like to point out that we have issues in the notice  
20 that we could speak to or, you know, whatever is on  
21 your mind would be fine. I think let's begin on this  
22 side and we'll just work our way down.

23           **MR. HILL:** Thank you very much. United  
24 Water Florida appreciates very much the opportunity to  
25 participate in this workshop.

1           We have engaged the services of Mr. Hanley  
2 to present a somewhat condensed study, after his  
3 examination of the leverage formula, that makes some  
4 recommendations as to how the formula could be revised  
5 or modified to produce more appropriate results; and I  
6 will let Mr. Hanley present a brief summary  
7 description of that study.

8           We also have here several copies of that  
9 study that we would like to leave and have made a part  
10 of the materials in this workshop, and we regret that  
11 we were unable to have them circulated to everyone  
12 prior this -- prior to today.

13           By way of general statement, though, one of  
14 the main points that I have gleaned from Mr. Hanley's  
15 study and also from the current proposed agency action  
16 process in which United Water Florida is now involved  
17 and, as a matter of fact, in which we expect an order  
18 either today or very soon, the indicated rate of  
19 return on equity for this company was determined  
20 through the leverage formula to be 9.57%.

21           And as you'll see in Mr. Hanley's study, the  
22 average return on equity that we have been able --  
23 that Mr. Hanley has been able to determine from those  
24 rates of return on equity being currently allowed by  
25 other commissions is in the area of 10.84.

1           Just from an intuitive nonexpert point of  
2 view, there does seem to be something wrong with this  
3 picture. And, again, we appreciate very much the  
4 recognition, or the potential recognition, on the part  
5 of the Staff that such may be the case.

6           In United Water Florida's pending case, that  
7 reduction in return on equity from the prior leverage  
8 formula were rather from -- I should say from the  
9 company's requested return on equity, which was in the  
10 area of 11% or thereabouts, was translated in that  
11 case to a reduction in the revenue requirement of well  
12 over a million dollars.

13           Now, some would say that that's a good  
14 result, but I think that one of the things we're going  
15 to try and point out is that these days when, although  
16 other utility segments may be involved in questions  
17 relating to how much rates should be decreasing, it's  
18 very important to recognize that United Water Florida  
19 and most other water utilities are facing increasing  
20 costs, particularly related to capital requirements  
21 that could result from required legislation or  
22 regulations regarding water and wastewater treatment  
23 and also relating to the need to replace aging  
24 infrastructure that may be approaching its useful  
25 life.

1           So those are just introductory comments to  
2 get us started here. I welcome the opportunity to  
3 participate further, and if it's appropriate at this  
4 time, I'd like to introduce Mr. Hanley to present a  
5 brief summary and, hopefully, start off some  
6 discussion on his study.

7           **MR. HANLEY:** Thank you all. And this is  
8 Frank Hanley speaking, of AUS Consultants, on behalf  
9 of United Water Florida.

10           I would like to just reiterate Mr. Hill's  
11 comments. We're sorry that we were not able to get  
12 these in your hands ahead of time, and had I been able  
13 to do so, then perhaps I would have been able to  
14 shorten this summary a little bit; but in order to  
15 make some sort of coherent sense, I will need a few  
16 minutes to talk through what perhaps could have all  
17 been read.

18           I believe that the leverage formula concept  
19 is an excellent one and it, frankly, is a terrific  
20 idea, given the quite large number of water and  
21 wastewater utilities regulated by this Commission,  
22 many of whom are quite small in size, and the idea of  
23 doing away with a lot of litigation over capital, cost  
24 of capital, and so forth, particularly for these  
25 smaller companies, but in general is a terrific idea.

1           However, there are some problems associated  
2 with trying to have the proverbial glass slipper fit  
3 all feet. So that's pretty much what I would like in  
4 a general way here to address and make some  
5 suggestions.

6           I find, first of all, that the notion of a  
7 40% equity ratio as a floor, I concur, and United  
8 Water concurs that that is reasonable, because I think  
9 it is dangerous for companies in general to  
10 overleverage, but I do think that there -- with any  
11 rule or any principle, there should be a mechanism for  
12 some specific consideration if a burden of proof can  
13 be met, if there are really mitigating circumstances,  
14 I think that there ought to be under those conditions,  
15 if the burden of proof is met, some exceptions to the  
16 rule to the -- you know, bend the glass slipper a  
17 little bit. But in general I think 40% is a good  
18 break point for the formula.

19           I also think it's excellent that a number of  
20 different models are employed in the formula. I think  
21 it's consistent with efficient market hypotheses.  
22 It's -- the investors realize there are a number of  
23 models out there. So I think it is a good thing to do  
24 to utilize a number of the models.

25           Now, one of the problems is, as Mr. Hill



1 noted and I'll get to it more, is that I think there  
2 is a widespread belief -- I guess I'd be hard-pressed  
3 to say that it's universally accepted by all parties,  
4 but that the leverage formula certainly in the last  
5 several years has been producing results that are felt  
6 by many parties to be inadequate; that the cost of  
7 equity derived from application of the formula is just  
8 really lower than a market-required cost rate.

9           So if you're making some suggestions about  
10 how to perhaps modify the approach but still keeping  
11 intact the general concepts of the formula, I came up  
12 with a result -- and what I did rather than trying to  
13 work in a vacuum, I took the position of what the 1998  
14 formula produced and then I went back and emulated, so  
15 my -- so all my calculations were made on the  
16 assumption that they would have been made at that  
17 point in time, i.e., on or about May 1, 1998, from  
18 information then available so that basically and  
19 hopefully we could compare the proverbial apple with  
20 an apple and not an apple and an orange.

21           Now, as a result, to summarize -- first, as  
22 a result of my analysis, I concluded that an 11.35%  
23 common equity cost rate was appropriately applicable  
24 at that point in time to a 40% common equity ratio;  
25 and that's, of course, in contrast to the 9.85% that

1 was actually derived by the current version of the  
2 formula.

3 I believe that at that point in time the  
4 assumption of a debt cost rate of 7.72% was a  
5 reasonable assumption based on what was then known,  
6 and, as a result of my finding, the -- I found the  
7 overall cost of capital to have been 9.17%. I  
8 concluded that an 11.26% common equity cost rate  
9 applied to the group of six water companies, the value  
10 line companies, or as Staff refers to them -- and I  
11 try to do as often as possible to avoid confusion --  
12 as the water index, I think that that average equity  
13 ratio of 40.92% was an appropriate starting point,  
14 relative to trying to arrive at a cost rate for a  
15 40% equity ratio.

16 As I applied the models -- and I'll talk  
17 about them a little bit -- I concluded a DCF cost rate  
18 of 10.10%, a risk premium cost rate of 10.68%, and a  
19 capital asset pricing model cost rate of 10.90%. The  
20 average of all three models was 10.56%, and I also  
21 concur that the bond yield differential of 45 basis  
22 points and also the private placement premium of 25  
23 basis points utilized in the actual application of the  
24 1998 leverage formula were appropriate and reasonable;  
25 and taking those added adjustments into account to

1 reflect risk differentials for the average  
2 water/wastewater utility and particularly the small  
3 size that need to use the private placement vehicle,  
4 that an 11.26% equity cost rate was appropriately  
5 applicable to the 40.92% common equity ratio of the  
6 six value line water companies.

7 Now, it might be appropriate to mention,  
8 although it's not in the report, but as of yesterday,  
9 part of that water index, Consumers Water, ceases to  
10 exist. The transaction was consummated yesterday  
11 by -- was acquired by Philadelphia Suburban Water; and  
12 I note that as of now, Elizabethtown Water Company is  
13 included in the group.

14 So there -- as of the moment, there are once  
15 again and will be six water companies, although  
16 Consumers will be replaced, in fact, is indeed  
17 replaced as of now by Elizabethtown Water Company.  
18 And so I think that group will be appropriate to use  
19 in the future.

20 I don't believe as far as the DCF model is  
21 concerned, that the use of an historical DCF is  
22 appropriate for use in the leverage formula. Again,  
23 you've got to keep in mind we're trying to get the  
24 glass slipper to fit all the feet.

25 And I think it's pretty clear that investors

1 are really concerned about the future, and there are  
2 studies that have been made that affirm pretty much  
3 what I believe is common sense, that analysts'  
4 forecasts of growth in earnings represent the best  
5 estimate of expected market prices and, therefore, the  
6 best estimate of investors' expectations of growth.

7 I noticed that some market value weighting  
8 was done for 1998. Perhaps it was done -- I'm not  
9 sure. I don't even choose to speculate why it was  
10 done in '98, but I don't think as a general rule  
11 market value rating is appropriate because it can  
12 place undue emphasis on either too higher a return or  
13 too lower a return depending on the market value or  
14 market capitalization of the company in question; and  
15 the largest company, if it swings, so swings the  
16 result of the weighting. I think as a rule the best  
17 measure is the arithmetic mean.

18 I encourage the use of a single-stage growth  
19 model for use in this formula rather than a two-stage  
20 growth rate. Certainly two-stage growth models are  
21 appropriate, but as a general rule, they seem most  
22 appropriate to apply for companies or industries that  
23 are in transition. A perfect example would be, for  
24 example, in the electric industry in this transition  
25 period from the regulated monopoly into a competitive

1 environment.

2           We don't really have that. And,  
3 furthermore, because I believe the analysts' forecasts  
4 of earnings growth are appropriate, to extrapolate a  
5 second-stage growth, whether it's a retention growth  
6 or whatever, that's basically an offshoot of the same  
7 five-year growth rate that's forecast by the analyst,  
8 to me in some sense is a form of circular reasoning.

9           Why not just stay with the best growth rate,  
10 one that reflects the past; because the analysts take  
11 into account the history of the companies, and they  
12 filter those, if you will, through meaningful  
13 information, discussions with management and so forth  
14 and, therefore, it's the best of both worlds. It  
15 reflects the past through the analyst's filter, if you  
16 will, to give the best expectation of the future.

17           Also, I would recommend the use of the value  
18 line forecasted growth in earnings per share and also  
19 to get other forecasts in there and not rely upon one  
20 from the Standard & Poor's earnings guide. They  
21 present the mean estimate of the number of IBIS  
22 forecasters, the Institutional Brokers Estimate  
23 System, that cover these companies.

24           Now, in some instances, who knows; it may be  
25 only one or two analysts. They don't tell you. But

1 we do know, and it's been confirmed by Standard &  
2 Poor's, that it is the mean estimate of those analysts  
3 for these particular companies.

4 I recommend discontinuance of the quarterly  
5 compounding model. Frankly, it adds undue complexity  
6 to the calculations. It's not typically used by  
7 regulators or experts so long as the discrete payment  
8 of dividends is recognized in the annual model. I  
9 mean, whatever is used in the calculation of the  
10 dividend yield should be reflective of the next --  
11 what's expected on average over the next 12-month  
12 periods.

13 That can be done easily without going  
14 through the complexities of compounding, and I think  
15 we ought to, to some sense, ought to try and simplify  
16 that.

17 As far as the risk premium model is  
18 concerned, it's a good model. I see absolutely no  
19 reason to have to use gas distribution companies. I  
20 think this model can be employed -- can just forget  
21 gas distribution companies, and the way I would  
22 suggest that it be employed is to use the estimate of  
23 the expected yield on A-rated utility bonds, and that  
24 can be obtained, you know, from the blue chip  
25 financial forecasts. And even if -- and I believe

1 they have just recently discontinued that -- that can  
2 easily be obtained by taking whatever forecast they do  
3 have in adjusting for yield differentials so that you  
4 basically come up with an A-rated yield, because  
5 that's -- companies -- you know, it's specific. An A  
6 is an A is an A, and it reflects all of the composite  
7 risks because it's a good benchmark starting place to  
8 begin.

9           Now, the bond rating process is  
10 comprehensive, and it takes all elements of  
11 diversifiable risk into account. As far as the  
12 determination of an equity risk premium, I believe  
13 it's most appropriate to rely upon a long-term,  
14 historical mean average of holding period returns.

15           Now, one of the problems I have with the way  
16 it's currently being done is I believe there's an  
17 inherent circularity to the process. There's a DCF  
18 calculation made in order to arrive at the equity risk  
19 premium. To me, that's circularity. To the extent  
20 that the DCF calculations are flawed, there's an  
21 inherent flaw in the result in equity risk premium.

22           So I would suggest we get away from that and  
23 look at holding period returns over a very long  
24 historical period; for example, those from the  
25 Ibbotson Associates that are published in their annual

1 yearbook.

2 I also suggest that the arithmetic mean is  
3 the proper return rate -- or the proper mean to use --  
4 not the return rate, but -- of those holding period  
5 returns, rather than geometric means.

6 Basically the reason is this; and there's a  
7 more detailed explanation in here and along with some  
8 of the attachments in the report, but for now I'll try  
9 and be a little bit more concise: The expectation  
10 that investors have consistent with the long-term  
11 investment horizon of common stocks.

12 And we have little doubt that there's a  
13 long-term investment horizon, because, in fact, the  
14 standard DCF model presumes an infinite holding  
15 period, although we know in reality it's not, but  
16 that's what it's -- presumes, a standard model that's  
17 applied. So we want to look at a long term.

18 To the extent that one chooses arbitrarily  
19 shorter historical periods of time, that builds an  
20 inherent bias into what one might expect. And this  
21 goes with the arithmetic mean. So if you're looking  
22 at a long-term horizon in the future, what might  
23 investors expect? Well, the best expectation is the  
24 long-term historical average. Is that true? Because  
25 if you go all the way back to 1926, that included, you



1 know, the Great Depression, World War II, Korea, Viet  
2 Nam, et cetera, et cetera.

3 Well, yeah, because who would have  
4 thought -- for example, though, it's been 100 and some  
5 years -- and we had a president that was just  
6 impeached. Who would have thought that that would  
7 have happened? The last time was Andrew Johnson in  
8 the 1860s. Who would have thought that the  
9 Soviet Union would be no more? Just going back a few  
10 years ago, who would have thought the savings and loan  
11 institutions would have had the problems that they  
12 did, so forth and so on.

13 So all these -- maybe certain specific  
14 events. We're certainly not going to have another  
15 Viet Nam, but who knows what we'll have, whether it's  
16 in the -- you know, the former Yugoslavia or whatever.  
17 Something else can happen. Similar events can happen.  
18 So that the best expectation of what can happen is  
19 insight derived from the long-term past, and the only  
20 way you get that is looking at the arithmetic mean of  
21 the long-term past, because if you look at the  
22 geometric mean, you smooth out everything to a  
23 constant rate of growth and it doesn't take into  
24 account the year-to-year changes.

25 Only the arithmetic mean does that. It

1 takes into account the distribution of returns, which  
2 basically says that the equity risk premium one year  
3 is totally unrelated to the equity risk premium of the  
4 prior year or the next year. In other words, they're  
5 random, and a serial correlation analysis in the  
6 Ibbotson studies confirms that they're random, so that  
7 the best way to estimate the long-term average future  
8 is from the long-term arithmetic mean of the past.

9           And this result can be allocated by the use  
10 of the water companies' average data to get an equity  
11 risk premium as shown. And I don't have to talk  
12 through step by step, because I think it's all  
13 contained in the report. But this general notion of  
14 allocating the equity risk premium in this manner is  
15 certainly a logical means, because if you've got a  
16 market risk premium, a logical way to allocate that to  
17 the water companies is through the use of data which  
18 is -- relates to the market as a whole.

19           In the capital asset pricing model, I  
20 suggest that there be two forms of the model actually  
21 employed; the -- what I call the traditional model, as  
22 well as the empirical capital asset pricing model.  
23 Studies have shown and there have been numerous  
24 studies have shown that the traditional model, even  
25 one which already uses an adjusted beta, tends to

1     understate -- still understate the cost of equity for  
2     companies with betas, adjusted betas, lower than 1,  
3     and overstate the cost rate for companies with betas  
4     greater than 1.

5             That can be accomplished through use of the  
6     empirical capital asset pricing model, which is  
7     described in the comments, and there's a related  
8     attachment that provides the background, the basis,  
9     and support for it.

10            I also suggest, as with the risk premium  
11     model, that the use of the long-term historical  
12     information be used from those holding period returns  
13     to make the determinations of the return on the market  
14     and in computing the property premium, if you will, as  
15     associated with the application of each of the two  
16     models.

17            As a result of taking this approach to these  
18     three models, I came up with a range of common equity  
19     cost rate at a 40% equity ratio from the overall,  
20     which would be at 100% equity of 9.17, to 11.35%  
21     compared to the current ranges.

22            Now, having arrived at that, I said to  
23     myself, you know, Hanley, this is really great, but is  
24     there any semblance of reality to what you come up  
25     with. And it would be nice to pat yourself on the

1 back and just say, this is terrific. And  
2 AUS Consultants on behalf of the National Association  
3 of Water Companies under contracts conducts quarterly  
4 surveys of water companies for their rate activity and  
5 report their rates of return and whatnot, their survey  
6 forms sent out and they fill in.

7 Now, to be very candid and put this up  
8 front, I never would feel -- other than what's  
9 published in the NAWC magazine, we can't just  
10 arbitrarily use the information that we get, but I can  
11 if it's provided to me by my client now, United  
12 Waterworks. The parent of United Water Florida gets  
13 the supporting information that we provide to NAWC,  
14 and the information that I'm about to discuss in here  
15 was, therefore, then provided to me by United  
16 Waterworks. That sounds like a circuitous route, but  
17 it's something that needs to be. Because of our  
18 contract with NAWC, we couldn't on our own give out  
19 the data that we do on their behalf.

20 Having said that, I looked at the awards for  
21 the six months prior -- or the two quarters, if you  
22 will, that would have been available prior to the time  
23 that this analysis would have been done for the 1998  
24 model. So they would have been the quarters ending  
25 December, 1997 and March, 1998. And I looked at those

1 results and found that the average equity ratio --  
2 there were 19 decisions involving 14 different state  
3 jurisdictions -- and, incidentally, they are  
4 summarized in Attachment 6 in handout -- and the  
5 average authorized return on equity during that  
6 six-month period was 10.84%.

7 Now, applying as a test, if you will, the  
8 formula -- I'll call it the pro forma formula, if you  
9 will -- having been applied in the -- applied the  
10 models in the manner I discussed is shown there, which  
11 is 7.72% plus 1.449% divided by, in this instance, the  
12 44.54% equity ratio, would have implied a 10.97%  
13 equity cost rate, which is close and -- but 13 basis  
14 points, in fact, higher than this actual of this  
15 recent average period of time.

16 Then I also took a look what would be  
17 implied at a 40% equity ratio, and -- and so by doing  
18 that, there were two companies of those 19 decisions,  
19 as you could see by visually scanning, that had equity  
20 ratios below 40%.

21 And since we believe that 40% is a good  
22 benchmark for it, I pulled those two out of the  
23 averages and then saw that the average authorized ROE  
24 then for the remaining companies was 10.86% and the  
25 average equity ratio for the remaining companies was

1 45.63% which, in turn, implied applying the formula,  
2 the pro forma formula, an ROE of 10.90%, which was  
3 then with only four basis points, as you could see,  
4 between the 10.86 versus the 10.90 applied by the  
5 formula, which gave me some degree of comfort that  
6 while any methodology is imperfect, I believe that  
7 this methodology described is reasonable and  
8 certainly, on this pro forma basis, would have  
9 produced a result that is more reasonable, in my  
10 opinion, and I believe in United Water Florida's  
11 opinion, than produced by the present formula.

12 Thank you.

13 **MR. DRAPER:** Thank you, sir; appreciate the  
14 study. Neil, would you like to --

15 **MR. BETHEA:** I'm going to defer and may ask  
16 some questions.

17 **MR. DRAPER:** Mark.

18 **MR. BURGESS:** Mark is going to have some  
19 comments both with regard to responding a little bit  
20 to what you just heard and perhaps back to the  
21 underpinning for our recommendations.

22 I have a question or two, though, about the  
23 process in which you anticipate. I appreciate the  
24 information that's been passed out by United Water and  
25 the completeness of it, but the timing of it is --

1 makes it a little bit difficult to respond in detail  
2 to some of these things; and so I'm questioning as to  
3 what process you have with regard to that.

4 We attempted to participate in the earlier  
5 workshops and understand what areas Staff wanted  
6 particular inquiry into and that type of thing, and  
7 attempted to respond to Staff's presentation of issues  
8 and subissues, so that anybody that wanted to address  
9 what our positions were, or information we had, or  
10 provide additional information to Staff with regard to  
11 that, had the capability. And so I'm just wondering  
12 whether you anticipate some type of further process  
13 whereby this can be addressed after deliberate  
14 reflection.

15 **MR. VACCARO:** If anybody would like to make  
16 written comments in response to any of the  
17 presentation made today, we would greatly appreciate  
18 it. Given the time frame we're on, we would probably  
19 need to get those comments probably by the end of this  
20 month for them to be useful.

21 **MR. BURGESS:** That's plenty of time for us.

22 **MR. VACCARO:** Great.

23 **MR. BURGESS:** And then Mark wanted to  
24 address some of the points that have been raised.

25 **MR. CICCHETTI:** I think Frank made many good

1 points. There are a couple of things that I would  
2 like to address, and we will address them further in  
3 our comments, and we would have them to you by the end  
4 of the month.

5 One important point, I think, is the market  
6 weighting. I strongly agree with Frank that that's  
7 inappropriate for the reasons that he raised. It  
8 seemed to me that in general, the differences that  
9 Frank and AUS and United Water have raised relative to  
10 what the Staff has been doing seem mainly to deal with  
11 the way to calculate the cost of the equity, very  
12 similar to what you might see in a rate case where  
13 different sides have different points of view on how  
14 that should be done.

15 One of the things that he mentioned was with  
16 regard to the single-stage model versus the two-stage  
17 model, and I would just like to point out that  
18 generally in financial textbooks you'll see that if  
19 there is a big expected change in growth, that you  
20 should recognize that in two distinct stages.

21 I really don't think that the Staff's model  
22 is doing a two-stage process for that purpose. It's,  
23 in essence, just recognizing the fact that we have  
24 analysts' expectations. And, again, I agree with  
25 Frank that analysts' expectations ought to be utilized



1 and the historical model shouldn't, but the Staff's  
2 model basically recognizes that the analysts'  
3 expectations only go out so far, and since the model  
4 deals with perpetuity, we're taking the longest term  
5 expectations and then just using them out into the  
6 future. And so I think the model is totally  
7 appropriate.

8           Frank mentioned that earnings per share  
9 should be used instead of dividends per share. I  
10 don't agree with that. The company does not pay out  
11 earnings per share as they earn them. The cost of  
12 equity is a function of expected dividends per share  
13 and expected change in stock price over some time,  
14 which is also a function of dividends per share. I  
15 have yet to find any financial textbook that suggests  
16 that earnings per share ought to be used in DCF  
17 analysis.

18           With regard to the quarterly compounding, I  
19 agree with Frank's point. I don't think it's  
20 necessary. As long as there's an appropriate  
21 adjustment if the quarterly model is being used in  
22 order to tie it back into the equity ratio construct,  
23 the amount of equity and how that's being determined,  
24 there shouldn't be a problem; but using the annual  
25 model and the way that the Staff determines how that's

1 applied, I think it's -- how the result of the return  
2 on equity is applied, I believe, is fine.

3           And if we are going to use the quarterly  
4 model, there should be some recognition of how that  
5 impacts the growth in retained earnings and the  
6 earnings on dividends paid, which is reflected in the  
7 quarterly determination of the cost of equity. And I  
8 believe we've got that in our comments, and I have  
9 published a paper in that regard, and I believe that's  
10 readily available.

11           With regard to the arithmetic means versus  
12 the geometric means, I agree with Frank. I think his  
13 points are very well taken. With regard to the risk  
14 premium model, he's suggesting that we rely on the  
15 earned returns as provided by Ibbotson, and I believe  
16 that's inappropriate.

17           The cost of equity is a function of  
18 expectations. Earned returns can differ from those  
19 expectations. I've seen instances of people relying  
20 on the earned returns, which would show that the cost  
21 equity is below the cost of debt if you have holding  
22 periods where there's been a negative return. So I  
23 think that just underscores the inappropriateness of  
24 using earned returns in a risk premium model.

25           The other part of that is Frank mentioned

1 that he believes it's circular if you use a DCF model  
2 in determining the risk premium cost of equity because  
3 if the DCF model is flawed, then your risk premium  
4 model is going to be flawed. I assume he would agree,  
5 then, if the DCF is not flawed, then the risk premium  
6 analysis would not be flawed. I don't see that as  
7 being a circularity problem.

8 I think a risk premium analysis that's  
9 determined the risk premium over some long period of  
10 time using a DCF model is just going to provide you  
11 with what that risk premium difference has been  
12 between the required return on equity and the cost of  
13 debt, and we'd just be trying to interpolate that into  
14 the future.

15 With regard to relying on a quarterly survey  
16 to determine the cost of equity -- and I think Frank  
17 was just using this to underscore the reasonableness  
18 of his methodologies -- I would just like to point out  
19 that to look at what other states have earned and then  
20 say that ought to be the cost of equity here  
21 incorporates a lot of circular logic.

22 You can't just say well, they have gotten  
23 this and, therefore, we ought to allow our companies  
24 this. You can see the problems that that would --  
25 what you would end up with there, the problems that

1 you would have.

2 Other than that, I'd just -- will take the  
3 chance to look at his study and provide some more  
4 comments by the end of the month. I did look at what  
5 Wayne Schiefelbein had handed out, Mr. Schiefelbein,  
6 and I just wanted to make two quick comments with  
7 regard to the general comments listed there.

8 The first general comment states that the  
9 cost of debt for some utilities might exceed the  
10 leverage formula of return on equity, and I would just  
11 point out that if there's a particular utility that  
12 has circumstances which show that the leverage formula  
13 should not be relied on because its risk is greater  
14 than what might be incorporated in the leverage  
15 formula, then a company does not have to rely on the  
16 leverage formula. I don't think we should gear the  
17 leverage formula for exceptions rather than the  
18 general use.

19 And the only other thing is with regard to  
20 the second comment, he states that these practice  
21 include -- or Mr. Perry states that these practices  
22 include nonrecognition of reuse facilities as 100%  
23 used and useful. I believe that was the condition of  
24 the Commission, but it's my understanding that that  
25 was overturned in court. And so, as I understand it,

1 the Commission will have to recognize those as 100%  
2 used and useful.

3 And that concludes my comments.

4 **MR. DRAPER:** Neil, would you like --

5 **MR. BETHEA:** Neil Bethea. First of all, I'd  
6 like to clarify that I'm not -- I'm sorry. I'm Neil  
7 Bethea with the Public Service Commission.

8 I'm not an expert in this area, so I'm  
9 treading on thin ice. I'm really kind of down in the  
10 trenches. I work with the Water and Wastewater  
11 Division, not the people who do the cost of capital,  
12 but I do have some questions for, I guess, both Mark  
13 and Mr. Hanley, and I'm going to ask the folks who are  
14 experts to help me out if I'm off base on any of  
15 these. But I'm trying to get an education a little  
16 bit on this, so bear with me.

17 First of all, Mark, I -- reading through  
18 your comments on the workshop questions, you list in  
19 1(b) the risk factors that are unique to Florida Water  
20 and Wastewater Utilities, and so you have several  
21 things listed there.

22 One thing we've talked about in the Division  
23 are things like the county option whereby the counties  
24 can opt out of our regulation. For one, the -- also,  
25 there seems to be -- there is a high incidence of

1 county or city protest to certification or territorial  
2 expansions. And then the other -- one other factor is  
3 the environmental conditions in Florida that are sort  
4 of unique among many other states, and I wonder if  
5 there's any way -- first of all, should we consider  
6 those factors and, if so, how do we consider them?

7 I mean, what could we do to recognize that  
8 there is -- that there may be a higher risk associated  
9 with Florida companies due to those factors?

10 **MR. CICCHETTI:** Now, I think they certainly  
11 should be considered on the one hand, and then on the  
12 other hand, what should those considerations be?

13 I would point out that with regard to  
14 environmental concerns, wherever there are higher  
15 costs involved, I believe the Commission would allow  
16 those costs to be recovered, assuming they were  
17 reasonable and prudently incurred costs.

18 And with regard to counties and municipals  
19 wanting to maintain territory, I don't know that  
20 that's necessarily unique to Florida. I think a lot  
21 of water utilities around the country face those same  
22 type of concerns.

23 **MR. BETHEA:** Do you know any specific states  
24 where that is --

25 **MR. CICCHETTI:** Well, I haven't --

1           **MR. BETHEA:** -- allowed?

2           **MR. CICHETTI:** We could take a closer look  
3 at that and investigate that, but --

4           **MR. BETHEA:** But you think there are --

5           **MR. CICHETTI:** Generally speaking, without  
6 having done any studies.

7           **MR. BETHEA:** Okay. Let me direct the same  
8 question to Mr. Hanley. Could you respond on that as  
9 well? If not, okay.

10           **MR. HANLEY:** I guess all I could say is, is  
11 that I generally concur with what Mark said in that  
12 regard. I don't have any other really specific  
13 comments, and I certainly don't have any studies here.

14           **MR. BETHEA:** Okay. Now I'm treading on  
15 really dangerous ground here. Mark are you familiar  
16 with Henry Mulle? I'm not sure I'm saying his name  
17 right. Henry G. Mulle, or Mulle?

18           **MR. CICHETTI:** Yes.

19           **MR. BETHEA:** How do you pronounce that,  
20 first of all --

21           **MR. CICHETTI:** Mulley (phonetic.)

22           **MR. BETHEA:** Mulle. Okay.

23           **MR. CICHETTI:** He worked for Frank for  
24 quite a --

25           **MR. BETHEA:** Oh, he did. Maybe he can help

1 me out, then. I got an article just yesterday and  
2 read through it, and it's called -- it was in the  
3 Water Magazine, I guess published by National  
4 Association of Water Companies, and it's entitled "It  
5 IS the Size of the Dog in the Fight After All". Are  
6 you familiar with the article?

7 **MR. CICCHETTI:** No.

8 **MR. BETHEA:** Have you read it?

9 **MR. HANLEY:** I have, yes.

10 **MR. BETHEA:** You have. Well, I'm going to  
11 try to ask some questions on this, so bear with me.  
12 Is it true that all of Florida water and wastewater  
13 utilities would classified as small cap companies in  
14 terms of market capitalization?

15 **MR. CICCHETTI:** Generally speaking, small  
16 companies are defined as under a billion dollars of  
17 market capitalization. So I believe that all Florida  
18 utilities -- I'm not aware -- I'm not sure if Southern  
19 States has gotten that large or not.

20 **MR. BETHEA:** What about for the rest of the  
21 water and wastewater industry in the United States;  
22 are those mostly categorized as small caps?

23 **MR. CICCHETTI:** That's my understanding,  
24 yes.

25 **MR. BETHEA:** Are you familiar with the SBBI



1 yearbook? Is that a recognized publication for --

2 **MR. CICCHETTI:** I'm not familiar.

3 **MR. HANLEY:** Yes, that's -- basically he  
4 uses that, but that's the Ibbotson that I was  
5 referring to, "Stocks, Bonds, Bills and Inflation" by  
6 Ibbotson Associates. I'm very familiar with --

7 **MR. CICCHETTI:** Well, I'm familiar with  
8 that. I didn't recognize --

9 **MR. BETHEA:** Okay. Well, I --

10 **MR. CICCHETTI:** -- SBBI --

11 **MR. BETHEA:** Again, I'm not the expert, and  
12 I've never heard of it. So I'm just going to read a  
13 part of this article. He says the use of beta as the  
14 sole risk measurement has come under increasing attack  
15 beginning with the 1995 edition of the SBBI Yearbook.  
16 SBBI began to fine-tune the risk premiums of small  
17 company stocks and even added the term "SP" for size  
18 premium to the basic capital asset pricing model  
19 formula.

20 Are you familiar with that approach at all?

21 **MR. CICCHETTI:** Well, I haven't seen that  
22 particular piece of work, but in general what you're  
23 talking about, I'm familiar with it, and I would point  
24 out that that's -- the use of that book is what I was  
25 referring to when I said relying on earned returns on

1 a historical basis as being inappropriate.

2 **MR. BETHEA:** Okay.

3 **MR. CICHETTI:** But I would agree that using  
4 beta solely as your measure of risk would be  
5 inappropriate. I believe there's a lot of negatory  
6 feelings, for lack of a better term, with regard to  
7 beta that are inappropriate. I think from a  
8 theoretical standpoint, beta is sound, very sound.  
9 It's when you try to apply it in practice that it  
10 breaks down, because most people rely on historical  
11 analyses when the whole concept is on a  
12 forward-looking basis. So to rely on it solely could  
13 provide you with some problems.

14 There's some very famous cases of companies  
15 who went bankrupt while their betas were still showing  
16 that everything is fine; they weren't very risky. But  
17 I believe it's an important tool to rely on in your  
18 overall analysis.

19 **MR. BETHEA:** Okay.

20 **MR. HANLEY:** If it's appropriate, I'd like  
21 to --

22 **MR. BETHEA:** Sure. Go ahead --

23 **MR. HANLEY:** -- just jump in with a comment.

24 **MR. BETHEA:** I'm kind of wanting some --

25 **MR. HANLEY:** I'm familiar with Mr. Mulle's

1 article, and I frankly disagree with it completely,  
2 and I seriously thought about writing a response to  
3 it. But to also be candid, this is an informal  
4 workshop. I saw no need to have to tick off a lot of  
5 people in the industry by doing so.

6 But in any event, the models when they're  
7 applied really take the size into account. Yes, there  
8 is a small size premium, and to the extent that  
9 smaller companies pay more for capital, market prices  
10 for example, reflect that, and also in this formula  
11 that we apply, there certainly is in my view a very  
12 serious bona fide attempt to recognize the effects of  
13 size.

14 Will they be adequate in every time? The  
15 answer is, I think, no. I believe -- I don't know for  
16 a fact, but clearly there have to be out of these  
17 several hundred water companies, and I think almost  
18 the same kind of number of wastewater companies in the  
19 state, there have to be circumstances where their cost  
20 of borrowing capital has got to exceed what's in the  
21 leverage formula.

22 And if they can meet the burden of proof,  
23 then I think to show that notwithstanding the attempts  
24 at equity ratio and everything else, they just cannot  
25 borrow at the rates presumed in the leverage formula,

1 then I think it is appropriate to say, okay, in this  
2 instance they've met the burden of proof; let's heat  
3 the slipper a little bit, expand it and make it fit.

4           But this carte blanche thing that Mulle has  
5 in his article, I think, frankly is preposterous, and  
6 I think there is again -- I'll say it again -- a bona  
7 fide effort to recognize this small size. Smaller  
8 companies tend to pay more for capital. They would  
9 tend to have lower bond ratings, and if they aren't  
10 rated or can't or choose not to even get a private  
11 rating or it's not required and they use the private  
12 placement technique, the institutional investors, in  
13 effect, rate them unofficially and say, well, you're a  
14 Baa3 or, actually, you're even below investment grade  
15 category, and if you want this loan, this is what you  
16 have to pay.

17           And if they can then demonstrate that and  
18 meet the burden of proof to the Staff, then I think it  
19 would be appropriate to say this is one of those  
20 instances where we can make an adjustment over and  
21 above what the formula indicates, but this carte  
22 blanche thing that Mulle has in his article I think is  
23 just dead wrong.

24           **MR. BETHEA:** Okay. I appreciate that. Were  
25 you saying early on that our leverage formula

1 adequately considers size, do you think?

2           **MR. HANLEY:** I believe that there's a  
3 serious effort to consider size, but I don't think,  
4 frankly, that in every instance it will have done an  
5 adequate job, because there just -- and, honestly, I  
6 don't know this; it's pure speculation on my part --  
7 but out of these several hundred water companies and,  
8 you know, many other -- I forget if it was 175 or a  
9 like number, whatever it is, of wastewater utilities,  
10 there just have to be many of them very, very small  
11 companies that couldn't possibly borrow, I believe,  
12 but don't know for a fact, at the rates presumed in  
13 the model, even with those extra adjustments.

14           I'm not talking about the 7.72, but even  
15 taking into account those differentials of  
16 accumulating an additional 70 basis points. And if  
17 they can demonstrate that and they can demonstrate  
18 that they just frankly cannot -- could not do any  
19 better, I don't think that they should be punished for  
20 that because of their size. Then I think that there  
21 needs to be some recognition to the formula to say,  
22 well, look they made their best efforts -- and I must  
23 confess, I don't know at the moment whether they need  
24 to come in every time they finance and get a financing  
25 certificate or not. I'm not that familiar with your

1 rules down here. But if that were the case, then they  
2 will already have demonstrated.

3 But in order to get a financing approval  
4 certificate to issue debt or whatever, it has to be  
5 presumed to have been a reasonable transaction. And  
6 if -- and so they would already have met that burden  
7 of proof, and if that type of a certificate isn't  
8 required, then they would have to meet the burden of  
9 proof on a -- call it an ad hoc basis in conjunction  
10 with their case to suggest why there ought to be an  
11 exception to the leverage formula.

12 **MR. CICCHETTI:** Neil, I have not read  
13 Frank's article, but other than that, I agree with  
14 everything that Frank is saying. I would just point  
15 out that my experience in looking at a lot of these  
16 companies that had high costs of debt, in many  
17 instances you would look at companies that had either  
18 negative equity or no equity or very little equity,  
19 and so lenders would require some pretty high  
20 premiums.

21 I think that needs to be considered  
22 separately from an adequately capitalized company, and  
23 if they're -- and I'm not 100% certain either, but if  
24 there are companies that are not -- that are  
25 adequately capitalized but still have high costs of

1 debt, then there should be some recognition.

2 MR. BETHEA: You're saying there should be  
3 some consideration outside the leverage formula to --

4 MR. CICCHETTI: Right. And my --

5 MR. BETHEA: -- account --

6 MR. CICCHETTI: -- understanding is that's  
7 available to them. They don't have to --

8 MR. BETHEA: Is that available in the --

9 MR. CICCHETTI: They don't have to --

10 MR. BETHEA: -- current way we do things?

11 (Inaudible overlapping comments.)

12 MR. BETHEA: We're not bound by the leverage  
13 formula in every case?

14 MR. DRAPER: I don't believe we are.

15 MR. BETHEA: And I'm getting educated here.

16 MR. CICCHETTI: Yeah, you don't have to --

17 MR. BURGESS: My understanding is that the  
18 leverage formula is just if a utility chooses not to  
19 put on any testimony.

20 MR. MAUREY: I'm Andrew Maurey with Staff.

21 That's correct. They have the option of  
22 filing under the leverage formula. Most companies do  
23 use the leverage formula, but they are free to propose  
24 other methods for determining their return on equity.

25 MR. CICCHETTI: I imagine one of those could

1 be, here's our special circumstances. This is why we  
2 ought to have a little in addition to the leverage  
3 formula rather than going through extensive cost of  
4 equity testimony, if that's what they choose to do.

5 **MR. BURGESS:** But that's rolled into each  
6 case as the company comes in rather than, as Frank is  
7 suggesting, it's something in the leverage formula  
8 itself. I mean, that's something that -- the fact  
9 that it's a departure, so to speak, as I understand  
10 it, it is anticipated that that would be dealt with in  
11 the rate case as the utility files.

12 **MR. HANLEY:** Yeah. I would just like to say  
13 one more thing, and here again I agree with Mark. I  
14 mean, if you've got some small company or developer's  
15 company or whatever and the guy's coming in and he  
16 says, well, you've got 5% equity in this thing, and,  
17 you know, 95% debt, and he wants like a 40% return on  
18 equity or something, I mean, just like if it were --  
19 you know, a real company, you know, with professional  
20 management and whatnot, if they overleverage or  
21 they've got too thick an equity ratio, commissions  
22 general across the country are free to say, well, you  
23 can do what you want in terms of running your company,  
24 but for ratemaking purposes, that's not reasonable and  
25 we can assume a hypothetical.



1           So, yeah. I mean, I think that has to be  
2 taken into account, as Mark suggested, but if they are  
3 appropriately capitalized and still can demonstrate  
4 a -- you know, an inordinately high cost for whatever  
5 the reasons, then I think there ought to be some  
6 mechanism for taking that into account, short of them  
7 having to go out and hire experts and put on a big,  
8 you know, case, which seems ludicrous if the company  
9 is that small to begin with.

10           **MR. MAUREY:** That's correct. I mean, we do  
11 have some companies where they're so undercapitalized  
12 with equity, or their operating costs are so high  
13 compared to the amount of rate base, that the rate  
14 base rate of return formula doesn't really give them  
15 the cash flow they need to operate; and those  
16 companies need to -- we do have the ability, if they  
17 are small enough in size, a Class C, I believe, a  
18 Group C, they can opt for an operating margin method  
19 of regulation so they can get away from the use of  
20 rate base rate of return regulation.

21           But we still have -- your point is well  
22 taken that if a company is negative equity or 5%  
23 equity and has some other things going on, they're not  
24 going to be in a position to put on an affirmative  
25 case to demonstrate why a leverage formula shouldn't

1 apply to them, other than the fact that someone is  
2 looking at their balance sheet and income statement  
3 and come to that conclusion themselves. But I agree  
4 that those are special cases that would have to be  
5 treated outside of the formalistic approach we're  
6 looking at here.

7 **MR. BURGESS:** But as I understand it, once  
8 again the process allows for all of that, including  
9 what we haven't mentioned yet, the staff-assisted rate  
10 case. If a company is small enough and it has special  
11 circumstances, the Staff with its expertise is able to  
12 look at that, and if it considers in its discretion  
13 that it needs to use one of these alternative methods  
14 as opposed to the leverage graph, it has that option,  
15 too.

16 So, you know, I think these special  
17 conditions are already anticipated and carved out.

18 **MR. BETHEA:** Steve, I'll just point out that  
19 in the Staff assisted program we typically use a  
20 leverage formula and force them into that model rather  
21 than deviate from it.

22 There have been, I think, only two cases  
23 where we've done an operating ratio, and we tried it  
24 in others, but there's not -- the Commission has been  
25 real reluctant to use that and just widespread in

1 cases where operating costs, operating expenses far  
2 exceed rate base.

3 **MR. BURGESS:** Then as we --

4 **MR. BETHEA:** -- (inaudible overlap) -- not  
5 generally applicable -- you really have to put on  
6 your -- you know, show that it's justified, but if --

7 **MR. BURGESS:** But it seems to me, and if  
8 I -- if what you're saying is you -- Staff has thought  
9 it appropriate to take some alternative mechanism to  
10 the Commission and the Commission in its discretion as  
11 decision maker said no, then that's what they're  
12 appointed for --

13 **MR. BETHEA:** That's true.

14 **MR. BURGESS:** -- and I don't think we want  
15 something that says, oh, now we need something to  
16 override the Commission's discretion because they have  
17 rejected it.

18 **MR. BETHEA:** Point well taken.

19 I guess one last question I have concerning  
20 small companies, because the model we have I don't  
21 think distinguishes between the As and the Bs and the  
22 Cs and it's one size fits all: Should there be  
23 consideration given for the Class Cs, for instance,  
24 since they are so much smaller and really have unique  
25 characteristics? Should that be considered and, if

1 so, how could we do that to assign an additional  
2 premium if we wanted to?

3 Anybody address that?

4 **MR. CICCHETTI:** Neil, I don't think that's  
5 unreasonable. If you want to sort of take the  
6 leverage formula apart and stretch it out a little bit  
7 and say it's more risky from the mean versus less  
8 risky or however, it's just -- doesn't sound  
9 unreasonable.

10 **MR. HANLEY:** Yeah, but see this is where I'm  
11 suggesting that, you know, once you've got the formula  
12 and you think the formula is good, but you recognize  
13 that it's not going to fit every foot, you know, in  
14 the kingdom, then you have to say okay; how are we  
15 going to make exceptions. Do we want to just have  
16 something out there on the platter and suggest that,  
17 oh, anybody that feels that it doesn't meet this, I  
18 don't think that -- if the tables were reversed and I  
19 were in the Commission, I would say no, you meet the  
20 burden of proof. Here's the formula. Come in and  
21 show me why. Explain why that this ought to be  
22 deviated from and what you can apply the formula, come  
23 up with a result and then after sitting down with  
24 them, make an additional, a yet additional -- in other  
25 words, apply the formula, come up with a result, and

1 then if, after proper discussion, you feel that they  
2 meet some degree of proof that they are more risky  
3 than what is implicit in the formula, then you can  
4 make an additional add-on if there's nothing that  
5 prohibits it.

6           **MR. CICCHETTI:** I would just like to qualify  
7 my statement as saying I think what the Commission is  
8 doing is fine. What Neil was proposing is not  
9 unreasonable, and I agree with what Frank is saying.

10           **MR. HILL:** Can I just add a quick comment  
11 here that's sort of ducking the question and maybe  
12 expanding the scope of this workshop?

13           But small water companies are a problem, I  
14 understand, not only in this state, but in many states  
15 where United Water operates. And I'm really unaware  
16 of any affirmative policies that this Commission has  
17 implemented to encourage the consolidation of these  
18 companies. That's not to say that they don't exist.  
19 I'm just not aware of them.

20           I am aware in other states commissions have  
21 drafted and implemented policies to encourage the  
22 acquisition, for example, of smaller companies by the  
23 larger companies to get rid of some of these problems.

24           It's certainly not a perfect answer, but one  
25 of those incentives would be favorable consideration

1 of acquisition adjustments and those types of things,  
2 where in a -- in a situation here where many times  
3 small water company owners believe that their assets  
4 are worth a lot more than they really are, and in  
5 order to solve some of these problems that relate to  
6 small water companies, the only answer is to have them  
7 become part of a larger customer base.

8           And for those reasons, I guess I'm asking  
9 whether there are any policies that have been  
10 considered or implemented here, even though this may  
11 be somewhat outside the scope of this workshop.

12           **MR. BETHEA:** I'll try to address that. I  
13 guess if we -- we don't have an official policy on  
14 that, but our practice has been that the company has  
15 to prove that a positive acquisition adjustment is  
16 appropriate. The company has to make that case and  
17 I'm not -- I couldn't tell you how many times we had  
18 done that. It's not been many. But our general  
19 policy is that absent any proof to the contrary, we  
20 don't recognize positive or negative acquisition  
21 adjustments.

22           **MR. CICHETTI:** Neil, isn't it true that in  
23 many instances there is a negative acquisition  
24 adjustment, but the Commission allows the company to  
25 recognize the full rate base --

1           **MR. BETHEA:** Yes, that's --

2           **MR. CICCHETTI:** -- so it -- doesn't that  
3 work in the company's favor.

4           **MR. BETHEA:** That's what I meant, that it  
5 would not have an impact on the rate base unless the  
6 Commission deemed it appropriate.

7           **MR. HILL:** That could work to the company's  
8 benefit or detriment, depending on the purchase price  
9 of the system.

10          **MR. BETHEA:** Right.

11          **MR. HILL:** I'd be happy to provide, by the  
12 way, examples of some incentive policies that have  
13 been implemented in other states if there's interest  
14 in that.

15          **MR. BETHEA:** I'd like to have that.

16          **MR. MAUREY:** I just have a couple questions  
17 and then a comment; one I want to -- a question I want  
18 to give both Mark and Frank an opportunity to address  
19 regarding the cost of debt that we use in the leverage  
20 formula.

21                 It's already been mentioned that in some  
22 cases, some of the utilities in Florida aren't  
23 borrowing at the assumed cost of debt that we use in  
24 the leverage formula. We presently use an assumed  
25 rate of a BBB3, but if either of you have ideas on a

1 more appropriate cost of debt or how we'd quantify a  
2 more appropriate cost of debt for use in this leverage  
3 formula, I'd like to hear each of your ideas.

4           **MR. HANLEY:** Well, actually, Andrew, I  
5 thought, you know, about that and, frankly, trying to  
6 stay with the notion of a -- of a formula that works  
7 in most instances but we recognize not all, I think  
8 the use of a Baa3 or, you know, BBB- equivalent is  
9 probably a good one.

10           I don't think you want to assume in terms of  
11 a formula anything lower than that, and that I think  
12 by making the additional -- because you don't want to  
13 think -- and in terms of a general formula I don't  
14 think below investment grade. At least I wouldn't.

15           So really, no. I mean, I think the thinking  
16 in those regards has been right on the money. Again,  
17 I would just say and encourage that, to continue that  
18 aspect of the model and just really consider  
19 exceptions to the rule as they become really apparent  
20 and if, in fact, they are really bona fide exceptions  
21 rather than irresponsible management.

22           **MR. CICCHETTI:** I concur with Frank.  
23 Andrew, the last time -- last workshop we -- at the  
24 last workshop there was some mention of some programs  
25 that may be available from DEP, and I believe that



1 there is a gentleman here from DEP, and I was just  
2 wondering if we could hear how that program might  
3 relate to investor-owned utilities in Florida.

4 **MR. MAUREY:** Sure. If he's interested in  
5 making some comments, we'd like to hear from him.  
6 You'll need to step to the microphone and identify  
7 yourself for the court reporter, please.

8 **MR. BANKS:** Tim Banks with the drinking  
9 water funding section at DEP, Bureau of Water  
10 Facilities Funding.

11 We do have a grant and loan program for  
12 drinking water systems. We also have a loan program  
13 for wastewater facilities. Obviously our section only  
14 handles drinking water. Currently our loan program --  
15 it's called the Drinking Water State Revolving Fund  
16 Program -- offers 20-year loans at right around 3%  
17 interest.

18 We have a grants program for financially  
19 disadvantaged communities with public health risk  
20 concerns. Those are 65 or 85% grants, but they do  
21 have to have a public health risk problem, as in a  
22 bacteriological or a chemical contamination or a  
23 violation of certain standards.

24 We have about 26 million available each year  
25 for the loans and the grants. Currently we have about

1 30 million in projects being funded.

2 As far as the loan program, they can fund  
3 just about anything except projects entirely for  
4 future growth. So we can fund infrastructure, we can  
5 fund treatment, distribution systems, laboratory  
6 facilities, computers; pretty much whatever, like I  
7 said, except for future growth.

8 **MR. BURGESS:** Could you elaborate a little  
9 bit on qualification, the qualification to obtain the  
10 loan; ownership -- you've already spoken as to the  
11 type of investment that it's allowed for, but, I mean,  
12 as far as what --

13 **MR. BANKS:** I meant to get that. Actually,  
14 when I started talking about wastewater, the  
15 wastewater part is limited to governmentally owned  
16 entities. The drinking water part doesn't have that  
17 kind of limitation, but we do have a limitation on  
18 investor-owned utilities of 1500 service connections  
19 or less unless the project is for consolidation or  
20 regionalization. I think that subject has been  
21 brought up. If the project is for consolidation, it's  
22 ineligible no matter what size the entity.

23 **MR. BURGESS:** Okay. But that being the  
24 smaller utilities anyway, I mean, that's what -- that  
25 kind of does provide that --

1           **MR. BANKS:** Our first loan, in fact, was to  
2 a very small private utility.

3           **MR. BETHEA:** Well, there are limited funds,  
4 though. How do you categorize who you're going to  
5 lend to? I mean, can just anyone, small utility, come  
6 in and be assured they're going to get the money?

7           **MR. BANKS:** It's based on priority.  
8 Priority is based on degree of public health risk or a  
9 compliance issue. Projects that don't involve either  
10 one of those are obviously at the bottom of the list.  
11 That doesn't mean they won't get funded.

12           We do segment large projects which stretches  
13 the funding out over several years to allow smaller  
14 projects with lesser priority to get funded, so even a  
15 project that is, say, a distribution system expansion  
16 to a planned community could get funded.

17           The level of segmentation obviously depends  
18 on the need. If we can stretch it a little bit to add  
19 these projects, we will.

20           **MR. BETHEA:** I wasn't aware that it could  
21 be -- the funds could be used for growth.

22           **MR. BANKS:** They can't be used for future  
23 growth. They can be used for, say, a subdivision  
24 that's already there. We can extend a distribution  
25 system into that subdivision or one that's planned.

1 We just can't -- it has to be -- one of the things  
2 that's required is a facilities plan. It's an EPA  
3 requirement. And if within that plan is this  
4 particular subdivision, we can extend the lines to  
5 that subdivision. We just can't expand them randomly.

6 **MR. BETHEA:** So if we had a small system,  
7 let's say or -- under 1500 connections, did you say --  
8 that their distribution system was, or their -- well,  
9 this is just water -- so distribution system would be  
10 deteriorating, they could get funds for replacement  
11 that --

12 **MR. BANKS:** Absolutely.

13 **MR. BETHEA:** -- and that sort of thing?

14 **MR. BANKS:** A number of our projects are for  
15 replacement of distribution systems.

16 **MR. BURGESS:** Let me ask about the  
17 underlying authority under which this process was made  
18 available, more specifically to the question of has  
19 there been any consideration or thought to opening up  
20 the wastewater side to privately owned utilities as  
21 well?

22 **MR. BANKS:** There's been some discussion.  
23 Unfortunately for the privates on the wastewater side,  
24 it was funded under a separate act. It's the Clean  
25 Water Act that does not allow privates. The

1 drinking -- the Safe Drinking Water Act that we're  
2 funded under specifically does privates.

3 **MR. BURGESS:** So it would take statute  
4 amendment --

5 **MR. BANKS:** It would take a federal --

6 **MR. CICCHETTI:** Tim, would a system that was  
7 less than 1500 but was part of the larger holding  
8 company, would that qualify?

9 **MR. BANKS:** That's a good question. I  
10 believe so. It kind of depends on how you define  
11 ownership. Our rules say that the owner has to -- of  
12 the system has to be less than 1500 service  
13 connections, but some of these are obviously not real  
14 clear-cut. That's an issue we're going to have to  
15 address.

16 **MR. BURGESS:** Do you have anything in a  
17 process of education or dissemination of information,  
18 how does a utility -- aware of you? Is it something  
19 that you just expect any privately-owned to be aware  
20 of?

21 **MR. BANKS:** Well, we send out for requests  
22 for inclusion on our priority list annually, at least  
23 annually, to all public water systems that are  
24 community water systems, number one, and then rate  
25 based, number two. So everybody that's -- would

1 qualify does get what we call an RFI, and that program  
2 will be expanded at some point in time to other  
3 nonrate-based systems.

4 **MR. BETHEA:** And just to -- one other  
5 clarifying question. If it's an upgrade of treatment  
6 plant from -- to, let's say, reverse osmosis, that  
7 would clearly fall under --

8 **MR. BANKS:** Absolutely, even if it's not a  
9 public health risk at that time. If it was just for  
10 esthetics even, it could qualify. It could even -- if  
11 it's a financially disadvantaged community and it's  
12 got, say, half the maximum contaminant level for a  
13 particular contaminant, it might even qualify for a  
14 grant.

15 **MR. BETHEA:** What about stuff like aeration?

16 **MR. BANKS:** Aeration for some chemicals is  
17 the best available treatment to --

18 **MR. BETHEA:** Or just smell or something like  
19 that.

20 **MR. BANKS:** That would come under secondary,  
21 which you would have to have something else to get a  
22 grant, but it would certainly qualify for a loan.  
23 Compliance and public health risk problems almost  
24 always will get -- in fact, always will get funded  
25 under the current arrangement with the current funding

1 levels.

2           **MR. BETHEA:** And you said the statute is not  
3 clear as to whether it would apply to smaller  
4 companies that are owned by larger companies?  
5 Wouldn't it -- doesn't it target that community that  
6 it's serving?

7           **MR. BANKS:** It pretty much specifies the  
8 franchise area which --

9           **MR. BETHEA:** Okay.

10           **MR. BANKS:** -- which I think that's where  
11 the gray area gets into -- comes into play. I know  
12 there's some utilities out there that even the local  
13 utility, even though there's even a parent company to  
14 have that -- but the local utility has a number of  
15 systems, and each franchise area, the way the rule  
16 reads to me right now, could qualify separately; but  
17 that is a gray area. We'd have to look at each case  
18 and --

19           **MR. BETHEA:** But you've probably funded them  
20 before, right?

21           **MR. BANKS:** Actually our program is very  
22 new. Our first loans were made in July of last year  
23 and our first construction loans, those first two  
24 loans that we made were actually loans and grants  
25 to -- for preconstruction. The first construction was

1 in September.

2 **MR. BETHEA:** And a list -- you've got a list  
3 available, don't you, of all --

4 **MR. BANKS:** Uh-huh.

5 **MR. MAUREY:** Well, thank you very much.

6 Frank, we appreciate the analysis you did,  
7 and some of the suggestions that you've made we've  
8 considered. I mean, we've added the prospective CAPM  
9 analysis based on Dr. Morin's comments from our  
10 workshop in '95, and we've -- we're also seriously  
11 looking at the use of the gas distribution risk  
12 premium, if it's still a reasonable approach, and the  
13 historic DCF.

14 But I did want to ask you a question in  
15 regard to your comments about why you're advocating  
16 the use of a prospective DCF model not based on  
17 historic growth rates. You are recommending that we  
18 go to a historic or -- are based on a -- a risk  
19 premium based on historic or earned returns, and a  
20 CAPM analysis based on historic or earned returns, and  
21 I'd like to give you an opportunity to comment on  
22 that.

23 **MR. HANLEY:** I'm really glad you asked this  
24 question, because I was hoping to get onto those  
25 topics to respond to some of Mark's comments. So this



1 certainly provides that opportunity.

2           As far as the -- in the DCF, yes, I think  
3 that the analysts' forecasts -- and there have been  
4 studies that show that the analysts' forecasts are  
5 appropriate, because you've got to keep in mind you're  
6 taking a current price and you're saying, okay; what  
7 are you looking for in terms of growth.

8           Now, it's true in the textbooks they talk  
9 about it's growth in dividend, but when you think  
10 about the model in practical terms, you have to say to  
11 yourself -- which is why I think the analysts'  
12 forecast of earnings is the most meaningful --  
13 dividends can grow either way below earnings, rate of  
14 earnings growth in the short run, and if it grows  
15 above it for over the longer term, the company is in  
16 real trouble. So basically over the longer term it's  
17 got to grow the way earnings grow.

18           Now, ideally if we had a 10 or 15 or 20 or  
19 25-year forecast growth in earnings, that would be  
20 great, but we don't. They have 5-year earnings  
21 forecasts. What really drives market prices? Is it  
22 if a company ticks its dividend up two cents? Does  
23 that really drive market prices? No.

24           It's the expectation of future earnings and  
25 the related multiples that go along with that that

1 really drives it up, and that's where the capital  
2 appreciation comes from. That's where the growth in  
3 the model, the bulk of the growth, really is.

4           So I think that's what you really need to  
5 look at. And the analysts' forecasts take into  
6 account, as I said historical, trends and, if you  
7 will, they kind of run them through a filter. They  
8 have meetings. They get all sorts of questions  
9 answered that the average investor certainly wouldn't  
10 know what to ask or how to get that information, but  
11 those analysts do, and they filter that process and  
12 then they come out with earnings estimates that  
13 clearly influence investors' decisions and have an  
14 impact on market prices.

15           And to the extent that they impact market  
16 prices, they impact the expectations of growth a lot  
17 more than other measures; and so I think that they  
18 really are appropriate to use more than just looking  
19 as an investor at historical information.

20           Now, you say, okay, what about in the  
21 context of, for example, the risk premium analysis;  
22 why am I suggesting the use of a long-term historical  
23 average. Well, the bond rating process really  
24 reflects all the most current assessment of risks of  
25 an enterprise, and I've got one of the attachments in

1 the handout here from Standard & Poor's, and you can  
2 see the process that they go through and all the  
3 things that they consider.

4           And I would suggest to you that you'd be  
5 hard-pressed to come up with anything in terms of a  
6 diversifiable risk, business or financial risk, some  
7 element that they really don't contemplate in that  
8 bond rating process.

9           So when you're getting basically the  
10 equivalent of a company-specific bond yield, and  
11 even -- we adjust even more for recognizing these  
12 really little companies with our added increments and  
13 so forth, so think in terms of that as well -- then  
14 you have to say, okay, now how do we go about equity  
15 risk premium.

16           Well, the bond yield -- or on long-term  
17 bonds is a long-term investment horizon, and ideally,  
18 ideally, we would want to look for long-term earnings  
19 growth, too, in the standard DCF model, except we  
20 don't have any. The most we have are five-year  
21 projections of growth. But if we look back, what do  
22 we have for historical growth measures, and even they  
23 aren't particularly meaningful because they're company  
24 specific is what you look at in the DCF model. But  
25 now when you've got company-specific, a large portion

1 of your risk is already reflected in the  
2 company-specific bond yield.

3 We want to come up with some idea of a  
4 long-term equity risk premium. You're not looking at  
5 company-specifics. It is appropriate, in my opinion,  
6 to look to the long-term past of market returns --  
7 without repeating what I said earlier about what --  
8 and Mark agrees, the arithmetic mean is appropriate to  
9 look at.

10 But when you look at that long-term average  
11 in that regard because it was the market, and now  
12 you're getting really beyond diversifiable kind of  
13 risk, you're getting into all those socioeconomic  
14 macro kind of factors around the world; you know, war  
15 and peace; you know, starvation; what Bill Gates says  
16 on the witness stand and how it affects the market and  
17 all the technology stocks; all sorts of things that  
18 have absolutely nothing to do with an individual  
19 company or, indeed, a given industry.

20 And so it is appropriate in my view to look  
21 at the long-term average of all those random holding  
22 period returns to get -- and then, you know, subtract  
23 out the appropriate debt to get the equity risk  
24 premium from it and say on average over the long term,  
25 that is a reasonable expectation; because as we said,

1 you know, there's probably not going to be another  
2 Viet Nam or a World War II or something like that, but  
3 there will be all kinds of events, things that shake  
4 up the world.

5           And while they differ, all these things can,  
6 like would happen -- as Ibbotson & Associates says --  
7 and again there's that relevant part as one of the  
8 attachments in there -- if a lot of these things  
9 didn't happen, who would have ever believed that we  
10 would -- what would happen to the savings and loans,  
11 the thrift institutions?

12           Who would have believed -- go back to, you  
13 know, 20 years ago. Who would have believed that the  
14 Soviet Union would no longer exist? People would have  
15 thought it was not possible. So these kinds of things  
16 that we say are crazy, and "that's history," will  
17 never happen again.

18           Maybe the same things won't, but over the  
19 very long term, other things that may have the same  
20 kind of impacts. And they provide the arithmetic mean  
21 of those random returns, those holding -- actual  
22 market holding returns allocated by the beta do  
23 provide insight into a long-term equity risk premium  
24 that could be expected again with emphasis on the long  
25 term.

1           Ideally in the DCF, if we had a meaningful,  
2 really, you know, an intelligent, long-term forecast  
3 of -- on a company-specific basis that one could use,  
4 sure, use it. But when you've only got five years to  
5 work with, you know, you have to work with that.

6           And then I would just suggest also that  
7 that's why a two-stage in my view is -- a two-stage  
8 growth model is basically kind of -- I hate to use the  
9 word -- but silly, because you've either got to do two  
10 things; one, you either have to make the brash  
11 assumption that the second-stage growth is really an  
12 outfall of the five-year forecast, which is really  
13 what you do; and if you don't do that, then you've got  
14 to make the assumption that you're only going to grow  
15 impact with the economy. And if you want to, use some  
16 long-range forecasts as the FERC has done -- which I  
17 think is also kind of silly -- the presumed or  
18 estimated growth rate in gross domestic product; but  
19 there is absolutely no empirical evidence to suggest  
20 that companies are going to be limited to that. It  
21 could be less, it could be more.

22           It's, you know, a great textbook theory that  
23 somebody came up with, but there's absolutely no  
24 empirical evidence to support it. So absent that, why  
25 not use what you have, which is the best expectation

1 of a long-term growth rate, but it happens to be  
2 limited to five years. I mean, insofar as the DCF  
3 model is concerned.

4 **MR. MAUREY:** Well, the main point of my  
5 question was that while it's becoming widely accepted  
6 that analysts' forecasts for growth rates in the DCF  
7 model is the most appropriate method to use, an  
8 historic DCF -- the use of it in our model is  
9 somewhat -- goes back to the evolution of the model,  
10 if you will.

11 I believe that we're in a transition point,  
12 and whether the historic version of the DCF model  
13 continues to be used or not, we will seriously  
14 consider that.

15 But I guess my point was looking at the use  
16 of analysts' forecasts in the DCF, which is a forward  
17 looking view of where the -- of the inputs, and then  
18 you go to the risk premium model where we're looking  
19 at earned returns over a long term versus analysts' --  
20 I mean, you can pick up any Merrill Lynch or any other  
21 investment banking firm, and they look at prospective  
22 risk premiums that are more in the range of 200 to 500  
23 basis points over the current cost of debt as opposed  
24 to these long-run historic earned returns, which are  
25 in the neighborhood of 600, 700, 800 basis points.

1           And what we were -- the gist of my question  
2 was correlating the use of analysts' forecasts and use  
3 of the DCF model and analysts' projections, if you  
4 will, in the risk premium model in terms of measuring  
5 the risk premium. But I see we've --

6           **MR. HANLEY:** Okay. Well, in addition to the  
7 reasons that I've already given, I think another  
8 reason is, is that when you're talking about  
9 forecasting market returns, all you -- you know, keep  
10 in mind here we're talking about in the context of a  
11 formula that we want to try and keep in place for a  
12 year.

13           Just think about how volatile the market  
14 really is and if you want some idea of the forecasted  
15 market returns, all you've got to look at the value  
16 line, the weekly returns when they forecast a  
17 potential appreciation and see how that bounces from  
18 week to week and month to month depending on what the  
19 market does. The higher the market goes, the more the  
20 potential appreciation shrinks.

21           Back in the fall, or whenever it was, the  
22 market dropped way down to below 7500 again, whatever  
23 it was. It shot up again, and it's just bouncing like  
24 a seesaw. Look, just follow the market, not only from  
25 day to day, but even intra-day at the tremendous



1 volatility. And do we want to set a leverage formula  
2 that's going to be in place for a year with that kind  
3 of potential market volatility.

4 I don't think so, because what you want to  
5 really look at is if you're assuming that at the time  
6 you make the determination of a cost of equity, that  
7 that's not for a speculator or not for the guys that  
8 play the market and go in today and sell tomorrow or  
9 sell two days from now and try and make a killing or  
10 take a beating because they're willing to gamble, but  
11 for a real investor; and a real investor is going to  
12 look over the long-run horizon.

13 And in that regard, so far as the equity  
14 risk premium is concerned, the best clue to that is  
15 the long-term average not of some company-specific  
16 forecast, but what the market did as a whole, and then  
17 allocate that based upon the relative risks on a more  
18 current basis in the form of beta.

19 Now, you mentioned, yeah, they go all the  
20 way up. But I came up with an adjusted market equity  
21 risk premium of 6.4%, but when you allocated that  
22 based on the beta as of May last year for these water  
23 companies, it was 3.78, which is -- you know, it's not  
24 an 800 points that applies to this or whatever, but I  
25 think that it is important especially in a leverage

1 formula -- again, I hate to keep using this -- this  
2 cliché, but in my mind it really applies -- you're  
3 trying to make the slipper fit a lot of different  
4 sized feet.

5 I think you want to get away from something  
6 that is tremendously volatile. That's one goal. And  
7 the other goal is, you want to come up with something  
8 that's reasonable. I don't think anybody on the  
9 Commission or the Commission Staff says, we want to  
10 come up with the worst return we can because we want  
11 to drive everybody out of business.

12 I think the goal of everyone is, is to come  
13 up with something that is reasonable. And as far as  
14 what Mark said, I didn't look what -- in this survey  
15 that was done on behalf of the National Association of  
16 Water Companies, incidentally, not of our own volition  
17 or decision. We were commissioned to do it, and paid  
18 to do it, as a matter of fact, and our pay has nothing  
19 to do with the results that we get from the survey.  
20 Let me say that right up front.

21 So it's not what they earned; it's what they  
22 were awarded by other regulatory commissions. Now,  
23 should the Florida Commission say, oh, my goodness;  
24 Pennsylvania did this, California did that, and that's  
25 what we ought to do. No. But I think it is a reality

1 check that if you're applying a formula and the  
2 majority of other state commissions are making awards  
3 for other companies that basically all do fit into the  
4 small cap category, if you will, because there are no  
5 huge, large cap water companies, at least not yet,  
6 then I -- the only words I could think of is, it's a  
7 reality check, and I think the reality check relative  
8 to my pro forma, if you will, application of the model  
9 as I'm suggesting here, it passes a reality check, but  
10 I don't think the existing one does.

11 **MR. MAUREY:** Well, the Commission does  
12 compare other -- returns awarded in other  
13 jurisdictions. I mean, we do that in other industries  
14 as well. So it's not -- I mean, we use that same type  
15 of reality check.

16 I guess I did want to make one comment on  
17 you were talking about the volatility of prospective  
18 returns. But Staff's concern with using earned  
19 returns is because there's considerable volatility in  
20 those as well. I mean, in some years you're looking  
21 at a positive risk premium of 20%, some years it's  
22 negative 6. On average over a long term, it may come  
23 out to 6.4, 6.8 or -- depending on the period you're  
24 measuring over. But there's also 10-year or 20-year  
25 periods where that return is very small or negative

1 because -- just depending on how you choose the  
2 period; and that's the concern we've had with that  
3 model.

4 **MR. HANLEY:** Yeah, but that's exactly right;  
5 And so you if you arbitrarily pick some historical  
6 period, say, like 10 years, you're building an  
7 inherent bias. You're assuming that that 10-year  
8 period is going to be representative over a very long  
9 period of time in the future.

10 You know, if you did -- when you take the  
11 DCF model and we say, okay, it presumes an infinite  
12 horizon. Are there other forms of the model? Yes.  
13 But the standard model that's normally used in  
14 regulation -- and this Commission is no exception --  
15 presumes an infinite horizon. But in practical terms  
16 what does that really mean?

17 Well, with the present value concept, to get  
18 as close to present value as zero as you can normally  
19 takes about 40 years. Okay. So that's pretty  
20 long-term. It's a lot longer than 10 and -- but it's  
21 a lot closer to this long-term historical average. So  
22 that's, I think, a better indication of what could be  
23 experienced on average over a 40-year period of time  
24 in the future than arbitrarily picking the past five  
25 or past 10 years or something like that.

1           **MR. MAUREY:** What long-term period did your  
2 analysis assume?

3           **MR. HANLEY:** Well, they -- the Ibbotson  
4 Associates in their annual yearbook they accumulated  
5 each year, so it's running from -- this would have  
6 been from 1926 through 1997.

7           **MR. MAUREY:** All right. I had another  
8 question regarding your discussion of the two-stage  
9 DCF model. I can't recall if you were there. I was  
10 at the presentation where Dr. Myron Gordon discussed  
11 the -- his evolution, I guess, of the DCF model, and  
12 he discussed the appropriateness of a two-stage model  
13 in certain circumstances, and did -- he and his son  
14 did empirical studies on the reasonableness of that  
15 approach.

16           Have you read his paper, or were you at the  
17 SURFA conference last year that -- where he made that  
18 presentation?

19           **MR. HANLEY:** I was there, and I was also  
20 there when Jim VanderWeide asked him a question and  
21 said, well, what happens if; and you come up with this  
22 kind of result. And then if you remember Gordon's  
23 result, he said, well, then the DCF result would be  
24 wrong. So, I mean, I think he acknowledged even that  
25 the DCF is not a perfect model by any stretch of the

1 imagination.

2           And yes, I agree that the two-stage model is  
3 certainly appropriate in a number of instances, and it  
4 would clearly, clearly be very appropriate, I think,  
5 for the typical energy company, or certainly of  
6 electricians at least that are entering this new stage of  
7 their life, if you will, and so they're going to be  
8 going through some transition period, and then they're  
9 going to get beyond that, hit that adulthood, if you  
10 would, and then they're going to taper off and go to  
11 this kind of what they refer to as the steady state.  
12 But if you're already in the steady stage, what second  
13 stage?

14           **MR. MAUREY:** Well, we've dealt with that  
15 issue in our recent telecommunications docket where we  
16 had what the same -- the witness advocating a  
17 multi-stage DCF model made the same argument that  
18 you're making, that in transition phases it may be  
19 appropriate to have more than one growth rate.

20           **MR. CICCHETTI:** Andrew, if I could just make  
21 a comment about that.

22           This two-stage versus one-stage argument  
23 really confuses me, because all it is is a  
24 mathematical representation that's using the first  
25 four years as specific first four-year growth amounts,

1 and then for the fifth year growth amount, it's just  
2 using that into perpetuity.

3           Would it not be a two-stage model, instead  
4 of just showing it mathematically in two stages, to  
5 break out each specific year's expected cash flows  
6 based on first four years of growth that are available  
7 and then using the fifth year? I mean, whether you're  
8 using earnings per share or dividends per share,  
9 you're getting the same result, other than you're  
10 taking a short-term earnings per share growth estimate  
11 and using it for all periods versus specifically using  
12 the dividend forecasts that are available and then  
13 using the longest term dividend forecast as the  
14 long-term part of the model.

15           So I think there's coming some confusion  
16 between the two-stage model being used to represent  
17 significant changes of growth over periods of time  
18 versus using a model that's just trying to represent  
19 the analysts' forecasts that are available.

20           **MR. HANLEY:** Well, my response to that is, I  
21 don't think so. I mean, I hear what Mark is saying.  
22 But basically if you take -- you're just taking  
23 earnings of the first couple of years or whatever, and  
24 then you say, okay, well, for the second-stage growth  
25 rate we're going to assume what B times, well -- or

1 retention growth rate. And that's supposed to be your  
2 steady state, and it's supposed to go out, you know,  
3 ad infinitum, well, that's absurd to assume that  
4 because it doesn't go out, has no implications beyond  
5 five years.

6 And when the analysts are making a five-year  
7 growth rate, they're not saying it's 2% this year and  
8 8% next year and whatever and it -- and then it  
9 comes -- compounds out the five; they're saying, I  
10 predict over the next five years the growth rate is  
11 going to be -- and that's what motivates investors.

12 That single -- that -- you know, that growth  
13 rate is what is going to be motivating market -- or  
14 driving market prices. And if you really are going to  
15 look at a long-term growth rate, then I guess you have  
16 to do what the FERC does; but what the FERC does even,  
17 if I may say -- and I don't mean to denigrate another  
18 regulatory body -- is a joke.

19 They decided somewhere along the line they  
20 were going to use a two-stage model, and for the  
21 second stage they use forecasted growth in GDP, but if  
22 you're going to do it, it should be a compound growth  
23 rate so that they go out five years. They use IBIS  
24 growth in earnings, and then they use this long  
25 term -- so beyond -- from your sixth out to at least



1 20 -- the next 16 or so years, they use a forecasted  
2 growth in GDP.

3 Well, normally your growth in earnings is  
4 higher, that five-year growth rate, than the  
5 forecasted growth in GDP for those other years. Now,  
6 I know what happened, but can I prove it? No. But  
7 they -- so if you compounded it, took that first rate  
8 for the first five years and then the year-to-year  
9 rate for the GDP for the remaining 16 years or however  
10 far the forecast goes out, they came up with too lower  
11 results.

12 So guess what they did. They began by  
13 averaging. They averaged equal the first five years  
14 with the next 16 because they wanted a result that in  
15 their minds was somewhat realistic. And then when  
16 that got too low last fall or whenever it was, they  
17 made a new decision. They decided to weight  
18 two-thirds to the first five. It's a joke. It's end  
19 result driven. Why bother? It's a steady state  
20 industry, and when -- you've got the best forecast,  
21 which is the analysts' five-year forecast growth in  
22 earnings.

23 **MR. CICCHETTI:** I just feel strongly that I  
24 need to emphasize that from a mathematical  
25 perspective, saying earnings per share are going to

1 grow at 6% into perpetuity and using that versus its  
2 dividends are going to grow 4% for the first four  
3 years and then 6% into perpetuity with regard to the  
4 equation and B times R assumptions and all of that,  
5 they're identical.

6           The distinction in the two-stage that's  
7 being made here is somehow that using more current  
8 available forecasts for dividends and then using a  
9 long-term dividend forecast into perpetuity somehow  
10 means the mechanics of the model are wrong is  
11 incorrect.

12           **MR. MAUREY:** Well, I'd like to -- that's all  
13 the questions I had. I did want to make one more  
14 comment, that as OPC will be filing comments with us  
15 before the end of the month on the analysis that AUS  
16 has done on behalf of United Water, we'd also like to  
17 extend the opportunity for you to file comments on  
18 OPC's filing. I think I saw you get a copy. It was  
19 the March 8th filing. I see you have that.

20           There was one other filing done on behalf --  
21 but there were very -- some limited comments, of -- is  
22 it Florida Water?

23           **MR. VACCARO:** Yes.

24           **MR. MAUREY:** Florida Water filed. Has  
25 everyone received a copy of that? And if you want

1 to --

2           **MR. HILL:** This is March 11th comments from  
3 Jim Perry.

4           **MR. MAUREY:** Yes. That's it.

5           **MR. HILL:** We have it.

6           **MR. MAUREY:** Okay. I'd also encourage you  
7 to, if you had any comments on that filing, to make  
8 them as well.

9           The time line we're looking at is May 20th  
10 for a recommendation in this docket. And so to  
11 facilitate our review of the analysis that each party  
12 has done and the comments that each party has on those  
13 analyses, sooner is better than later on us getting  
14 those responses.

15           So while we did talk in terms of the month,  
16 I mean, two weeks would be better for us if that's  
17 doable. And we will be preparing a report on the  
18 workshop, on the results of the workshop, but that is  
19 second -- that's not going to be filed. It's not  
20 taken to Agenda or anything. It's separate from the  
21 recommendation in this docket.

22           **MR. DRAPER:** Are there any further comments  
23 that anybody would like to make?

24           **MR. HILL:** Can I just ask a question about  
25 the process? On May 20th the Staff will file a

1 recommendation and then that will be scheduled for the  
2 Commission's consideration at open meeting?

3 **MR. VACCARO:** Yes, at the June 1st Agenda  
4 Conference here.

5 **MR. DRAPER:** Are there any comments from the  
6 audience? Anybody who would like to ask any  
7 questions? (No response.)

8 I guess not. I'd like to thank you all for  
9 participating. I think this is a really good  
10 opportunity for us to get together and discuss some of  
11 these issues. I would just encourage that we continue  
12 yearly to try to get together when they do these  
13 workshops and discuss further issues that come up.

14 I think if there's nothing further, this  
15 concludes our workshop.

16 (Thereupon, the workshop concluded  
17 at 11:25 a.m.)

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