BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 080121-WS

In the Matter of:

APPLICATION FOR INCREASE IN WATER AND WASTEWATER RATES IN ALACHUA, BREVARD, DESOTO, HIGHLANDS, LAKE, LEE, MARION, ORANGE, PALM BEACH, PASCO, POLK, PUTNAM, SEMINOLE, SUMTER, VOLUSIA, AND WASHINGTON COUNTIES BY AQUA UTILITIES FLORIDA, INC.
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VOLUME 3

Pages 173 through 361

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PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN MATTHEW M. CARTER, II COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. McMURRIAN COMMISSIONER NANCY ARGENZIANO COMMISSIONER NATHAN A. SKOP
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PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	MARY ALLEN NEEL, RPR, FPR
PARTICIPATING:	(As heretofore noted.)

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I N D E X

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PROCEEDINGS

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CHAIRMAN CARTER: Thank you. Mr. May.

MR. MAY: Thank you, Mr. Chairman.

CROSS-EXAMINATION

BY MR. MAY:

Q. Good afternoon, Mr. Rothschild.

A. Good afternoon, Mr. May.

Q. I'm Bruce May appearing today on behalf of Aqua Utilities Florida. You and I were introduced during your deposition on November -- I think it was 19th of this year. Do you recall that?

A. Yes, I do.

Q. We had a nice conversation. Do you have that deposition with you?

A. No, I do not have a copy of the transcript.

Q. Does your counsel have a copy of your deposition transcript?

MR. BECK: I have one of my own.

MS. FLEMING: For ease of reference, I would note that it is available in the staff composite exhibit. It is tab number 28.

BY MR. MAY:

Q. While he's getting the transcript, I've got

a -- let's just cut to the chase here. You've got -- on page 7, lines 9 through 12, you made a big deal out of the statement that $392 million of debt financing at the AAI level were issued, but are not reflected on any of the books of Aqua America, Inc. subsidiaries; is that correct?

CHAIRMAN CARTER: Hang on one second.

COMMISSIONER SKOP: Thank you, Mr. Chairman. Mr. May, can you repeat that page, because I'm on page 7, and I don't see that.

MR. MAY: Sure.

COMMISSIONER SKOP: Is that the correct page?

CHAIRMAN CARTER: The page number.

MR. MAY: It's page 7, lines 10 through 12.

COMMISSIONER SKOP: Oh, okay. I'm sorry. The testimony. I thought you were looking at the deposition. I'm sorry.

MR. MAY: I was just -- I was going to ask him another question while he got comfortable with the deposition transcript.

CHAIRMAN CARTER: All right. So we're on page 7 of the --

MR. BECK: Just to clarify, you're asking about page 7 of his prefiled testimony?

MR. MAY: Right. Let's just start there.

MR. BECK: He's asking about the prefiled testimony, not the deposition.

THE WITNESS: Oh, sorry.

BY MR. MAY:

Q. In your summary, Mr. Rothschild, you stated that -- and I think you quoted from page 7, lines 10 through 12, that there was $392 million in debt financings at the Aqua America, Inc. level that are not reflected on any books of any of Aqua America, Inc.'s subsidiaries. And I want to be absolutely certain that's what you're saying here today. I want you to read that very carefully.

A. Okay. So you have me on page 7?

Q. Page 7, lines 10 through 12. You quoted it in your summary.

A. Yes, I see where you're -- I see where you are referencing.

Q. Are you stating here today that of that $392 million in debt financings at the parent level, none of that is reflected on the books of any of Aqua America, Inc.'s subsidiaries? That's what it appears to say, and I just want to make sure that's what you're saying.

A. Yes. That's what was shown in the 10-K, 10-Q reports of Aqua America that I reviewed.

Q. You reviewed the Aqua America, Inc. reports?

A. Yes.

Q. But what you're saying here is that none of that $392 million is reflected on the books of any of the subsidiaries.

A. Yes. And if you look at the -- I don't remember if it was the 10-K or the 10-Q, it shows -- there is the corporate debt, and it shows the debt that has been allocated to the utilities in a separate line on that balance sheet.

Q. That's not my question. Have you reviewed any of the books or records of the Aqua America, Inc. subsidiaries?

A. No. Instead, I looked --

Q. That's all I asked. You have not reviewed any of the books or records of the Aqua America, Inc. subsidiaries?

A. Instead, I looked at the conclusion in the consolidated statement and how it was noted and how it was categorized in that audited statement.

Q. And you said you looked only at a consolidated statement at the parent level?

A. Yes, and saw what it said. The consolidated statement, which I don't have in front of me right know, but it makes it quite clear that there is --

Q. We'll have Mr. Anzaldo come up and clarify this a little later. I just want to make sure that you're saying, for the record, that none of that $392 million is reflected on any book or record of an Aqua America subsidiary.

A. That is what is indicated in the audited reports that I reviewed of the consolidated books of the company.

Q. And the only thing you reviewed was the consolidated report of the parent company; correct?

A. I did not do an independent audit of that. I trusted the auditor of the company and its opinion letter.

Q. Very good. Mr. Rothschild, you recommend that in setting the rates for Aqua Utilities Florida, the Commission should ignore Aqua Utilities Florida's capital structure and instead use the capital structure of Aqua Utilities Florida's parent, Aqua America, Inc.; is that correct?

A. The appropriate capital structure to use to determine the overall cost of capital as perceived as appropriate by the management of the company is the consolidated capital structure of Aqua America, Inc. An intermediate capital structure of a subsidiary such as AUF does not provide the appropriate tradeoff that has

occurred between the equity investors and the debt investors and so really does not give the insight that would be implied if one were to just simply take that capital structure.

Q. Mr. Rothschild, just to move things along, could I ask you to answer a question that's capable of being answered yes or no, yes or no, and then I will certainly give you the courtesy of explaining that.

So I want to ask this question again. Are you asking the Commission to ignore AUF's capital structure and instead use the capital structure of AUF's parent?

A. I gave you the answer I did because I wouldn't go so far as to say ignore. It was the word "ignore" that bothered me. That's why I didn't give you just the yes or no. Ignore is a step more strong than I would like to use.

Q. Aqua Utilities Florida is not the same company as Aqua America, Inc., is it?

A. It's not the same company.

Q. Okay. In fact, Aqua Utilities --

A. I thought I got to give you the yes or no answer and then explain. It's not the same company, but when you're looking at -- what are you doing when you're looking at capital structure? I think that -- my understanding of what regulators are doing is, they're

saying, "Okay. It's not the easiest thing in the world to figure out what an optimal capital structure is, so we'll take look and see what management has chosen as what hopefully would be its choice of an optimal kind of capital structure, and we'll take a look and see whether that's reasonable."

When you're asking that question, you have to go further than the AUF level, because the tradeoffs, which include what the capital markets believe, especially in this case, the equity investors believe, is it occurs at the consolidated level, because the cash flows that occur to service the debt and service the equity are only reflected in a true sense in the -- in a complete sense, I should say, when you're looking at the consolidated capital structure.

Q. Aqua is a separate, wholly owned subsidiary of Aqua America, Inc., is it not?

A. Aqua Florida is a separate, wholly owned subsidiary, yes.

Q. Aqua Utilities Florida is not a division of Aqua America, Inc.; correct?

A. For the purpose of my question, it wouldn't change the answer, but it's a separate, wholly owned subsidiary.

Q. Could you answer the question? Aqua Utilities

Florida is not a division of Aqua America, Inc.; correct?

A. Correct. I believe I did answer your question, but I'll answer it again. Yes.

Q. In fact, Aqua Utilities Florida has its own board, and it has its own officers separate and apart from Aqua America, Inc.; correct?

A. I don't know to what extent there's duplication on the board. I didn't check that.

Q. Mr. Rothschild, do you know that the capital structure of Aqua America, Inc. contains debt items from industrial development bonds and state revolving funds in Ohio which by law must be used in Ohio and cannot be used in Florida?

A. That's -- I'm aware that such bonds exist, and I have not suggested that those bonds be used in Florida. That is not implied in my recommendation.

What you're talking about when you have those kinds of bonds, which tend to be tax-favored bonds and at a lower interest rate, what's important to do is to not assign that -- the cost of that debt to the costs outside the state in question. It should be assigned to the state in question. And as I explained in my summary and in my direct testimony, I have adopted the cost of debt as proposed by the company, so I have not done what

you said.

However, when you have debt that exists -- and indeed, good management should take advantage of such low cost debt when it's available. But when that's done, it still puts pressure on the common equity ratio to support all of the debt. And so when you get to ratios, it's a completely different issue than the cost of debt.

So when Mr. Anzaldo talks about the issue of allocating the debt that's been -- the debt that has to be used within each state, he's mixing concepts here. Keep the cost of the debt where it is when it's provided, but remember that the equity that's supporting this is the consolidated equity, and it supports all of the debt proportionally.

Q. So isn't it true, Mr. Rothschild, subject to check, that the capital structure of Aqua America, Inc. involves restricted debt financings with earmarked capital projects that are limited to county and state?

A. Well, yes. But when you're doing that, from the point of view of the question I'm answering, that's a different point. The debt is limited to finance those items, but to the extent that more debt might be available in one state, it takes that much more pressure on the equity.

So when you're allocating capital structure ratios, you need to look to the consolidated entity. When you're allocating the cost of debt, you should -- when that debt has been especially subsidized and is financing something within the state that has provided it, that cost of debt should be assigned totally to that state. I haven't argued against that. I wouldn't argue against that.

MR. MAY: I'm not going to belabor this line of questioning any longer, Mr. Chairman. I would like to shift gears a little bit.

BY MR. MAY:

Q. Mr. Rothschild, did you recently testify before the Rhode Island Public Utilities Commission in a rate case involving the gas operations of Narragansett Electric Company doing business as National Grid?

A. Yes.

Q. And on whose behalf did you testify in that proceeding?

A. I was a division witness, which is the Commission.

Q. Did you raise similar parent capital structure issues in that case?

A. There were capital structure issues brought out that had some similarities. They weren't identical.

Q. Where is that case in the process? Is the case over?

A. I got an e-mail a few days ago suggesting there were some deliberations, but I'm not sure whether a decision has been rendered.

Q. I just have a few more questions, Mr. Rothschild. Let's get your deposition out.

Are you aware that the OPC has objected to Aqua Utilities Florida's use of the leverage graph formula to establish common cost of equity in this case?

A. Yes.

Q. Were you hired to provide a recommendation on what you believe to be a fair and reasonable cost of capital for AUF?

A. Yes.

Q. And I believe you stated in your deposition you didn't consider in making that recommendation whether Aqua Utilities Florida faces any unique regulatory risks in Florida; correct?

MR. BECK: Do you have a reference for that, Mr. May?

MR. MAY: Well, I can't find it.

BY MR. MAY:

Q. I'll just ask you again. In making your recommendation on an appropriate capital structure, did

you consider any unique regulatory risks that Aqua Utilities Florida faces in Florida?

A. Did I make any adjustments for any unique risk? No.

Q. You've never inspected Aqua Utilities' plant operations in the state, have you?

A. No, I did not.

Q. And you haven't reviewed any of the environmental regulations that pertain to Aqua Utilities' systems in the state, have you?

A. No.

Q. And you haven't evaluated the used and useful regulations and policies of the Public Service Commission as it applies to Aqua's operations in the state, have you?

A. I'm aware of used and useful type regulations. Whether or not I specifically reviewed them in Florida, I don't know. They tend to be reasonably similar and would be the kind of risk that would be a diversifiable risk anyway. So in answer to your request, I'm not sure, but I don't know what I would do with the information if I had.

Q. Would you agree that beta is a measure of nondiversifiable risk?

A. Yes.

Q. You're familiar, are you not, with the comparative gas company group which serves as a foundation for the Florida Public Service Commission's leverage formula, are you not?

A. Yes.

Q. And I think you stated in your testimony that the beta for that comparative gas company group is .83; is that correct?

A. That sounds right, yes.

Q. Aqua America currently has a Value Line beta of 1.0, does it not?

A. Yes.

Q. So since Aqua America's beta is greater than the beta for the comparative gas group, that indicates that Aqua America faces more systemic risk than the comparative gas group; correct?

A. No. As we talked about during the deposition, that would be an overuse of the concept of beta. Beta is designed to -- it's a statistical analysis that's designed to have meaning of how the risk of an individual company participates or contributes to the risk of a portfolio. When you start looking at an individual situation, it's going a bit too far to reach that kind of an absolute conclusion. Because it has statistical aberrations around it, it's just going too

far.

Q. But you stated previously that beta is a measure of nondiversifiable risk; correct?

A. It's the measure of nondiversifiable risk for a company -- as a way of determining the risk of a portfolio. For example, and you can read this -- I think I could still find it. This comes out of Value Line's description on how to use beta.

If you had a portfolio with 15 companies, and let's say for simplification purposes you had an equal dollar investment of each 15 companies. You would then average the betas of those 15 companies to arrive at a reasonable estimate of the risk of the overall portfolio.

To change the computation around a bit, in the real world, you would probably never have an exact dollar amount investment of all 15 companies, so you would come out with a weighted computation of the beta. Assuming that the percentages of those companies weren't too terribly diverse, you would get a pretty good estimate of how that portfolio would perform in response to a change in the overall market.

But when you get to an individual company, then the beta tends to be not such a good indicator. The beta is going to tell you how a portfolio is going

to be likely to behave in response to a percentage change in a broad market index.

So, for example, if you had a diversified portfolio with a beta of 1.2, and you heard on the radio when you were driving home that the Dow Jones industrial average was up 5 percent that day, you could estimate that your portfolio probably went up 20 percent more than that or 20 percent more than the 5 percent, which would be 6 percent. That's how you use beta.

But to reach a conclusion from that that if all of your investment were in IBM and that therefore IBM went up 5 percent that day if its beta was 1 would be a lot less likely to be correct.

MR. MAY: Thank you for that clarification, Mr. Rothschild. I have no further questions.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chairman. Just one quick question for Mr. Rothschild as a point of clarification.

With respect to the cost of equity analysis presented in your prefiled testimony, that's based upon discounted cash flow and CAPM model analysis prior to any adjustments or proposed adjustments for quality of service issues; is that correct?

THE WITNESS: Yes, that's correct.

COMMISSIONER SKOP: All right. Thank you.

CHAIRMAN CARTER: Thank you. Staff?

MR. JAEGER: Thank you, Chairman. I have just a few questions. And unfortunately, I'm going to take off where Bruce let off on the difference between subsidiary and capital structure.

CROSS-EXAMINATION

BY MR. JAEGER:

Q. Mr. Rothschild, do you know how the Public Service Commission has historically treated the determination of capital structure of utilities?

A. I don't remember the exact wording offhand, so -- I don't want to state it wrong, so let me say I'm not sure.

Q. I asked that same question at the deposition on page 43, line 19. Could you open yours? I said, "Do you know how the Florida Public Service Commission has historically treated the determination of capital structure of utilities?"

And you said, "I have not done a survey to determine what the history has been." Do you stand by that answer?

A. Yes.

Q. Okay. Then do you have an understanding of how this Commission determines the appropriate capital

structure for ratemaking purposes?

A. Well, as I say in my answer there, I haven't done a survey to be able to tell you that. But what the Commission, I'm sure, wants to do is come up with a fair and reasonable result based upon good, solid financial and regulatory principles, and my recommendation for capital structure is the way to do that.

Q. Okay. Are you familiar with Order No. PSC-08-0327-FOF-EI that was issued May 19, 2008, in Docket No. 070304-EI? That was the petition for a rate increase by the Florida Public Utilities Company.

A. I do not specifically remember reviewing that decision.

Q. So you're not aware that Florida Public Utilities Company has a divisional capital structure?

A. I'm not familiar with that case.

Q. Okay. And so you're not aware that the Florida Public Service Commission applied the capital structure of the FPUC company on a consolidated basis to allocate investor capital to each division?

A. That sounds like a reasonable thing to have done from what you're telling me, but without being familiar with the details of the case, I would put a caution in my probable agreement with the Commission.

Q. Well, are you familiar with Order No.

PSC-05-0902-S-EI issued on September 14, 2005, regarding Florida Power & Light's petition for a rate increase?

A. I'm not sure whether that's one of the Florida Power & Light decisions I've read or not.

Q. So you're not aware that FPL has a subsidiary structure?

A. Oh, I am aware FPL has a subsidiary structure. That's a different question.

Q. Okay. And are you aware of the difference between a divisional structure and a subsidiary structure?

A. Essentially, yes. But from the perspective of the tradeoffs in terms of the risk perceived by equity and how it affects the cost of debt and the debt rating, I don't see that big of a difference.

Q. So are you aware that the Commission's determination of the appropriate rate structure has been dictated somewhat on whether it is a divisional or subsidiary structure? You're not aware of that?

A. I am aware of that differentiation. I have to say that I would suggest that the Commission take another look at that, look at some of the Standard & Poor's statements, look at what really happens when extra debt is issued at the consolidated level and when that debt effectively becomes equity, which can occur

either through a subsidiary structure or a divisional structure. And so if -- I would be hard pressed to defend that kind of differentiation. I think you have to recognize the true dynamics in the financial marketplace, the tradeoff between the debt and equity holders in the company and where that takes place and what the impacts are of that.

Q. I think this has been touched on, but do you know if Aqua America has a divisional or a subsidiary structure?

A. My understanding is that Aqua America has a subsidiary structure. But as you can see here from what's going on with Aqua America and this extra hundreds of millions of dollars that's not allocated, any of it allocated to Aqua Florida, but nevertheless, it's there to impact the bond rating and the cost of debt being charged to Aqua Florida, it just doesn't make any sense to hang one's hat on the capital structure of convenience, which is the Aqua Utilities Florida capital structure.

Q. Just a couple more questions. Would you agree that it is important for a regulatory commission to be consistent in its treatment of utilities under its jurisdiction?

A. Well, consistency is a great thing, but

consistency to hold on to something which might not be correct anymore wouldn't be a good thing. I would say that getting it correct is more important than being totally consistent. But that isn't to say -- if you had to answer, if you kept switching up and back, that would suggest as inconsistency that wouldn't make any sense.

So I guess I would rather be inconsistently correct than consistently wrong. But ideally what you will do is fix a problem and then be consistent with it once it's correct.

Q. I guess the bottom line of your testimony is, you're just saying you do agree that all water and wastewater utilities need to attract capital in order to provide regulatory utility service; is that correct?

A. Well, I don't know if they all need to attract capital, but please don't misunderstand what I'm saying. They certainly need to be given a reasonable opportunity to earn the cost of capital, assuming that all of the costs were incurred appropriately, and without making any statements as to whether or not there are punitive actions that might occur if those should be deemed appropriate.

But absent those extraordinary things, it would be unfair to ratepayers, it would be unfair to investors, it would be unfair to everybody to do

anything but give a regulated utility company that's doing things right a fair opportunity to earn its cost of capital.

MR. JAEGER: That's all staff has.

CHAIRMAN CARTER: Commissioner McMurrian.

COMMISSIONER McMURRIAN: Thank you, Chairman.

Mr. Rothschild, with regards to the 392 million that you're stating is not allocated at all to the subsidiaries, have you determined how much of that 392 million should be allocated to Aqua utilities Florida?

THE WITNESS: Well, it would be a proportional share based upon its total capitalization as a percentage of the total capitalization of Aqua America, and that automatically happens when you use the consolidated capital structure.

So if we take the consolidated debt percentage and multiply it by whatever rate base you determine, that would tell you how many dollars of total debt are being allocated, and then you could subtract out from that how much is the debt that's not that 392 million, and you could find out that way.

COMMISSIONER McMURRIAN: Okay. But you didn't do that calculation?

THE WITNESS: I didn't do it that way because

I didn't have to. It was about the percentages. But I could do it for you if you wanted to, although I guess -- I don't even know. To the extent there's any dispute as to what the rate base ought to be, you could have two different numbers. And I could make the computation for you if you like using whatever rate base number you would like me to, or I could tell you assuming a rate base of X dollars, it would be this, and it would go up or down at whatever you might find for rate base.

COMMISSIONER McMURRIAN: I don't think I need that. I was just -- would it be a great deal, the 392 million? I can't remember how much subsidiaries you're talking about with Aqua Utilities.

THE WITNESS: I don't know offhand what percentage of Aqua America is represented by AUF, but it would be its proportional share, which is not going to be any $392 million or anything like that. It's going to be much lower than that.

COMMISSIONER McMURRIAN: Okay. Thank you.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

Mr. Rothschild, a quick question following up on Commissioner McMurrian's question with respect to the $392 million. We heard a line of questioning or

cross-examination from Mr. May about the debt that Aqua America has and how some debt is specifically earmarked to certain projects at the state level and local level. Have you convinced yourself that the $392 million of debt in question has no restrictions, it's just general debt so that it can be allocated?

THE WITNESS: Well, from the assertions made by Mr. May, I'm wondering if for some reason or other there was some perhaps unintentional misleading conclusions that come just from reading the 10-K report.

But it wouldn't -- I can't imagine how it would change my recommendation even if some of that 392 million had been assigned to a different subsidiary, because the real question is, how much equity and how much debt does the company have on a percentage basis, and how is that determined?

So if you have a higher level of debt in one subsidiary, it still doesn't change the dynamic of what the tradeoff between equity and debt is. As your own leverage formula recognizes, as the percentage of equity goes up, the cost of equity and the cost of debt go down, and vice versa.

And so when you come along and say that you're going to adopt the company's -- in this case, the company's 5.10 percent cost of debt, that comes out of

the tradeoffs that occur, the coverage ratios that occur, the cash flow that occurs, because investors perceive that dynamic based upon the consolidated capital structure. And you can see that very clearly from the statements in Standard & Poor's and how it looks at companies and recognizes the tradeoff.

And also, to the extent you think like an investor, you realize that that's true, that Aqua America is going to pay its debt holders contractually to the extent they possibly can. Because it doesn't like to, doesn't want to be in bankruptcy, it makes the payment. And indeed it should, and you want it to make those payments.

But then the equity holders recognize that if there is a problem, the dividends are going to be that much harder to pay, that the debt holders have to be paid first. And it's in that tradeoff that occurs, and that's why the consolidated capital structure is what determines the true tradeoff between debt and equity. It's the closest statement we have as to what management really believes is the way of getting its best overall cost of capital.

COMMISSIONER SKOP: Sorry to belabor this, Mr. Chairman. I'm just trying to get things clear in my own mind.

Going back to the $392 million with respect to your prefiled testimony on page 2, if that were allocated or burdened to the Florida subsidiary, is that reflected in your results presented at the bottom of page 2, lines 18 through 25, or would that be something that you've not accounted for already?

THE WITNESS: Oh, no. I've already accounted for that. The consolidated capital structure of 44.03 percent is the capital structure that does take into account all of that debt.

But that number, the 44.03 percent, is the capital structure number to start out with, which is consistent with the way Mr. Anzaldo was talking about capital structure. It's the one that -- it's better for comparative purposes, but it in no way suggests that the Commission should change its policy, and I'm not suggesting the Commission change its policy on how it treats deferred taxes and customer deposits. And so when you blend those in, you would have your normal differences.

COMMISSIONER SKOP: Okay. And just briefly, one point of confusion that has resulted to me from this. On page 2, lines 18 through 25, you recommend a cost of equity of 9.47 percent, but then down on -- beginning at lines 23 and 24, if you use the company's

common equity ratio, it would lower the cost of equity. So are you advocating for a higher cost of equity? I'm a little confused on that now that I've had a moment to --

THE WITNESS: The 8.75 is what would be the cost of equity if the company's requested 62.31 percent number -- and you'll find the 62.31 in Mr. Anzaldo's testimony. If you were to use that -- I recommend not using that capital structure, but if you were, then the lower financial risk associated with a 62.31 percent common equity ratio has a lower cost of equity.

COMMISSIONER SKOP: Okay. So you're adjusting for the risk premia then?

THE WITNESS: I'm adjusting for the financial risk difference, yes.

COMMISSIONER SKOP: Okay. But just guess holistically, I guess if -- you're saying that the number should actually be lower than the 8.75 asserted by the company for the cost of equity?

THE WITNESS: No, the company -- I'm sorry. I certainly don't intend to mislead you. The company is not saying its cost of equity is 8.75. The company is saying its common equity ratio is 62.31.

And I'm saying if you had a typical water utility, then with a 62.31 percent common equity ratio,

then its cost of equity would be 8.75. The company is saying, no, use the leverage formula. And if you used your currently approved leverage formula and its capital structure of 62.31, then you would get 10.25.

COMMISSIONER SKOP: Okay. All right. I think I understand now. Thank you.

CHAIRMAN CARTER: Commissioner McMurrian.

COMMISSIONER McMURRIAN: I guess I'm still a little confused with the questions that Commissioner Skop was just asking you. I thought what I was hearing him ask you was about the difference in the 9.47 and the 8.75, and I think he was asking you, you're recommending that higher cost of equity because you're suggesting you should use the 44 percent common equity.

THE WITNESS: Yes.

COMMISSIONER McMURRIAN: And I think he was -- I don't want to put --

THE WITNESS: Yes, that's correct.

COMMISSIONER McMURRIAN: Okay. And I'm puzzled too, so I guess I'm --

THE WITNESS: I am recommending that before making the normal regulatory adjustments for deferred taxes and customer deposits and computing the overall cost of capital, that the common equity ratio is 44.03 percent.

COMMISSIONER McMURRIAN: Right.

THE WITNESS: And that -- go ahead and make the adjustments for deferred taxes and customer deposits as you normally do, and then you'll have a little bit less than the 44.03 percent common equity ratio, whatever that is. When you do that, the cost of debt is the same as the company has requested, which is 5.10, and the cost of equity should be 9.47 percent. That's my recommendation.

In a perfect world, that's what your decision will say, and I will be happy. I recognize in a world that's less than perfect, it doesn't always come out the way I exactly hope.

And if for some reason I haven't done the job I should hopefully have done appropriately in explaining why the consolidated capital structure is appropriate, I just wanted to give you the additional information that if I only partially have convinced you, then in that case where you choose to -- were you to choose to use the AUF capital structure, which Mr. Anzaldo has defined as the 62.31 percent, then you would also take that, go ahead and make your normal downward adjustments for deferred taxes and customer deposits -- and I don't think there's any dispute on doing that. But then when you're done, if you when you're done like my arguments,

my computations for DCF and CAPM and agree with me on how to do that, then you would go ahead and use the 8.75 percent cost of equity for that alternative capital structure.

COMMISSIONER McMURRIAN: Okay. I think I do understand why you're saying to use the 44 percent common equity numbers. I guess I'm just surprised that it yields a larger cost of equity.

THE WITNESS: Well, as the -- and this is one area where your own leverage formula does it this way. And Mr. Moul will shortly speak for himself. I guarantee you he will agree with me that a lower percentage of common equity in the capital structure adds to financial risk and therefore adds to the cost of equity.

While we might not agree on the magnitude of the change, we certainly agree on the direction of the change, and so does your leverage formula agree on the direction of the change, if not the magnitude.

COMMISSIONER McMURRIAN: Okay. Thank you.

CHAIRMAN CARTER: Thank you, Commissioners. Anything further from the bench?

Mr. Beck.

MR. BECK: Thank you, Mr. Chairman.

REDIRECT EXAMINATION

BY MR. BECK:

Q. Mr. Rothschild, let me go back to the consolidated capital structure. The consolidated capital structure of Aqua America and its subsidiaries is the one that's 44 percent equity and 56 percent debt; is that right?

A. Yes.

Q. And you found that on a 10-K of Aqua America and its subsidiaries, a consolidated statement of capitalization?

A. Yes. It might have been the 10-Q, because I think I used one a little bit more current, but I got some information both from the 10-Ks, which come out once a year, and the 10-Qs, which come out quarterly.

Q. Okay. Now, of that capital structure, the consolidated capital structure that's 56 percent debt and 44 percent equity, is part of that 56 percent debt debt of other subsidiaries of Aqua America?

A. It includes all of the debt, so it would include all of the debt of all of -- anything that Aqua America owns, everything.

Q. So that when Mr. May asked you about the industrial development bonds of Ohio, for example, that would be part of the debt on the parent company or the

consolidated capital structure; is that right?

A. Yes. And any debt that's financing the Florida operations that it so encountered it would be included too, and Pennsylvania operations, et cetera, et cetera. It's all of the debt, all of it.

Q. Now, the fact that some of that debt that's reflected on the consolidated statement of capitalization, the fact that some of that debt is dedicated to certain places or purposes, how does that affect the overall capital structure that the parent chooses?

A. Well, to the extent that a company has an opportunity to get cheap debt in one state, good financial management would say go take that debt. But good financial management would also recognize that as a hunk of debt was obtained somewhere, it means that it needs to get some equity to go along with that extra debt. So you can't look at the debt in one state in isolation just because there might be regulations in one state that say this low cost debt has to be used in that state, that you then would say you're going to allocate that debt out and not allocate the associated equity out. So by using the consolidated capital structure, you're keeping the debt ratios and the equity ratios in balance.

But -- and I have testified in states where there is a situation where the low cost debt is available in that state. When that happens, you don't change the capital structure for that state, but you do allocate the lower cost of debt to that state, and that is appropriate. I have not allocated and would not recommend allocating the low cost debt that was issued and must be used in another state, do not recommend in any way allocating that in any way to the Florida operations.

Q. Mr. May asked you about a Rhode Island case involving Narragansett gas utility. Do you recall that?

A. Yes.

Q. And they do business as National Grid?

A. Yes.

Q. Okay. Who is the ultimate owner of those companies, the parent company?

A. That would be National Grid, LLC, which is a company that's in Great Britain.

Q. Okay. And are there any special issues with the fact -- that are associated with the ownership by a British company as opposed to an American company?

A. Well, there were issues that the company brought out which I think were not relevant, but they brought them out, that are different. They argued that

because regulation is different in -- let me step back by staying that National Grid is -- roughly 50 percent of the assets, approximately 50 percent are utilities regulated in England, and the other roughly 50 percent are in the United States. And so they argued because regulation is different in Great Britain, that it would possibly cause different pressures on the capital structure.

Q. Okay. You testified in that case; is that correct?

A. Yes, I did.

Q. And that was on behalf of the regulatory agency or --

A. Yes. I was a division witness, as they call it, which is, in essence, working for the Commission.

Q. Did Mr. Moul also testify in that case?

A. Yes, he did.

Q. And did he conduct a discounted cash flow analysis of the gas company in that case?

A. Yes, he did.

Q. Do you recall what the results of that were for the gas company?

A. I remember his number was only very slightly higher than mine, 9.7, 9.8. I don't remember exactly. It was in the upper 9s.

Q. Let me change to another topic, and that's the subsidiary versus divisional status of Aqua Utilities Florida. You recall that Aqua Utilities Florida is a subsidiary of the parent company; is that right?

A. Yes.

Q. Okay. Would it make any difference to your recommendation if it were a division as opposed to a subsidiary?

A. No.

Q. Why?

A. Because the tradeoff between the debt holders and the equity holders remains the same. The dynamics are the same. The cash flow to service all of the debt is still there. Aqua Utilities, that cash flow goes up the line, and bond investors are aware of that. They're not naive to that.

And Standard & Poor's goes to great length to explain that it recognizes that difference. And most of the time when Standard & Poor's provides a rate, a bond rating for a utility company, it specifically issues a corporate debt rating and does not issue a higher bond rating for the subsidiary. You'll find exceptions to that, but they're few and far between, and there's some extenuating circumstance if and when that happens.

Q. The Florida Power & Light case that staff

asked you about, do you happen to know whether that was a settlement case that the Commission approved or a litigated case, if you know?

A. I know there have been many settlement cases. I'm not positive about that one.

MR. BECK: Okay. Thank you. That's all I have.

CHAIRMAN CARTER: Thank you. Okay. We have two exhibits. That will be Exhibit Number 93 and 94. Any objections?

Without objection, show it done.

(Exhibits 93 and 94 were admitted into the record.)

CHAIRMAN CARTER: Commissioners, we're a little over two hours. Good breaking point for the court reporter and staff. We'll come back at 32 after. We're on recess.

(Short recess.)

CHAIRMAN CARTER: We are back on the record, and when we left we had finished with Mr. Rothschild. And what we had done, Commissioners, we had taken witness Anzaldo on direct and Rothschild on direct, and now we are ready to go on rebuttal with Anzaldo and rebuttal on Moul.

MR. MAY: Yes, Mr. Chairman.

CHAIRMAN CARTER: It's not spelled that way. Just kidding. Mr. May, you're recognized.

MR. MAY: Mr. Chairman, with your permission, Aqua Utilities Florida would call its rebuttal witness, Mr. Stephen Anzaldo.

CHAIRMAN CARTER: You may proceed.

Thereupon,

STEPHEN F. ANZALDO

was called as a rebuttal witness on behalf of Aqua Utilities Florida, Inc. and, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MAY:

Q. Good afternoon, Mr. Anzaldo.

A. Good afternoon.

Q. Have you previously been sworn?

A. Yes, I have.

Q. Did you prepare and cause to be filed rebuttal testimony in this proceeding?

A. Yes, I did.

Q. Do you have that rebuttal testimony before you?

A. I do.

Q. Do you have any corrections to that rebuttal testimony?

A. There are no corrections.

Q. Mr. Chairman -- well, Mr. Franceski, if I were to ask you the questions that are in your rebuttal testimony today, would your answers be the same? I'm sorry. Mr. Anzaldo.

CHAIRMAN CARTER: That's okay. It's been a long day.

MR. MAY: Let me start over.

BY MR. MAY:

Q. Mr. Anzaldo, if I were to ask you the questions that are in your rebuttal testimony today, would your answers be the same?

A. They would.

MR. MAY: Mr. Chairman, I would ask that the prefiled rebuttal testimony of Mr. Anzaldo be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be entered into the record as though read.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

AQUA UTILITIES FLORIDA, INC.

REBUTTAL TESTIMONY OF STEPHEN F. ANZALDO

DOCKET No. 080121-WS

Q. **Please state your name and business address.**

A. My name is Stephen Anzaldo. My business address is 762 West Lancaster Ave., Bryn Mawr, PA 19010.

Q. **Have you previously submitted testimony in this proceeding?**

A. Yes. I previously submitted pre-filed direct testimony, and have sponsored the following MFR pages: D-1, D-2, D-3, D-4, D-5, D-6, and D-7.

Q. **What is the purpose of your rebuttal testimony?**

A. The purpose of my testimony is to respond to portions of the direct testimony presented by Office of Public Counsel (OPC) witness Rothschild relative to capital structure and OPC witness Merchant relative to deferred taxes.

Q. **Are you sponsoring any exhibits to your rebuttal testimony?**

A. Yes, I'm sponsoring Exhibit SFA-1.

REBUTTAL OF OPC DIRECT TESTIMONY

Q. **What is Mr. Rothschild claiming with respect to capital structure in this rate case?**

A. Mr. Rothschild claims that the capital structure of AUF's parent, Aqua America Inc. (AAI), should be used in the AUF rate case.

Q. **Do you agree?**

A. No. In making this recommendation, Mr. Rothschild ignores the facts that the Company is a separate wholly-owned subsidiary of AAI, operates exclusively in

Florida, and has its own capital structure that reflects the unique risks that the Company faces in Florida.

Q. Mr. Rothschild also takes issue with AUF's thirteen month average methodology for calculating pro-forma capital structure. Do you agree with his position?

A. No, I do not. First, Mr. Rothschild ignores the fact that the thirteen month average methodology is the Commission's required capital structure approach.

Second, Mr. Rothschild argues that it would be inappropriate to assign a higher level of common equity to the capital structure than AUF is actually using unless such assignment could be shown to result in a lower, not higher, revenue requirement. His argument assumes that the thirteen month average I have used to calculate AUF's capital structure would result in a higher return than if the December 31, 2007 AUF capital structure were used. That simply is not the case. The components of my AUF capital structure that are not contained in Mr. Rothschild's Exhibit JAR-1, Schedule 1 are a zero cost of capital for deferred taxes and 6% cost of capital for customer deposits. These added components result in a lower overall return compared to the AUF capital structure without these items.

Q. Has Mr. Rothschild utilized the thirteen month methodology in presenting his recommended capital structure?

A. No.

Q. In light of Mr. Rothschild's testimony, what is your recommendation with respect to the appropriate capital structure to be used in this proceeding?

A. For the reasons stated above, I recommend that the AUF capital structure, based on the thirteen month methodology, be utilized in this rate case. The schedule attached to my rebuttal testimony as Exhibit SFA-1 sets forth AUF's recommended capital structure and weighted cost rate in the instant rate case. Please note that the ROE

shown in Exhibit SFA-1 is based on the Commission's 2007 leverage formula for illustrative purposes. I understand that the 2008 leverage formula has been issued and may result in slightly higher ROEs.

USE OF PARENT COMPANY DATA

Q. If the Commission were to adopt Mr. Rothschild's recommendation that capital structure should be based on the June 30, 2008 AAI consolidated capital structure instead of the AUF capital structure, do you have any substantive comments regarding changes that should be made to Exhibit JAR-1, Schedule 1?

A. Yes. First, as stated above, AUF is a separate wholly-owned subsidiary of AAI with its own rate structure. Thus, I believe that AUF's rate structure should be used in this case. However, if the Commission were to disagree with that approach, the Commission should carefully note that Mr. Rothschild's recommended capital structure and cost rates as shown in Exhibit JAR-1, Schedule 1 contain an invalid Long-Term debt cost rate and an unduly low ROE which is disputed by Paul Moul in his rebuttal testimony. It is also important that Mr. Rothschild's recommended capital structure failed to net against the principal amount outstanding the funds held by the trustee of the tax-exempt debt that has not yet been expended on utility assets. The 5.10% weighted cost of Long-Term debt utilized by Mr. Rothschild in Exhibit JAR-1, Schedule 1 is the interest rate of the note between AAI and AUF. The actual AAI weighted cost of Long-Term debt at December 31, 2007 was 5.58%, as reported in AAI's 2007 Annual Report in the MD&A, on page 10. In the second schedule of Exhibit SFA-1, I have corrected for (1) the lack of a thirteen month methodology with the inclusion of customer deposits and deferred taxes in the capital structure, (2) the correct weighted cost of Long-Term debt, and (3) an ROE based on the Commission's leverage formula.

Q. Has Mr. Rothschild correctly identified the amount of AAI Long-Term debt in Exhibit JAR-1, Schedule 8?

A. No. The capital structure for AAI and subsidiaries that Mr. Rothschild derived from Aqua's 10-Q, dated June 30, 2008, contains debt items for Industrial Development Bonds and State Revolving Funds in Ohio, New Jersey, Illinois, New York, Maine and Pennsylvania, which is not available for use in Florida. If the capital structure of AAI is to be used in this proceeding, AAI's short-term debt and restricted debt financings must be eliminated because the earmarked capital projects are limited as to County and State, and thus cannot be used in Florida. The cost of AAI Long-Term debt is increased to 6.27% by removing the subsidized tax exempt state financings. Included in Exhibit SFA-1 is a thirteen month workpaper of AAI capital structure without tax-exempt financing and short-term debt. It is important to note that this is not the Company's recommendation. However, it provides a more accurate picture of the AAI capital structure and weighted cost rate.

Q. Why have you removed AAI's short-term debt in your bottom schedule in Exhibit SFA-1?

A. AAI's capital structure includes short-term debt that is not part of AUF's capital structure and thus should not be imputed.

Q. Mr. Anzaldo, how should this AAI information be used in the instant rate filings?

A. As I indicated earlier in my testimony, there are very good regulatory and legal reasons to adhere to the AUF capital structure. However, I offer corrected, thirteen month AAI capital structure and weighted cost of debt figures to use in the event the Commission is influenced by Mr. Rothschild's arguments. In my opinion, it would be inappropriate and inaccurate to accept Mr. Rothschild's unadjusted figures that are

not based on real Long-Term debt rates, the Commission's leverage formula, or the Commission's thirteen month methodology.

CAPITAL STRUCTURE – DEFERRED TAXES

Q. What has OPC witness Merchant recommended with regard to Accumulated Deferred Taxes in the capital structure?

A. Ms. Merchant points out that in AUF's response to OPC's Interrogatory No. 102, it did not consider the deferred taxes related to the pro-forma additions to plant when the MFRs were originally filed. She calculates that deferred taxes should be increased by $850,382 and that this amount should be added to the capital structure.

Q. Do you agree?

A. No. AUF agrees that the values included on page 25, lines 5 to 10, of Ms. Merchant's testimony are those provided by AUF in response to the referenced interrogatory. However, in developing her proposed adjustment of $850,318, Ms. Merchant has failed to account for required averaging of the taxes related to IT equipment and 2008 pro-forma additions, and has used total Florida values for taxes related to the IT equipment. The deferred taxes related to 2008 pro-forma adjustments of $712,841 represent the full year accumulation of taxes based on accelerated depreciation in 2008. Based on the half-year convention used for depreciation in the pro-forma rate base adjustment, this would not be the appropriate amount to be used to adjust the average capital structure. Rather, the appropriate adjustment would be to use the average amount of $356,421. In addition, taxes of $117,477 for IT equipment represent the total value for AUF, of which 65.85%, or $77,353 should be allocated to systems included in the filing. Then, the appropriate capital structure adjustment for deferred tax on the 2008 IT equipment would be the average balance of $38,677. Ms. Merchant also proposes to adjust for the average balance of $22,064 for year 2007

Corporate IT and Corporate Structures and Improvements related deferred taxes. This adjustment is a duplication. Ms. Merchant fails to realize that a spreadsheet entitled "Analysis of Temporary Differences-2007," which AUF provided to the OPC in response to OPC's Request for Production No. 2, provided support that this $22,064 was indeed included in the deferred taxes allocated to the capital structure of each AUF system. Therefore, the appropriate average deferred tax correction is $395,098. Furthermore, Ms. Merchant fails to recognize the offsetting impact of the deferred tax adjustments. The increase in average deferred taxes would be offset by a decrease in current accrued taxes, which would increase the AUF working capital claim by the same $395,098.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BY MR. MAY:

Q. Mr. Anzaldo, have you attached exhibits to your rebuttal testimony?

A. Yes, I did.

Q. And would that be Exhibit SFA-1?

A. That is correct.

Q. Do you have any corrections or revisions to that exhibit?

A. I do not.

Q. Mr. Anzaldo, have you prepared a summary, a brief summary of your rebuttal testimony?

A. I have.

Q. Would you please provide that summary now?

A. Afternoon, Commissioners and staff. My name is Stephen F. Anzaldo, and I'm treasurer for Aqua Services, Inc. and for all the subsidiaries of Aqua America, Inc., including Aqua Utilities Florida, AUF. AUF is a separate wholly owned subsidiary of Aqua America, Inc.

My rebuttal testimony responds to portions of the direct testimony presented by Office of Public Counsel witness James A. Rothschild relative to capital structure and Office of Public Counsel witness Patricia W. Merchant relative to deferred taxes.

Q. Does that complete your summary?

A. That completes my summary.

MR. MAY: We would tender the witness for cross.

CHAIRMAN CARTER: Mr. Beck, you're recognized.

MR. BECK: Thank, Mr. Chairman.

CROSS-EXAMINATION

BY MR. BECK:

Q. Mr. Anzaldo, when you left the stand from your direct testimony, you were going to do a calculation comparing the revenue requirement associated with a 10.25 percent return on equity compared to 10.77. Have you done that?

A. Yes, I did. The 52 basis point increase would generate an additional 182,000 of revenue.

Q. So that would increase the request that Aqua has compared to what it originally filed by that $182,000?

A. Yes, if the Commission adopts the leverage formula.

MR. BECK: Mr. Anzaldo, I have an exhibit I would like to hand out and ask that it be marked for identification.

CHAIRMAN CARTER: That will be Exhibit Number 183, 183.

MR. JAEGER: That's right.

CHAIRMAN CARTER: Thank you. Short title, Mr. Beck?

MR. BECK: Aqua America 10-Q dated June 30, 2008, excerpt from.

CHAIRMAN CARTER: 10-Q Excerpt Aqua. Got that? 10-Q Excerpt Aqua.

(Exhibit 183 was marked for identification.)

BY MR. BECK:

Q. Mr. Anzaldo, do you have the exhibit in front of you?

A. Yes, I do.

Q. And do you recognize that as an excerpt from the 10-Q filed by Aqua American for the period ended June 30, 2008?

A. Yes, I do.

Q. And could you turn to the last page, which is the consolidated statement of capitalization for Aqua America and its subsidiaries? Do you see that?

A. Yes, I do.

Q. It shows the total common equity of Aqua America and its subsidiaries of $1,022,114,000.

A. Yes.

Q. Do I have that right?

And if we go down toward the bottom, there is long-term debt, excluding current portion, of

approximately $1.2 billion; is that right?

A. That's correct.

Q. And do you see where there's a section called long-term debt of subsidiaries substantially secured by utility plant?

A. Yes.

Q. Okay. And it totals $827,121,000; is that right?

A. That is correct.

Q. Does that include the tax-exempt debt to which you've referred in your rebuttal testimony?

A. Yes. That includes the tax-exempt debt, the state revolving loan funds, and any first mortgage bonds for all the subsidiaries.

Q. Okay. Now, in addition to that debt for the subsidiaries, there's other amounts listed for long-term debt, is there not?

A. Yes.

Q. There's a note payable for $50,000; is that right? $50 million?

A. Fifty million, that's correct.

Q. And notes, 4.87 percent due 2010 through 2023, and that's 135 million; is that right?

A. That is correct.

Q. And then there are some other notes for

$207,132,000?

A. Yes.

Q. And we add those three together, the notes payable and those other two notes, that's $392 million; is that right?

A. Yes, that's correct.

Q. Okay. Does the capital structure that you've recommended, which is for Aqua Utilities Florida by itself, it consists of equity and a note payable to the parent; is that right?

A. Yes.

Q. Is the note payable from Aqua Utilities Florida to the parent company shown anywhere on this consolidated statement of capitalization?

A. Yes, it is.

Q. Where would that be?

A. It would be shown as part of the notes for 4.87 percent for 135 million and part of the notes for $207 million.

Q. And that's a note payable from the subsidiary to the parent corporation?

A. Yes.

Q. And why is that not eliminated through the process of consolidation?

A. Because that note is on the books of the

subsidiary. It is on the books of Aqua Utilities Florida, and it's also on their general ledger, as well as the annual report filed by Aqua Utilities Florida to the Public Service Commission for December 31, 2007, on page F-15, bonds, in the amount of $26,136,123, which is the debt that I used in my capital structure.

Q. Okay. How did you determine the amount of the note that should be payable from the subsidiary to the parent corporation?

A. That was decided by our management based on financial results and capital expenditures.

Q. Would you agree that's simply subject to the judgment of the management then to determine how much of a note payable would be made from the subsidiary to the parent?

A. No. I think there could be some -- I think there is some documentation that would support where the number came from. I don't believe it's been pulled out of the air in any way.

Q. Would you agree that the capital structure shown on the consolidated statement of capitalization, that is the capital structure that is most -- in which investors are most interested?

A. It depends. When debt is issued as a subsidiary, they look at the subsidiary books also. But

the shareholders mainly look at the consolidated, and S&P will look at the consolidated results also. I think they look at both. They look at us as a separate company and collectively what we do.

Q. The stock of Aqua Utilities Florida is not traded at all, is it not?

A. That is correct.

Q. That stock is 100 percent owned by the parent corporation; is that correct?

A. Yes.

MR. BECK: Mr. Anzaldo, thank you. That's all I have.

CHAIRMAN CARTER: Thank you. Ms. Bradley?

MS. BRADLEY: No questions, Mr. Chairman.

CHAIRMAN CARTER: Mr. May?

MR. MAY: No questions.

CHAIRMAN CARTER: Excuse me, Mr. May, before I come back to you. Staff, do you have any questions?

MR. JAEGER: Staff has no questions.

CHAIRMAN CARTER: Mr. May.

MR. MAY: No questions.

CHAIRMAN CARTER: Commissioners, anything further for this witness?

Exhibit Number -- I think you said 134; is that correct?

MR. MAY: It's Exhibit 134 on staff's composite list.

MR. JAEGER: Comprehensive exhibit list.

MR. MAY: I'm sorry. Comprehensive exhibit list.

CHAIRMAN CARTER: Comprehensive exhibit list. Commissioners, that's Number 134. Any objections? Without objection, show it done.

(Exhibit 134 was admitted into the record.)

CHAIRMAN CARTER: Mr. Beck, Exhibit 183?

MR. BECK: We move it into the record.

CHAIRMAN CARTER: Mr. May, any objections?

MR. MAY: No, I don't.

CHAIRMAN CARTER: Without objection, show it done.

(Exhibit 183 was admitted into the record.)

CHAIRMAN CARTER: Okay. Call your next witness.

MR. MAY: Aqua Utilities Florida would call Mr. Paul Moul, a rebuttal witness, to the stand.

CHAIRMAN CARTER: One second.

Mr. May, you may proceed.

MR. MAY: Thank you, Mr. Chairman.

Thereupon,

PAUL R. MOUL

was called as a rebuttal witness on behalf of Aqua Utilities Florida, Inc. and, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MAY:

Q. Good afternoon, Mr. Moul.

A. Good afternoon.

Q. Have you previously been sworn in this proceeding?

A. I have.

Q. Would you please state your name and business address for the record?

A. Yes. My name is Paul, middle initial R., last name Moul. That's spelled M-o-u-l. And the way I pronounce it, it rhymes with owl. You couldn't tell from the spelling how to pronounce it.

Q. That's for sure.

Mr. Moul, did you prepare and cause to be filed 29 pages of rebuttal testimony in this proceeding?

A. I did.

Q. Do you have that rebuttal testimony before you today?

A. I do.

Q. Do you have any corrections or revisions to your rebuttal testimony?

A. Yes. There are two corrections we should make to the rebuttal testimony, pages 13 and 21. Let's do 13 first.

On page 13, line 19, towards the end of the line there's a parenthetical. And what we need to do, there's a term there, year-end, and we should make that e-d. It should be "year-ended," and then insert "and spot." So the parenthetical should read, "using year-ended and spot market prices."

And then the second one I have is on page 21, and this is on line 3.

CHAIRMAN CARTER: Say again.

THE WITNESS: On line 3. Also within the parenthetical, about in the middle of the line there's the word "deviation." The correct word should be "duration."

CHAIRMAN CARTER: Duration?

THE WITNESS: Duration. And those are all the corrections I would like to make at this time.

BY MR. MAY:

Q. Mr. Moul, with those corrections noted, if I were to ask you the questions in your rebuttal testimony today, would your answers be the same?

A. Yes, they would.

MR. MAY: Mr. Chairman, I would ask that the rebuttal testimony of Mr. Moul be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be entered into the record as though read.

MR. MAY: Thank you.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

AQUA UTILITIES FLORIDA, INC.

REBUTTAL TESTIMONY OF PAUL R. MOUL

DOCKET NO. 080121-WS

INTRODUCTION AND SCOPE OF TESTIMONY

Q. Please state your name, business address and occupation.

A. My name is Paul Ronald Moul. My business address is 251 Hopkins Road, Haddonfield, NJ 08033-3062. I am Managing Consultant at the firm P. Moul & Associates, an independent financial and regulatory consulting firm.

Q. On whose behalf are you submitting rebuttal testimony in this proceeding?

A. Aqua Utilities Florida, Inc. ("AUF" or the "Company").

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address, comment on, and rebut the testimony presented by Mr. James A. Rothschild, a witness appearing on behalf of the Office of Public Counsel ("OPC").

Q. Are you sponsoring any exhibits to your rebuttal testimony?

A. Yes. My educational background, business experience and qualifications are attached as Exhibit PRM-1. I am also sponsoring Exhibit PRM-2 regarding Florida's leverage formula law.

REBUTTAL SUMMARY

Q. Please summarize those issues raised in Mr. Rothschild's testimony that you will address.

A. The central areas of dispute in this case involve: (i) the appropriate capital structure ratios that should be used to calculate the overall rate of return, (ii)

whether the Company's cost of equity should be set using the leverage formula that is prescribed annually by the Commission for water and wastewater utilities, (iii) whether the cost of equity proposed by Mr. Rothschild, if adopted, will be adequate to satisfy investor expectations, (iv) the determination of a reasonable Discounted Cash Flow ("DCF") cost rate, and (v) the proper application of the Capital Asset Pricing Model ("CAPM") as a measure of the Company's cost of equity.

CAPITAL STRUCTURE

Q. Please outline the deficiencies in Mr. Rothschild's proposal related to capital structure?

A. Mr. Rothschild recommends that the Company's cost of capital be based on the capital structure of the Company's parent – Aqua America, Inc. ("AAI"). Mr. Anzaldo points out in his rebuttal testimony that in making this recommendation, Mr. Rothschild ignores the facts that the Company is a separate wholly-owned subsidiary of AAI, operates exclusively in Florida, and has its own capital structure that reflects the unique risks that the Company faces in Florida.

Q. Are there other reasons why it would inappropriate to base the Company's cost of capital on the capital structure of AAI?

A. Yes. As explained in more detail in Mr. Anzaldo's testimony, the capital structure of AAI includes capital from restricted debt financings which is not available for use in Florida. In addition, AAI's capital structure includes short-term debt that is not part of the Company's capital structure and thus should not be imputed to the Company. If the capital structure of AAI is to be used in this proceeding, AAI's short-term debt and restricted debt

financings must be eliminated before imputing the parent's capital structure to the Company.

THE COMMISSION'S LEVERAGE FORMULA

Q. Mr. Moul, were you engaged to participate in this case when AUF filed its direct case in May 2008?

A. No. It is my understanding that AUF did not require the services of a cost of capital expert and the Company made no provision in its rate case expense for my services. When it presented its direct case, AUF utilized the leverage formula to establish the cost of equity and Mr. Steven Anzaldo filed testimony in support of that proposal. After the OPC ignored the leverage formula and presented alternative cost of equity testimony, it became necessary for AUF to respond and engage my services.

Q. Has Mr. Rothschild adequately explained why the Company's rate of return on common equity should not be based on the Commission's leverage formula?

A. No. In fact, he has not even addressed the issue. It is my understanding that the Commission has encouraged water and wastewater utilities in Florida to take advantage of the leverage formula in rate cases based upon legislation enacted for this purpose. The leverage formula provides a streamlined approach to an often contentious issue in rate cases, which can consume considered resources for the Commission and its regulated utilities. Indeed, this approach provides administrative efficiency and helps to minimize the cost of rate cases to both the utility and its customers. Unfortunately, the OPC has created a rate of return issue that the Company is forced to deal with in this case. The submission of Mr. Rothschild's testimony in this case

subverts the intention of the leverage formula, which has been used successfully by other water and wastewater cases in Florida to reduce rate case expense which is ultimately borne by the ratepayers.

Q. Has the Commission and its staff recognized that the leverage formula statute was designed to provide cost savings to ratepayers?

A. Yes. As shown in Exhibit PRM-2, the Commission has long recognized that presenting cost of equity testimony in a rate case can be extremely expensive; and, that the leverage formula statute allows a utility to mitigate significant rate case expense by employing the cost of equity on a leverage scale in lieu of presenting its own cost of equity witness.

Q. Please outline the deficiencies in Mr. Rothschild's proposals related to return on equity?

A. Mr. Rothschild recommends a 9.47% rate of return on common equity based upon a flawed discounted cash flow approach for determining the cost of common equity. The ROE proposed by Mr. Rothschild is entirely inadequate to reflect the current risk of common stocks. Rates of return established in other ratesetting proceedings show that the return proposed by Mr. Rothschild is much too low. For example, Aqua Pennsylvania, an affiliate of AUF, was recently granted an 11% equity return in its recent rate case (Order entered July 31, 2008 in Docket No. R-00072711). The weighted average of other major authorized returns for subsidiaries of Aqua America is 10.86%. The table presented below shows those returns.

Table 1

AQUA AMERICA INC
Authorized Equity Returns Weighted by State

	Net Property, Plant and Equipment	Percent to Total	State Authorized Return on Equity
Pennsylvania	$ 1,555,155	59.6%	11.00%
North Carolina	214,024	8.2%	10.40%
Illinois	210,270	8.1%	10.75%
Ohio	202,798	7.8%	10.48%
Texas	172,556	6.6%	12.00%
New Jersey	137,510	5.3%	10.00%
Indiana	114,994	4.4%	10.00%
Total or Weighted Average	$ 2,607,307	100.0%	10.86%

Excluding New York, Virginia, Maine and Florida for which no recent data is available. These jurisdictions, along with other states and eliminations, represent approximately 7% of total net property, plant and equipment

If the Commission were to adopt the proposals of Mr. Rothschild in this case, it would provide a disincentive for further investment by Aqua America in its Florida operations, because higher returns could be obtained in other jurisdictions.

Q. Are there other factors that lead you to believe that Mr. Rothschild has understated the Company's cost of equity?

A. Apart from the Value Line forecasts which I will discuss later in my testimony, it is apparent that Mr. Rothschild has failed to adequately take into account the tremendous volatility in the capital markets that has resulted from the current financial crisis. Volatility in the financial markets can be traced initially to turmoil in the credit markets that began with the collapse of the sub-prime mortgage market, which prompted central banks

throughout the world to inject enormous amounts of reserves into the banking system to increase liquidity in reaction to the credit crunch. Valuation uncertainties for asset-backed securities linked to sub-prime mortgages caused liquidity concerns for many hedge funds, investment banks, and financial institutions, including the near collapse of a major investment bank (i.e., The Bear Stearns Companies). During this period, many critical events occurred including the third-largest banking failure in U.S. history after a "run on the bank" by depositors of IndyMac. Subsequently, the Federal Housing Finance Agency placed the government-sponsored enterprises ("GSE") -- Federal National Mortgage Association (Fannie Mae) and Freddie Mac into conservatorship on September 7, 2008. Thereafter, in the largest bankruptcy in history, Lehman Brothers Holding, Inc. filed a bankruptcy petition on September 15, 2008. Then, JPMorgan Chase acquired the banking operations of Washington Mutual, which was the largest U.S. savings bank (its holding company subsequently filed for bankruptcy protection); Bank of America rescued Merrill Lynch & Co., Inc. with assistance of the Federal government; and the U.S. Treasury effectively nationalized through acquisition of 79.9% of the equity in American International Group, which was the world's largest insurance company. Afterward, on October 3, 2008, Congress passed and the President signed the Emergency Economic Stabilization Act of 2008, which among other provisions provides the mechanisms to deploy up to $700 billion through the Troubled Asset Relief Program ("TARP") to address the urgent needs of the credit crisis. Then, the Federal Reserve Board instituted its Commercial Paper Funding Facility ("CPFF"), which was authorized on October 7, 2008,

and it participated in coordinated efforts by major central banks to support financial stability and to maintain flows of credit in the banking system. These programs included a $75 billion Term Auction Facility ("TAF"), a future TAF auction totaling $150 billion, and an increase to $620 billion of swap authorizations with central banks in Canada, England, Japan, Denmark, the European Union, Norway, Australia, Sweden, and Switzerland.

Q. Have these recent events which have destabilized the financial markets increased the cost of capital for water and wastewater utilities like AUF?

A. Yes. Higher capital costs for public utilities are revealed by the increased volatility in the stock market, declining stock prices, and higher public utility bond yields. I will describe each of these factors that point to a higher cost of capital, including the cost of equity. Mr. Rothschild's testimony does not reflect these higher capital cost rates.

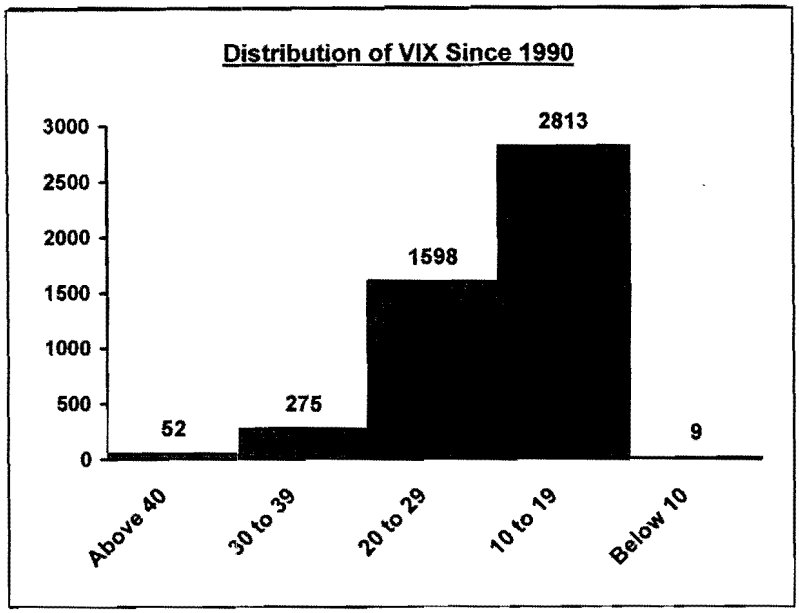
Q. Is there an objective measure of volatility in the stock market that reflects the increase in the cost of equity?

A. Yes. Volatility is a measure of the risk associated with common stocks. As volatility in the stock market increases, the cost of equity also increases. The Chicago Board Options Exchange ("CBOE") Volatility Index (i.e., "VIX") can be used to measure this risk. The VIX is based on real-time prices of options on the S&P 500 Index, and is designed to reflect investors' consensus view of future (30-day) expected stock market volatility.

Q. Can you present the VIX in an historical context?

A. Yes. Presented below is the distribution of the history of the VIX.

Table 2

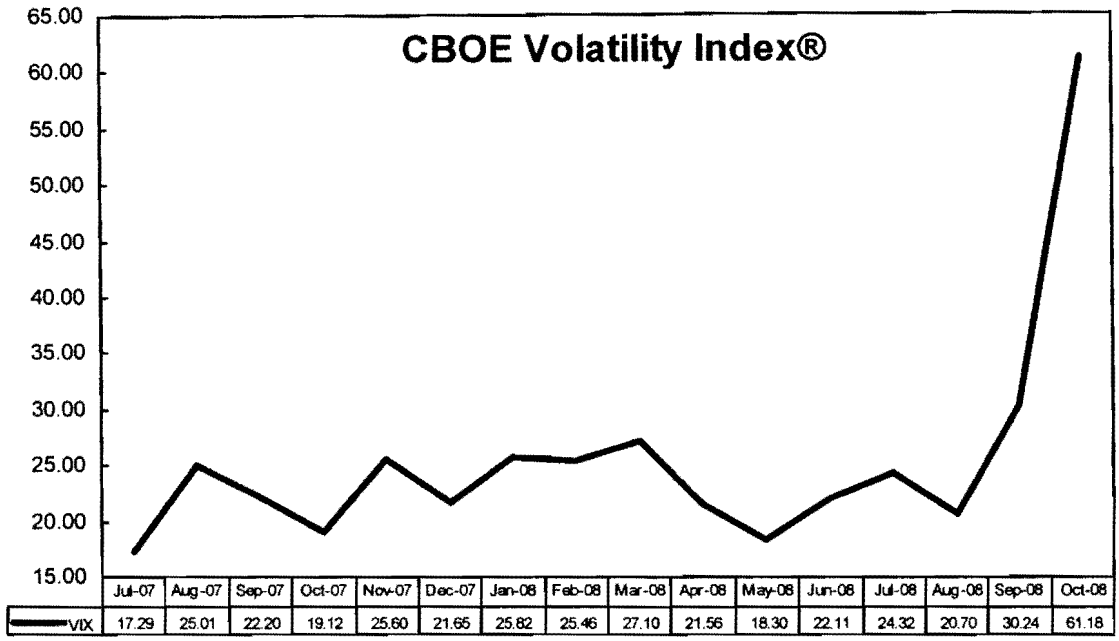


The histogram in Table 2 represents the VIX daily closing index sorted into five groupings over the period from January 2, 1990 to October 31, 2008. The higher the index values, the more volatility investors expect in the S&P 500. For 2008 through October 31, the VIX averaged 27.96, or above its historic average of 19.37. Such volatility is not surprising given investor concerns about financial market uncertainties and future economic growth.

Q. Has Mr. Rothschild taken these current market conditions into account?

A. Not that I can see. Mr. Rothschild uses stock prices through August 31, 2008 in his analysis. As previously explained, current market conditions are substantially different as represented by increased stock market volatility. This can be further demonstrated by recent performance of the VIX as shown below.

Table 3



	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08
VIX	17.29	25.01	22.20	19.12	25.60	21.65	25.82	25.46	27.10	21.56	18.30	22.11	24.32	20.70	30.24	61.18

The graph indicates that the VIX has ballooned outside of its historical range by moving well above 40 and peaking at 80 on October 27, 2008. The volatility of the stock market is today significantly higher than in the recent past. This high volatility increases risk, which brings with it higher capital costs. Given the recent performance of the VIX, there is no support for Mr. Rothschild's unduly low proposed equity return in this case.

Q. You have identified a number of factors that cause Mr. Rothschild to understate the Company's cost of equity. In your opinion, are there other reasons that have led Mr. Rothschild to propose an unduly low (i.e., single digit) return on equity?

A. Yes. For a variety of technical reasons that I will cover later in my rebuttal testimony, the rate of return testimony submitted by Mr. Rothschild misapplies the models used to measure the cost of equity. In general, the infirmities in his analyses include:

- A DCF growth rate that understates investor expected growth because his growth rate has failed to reflect all of the factors important to investors when developing their total return requirements.
- A failure to reflect flotation costs as part of the rate of return on common equity.
- A CAPM approach that fails to adequately measure investor requirements of the required returns for public utilities.

As such, the recommendation of Mr. Rothschild fails to meet the accepted standards of a fair rate of return.

DISCOUNTED CASH FLOW

Q. What form of the DCF model has been employed by Mr. Rothschild in this case?

A. Mr. Rothschild's methodology is based on the constant growth or "Gordon" form of the DCF model. This form of the DCF is the simplified version of the model that is also used by the Commission in its annual prescription of the leverage formula for water and wastewater utilities.

Q. Do you have any concerns regarding the DCF model?

A. There is an element of circularity in the DCF model when applied in public utility rate cases. This is because investors' expectations for the future depend upon regulatory decisions. Therefore, the use of the DCF model in rate cases ensures that regulators will continue to provide high growth utilities with a return which sustains that performance. On the other hand, the use of the DCF model for low growth companies perpetuates that performance and hinders any improvement. This then will reinforce investors' expectations that regulators will grant returns which guarantee

low growth. Due to this circularity, the DCF model may not fully reflect the true risk of a utility because the model may not deal with the high risk traits of a utility with low growth caused by poor accounting returns as revealed by reported earnings per share. If the DCF approach cannot cope with general capital market fundamentals, then either the assumptions underlying the DCF method are incomplete or the approach is not being properly implemented. For this reason, other models of the cost of equity should be used along with DCF.

Q. Previously, you indicated that Mr. Rothschild's market evidence ended with stock prices on August 31, 2008. Do his stock prices fully reflect the current status of the equity market?

A. No. I described previously the significant dislocations that have occurred in the capital markets -- both debt and equity markets. By ending his analysis in August 2008, he does not reflect current capital cost conditions. As shown below, the updated dividend yields for his gas companies of reference are:

Table 4

	Spot Dividend Yield			Average Dividend Yield		
	At 10/31/08	At 08/31/08	Δ	Avg. for Year 10/08	Avg. for Year 08/08	Δ
AGL Resources	5.53%	5.08%	0.44%	5.31%	4.58%	0.73%
ATMOS Energy Corp.	5.36%	4.72%	0.64%	5.31%	4.76%	0.55%
Equitable Res	2.54%	1.76%	0.77%	1.82%	1.43%	0.39%
Laclede Group	2.87%	3.34%	-0.47%	3.47%	3.82%	-0.34%
Nicor, Inc.	4.03%	4.05%	-0.03%	4.41%	4.70%	-0.29%
N. W. National Gas	3.11%	3.08%	0.03%	3.44%	3.26%	0.18%
Piedmont National Gas	3.16%	3.60%	-0.45%	3.73%	3.91%	-0.18%
South Jersey Inds.	3.17%	3.03%	0.14%	3.35%	3.03%	0.31%
Southwest Gas	3.45%	2.97%	0.48%	3.29%	3.16%	0.12%
WGL Holdings	4.41%	4.47%	-0.06%	4.84%	4.37%	0.48%
Average	3.76%	3.61%	0.15%	3.90%	3.70%	0.19%
AQUA AMERICA INC.	3.00%	2.73%	0.27%	3.05%	2.53%	0.52%

With these updated prices, the dividend yields for Mr. Rothschild's gas group increased by 0.15% using spot prices and 0.19% using average prices. The dividend yield increases for Aqua America have been 0.27% and 0.52%, respectively. This shows that Mr. Rothschild has understated his DCF analysis in this case. I will subsequently incorporate these updated dividend yields into Mr. Rothschild's DCF application.

Q. How does Mr. Rothschild arrive at a growth rate for purposes of his DCF model?

A. Mr. Rothschild relies principally on a retention growth calculation. I believe that there are serious limitations in this approach. Retention growth, along with external financing growth, is one way of describing book value per share growth. That is to say, book value changes from period to period by earnings not paid out in dividends plus the accretion to existing stockholders from the sale of new shares at above book value. Other factors also

contribute to earnings growth, which are not accounted for by the retention growth formula. Some of the factors which actually contribute to investors' expectations of earnings growth and which should be considered in assessing those expectations, are: (i) the earnings rate on existing equity, (ii) the portion of earnings not paid out in dividends, (iii) sales of additional common equity, (iv) reacquisition of common stock previously issued, (v) changes in financial leverage, (vi) acquisitions of new business opportunities, (vii) profitable liquidation of assets, and (viii) repositioning of existing assets. In my view, book value per share growth, or its surrogate retention growth, does not represent the proper financial variable to be considered when selecting the DCF growth component. This is because utility stocks do not typically trade at book value.

Q. Please illustrate the infirmities in Mr. Rothschild's DCF approach?

A. The major infirmity of the DCF method becomes apparent when viewing the model in its retention growth rate form, which has been proposed by Mr. Rothschild. Essentially, Mr. Rothschild merely adjusts his assumed return on book common equity by the difference between the dividend yield on book value and the dividend yield on market value. The table of figures provided below shows how his DCF result (using ~~year-end~~ year-ended and spot market prices) can be expressed from the values shown on page 1 of JAR Schedule 3. Each element is referenced to the associated line item shown on those pages of Mr. Rothschild's schedules.

Table 5

Gas Group	Year Ended	At 08/30/08
Return on Equity (Line 2c)	12.25%	12.25%
Dividend Yield on Book Value (Line 2b)	-8.86%	-8.14%
Dividend Yield on Market Value (Line 1)	3.70%	3.61%
Result	7.09%	7.72%
Additional factors (Lines 4 & 6)	2.19%	1.99%
Average DCF return	9.28%	9.71%

A key component of retention growth is his assumed return on book common equity. In his testimony, Mr. Rothschild acknowledges that the Gas Group will earn a 12.25% return on equity, but instead he proposes a DCF return of just 9.71% using August 31, 2008 stock prices and 9.28% for the year ended August 31, 2008 stock prices. The key to Mr. Rothschild's analysis is the set of values that he presents in footnote [A] on page 1 of JAR Schedule 3.

We know that the DCF model is intended to represent the investor expected returns using variables that they will realize in the future. To conform with the forward-looking nature of the DCF model, it is necessary to employ forecasts of investor expected returns. Unfortunately, Mr. Rothschild has mixed historic and forecast variables in his calculations, thus double counting the historical data. This double counting arises because when making their forecasts, analysts consider historical data, which they then adjust for abnormalities that are not considered relevant for future growth,

or for trends in the historical data. As such, the analysts' growth rate forecasts already reflect the historical performance of the utilities that they follow. To avoid double-counting for historical information, the investor expected equity returns would be 12.95% (12.25% + 13.00% + 13.08% + 13.45% = 51.78% ÷ 4) for the Gas Group. By employing investor expected returns, which do not double-count historical returns, the results of Mr. Rothschild's DCF model would be 10.41% (12.95% - 8.14% + 3.61% + 1.99%) for the Gas Group using August 31, 2008 stock prices. The results using the year ended August 31, 2008 stock prices would be 9.98% (12.95% - 8.86% + 3.70% + 2.19%) for the Gas Group. This data clearly show that Mr. Rothschild's DCF results are unreasonably low.

Q. In your prior illustration which demonstrates that the DCF return is highly sensitive to the assumed return on equity, you show that Mr. Rothschild's retention growth form of the DCF is merely a reformulated earnings/book ratio. Does Mr. Rothschild attempt to rationalize this discrepancy?

A. Yes. However, Mr. Rothschild's justification is inconsistent and contradictory. For example, Mr. Rothschild suggests that the cost of equity would not change because increases (or decreases) in the return on book common equity will be offset by decreases (or increases) in the price of stock as it affects the variables within his form of the DCF model. Mr. Rothschild offers no proof of his assertion that higher (or lower) dividend yields would be offset by lower (or higher) growth rates. Under this theory, the cost of equity is always the same. Essentially, his highly structured DCF analysis provides an overly simplified expression of the cost of equity that is

significantly dependent upon Mr. Rothschild's selection of the value that he assigns to the Return on Equity of his companies. As clearly shown, his selection in this regard is biased. Further, Mr. Rothschild never explains how his gas group could earn a 12.25% return on book value if his DCF cost rates are 9.28% or 9.71% which are used to set their allowed returns in rate cases.

Q. In order to implement the constant growth DCF model using the retention growth rate formula, must one assume a constant dividend payout ratio?

A. Yes.

Q. Is this assumption reasonable?

A. No. With forecasts showing higher earnings growth rates than dividend growth rates, the expectation is that dividend payout ratios will decline in the future. Indeed, Value Line projects declining dividend payout ratios for the natural gas companies, which means that earnings per share and price appreciation (i.e., the capital gains yield, or growth component of the DCF) can be expected to grow at a higher rate than dividends in the future. This is shown below based on the Value Line forecasts for each of the natural gas utility companies covered by Value Line.

Table 6

Company	2008	2009	2011-13
AGL Resources, Inc.	62.0%	61.0%	59.0%
Atmos Energy Corporation	66.0%	63.0%	58.0%
Equitable Resources	43.0%	34.0%	28.0%
Laclede Group, Inc.	54.0%	61.0%	56.0%
Nicor Inc.	78.0%	72.0%	51.0%
Northwest Natural Gas Co.	58.0%	57.0%	56.0%
Piedmont Natural Gas Compan	66.0%	67.0%	60.0%
South Jersey Industries, Inc.	47.0%	46.0%	42.0%
Southwest Gas Corporation	44.0%	42.0%	41.0%
WGL Holdings, Inc.	58.0%	59.0%	61.0%
Average	57.6%	56.2%	51.2%

These forecasts as of September 12, 2008 show that dividend payout ratios will not be constant, hence, a critical element of the retention growth formulation of the DCF model is unrealistic.

Q. As to the DCF growth component, what financial variables should be given greatest weight when assessing investor expectations?

A. The theory of DCF suggests that, absent a change in price-earnings multiple, the value of a firm's equity (i.e., share price) will grow at the same rate as earnings per share. Hence, earnings per share form the basis for investors' capital gains yield, and earnings are the source of dividend payments to investors. As shown above, a constant dividend payout ratio does not reflect the reality of the equity markets, nor investor expectations. Therefore, to properly reflect investor expectations within the limitations of the DCF model, earnings per share growth, which is the basis for the capital gains yield and the source of dividend payments, must be emphasized. Moreover, it is instructive to note that Professor Gordon, the foremost proponent of the DCF model in rate cases (and the individual whose name is most commonly

associated with the DCF model), has determined that the best measure of growth in the DCF model is analysts' forecasted earnings per share growth. Hence, to follow Professor Gordon's findings, earnings per share forecasts must be given primary weight.[1]

Q. Does Mr. Rothschild use earning per share forecasts in his DCF model?

A. Not directly. While Mr. Rothschild provided analysts earnings growth rates, he declined to use them directly in his DCF model.

Q. How would the use of analysts' forecasts of earnings growth impact the DCF?

A. The Zack's earnings growth rates for his gas group are shown on page 3 of JAR Schedule 4 and revealed by footnote [B]. There, the gas group average growth rate is 7.12%. For Aqua America, the Zack's growth rate is 8.70%. Using the Zacks average growth rate, the DCF result is:

Table 7

Discounted Cash Flow (DCF)	D_0/P_0	x	(1+0.5g)	+	g	=	k
Gas Group	3.61%	x	1.03560	+	7.12%	=	10.86%
Aqua America	2.53%	x	1.04350	+	8.70%	=	11.34%

Q. Previously, you provided a comparison of dividend yields that showed that they have increased. By recognizing those higher yields, what DCF result would now be produced?

A. Yes. As indicated previously, the dividend yield component of the DCF model has increased. The Zacks earnings growth estimates for the gas group have also changed. The updated growth rate is now 7.20% for the Gas Group. The Zacks forecast for Aqua America has remained constant.

[1] "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management, Spring 1989 by Gordon, Gordon & Gould.

By utilizing the midpoint of the spot and average dividend yields updated through October 2008, the DCF results would be:

Table 8

Discounted Cash Flow (DCF)	D_0/P_0	x	(1+0.5g)	+	g	=	k
Gas Group	3.83%	x	1.03600	+	7.20%	=	11.17%
Aqua America	3.02%	x	1.04350	+	8.70%	=	11.85%

Q. Has Mr. Rothschild taken flotation costs into account in his DCF model?

A. No. By failing to adjust his DCF model for flotation costs, Mr. Rothschild has understated the required rate of return on common equity. To the extent that the Gas Group is expected to issue new shares to investors, it is necessary to make a provision in the cost of equity for the costs associated with issuing those new shares. I should also note that Mr. Rothschild's failure to account for flotation costs is inconsistent with the Value Line forecasts that show that the gas companies will be issuing new common stock in the future. Indeed, Mr. Rothschild acknowledges that there will be a 1.50% annual increase in shares outstanding for his gas group and 0.83% for Aqua America (see JAR Schedule 5). It is obvious that issuance costs associated with these common stock financings, yet Mr. Rothschild ignored these costs in his DCF model.

Q. What impact would a flotation cost adjustment have on Mr. Rothschild's DCF model?

A. In Docket No. 080006-WS, the Commission Staff memorandum dated May 8, 2008 calculated 0.20% for flotation costs. Based upon my experience, this allowance is reasonable. Using this allowance, the DCF results are

11.06% (10.86% + 0.20%) for the gas group using August 31, 2008 prices and 11.54% (11.34% + 0.20%) for Aqua America using August 31, 2008 prices. Using updated dividend yields through October 2008, the DCF results would be 11.37% (11.17% + 0.20%) for the gas group and 12.05% (11.85% + 0.20%) for Aqua America.

CAPITAL ASSET PRICE MODEL

Q. You previously stated that Mr. Rothschild had included a CAPM element as part of his cost of equity calculation. Do you agree with Mr. Rothschild's CAPM approach?

A. No.

Q. How do you understand the CAPM approach used by Mr. Rothschild?

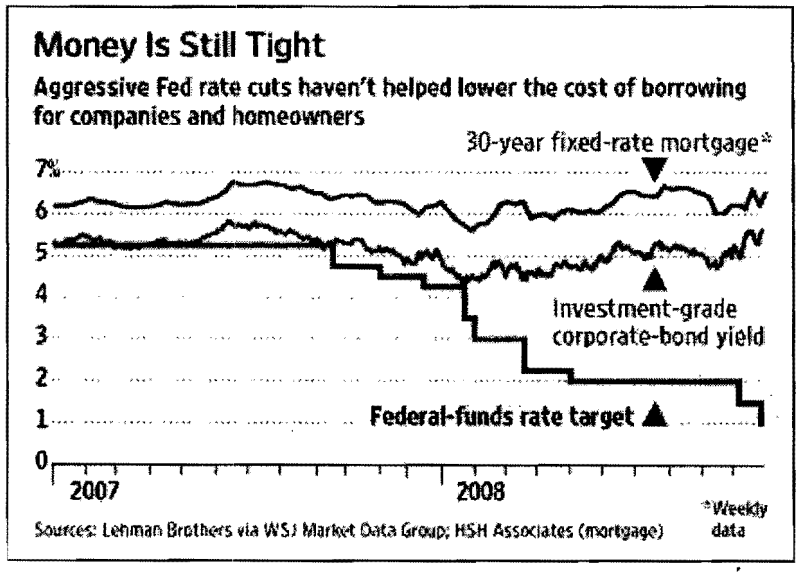
A. Mr. Rothschild submits a cost of equity that is loosely tied to the CAPM, and he employs a convoluted process to apply his version of the CAPM. Rather than using a straight-forward approach to the CAPM, Mr. Rothschild essentially reduces the historical return on the S&P Composite published by Ibbotson Associates (now Morningstar) downward for changes in inflation that occurred historically and the inflation rate that he calculated.

Q. One element of the CAPM is the risk-free rate of return. Mr. Rothschild employed a 4.43% risk-free rate of return using the yields on 30-year Treasury bonds. Are there problems with using Treasury yields as a measure of the risk-free rate of return in this economic environment?

A. Yes. There are real problems with using Treasury yields as a measure of the risk-free rate of return in our current economic environment. Due to the financial turmoil that I described previously, there has been a flight to

quality, thereby reducing the yields on Treasury obligations. While this condition is most pronounced at the shortest end of the yield curve (i.e., obligations with the shortest ~~deviation~~ duration), all Treasury yields display relatively low yields by reference to other credit obligations. This situation is displayed by the graphic published on the front page of the October 30, 2008 edition of The Wall Street Journal. That graph is shown below.

Table 9



This situation is also revealed by the yield spreads related to public utility borrowing costs. Those comparisons are:

Table 10

A Rated Public Utility Bonds over 20-Year Treasuries

Month	A-rated Public Utility Bonds	20-Year Treasuries Yield	20-Year Treasuries Spread	Month	A-rated Public Utility Bonds	20-Year Treasuries Yield	20-Year Treasuries Spread
Jan-07	5.96%	4.95%	1.01%	Jan-08	6.02%	4.35%	1.67%
Feb-07	5.90%	4.93%	0.97%	Feb-08	6.21%	4.49%	1.72%
Mar-07	5.85%	4.81%	1.04%	Mar-08	6.21%	4.36%	1.85%
Apr-07	5.97%	4.95%	1.02%	Apr-08	6.29%	4.44%	1.85%
May-07	5.99%	4.98%	1.01%	May-08	6.28%	4.60%	1.68%
Jun-07	6.30%	5.29%	1.01%	Jun-08	6.38%	4.74%	1.64%
Jul-07	6.25%	5.19%	1.06%	Jul-08	6.40%	4.62%	1.78%
Aug-07	6.24%	5.00%	1.24%	Aug-08	6.37%	4.53%	1.84%
Sep-07	6.18%	4.84%	1.34%	Sep-08	6.49%	4.32%	2.17%
Oct-07	6.11%	4.83%	1.28%	Oct-08	7.56%	4.45%	3.11%
Nov-07	5.97%	4.56%	1.41%				
Dec-07	6.16%	4.57%	1.59%				

Here, the spread in yields on A-rated public utility bonds and 20-year Treasury bonds has tripled since the beginning of 2007. This means that the CAPM, which is based on Treasury yields, has a tendency to understate the cost of equity for a water utility. And, the fact that the yield on A-rated public utility bonds is now over 7.50%, it shows clearly that Mr. Rothschild's 9.25% cost of equity recommendation, prior to his adjustment for a 44% common equity ratio, is well off the mark. Indeed, due to the much higher risk of common equity over long-term corporate debt, the risk spread must be substantially higher than 1.75% (9.25% - 7.50%).

Q. Are there other features of the CAPM which suggest that the Company's cost of equity should be higher than indicated by the CAPM results for the comparative gas companies used by Mr. Rothschild in his analysis?

A. Yes. The beta for Aqua America is 1.00 based upon the October 24, 2008 issue of Value Line, while Mr. Rothschild reported a beta value of 0.95 for Aqua America. I presume the difference in betas is attributable to Mr.

Rothschild's use of an earlier Value Line publication. The beta for the gas group is 0.83 according to Mr. Rothschild, although the Staff memorandum dated May 8, 2008 shows a 0.87 beta for the gas group. The higher beta for Aqua America indicates more systematic risk. Therefore the Company's cost of equity must be higher than indicated for the comparative gas company group, which serves as the foundation for the Commission's leverage formula.

Q. Mr. Rothschild has used a geometric mean to measure historic returns in his CAPM application. Do you agree with that approach?

A. No. A serious flaw in Mr. Rothschild's CAPM approach rests with his measurement of the historical returns using the geometric mean rather than the correct arithmetic mean. This is shown by Mr. Rothschild's erroneous inflation-adjusted market return of just 9.66%, as compared to the 12.20% market return used in the Staff memorandum dated May 8, 2008. It is obvious that Mr. Rothschild is way off the mark. Fundamentally, the arithmetic mean must be used to the exclusion of the geometric mean in the CAPM. As I will describe below, it has been established that the arithmetic mean best describes expected future returns -- the objective of the CAPM. The arithmetic mean provides the correct representation of all probable outcomes and has a measurable variance. The geometric mean, which Mr. Rothschild advocates, consists merely of a rate of return taken from two data points which would have no measurable variance (i.e., the dispersion of the returns cannot be calculated with a geometric mean). So while a geometric mean will capture the growth from an initial to a terminal value, it cannot provide a reasonable representation of the market premium in the context of

the CAPM because the model requires a single period return expectation of investors. The arithmetic mean provides an unbiased estimate, provides the correct representation of all probable outcomes, and has a measurable variance.

As stated by Ibbotson:

> *Arithmetic Versus Geometric Differences*
> For use as the expected equity risk premium in the CAPM, the arithmetic or simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because the CAPM is an additive model where the cost of capital is the sum of its parts. Therefore, the CAPM expected equity risk premium must be derived by arithmetic, not geometric, subtraction.
>
> *Arithmetic Versus Geometric Means*
> The expected equity risk premium should always be calculated using the arithmetic mean. The arithmetic mean is the rate of return which, when compounded over multiple periods, gives the mean of the probability distribution of ending wealth values....This makes the arithmetic mean return appropriate for computing the cost of capital. The discount rate that equates expected (mean) future values with the present value of an investment is that investment's cost of capital. The logic of using the discount rate as the cost of capital is reinforced by noting that investors will discount their (mean) ending wealth values from an investment back to the present using the arithmetic mean, for the reason given above. They will therefore require such an expected (mean) return prospectively (that is, in the present looking toward the future) in order to commit their capital to the investment. (Stocks, Bonds, Bills and Inflation - 1996 Yearbook, pages 153-154)

As stated in the 2003 Yearbook published by Ibbotson Associates:

> The arithmetic mean is the rate of return which, when compounded over multiple periods, gives the mean of the probability distribution of ending wealth values....This makes the arithmetic mean return appropriate for forecasting, discounting, and computing the cost of capital. The discount rate that equates expected (mean) future values with the present value of an investment is that investment's

> cost of capital. The logic of using the discount rate as the cost of capital is reinforced by noting that investors will discount his expected (mean) ending wealth values from an investment back to the present using the arithmetic mean, for the reason given above. They will, therefore, require such an expected (mean) return prospectively (that is, in the present looking toward the future) to commit his capital to the investment. (Stocks, Bonds, Bills and Inflation - 2003 Yearbook, page 100)

In the 2006 Yearbook, Ibbotson added:

> A simple example illustrates the difference between geometric and arithmetic means. Suppose $1.00 was invested in a large company stock portfolio that experiences successive annual returns of +50 percent and -50 percent. At the end of the first year, the portfolio is worth $1.50. At the end of the second year, the portfolio is worth $0.75. The annual arithmetic mean is 0.0 percent, whereas the annual geometric mean is -13.4 percent. Both are calculated as follows:
>
> $$r_A = \frac{1}{2}(0.50 - 0.50) = 0.0, \textit{ and}$$
>
> $$r_G = \left[\frac{0.75}{1.00}\right]^{\frac{1}{2}} - 1 = -0.134$$
>
> The geometric mean is backward-looking, measuring the change in wealth over more than one period. On the other hand, the arithmetic mean better represents a typical performance over single periods.
>
> In general, the geometric mean for any time period is less than or equal to the arithmetic mean. The two means are equal only for a return series that is constant (i.e., the same return in every period). For a non-constant series, the difference between the two is positively related to the variability or standard deviation of the returns. For example, in Table 6-7, the difference between the arithmetic and geometric mean is much larger for risky large company stocks than it is for nearly riskless Treasury bills. (Stocks, Bonds, Bills and Inflation - 2006 Yearbook, page 108)

As such, the geometric mean should not be used in the CAPM.

Q. How would the use of the arithmetic mean affect Mr. Rothschild's CAPM result?

A. To begin, the correct arithmetic mean historical return is 12.3% according to the 2008 Ibbotson Associates Yearbook. The arithmetic mean historical inflation rate was 3.1% during that period. To adjust the historical returns for changes in inflation as proposed by Mr. Rothschild, the market return would become 11.46% (i.e., 2.26% - 3.1% + 12.3%) using his other inputs from page 1 of JAR Schedule 6. Correcting Mr. Rothschild's analysis to reflect an 11.46% market return, the result would be:

Table 11

Capital Asset Pricing Model (CAPM)	*Rf*	+	*ß*	*x (*	*Rm*	-	*Rf*	*) =*	*k*
Gas Group	4.43%	+	0.83	x (	11.46%	-	4.43%	) =	10.26%
AAI	4.43%	+	1.00	x (	11.46%	-	4.43%	) =	11.46%

By recognizing flotation costs, the resulting CAPM returns would be 10.46% (10.26% + 0.20%) for the gas group and 11.66% (11.46% + 0.20%) for Aqua America.

Q. Does an 11.46% market return that you are using in the CAPM calculations shown above, seem reasonable in the current investment environment?

A. It is certainly too low by reference to the 12.20% market return specified in the Staff memorandum dated May 8, 2008. Mr. Rothschild has substantially understated the total return for the market in today's environment. To bring some perspective to the market return approach advocated by Mr. Rothschild, the DCF return can be calculated for the Value Line Composite of 583 industrial, retail and transportation companies, which includes 72 of Value Line's 98 industry groups and excludes financial services, utilities

and non-North American companies. In its semi-annual forecast dated May 9, 2008, Value Line forecasts growth for the Industrial Composite of 11.0% for earnings per share, 10.0% for dividends per share, 6.0% for book value per share, and 16.5% for percent retained to common equity. An average of these four growth rates is 10.9% (11.0% + 10.0% + 6.0% + 16.5% = 43.5% ÷ 4), which is very close to the earnings forecast. The resulting DCF return is 12.7% (1.8% dividend yield plus 10.9% growth rate for the Value Line composite). This DCF return shows that the market return of 11.46% is far too low.

Q. What would the CAPM results look like if the Value Line DCF return for the industrial composite were used?

A. Those results are:

Table 12

Capital Asset Pricing Model (CAPM)	*Rf*	+	*ß*	*x (*	*Rm*	-	*Rf*	*)*	=	*k*
Gas Group	4.43%	+	0.83	x (	12.7%	-	4.43%	)	=	11.29%
AAI	4.43%	+	1.00	x (	12.7%	-	4.43%	)	=	12.70%

Adjusted for flotation costs, the returns would be 11.49% (11.29% + 0.20%) for the gas group and 12.90% (12.70% + 0.20%) for Aqua America.

ADJUSTMENT TO THE COST OF EQUITY APPLICABLE TO THE AQUA AMERICA CONSOLIDATED CAPITAL STRUCTURE

Q. Mr. Rothschild adjusts his 9.25% recommended cost of equity for his gas companies upward by 0.22% when it is to be applied to the Aqua America capital structure. Do you agree with this adjustment?

A. No. His adjustment is deficient because a 0.22% adjustment is inadequate to compensate investors for the financial risk associated with the 44.03%

common equity ratio that he is proposing. As revealed by the leverage formula contained in the Staff memorandum dated May 8, 2008, the cost of equity would increase by 0.54% (4.82% - 4.28%) when the common equity ratio declines by 5.59% (49.62% - 44.03%) for the gas group.

Further, there are serious errors with regard to Mr. Rothschild's use of short-term debt for the gas company group. Most stand-alone LDCs have seasonal working capital needs related to stored gas inventory. Those cash flow needs often correspond with the end of the fiscal year for many LDCs, which are typically at September 30 or December 31. A stand-alone LDC would borrow short-term to finance injections of natural gas into storage in the summer when their cash flow is at a trough. In the heating season, that inventory is sold to customers and the short-term debt is repaid. Hence, for natural gas companies, their cash flow requirements are cyclical according to seasons, which cause short-term debt to peak near the end of the fiscal year. It is for this reason that average short-term debt is commonly used for gas companies in rate cases. Similar situations do not apply to water companies because they do not temporarily finance raw water stored in inventory. For water companies, their cash flow typically peaks after the summer sales of water, which does not correspond to the end of their fiscal year. Regardless of these errors, Mr. Rothschild is incorrect in adopting a 0.22% adjustment for change in common equity ratios, particularly when we know that the leverage formula shows a 0.54% increase.

REBUTTAL SUMMARY

Q. What conclusions do you reach regarding the return on common equity and capital structure recommendations sponsored by Mr. Rothschild in

this proceeding?

A. For purposes of establishing rates in this proceeding, AUF has elected to use Commission's leverage formula to establish ROE. This ROE based upon the leverage formula is conservative. Mr. Rothschild's proposed cost of equity is far too low in comparison to returns for the gas utilities, investor expectations and other objective measures, and thus understates the cost of equity of AUF. In my rebuttal, I have pointed out that the DCF and CAPM approaches as applied by Mr. Rothschild are flawed and systematically understate the Company's cost of equity. Finally, the Commission should not adopt the low common equity ratio recommended by Mr. Rothschild. As explained in Mr. Anzaldo's testimony, this low equity ratio was determined and applied in an inappropriate manner and when combined with his low return on equity recommendation produces a weighted return on equity well below the types of returns that investors expect for water utilities such as AUF.

Q. Does this conclude your rebuttal testimony?

A. Yes.

BY MR. MAY:

Q. Mr. Moul, have you attached two exhibits, PRM-1 and PRM-2, to your rebuttal testimony?

A. Yes, I did.

Q. Do you have corrections or revisions to those exhibits?

A. None that I'm aware of at this time.

Q. Mr. Moul, have you prepared a summary of your rebuttal testimony?

A. Yes, I have.

Q. Would you please provide that summary now?

A. Yes, I can do that.

Good afternoon, Chairman and Commissioners. My name is Paul Moul, and I'm managing consultant at the firm P. Moul & Associates. I've been engaged by AUF to analyze, critique, and rebut the rate of return testimony of OPC Rothschild.

It is unfortunate that the rate of return has become an issue in this case, because the Commission has been innovative in its approach to setting the cost of equity for water and wastewater utilities through use of its leverage formula. The company is agreeable to using the Commission's leverage formula rather than litigating this issue. The OPC did not agree, so the company was obligated to respond. In my view, the OPC never

explains why the Commission's leverage formula is not applicable to the company.

My assessment of the proposed rate of return contained in the testimony of Mr. Rothschild is that it is much too low. As part of his testimony, he has proposed a capital structure that is skewed with too much debt. I have reviewed the direct and rebuttal testimony of Mr. Anzaldo, and I agree with his conclusions regarding the capital structure issue.

As to the cost of equity, Mr. Rothschild's proposal is outside mainstream returns, and clearly it does not conform with the risks now present in the financial markets. We are in turbulent times in the capital markets, which began last winter with the Bear Stearns rescue, and followed by a series of tumultuous events, including the fed takeover of Fannie Mae and Freddie Mac, the bankruptcy of Lehman Brothers, the nationalization of AIG, and the creation of the $700 billion TARP. Mr. Rothschild's proposed cost of equity is incompatible with the risk present in today's capital markets.

In my rebuttal, I have provided a detailed critique of the technical shortcomings of Mr. Rothschild's analysis, which focused on items such as his misspecification of the DCF model, the biased

input that he used in that model, his failure to include flotation costs, and his CAPM application that used improper inputs. After addressing these issues, the proper application of both the DCF model and CAPM essentially support the rate of return on common equity that is produced by the Commission's leverage formula. As such, application of the Commission's leverage formula provides a return that is reasonable for the company, and there is no reasonable evidence that would refute the return produced by it.

Thank you for your attention, and that concludes my summary.

MR. MAY: We tender the witness for cross.

CHAIRMAN CARTER: Mr. Beck.

MR. BECK: Thank you, Mr. Chairman.

CROSS-EXAMINATION

BY MR. BECK:

Q. Good afternoon, Mr. Moul.

A. Good afternoon.

Q. In your summary, I believe I heard you use terms such as turbulent times and tumultuous events to describe recent events relating to the financial markets; is that right?

A. Yes, that is correct.

Q. And it's your conclusion in your rebuttal

testimony that this should increase the return on equity that this Commission would approve; is that right?

A. Well, it certainly produces a higher cost of equity today than before those events took place, sure.

MR. BECK: Okay. I've got a few exhibits to ask you about. I'm going to ask Mr. Reilly to hand out one to start with.

CHAIRMAN CARTER: We need number for that.

MR. BECK: Number 184 would be --

CHAIRMAN CARTER: This will be 184, Commissioners.

MR. BECK: S&P 500 Index.

CHAIRMAN CARTER: S&P 500.

(Exhibit 184 was marked for identification.)

CHAIRMAN CARTER: You may proceed.

BY MR. BECK:

Q. Mr. Moul, do you have the exhibit in front of you?

A. I do.

Q. And would you accept, subject to check, that this reflects the movement of the Standard & Poor's 500 Index over the past year?

A. That's what it appears to represent; correct.

Q. And does it look correct to you?

A. Yes.

Q. Okay. It indicates the Standard & Poor's 500 at the beginning of this year was at about 1450; would you agree?

A. That is correct.

Q. Okay. And as of this Friday, the S&P 500 was at 876.07; is that right?

A. Correct.

Q. Would you agree that's quite a substantial drop?

A. It is indeed a very substantial drop.

Q. Okay. I would like to ask you to focus on the graph and the time period from October through the present for the S&P 500. Do you see that?

A. I do.

Q. Okay. Is a lot of the drop over the last year in the Standard & Poor's 500 reflective of what has happened in the last two months or so?

A. Well, generally I can agree with your proposition. The downtrend was established before then, but the failure and the bankruptcy of Lehman Brothers really exacerbated that and caused what you see in the graph for the later months.

Q. And what was the date of the failure of Lehman Brothers that you just referred to?

A. September 15th sticks in my head, but I could

be a day or two off on that.

Q. And that was about the time that the substantial drop started that takes us through the present day; is that correct?

A. That's right.

MR. BECK: Now, I have another exhibit that I would like to ask Mr. Reilly to pass out.

CHAIRMAN CARTER: This will be number 185. Title, Mr. Beck?

MR. BECK: Yes. It's the Daily Treasury Yield Curve Rates.

CHAIRMAN CARTER: Thank you. You may proceed.

(Exhibit 185 was marked for identification.)

BY MR. BECK:

Q. Mr. Moul, before we get to the yield rates, let me ask you a few more questions about the S&P 500 Index. Would you agree that the stock price decline is in part a reaction by investors to the possibility of a recession that might cause a substantial reduction in the earnings for many companies?

A. I would agree with that.

Q. Would you agree that investors fear that some companies might be going through a period of several quarters or more where instead of making money, they'll actually show losses?

A. I would also agree with that.

Q. Would you agree that investors have responded to that prospect by undergoing a flight to quality?

A. Oh, absolutely. That's why Treasury yields have dropped the way Mr. Rothschild described in his testimony.

Q. And with that, I would like to ask you to look at the exhibit I just handed out on Treasury yields. Do you have that in front of you?

A. Yes, I do.

Q. Okay. And the first page shows the Treasury yields from this past week, does it not?

A. Yes.

Q. Okay. And the yield for one-month and three-month yields is .02 percent; is that right?

A. Yes. The yields are almost nonexistent. They're almost -- they're near zero.

Q. And would you agree that the reason investors are willing to take that type of yield is again because they're looking for safety rather than a large return?

A. Well, there's two things that are driving it. One is the action of the Federal Open Market Committee and some of the actions it has taken to deal with the credit crisis, and the other is the one that you suggest, which is a flight to quality.

Q. In fact, the yields right now at this moment are among the lowest we've seen over the course of the past year; is that right?

A. On one-month Treasury bills, I cannot think of another time when they've been this low.

Q. Okay. And the yields for long-term debt, for example, the 30-year, as of Friday they were at 3.11 percent; is that right?

A. Yes. Again, they've come down as well due to the flight to quality. And now, of course, this applies just to Treasuries. This doesn't apply to corporate borrowers.

Q. Right. And the reason we're looking at Treasuries, is it not, is because that's where there's the least risk?

A. Sure. But corporations and pubic utilities can't borrow at the Treasury rate. Only the government can borrow at these rates. Corporations can't borrow at these rates. You and I can't borrow at these rates.

Q. Now, would you agree that given the tumultuous times and the prospect of a recession, that some companies are going to do worse, and some companies are going to do better than others?

A. Oh, winners and losers, sure. There's winners and losers in good times and bad. There's always

winners and losers.

Q. Would you agree that investors might find a stock such as Aqua America a safe haven as a type of investment in these types of times?

A. It depends. The beta of Aqua America of 1 would indicate that it would move like the rest of the market. So I don't know with the beta of Aqua being what it is whether it would move a whole lot different than the rest of the market.

Q. Okay. Mr. Moul, let's look at the performance of Aqua America, if we could. Where's Mr. Reilly?

CHAIRMAN CARTER: He got tired of you using him, I guess.

This will be Exhibit 186.

MR. BECK: And it would be one-year stock of Aqua America.

CHAIRMAN CARTER: Thank you.

(Exhibit 186 was marked for identification.)

CHAIRMAN CARTER: You may proceed.

BY MR. BECK:

Q. Mr. Moul, do you have the stock chart for Aqua America in front of you?

A. I see that. Yes, I do.

Q. Would you agree that the -- and this shows the closing prices of Aqua America through this past Friday,

does it not?

A. I'll take your word for it. I don't really see that.

Q. Well, would you look at the chart, please. Do you see the ending date?

A. Oh, there you go. 12/5/08, yes, right.

Q. Would you agree that the stock price of Aqua America is essentially unchanged for this year and has rallied substantially in the last few months?

A. Yes. There was a big uptick in the price of the stock from November through early December.

Q. And isn't that --

A. But then it trailed off a little bit towards the end.

Q. And doesn't that uptick in Aqua America occur at the very time that the Standard & Poor's 500 was declining so substantially?

A. Yes, that's correct.

Q. And would you agree that one possible explanation for that is that investors right now see Aqua America as a less risky place to put their money?

A. That, or they might see significant dividend growth out of Aqua America that might be driving the stock price. There's a whole host of items or factors that could influence the stock price.

Q. Would you agree that the fact that Aqua America's stock price has been resistant to the downward movement we saw in the Standard & Poor's 500, and in fact went up during the last few months, indicates that the cost of equity that is appropriate for Aqua America is lower than it was a few months ago?

A. Well, what I can see here is two things. One, the stock price had declined, it appears, like the rest of the market, and then in the recent periods, it moved back up. And that could be attributed to a reassessment of the growth prospects for Aqua America.

Q. But the Standard & Poor's 500 dropped about 40 percent over the course of the last year, did it not?

A. I agree with that.

Q. And Aqua America is essentially unchanged over the course of -- from the beginning of the year to the end of the year?

A. Well, what I think you see is a lot of volatility in Aqua America's stock price. I mean, you're absolutely right in what you say from the beginning to the end, but look at all of the volatility that took place in between.

Q. Okay. Mr. Moul, let's move to another part of your rebuttal testimony. You stated, and you stated this in your summary, that we haven't adequately

explained why Aqua's rate of return shouldn't be based on the leverage graph; is that right?

A. Yes, at least as I read the testimony.

Q. Would you agree that one of the factors included in the leverage formula determination is the size of the company?

A. Yes, there is a size factor in there.

Q. Do you know how the size of Aqua Utilities Florida compares to the size of the average water and wastewater utility in Florida?

A. Well, it depends on whether you look at the individual systems within Aqua Florida or if you look at it as a single company. I think they set rates on an individual system basis, at least at the moment.

Q. Do you think we're setting -- you're talking about the rates for customers?

A. Yes.

Q. Is return on equity set on an individual customer basis?

A. Oh, no. I'm presuming that the cost of equity in the capital structure and the cost of debt will be set on a systemwide basis.

Q. And the stock of Aqua Utilities Florida is not publicly traded, is it not?

A. No.

Q. Okay. If Aqua Florida needs new common stock, it has to obtain that from the parent corporation, would it not?

A. Correct.

Q. The parent corporation is larger than Aqua Florida; is that right.

A. Yes.

Q. And in fact, Aqua America's stock trades on the New York Stock Exchange, does it not?

A. Correct.

Q. Would you agree that the current market capitalization of Aqua America is approximately $3 billion?

A. Hang on. Let me check.

The last figure I have is 2.3 billion, according to the Value Line report dated October 24th.

Q. And that would be before the Aqua stock price went up in the last two months or most recently, would it not?

A. Yes, there has been an increase in stock price since then. Let me just see here for a second.

The stock price at the time was $17.32, and I really can't tell from your graph exactly what the price was on the 5th. It looks like it's about -- over 20, between 20 and 21. So it went up from 17.32 to maybe 20

and a half.

Q. And what would that put the market capitalization at, about?

A. It would be higher than the 2.3 billion.

Q. And how would that compare to the average water and wastewater company in Florida?

A. Larger.

Q. At page 4 of your rebuttal testimony, Mr. Moul, you take issue with the 9.47 rate of return on common equity, the discounted cash flow approach, or the 9.47 percent rate of return recommended by Mr. Rothschild; is that right?

A. You're on line 13, are you?

Q. Yes.

A. Yes, uh-huh.

Q. Okay. Do you recall earlier where your counsel asked Mr. Rothschild about a proceeding in Rhode Island?

A. Yes.

Q. And you testified in that proceeding?

A. Yes.

Q. And that was for a gas company, was it not?

A. Correct.

Q. And the leverage graph in Florida is based upon a comparison group of gas companies, is it not?

A. Yes.

Q. And what was your DCF calculation for the gas company in Rhode Island?

A. Oh, I don't recall.

Q. Would you agree, subject to the check, that it was 9.11 before making a .54 leverage adjustment and a .19 percent financing cost adder?

A. I would just have to check. Of course, you would have to include those other factors to get a true DCF cost rate.

Q. Right. And after them, do you recall whether it was 9.84 after including those factors?

A. It might have been. Again, I would have to check. But I think the Commission found a much higher ROE than what was indicated there.

MR. BECK: Mr. Moul, thank you. That's all I have.

THE WITNESS: You're welcome.

CHAIRMAN CARTER: Thank you. Ms. Bradley?

MS. BRADLEY: No questions.

CHAIRMAN CARTER: Staff?

MR. JAEGER: No questions.

CHAIRMAN CARTER: Commissioners? Mr. May.

MR. MAY: No questions, Mr. Chairman.

CHAIRMAN CARTER: Okay. Let's deal with the

exhibits.

MR. MAY: We would ask that Mr. Moul's rebuttal exhibits PRM-1 and PRM-2 be assigned --

MR. JAEGER: They're 149 and 150.

MR. MAY: 149 and 150.

CHAIRMAN CARTER: 149 and 150, Commissioners. Any objections? Without objection, show it done.

(Exhibits 149 and 150 were admitted into the record.)

CHAIRMAN CARTER: Mr. Beck, Exhibits 184 through 186. Mr. May, any objections?

MR. MAY: No, sir.

CHAIRMAN CARTER: Without objection, show it done.

MR. BECK: Thank you, Mr. Chairman.

(Exhibits 184, 185, and 186 were admitted into the record.)

CHAIRMAN CARTER: Mr. May. Staff, based upon my notes, the next witness, Guastella, has been stipulated to; is that correct?

MS. FLEMING: That's correct. And I think as we stated previously in the preliminary matters, the parties would move in any prefiled testimony and any prefiled exhibits at the time of the witness.

CHAIRMAN CARTER: That's the agreement of the

parties? The prefiled testimony of the witness will be entered the record as though read. Are there any exhibits?

MR. JAEGER: There were no exhibits, Chairman, for his direct.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

AQUA UTILITIES FLORIDA, INC.

DIRECT TESTIMONY OF JOHN F. GUASTELLA

DOCKET NO. 080121-WS

Q. Please state your name and business address.

A. John F. Guastella, Guastella Associates, Inc., 6 Beacon Street, Suite 410, Boston, MA 02108.

Q. Please describe Guastella Associates, Inc.

A. Guastella Associates, Inc. provides utility management; valuation and rate consulting services to both regulated and unregulated utilities.

Q. Please describe your educational, professional and business background and experience.

A. I graduated from Stevens Institute of Technology in June of 1962, receiving a degree in Mechanical Engineering. I am a licensed professional engineer. I have completed courses in utility regulation sponsored by the National Association of Regulatory Utility Commissioners ("NARUC") and conducted by the University of Colorado, University of South Florida, Florida Atlantic University, the University of Utah, Florida State University, and the University of Florida.

I was employed by the New York State Public Service Commission for sixteen years from 1962 to 1978. With the exception of two years in which I was involved in the regulation of electric and gas utilities, my time with the New York Commission was devoted to the regulation of water utilities. After a series of promotions during the years

1962 to 1970, attained through competitive examinations, I was promoted to Chief of Rates and Finance in the Commission's Water Division. In 1972, I was made Assistant Director of the Water Division. In 1974, I was appointed by the Chairman of the Commission as Director of the Water Division, a position I held until my resignation from the Commission in August of 1978.

My duties with the Commission included the performance and supervision of various engineering and economic studies concerning valuation of utility property, financing, rates and service of electric, gas and water utilities. While in the Water Division, I either examined or supervised the examination of the books and records of literally hundreds of water utilities.

As Director of the Water Division, I was responsible for the regulation of more than 450 water companies in New York State, heading a professional staff consisting of 32 engineers and three technicians. One of my primary duties was to advise the Commission during its adjudication of formal proceedings, as well as other matters. In the course of those deliberations, testimony, exhibits and briefs submitted in formal proceedings were reviewed and analyzed. My duties and responsibilities covered such subjects as the reasonableness of investments in utility plant, appropriate depreciation, contributions in aid of construction, advances in aid of construction, construction work in progress, working capital, amortizations, rate base, revenue level, operation and maintenance expenses, taxes, cost of capital, fundable capital, financing, capital structure, rate of return, rate design, rate structure, quality of service and, in general, all aspects of utility valuation, rate setting and service.

Another major responsibility was the review of all proposed legislation affecting water utilities in New York and the subsequent preparation of recommendations for use by the governor or the legislature in considering such legislation. I also made legislative proposals and participated directly in drafting bills that were enacted: one expanded the New York Commission's jurisdiction with respect to the regulation of the service provided by small water companies and another dealt specifically with rate regulation and financing of developer-related water systems. During my employment with the New York Commission, I handled or supervised the handling of thousands of consumer complaints by individuals, corporations and municipal, governmental and political officials.

In 1978, I formed Guastella Associates, Inc. Concurrently with my position as President of Guastella Associates, Inc., I served as President of Country Knolls Water Works, Inc. from 1987 to 1991, directing the management and operation of this utility which served some 5,000 customers.

I have prepared appraisals and valuations of utility property, depreciation studies, rate analyses, cost allocation and rate design studies, and management and financial analyses. I have provided consulting services for municipal and investor-owned water and wastewater utilities, as well as gas utilities and solid waste collection and disposal companies.

Q. Have you previously presented expert testimony in proceedings involving regulatory agencies, municipal jurisdictions and court cases with respect to utility matters?

A. Yes.

Q. In what states were the utilities located?

A. My testimony was presented on behalf of utilities or regulatory agencies in the states of Alaska, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Maryland, Massachusetts, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, and Virginia.

Q. Briefly state your activities in connection with professional organizations and associations.

A. I served as Vice-Chairman of the Staff-Committee on Water of NARUC. While on that committee, I prepared a 95-page instruction manual entitled, "Model Record-Keeping Manual for Small Water Companies," which was published by the NARUC. The manual describes in detail the kinds of operating and accounting records that should be kept by small water utilities, with instructions on how to use those records in order to properly operate a water system and properly keep account of the cost of providing service.

Since 1974, I have prepared the rate case study material, assisted in the coordination of the program and served as an instructor at the Annual Fall Seminar on Water Rate Regulation sponsored by the NARUC and conducted by the University of South Florida, Florida Atlantic University, University of Utah, Florida State University, the University of Florida, and currently Michigan State University. This seminar is recognized as being one of the best in the country for teaching rate-setting principles and methodology. It is

attended by representatives of regulatory agencies, utilities, and engineering, accounting, economic and law firms throughout the country. In 1980, as a special consultant to NARUC, I assisted in the establishment of another similar seminar, which has been held annually in the spring in the western United States.

I served as an instructor and panelist in a seminar on water and sewer utility regulation conducted by the Independent Water and Sewer Companies of Texas. In 1998, I prepared and conducted a rate regulation seminar in Maine on behalf of the New England Chapter of the National Association of Water Company's ("NAWC"). In 2000 and 2001, I prepared and conducted a seminar for developer related and small water and sewer utilities in conjunction with Florida State University, and again in 2003 in conjunction with the University of Florida. This seminar provided instruction as to the financial structuring of utilities, rate setting, financing and valuation for market value determinations in preparation for negotiated sales or condemnations. It also identified the various problems faced by small utilities, the impact on their operations and potential solutions. In 2005, I prepared and conducted a special seminar on rate regulation for the newly formed Office of Regulatory Staff in South Carolina. In 2006 and 2007, I prepared and conducted seminars on rate regulation and valuation on behalf of the New York and New England Chapters of NAWC, respectively.

As a member of the NAWC, I served on its Rates and Revenue Committee and Small Company Committee. I am a life-time member of the American Water Works Association ("AWWA") and served on its Water Rates Committee, assisting in the preparation of the AWWA Rates Manual, Third Edition. I am a life-time member of the

New England Water Works Association. I have also served on a joint committee on rate design composed of staff members of NARUC and NAWC. In connection with my serving on these committees, and in connection with cost allocation and rate design studies I have performed in the course of my work, I have participated in decisional meetings to determine proper engineering and construction criteria in relation to costs in the design of water and sewer systems.

I have prepared and presented papers at a number of meetings of the National Association of Water Companies, the National Association of Regulatory Utility Commissioners, the New England Conference of Public Utilities Commissioners, the Mid-America Regulatory Conference, and at meetings of the Public Utility Law Section of the New Jersey Bar Association, the Pennsylvania Environmental Council, the Southeastern Association of Regulatory Utility Commissioners, the New Jersey Chapter of the American Water Works Association, and the Florida, New England, New Jersey and New York chapters of NAWC. I also participated in a special workshop conducted by the U.S. Environmental Protection Agency, State Revolving Fund Section, with respect to its Full Cost Pricing Initiative.

Q. What is the nature of your involvement in this proceeding?

A. Guastella Associates, Inc. has been retained by Aqua Utilities, Florida ("AUF" or "Company") to provide consulting services with respect to the preparation of its rate filing. In addition to general assistance in the preparation of the MFRs, our specific assignment included the performance of used and useful analyses.

Q. What is the scope of work performed by Guastella Associates in connection with this assignment?

A. Mr. Gary C. White, Mr. John M. Guastella and I have examined the Company's operating and billing data, and we supervised an analysis of the maps of each system. Our work was also coordinated with that of the Company's staff as well as other consultants.

Q. Have you prepared or supervised the preparation of any schedules that comprise the Minimum Filing Requirements?

A. Yes, the following schedules of the Minimum Filing Requirements ("MFR") were prepared by me or under my direction: Schedules F-5, F-6, F-7, F-8, F-9 and F-10. The results of my used and useful analysis are also reflected in Schedules A-1, A-2, A-3, A-5, A-6, A-7, A-9, A-10, A-12, A-14, B-13 and B-14.

Q. Are schedules F-5 through F-10 all related to used and useful calculations?

A. Yes.

Q. Would you please explain what you mean by used and useful?

A. The term "used and useful" is simply a regulatory rate setting term that describes the cost of property that is included in a utility's rate base (net investment) upon which the utility is entitled to earn a rate of return. The balance of the cost of property that is excluded from rate base is referred to as "non used and useful" or "future use" plant.

The reason for performing this type of allocation study is to have existing customers pay rates based on the cost of plant necessary to provide safe and adequate service to them on a reasonably continuous basis, and therefore preclude any subsidization of future customers by existing customers.

Q. Is there a prescribed method for performing used and useful analyses?

A. The FPSC recently adopted Rule 25-30.4325 with respect to Water Treatment and Storage Used and Useful Calculations in Docket No. 070183-WS. In addition, Rule 25-30.432 provides for Wastewater Treatment Plant Used and Useful Calculations. Those rules require specific calculations as well as opportunity to apply judgment if variations of the specific formulas or input data are supported.

Q. What was your approach in performing the used and useful calculations?

A. With a few minor exceptions that I will address, I applied the provision of the FPSC rules to which I referred.

Q. Are you able to summarize your used and useful determinations without discussing the individual calculations for each of the water and wastewater systems?

A. Yes. The rate filing includes 57 water and 25 wastewater systems that are relatively small - - some very small - - and most have characteristics that have enabled an easy determination of used and useful, as described in the respective "F" schedules. The used and useful F schedules include specific calculations and, if appropriate, explanations of the proposed used and useful percentages.

Q. Before summarizing your used and useful determinations, would you describe the source of the data you used?

A. The data were obtained from the Company, as reflected in the various "F" schedules showing demands and capacities, and including operating and billing reports and maps.

Q. Did you use a margin of reserve in your calculations?

A. Yes, but in many instances the used and useful percentages were found to be 100% regardless of a margin reserve allowance.

Q. Would you briefly describe margin reserve?

A. Margin reserve is an allowance for growth in customers for a five-year period after the test year. The Company's revenue requirement if based on the 2007 test year, and the growth was projected to 2012. A margin reserve allowance recognizes that utilities must have capacity available to provide service to new customers so that both new and existing customers will in the future receive adequate service. Obviously, facilities must be installed and operational in order to provide service to customers in the future, and the utility must incur costs for those facilities that must be recognized in setting rates.

Q. With respect to permanent rates, would you please describe your determination of the used and useful percentages of the water transmission and distributions mains?

A. On the basis of our take-offs of the individual system maps, and review of the number of connected customers and related ERCs, I found that transmission and distribution mains of 39 water systems are 100% used and useful. Transmission and distribution water mains were determined to be 100% used and useful when the ratio of ERCs to total lots (lots with mains fronting the property) was found to be over 90% or greater, after an allowance for margin reserve, and when the system was fully developed as planned. Only 2 systems (Piney Woods/Spring Lake and Palm Port) were treated as 100% because the ratio of ERCs to lots on lines exceed 90%. There are 5 systems (Beecher's Point, Friendly Center, Hobby Hills, Silver Lake Estates/Western Shores and Village Water) for which the ratio of ERCs to lots on line were less than 100% but the used and useful percentage was treated as 100% because the systems are fully developed or built out. There are 32 systems for which transmission and distribution mains were found to be 100% used and useful on the basis of the ratio of ERCs to lots on line. There are 18 systems where the used and useful percentages for transmission and distribution mains

were found to be less than 100% and the calculated percentages were used without adjustment.

Q. Why do you use ERCs as the numerator in the ratio of ERCs to lots on lines with respect to mains?

A. Mains are not only designed to cover distance, but also to meet varying demands. A ratio of connected lots to total lots on lines would only consider distance; the ratio of ERCs to total lots on lines take into account both distance and demands, because ERCs reflect the higher demands of general service customers or customers with larger meters.

Q. Would you please describe your determination of the used and useful percentages of the wastewater collection mains?

A. The calculations of the used and useful percentages for the collection (gravity) mains are similar to those for the water mains. The number of connected customers and total lots fronting mains was obtained from the map take-offs of individual systems. The ratio of ERCs (adjusted for margin reserve) to total lots on lines determined the used and useful percentage, but adjusted to 100% if the ratio exceeded 90% or the system is fully developed. Although there are 2 systems in which that ratio exceeded 90%, those systems as well as 5 others are fully developed, and treated as 100% used and useful. There are 11 systems for which the ratio of ERCs to total lots on lines produced 100% used and useful, without adjustment. There are 7 wastewater systems for which the collection mains were found to be less than 100% used and useful; specifically, Holiday Haven, Leisure Lakes, Palm Port, Silver Lake Oaks, Sunny Hills, The Woods and Village Water.

Q. Why are your calculations of used and useful only applicable to collection gravity mains?

A. The recently adopted rules with respect to water treatment and storage facilities state that the Commission's used and useful evaluation will consider the prudency of the investment, economies of scale and other relevant factors. Those considerations are also applicable to used and useful evaluations of other components of utility systems, such as lift stations and force mains. There are no customers directly connected to force mains and they are not comprised of a grid of collection mains, as is the case of gravity mains. Typically, there is significantly less footage of force mains, and they serve the purpose of dealing with the elevations of the service area. Wastewater from multiple customers is collected by gravity mains into the receiving wells of lift stations and pumped towards the treatment facilities. The size and cost of lift stations and force mains would not significantly fluctuate if more or less customers are added to the gravity mains; nor would it be economically prudent or practical to construct and replace such facilities with slightly increasing capacities, particularly when the design must not only accommodate average wastewater flow but also peak periods of inflow and infiltration during heavy rainfalls -- a factor not taken into account in the ratio of ERCs to lots on lines. Accordingly, the ratio of ERCs to lots on lines is not similarly applicable to lift stations and force mains, and considerations of prudency and economies of scale reasonably support the use of 100% for the used and usefulness of lift stations and force mains.

Q. Your testimony thus far regarding the used and useful percentages of water transmission and distribution mains and wastewater collection mains pertains to permanent rates. What are the respective percentages for interim rates?

A. The used and useful percentages with respect to interim rates are the same as for permanent rates for both water mains and sewer mains, except that the calculated ratio of ERCs to lots on lines was not adjusted to 100% when the ratio exceeded 90% or when the system is fully developed.

Q. Would you summarize the results of your used and useful determination for the water treatment plants?

A. Yes. First, however, I would point out that for interim rates for both water and wastewater plants, our calculations followed the methods accepted by the Commission in the last rate decisions, as best as we could understand them.

For permanent rates, the calculations comply with the recently adopted Rule 25-30.4325. The specific calculations are shown in the appropriate F schedules, and when a departure from those calculations was allowable under the under the rule, an explanation is provided in addition to the calculations. A spreadsheet analysis is also being provided as a work paper containing summaries of all source data and component calculations, by system.

With respect to water systems with storage, exclusive of hydropneumatic tanks, all storage facilities were determined to be 100% used and useful for both interim and permanent rates.

For interim rates, 17 of the 57 systems were calculated to be less than 100% used and useful. For permanent rates, only 5 systems have used and useful percentages that are

less than 100%, including Hermits Cove, Picciola Island, Sebring Lakes, Venetian Village and Welaka/Saratoga Harbour.

Q. Did you vary from the Commission's new rule with respect to the calculation of water treatment plants?

A. No. I would, however, note that for 10 water systems (Chuluota, Haines Creek, Hobby Hills, Lake Gibson Estates, Picciola Island, Piney Woods/Spring Lake, Pomona Park, Silver Lake Estates/Western Shores, Sunny Hills and Tangerine) the calculated lost and unaccounted for water is 10.6% to 12.2%. Although these percentages are above the 10% figure as stated as excessive in the Rule, 25-30.4325, Section (1) (e), the rule also states in Section (10) that the Commission would consider (with respect to unaccounted for water) "whether a proposed solution is economically feasible." Only 2 of those 10 systems are less than 100% used and useful. In any event, it is deemed reasonable not to make an adjustment to used and useful for unaccounted for water considering such small excesses in light of the economic feasibility of the cost to find and correct the losses, particularly when the determination of the level of unaccounted for water is not precise.

Q. Would you summarize your used and useful determinations for the wastewater treatment plants?

A. There are only 5 of the 21 wastewater treatment plants that are less than 100% used and useful, including Holiday Haven, Leisure Lakes, Silver Lake Oaks, Sunny Hills and Village Water. There are 4 systems that do not have treatment plants but purchase wastewater treatment (Beecher's Point, Lake Gibson Estates, Lake Suzy and Village Water). The capacities of the treatment plants are based on average annual permitted capacities except for 4 systems (Jasmine Lakes, Lake Suzy, Rosalie Oaks and The Woods) for which the permitted capacities are based on the average of the three

maximum consecutive months. The capacities of the treatment plants are the same as the capacities of the effluent treatment except in two instances, in which the lower capacity was used as the limiting factor.

Q. Were adjustments made for excessive I&I?

A. Yes, but only for 3 systems, Holiday Haven, Rosalie Oaks and Summit Chase. The level of excessive I&I was calculated according to a methodology used by the FPSC Staff. The acceptable infiltration is based on 500 gallons per day per inch foot per mile of gravity main. The inflow is based on 10% of water sold to wastewater customers. The inflow from customers is 80% of water use by residential wastewater customers and 96% of water use by commercial customers. Consideration was also made for systems where there were sewer customers who were not also water customers.

Q. What are the primary plant accounts to which the used and useful percentages for water treatment plants were applied?

A. The used and useful percentages were applied to Source of Supply, Wells and Springs and Pumping and Equipment, and to Water Treatment Structures and Improvements and Pumping Equipment. The intangible plant, land, source of supply structures (well housing) and power generation equipment are considered 100% used and useful. The water treatment equipment is also considered 100% used and useful because it relates to chemical feed equipment for which the cost does not fluctuate with demands.

Q. What are the primary plant accounts for wastewater treatment plants to which the used and useful percentages were applied?

A. The used and useful percentages were applied to Treatment and Disposal Plant, Structures and Improvements and Treatment and Disposal Equipment. The land, power generation equipment, plant sewers, outfall sewer lines and miscellaneous equipment

were considered 100% used and useful, because those costs do not fluctuate with demands.

Q. Do you have general comments with respect to used and useful for multi-system utilities?

A. Yes. The consolidation of many small systems under single ownership provides significant economies of scale in terms of common management, administration, accounting, operations and financing. It also provides each small system with levels of professional and technical staff and resources that would not be available at the same cost or at all, if the systems were owned and operated as single utilities. As single tariff pricing is established, the level of used and useful should be 100% if the dollar weighting of the used and useful percentages of all systems under single tariff pricing equals or exceeds 90%.

Q. Does that conclude your direct testimony at this time?

A. Yes.

CHAIRMAN CARTER: Okay, then. Mr. Beck, we're getting ready to go with witness Woodcock. Any kind of idea for planning purposes?

MR. BECK: Mr. Reilly will answer that.

CHAIRMAN CARTER: Mr. Reilly?

MR. REILLY: I can't anticipate the amount of cross-examination for Mr. Woodcock. Maybe you could inquire of Mr. May.

CHAIRMAN CARTER: Let's see. Staff, do you have questions for -- I'll come to you in a minute, Mr. May. Staff?

MR. JAEGER: Staff has no cross that we know of.

CHAIRMAN CARTER: Mr. May, any kind of idea, just for planning purposes? Commissioners, just for your records, I did not clear that with you, so I don't plan on going beyond 5:00 today. I think it would have been -- if I were going to go beyond that, I would have cleared it with you, and I did not, so we're going to stop at 5:00 today. So I'm looking for a good breaking point.

Mr. May, any idea?

MR. MAY: I have just a few questions. But again, the scope of my cross will depend on, I think, Ms. Bradley. I think she had some questions for this

witness.

CHAIRMAN CARTER: Okay. Well, let's see how far we can get, but be advised, we will be breaking at 5:00.

MR. BECK: Mr. Chairman, one other matter I forget to ask.

CHAIRMAN CARTER: Mr. Beck.

MR. BECK: Could Mr. Rothschild be excused?

CHAIRMAN CARTER: Oh, certainly. Mr. Rothschild, thank you so kindly.

MR. MAY: And, Mr. Chairman, may I ask the same of --

CHAIRMAN CARTER: Absolutely.

MR. MAY: -- Mr. Moul and Mr. Anzaldo?

CHAIRMAN CARTER: Yes.

MR. MAY: Okay. Thank you, sir.

CHAIRMAN CARTER: Thank you, attorneys, for bringing that to my attention. Are there any other witnesses that we -- I think the rest of them we're going to deal with as we come to them. Is that correct? Is that the agreement of the parties?

Okay. Thank you. Mr. Reilly, welcome back.

MR. REILLY: Thank you very much, Commissioner. Nice to be back.

CHAIRMAN CARTER: You're recognized, sir.

MR. REILLY: Thank you so much.

Thereupon,

ANDREW T. WOODCOCK

was called as a witness on behalf of the Citizens of the State of Florida and, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. REILLY:

Q. Mr. Woodcock, would you please state your full name and business address for the record?

A. Andrew Woodcock, 201 East Pine Street, Orlando, Florida, 32801.

Q. Were you previously sworn this morning?

A. Yes, I was.

Q. Did you prepare and cause to be filed prefiled direct testimony in this docket?

A. I did.

Q. Do you have any corrections or changes you need to make to your prefiled direct testimony?

A. I do.

Q. Would you share those with us?

A. Sure. On page 10, line 16, for Arrendondo --

CHAIRMAN CARTER: Just one second, please. You may proceed.

THE WITNESS: Page 10, line 16, Arrendondo

Farms, the water treatment used and useful changes from 68.89 to 100.00 percent.

Also on page 10, line 8 --

CHAIRMAN CARTER: From 68.89 to what?

THE WITNESS: 100.00 percent.

CHAIRMAN CARTER: 100.00?

THE WITNESS: Yes.

CHAIRMAN CARTER: Okay. Thank you.

THE WITNESS: Also on page 10, line 18, midway through 76.94 percent changes to 95.87 percent.

CHAIRMAN CARTER: 76.94 changes to --

THE WITNESS: 95.87.

CHAIRMAN CARTER: 95.87 percent. Thank you.

THE WITNESS: And there are also numerous changes to my testimony due to the -- reflecting the partial stipulations to Items 7, 9, 10, and 11.

CHAIRMAN CARTER: Okay. We'll just cross those bridges when we get to them. Is that okay with the parties?

MR. REILLY: Yes. His testimony is modified as stipulated to.

CHAIRMAN CARTER: Based upon the stipulation. That will be fine. You may proceed.

MR. REILLY: Okay. Thank you.

BY MR. REILLY:

Q. If I were to ask you the same questions posed in your prefiled direct testimony, would your answers be the same as those prefiled, except as modified today?

A. Yes.

MR. REILLY: At this time, I would move that Mr. Woodcock's prefiled direct testimony be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be entered into the record as though read.

PREFILED TESTIMONY OF

ANDREW T. WOODCOCK PE, MBA

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is Andrew Woodcock. My business address is 201 East Pine St. Suite 1000, Orlando, Florida.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am employed by Tetratech as a Professional Engineer and Senior Project Manager.

Q.WHAT IS YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE?

A. I graduated from the University of Central Florida in 1988 with a B.S. degree in Environmental Engineering and in 1989 with an M.S. degree in Environmental Engineering. In 2001, I graduated from Rollins College with an MBA degree. In 1990, I was hired at Dyer, Riddle, Mills and Precourt as an engineer. In May of 1991, I was hired at Hartman and Associates, which has since become Tetratech. My experience has been in the planning and design of water and wastewater systems with specific emphasis on utility valuation, capital planning, utility financing, utility mergers and acquisitions and cost of service rate studies. I have also served as utility rate regulatory staff for St. Johns and Collier Counties in engineering matters. Before the Florida Public Service Commission (FPSC) I have provided testimony for Docket No. 070183-WU, regarding the Used and Useful Rule for Water Treatment Systems and for Docket No. 070293-SU, KW Resort Utilities Rate Case. Exhibit ATW-1 provides additional details of my work experience.

Q. WHAT ARE YOUR PROFESSIONAL AFFILIATIONS?

A. I am a member of the Florida Stormwater Association, American Water Works Association and Water Environment Federation.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE A RATE REGULATORY BODY AS AN ENGINEERING WITNESS?

A. Yes, I testified in 2002 for the St. Johns County Regulatory Authority at a special hearing in an overearnings case against Intercoastal Utilities. In 2008, I testified before the FPSC on the Used and Useful Rule for Water Treatment Systems on behalf of the Office of Public Counsel (OPC). Also, in 2008, I testified in Docket 070293-SU regarding the used and usefulness of utility plant of KW Resort Utilities on behalf of OPC.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to offer used and useful (U&U) testimony on the 70 water systems and 25 wastewater systems included in this rate case. I will also provide testimony regarding the importance of meeting secondary potable water standards for utilities.

Q. WHAT DOCUMENTS HAVE YOU REVIEWED AND WHAT INVESTIGATIONS AND ANALYSES HAVE YOU MADE IN PREPARATION FOR YOUR TESTIMONY?

A. I have studied the filings of AUF, including the Minimum Filing Requirements (MFRs) and the direct Testimony of John Guastella and John Livarcik. I also reviewed the Annual Reports filed by AUF with FPSC for 2006 and 2007. I also contacted the Offices of the Florida Department of Environmental Protection (FDEP). I have reviewed and studied many of AUF's responses to discovery requests. I also for purposes of service area determination consulted the property maps of several County Appraisers offices.

I made an inspection trip to each of the systems in the rate case and personally inspected the major above ground treatment facilities of each system in the summer of 2007 as part

of the previous rate filing by AUF which was withdrawn. In the summer of 2008, I reinspected the following systems:

48 Estates
Arredondo Estates
Arredondo Farms
Belleview Hills Estates (Ocala Oaks)
Carlton Village
Chuluota
Imperial Mobile Terrace
Jasmine Lakes
Kings Cove
Lake Josephine
Lake Suzy
Leisure Lakes
Ocala Oaks
Palm Terrace
Picciola Island
Piney Woods
Pomona Park
Ravenswood
Rosalie Oaks
Sebring Lakes
Silver Lake Estates/Western Shores
South Seas
Summit Chase

Sunny Hills

Tangerine

The Woods

Tomoka

Twin Rivers

Valencia Terrace

Venetian Village

Village Water

Welaka/Saratoga Harbour

Zephyr Shores

I also analyzed the system maps of each system in relation to the number of connected customers, vacant lots and ability to provide fire flow.

Q. WHAT METHODOLOGY DID YOU USE TO CALCULATE THE U&U PERCENTAGES FOR WATER TREATMENT AND STORAGE?

A. I made my calculations based upon the requirements of the Commission's Rule No. 25-4325, F.A.C.

Q. WHAT ARE YOUR FINDINGS WITH RESPECT TO WATER TREATMENT AND STORAGE FOR THE SYSTEMS IN THIS RATE CASE?

A. A summary of my U&U percentages for treatment and storage is presented in Exhibit ATW-2 with supporting calculations. For water treatment, of the 70 systems evaluated I found 24 are 100% U&U due to either the U&U calculation, being a single well system or having a completely built out service area with no potential for expansion. The remaining systems have less than 100% U&U for treatment. For storage I found that all systems with storage are 100% U&U with respect to storage. I also found nine systems that receive treated water only from other non AUF utilities and therefore have no U&U

for treatment.

Q. WHAT DID YOU FIND WITH RESPECT TO EXCESS UNACCOUNTED FOR WATER IN THE SYSTEMS INCLUDED IN THE RATE CASE?

A. I relied upon the data provided by the Utility in the MFRs. In determining what amount of unaccounted for water is considered excessive I used a threshold of 10% of the pumped water, which is the standard pursuant to Rule No. 25-30.4325, F.A.C. Any unaccounted for water over this amount was deducted from the used and useful calculation.

Q. HOW DID YOU DETERMINE THE MAXIMUM DAY DEMAND FOR THE WATER SYSTEMS?

A. I conducted a thorough analysis of the Monthly Operating Reports (MORs) AUF was required to submit to the FDEP for the 2007 test year and selected the single highest demand recorded for the year.

Q. IN YOUR ANALYSIS DID YOU OCCASIONALLY USE A DEMAND OTHER THAN THE MAXIMUM DAY DEMAND?

A. Yes, I did. In several instances AUF in its MFRs did not use the actual maximum day demand of the historic test year in its used and useful calculation. I take this to mean that those days are anomalies and are not to be used in the used and useful calculations and therefore I relied upon the demands utilized in the filing. The systems in question are:

Chuluota

Grand Terrace

Haines Creek

Harmony Homes

Imperial Mobile Terrace

Kings Cove

Silver Lake Estates

Sunny Hills

Tangerine

Venetian Village

Welaka/Saratoga Harbour

The Woods

In some other cases the U&U for water was not individually calculated per system in favor of a grouped calculation for numerous systems. I address these systems specifically further in my testimony. However, for purposes of determining demand I relied upon the maximum day demand as reported in the MORs of the test year. In two other cases the maximum day demand presented in the MFRs did not match the test year MOR data. In these cases I relied upon the MOR amount.

Q. WHAT STEPS DID YOU TAKE TO DETERMINE THE CAPACITIES OF THE WATER TREATMENT COMPONENTS?

A. I relied primarily upon what was stated in the MFRs submitted by AUF, as verified by my reviews of the system permits, sanitary surveys, and review of on-site O&M manuals and other data. In some cases where there was no data to document what was in the MFRs I conducted rudimentary flow tests during my system inspections. These tests on the system pumps consisted of reading the flow meters during their operation. I made the following adjustments or changes to the U&U calculation:

System	Component	Notes
49th St Villas (Ocala Oaks)	Wells	Added 75 gpm well based on Sanitary Surveys
Belleaire (Ocala Oaks)	Wells	Added two 92 gpm wells based on Sanitary Surveys

1	Belleview Hills (Ocala Oaks)	Wells	Added two 70 gpm wells
2			based on Sanitary Surveys
3	Belleview Hills Estates (Ocala Oaks)	Wells	Added two 200 gpm wells
4			based on Sanitary Surveys
5	Chappell Hills (Ocala Oaks)	Wells	Added one 70 gpm well
6			based on Sanitary Surveys
7	Fairfax Hills (Ocala Oaks)	Wells	Added two 70 gpm wells
8			based on Sanitary Surveys
9	Gibsonia Estates	Wells	Used well capacities of 305
10			and 180 gpm based on onsite
11			O&M data
12	Hawks Point (Ocala Oaks)	Wells	Added two 185 gpm wells
13			based on Sanitary Surveys
14	Marion Hills (Ocala Oaks)	Wells	Added one 50 gpm well
15			based on Sanitary Surveys
16	Ridgeview (Ocala Oaks)	Wells	Added two 90 gpm wells
17			based on Sanitary Surveys
18	Westview (Ocala Oaks)	Wells	Added one 70 gpm well
19			based on Sanitary Surveys
20	Woodbury (Ocala Oaks)	Wells	Added one 70 gpm well
21			based on Sanitary Surveys
22	Zephyr Shores	Wells	Added a 500 gpm well from
23			field inspection
24			
25			

Q. HOW DID YOU ADDRESS GROWTH IN YOUR USED AND USEFUL ANALYSIS?

A. Chapter 367.081 (2)(a)2.b., F.S., requires that used and useful calculations include a growth factor for the first full five years after the end of the test year. In this case the test year is 2007. In my growth calculations I have included growth through 2012 which is five years past the projected test year.

For the estimate of annual growth for each system I relied upon the data submitted by the Utility in Schedules F-9 and F-10. In instances where a negative growth rate was calculated I used 0%. In instances where the growth rate over the five year period was in excess of 25% I used a growth rate of 5% for five years as required by Chapter 367.081 (2)(a)2.b., F.S.

Q. ARE ANY OF THE SYSTEMS YOU EVALUATED INTERCONNECTED?

A. Yes, I found four instances where water systems were interconnected; East Lake Harris - Friendly Estates, St Johns Highlands - Hermits Cove, Sebring Lakes – Lake Josephine and Welaka - Saratoga Harbour. In each case it was necessary to calculate the used and useful percentages with the interconnected systems operating together as detailed in Exhibit ATW-2. For the most part this consisted of calculating the firm reliable capacity using the combined wells of the systems. However, In the case of Sebring Lakes – Lake Josephine it was also necessary to combine the unaccounted for water analysis and growth factors based on a weighted average of the systems.

Q. WHY IS IT IMPORTANT THAT INTERCONNECTED SYSTEMS BE EVALUATED TOGETHER FOR PURPOSES OF U&U?

A. Interconnected water systems generally operate as one water system, so even though there may be two water treatment plants (one for each system) they provide capacity to the system as if they were a single water treatment plant. For U&U purposes this would

require using the capacity of the wells for both water treatment plants and removing the largest well per Rule No. 25-30.4325, F.A.C. If the water systems are considered separately the largest well at each water treatment plant would be removed from the calculation and would overstate the U&U of the combined system.

Q. WERE THERE ANY ANOMALIES IN THE WATER SYSTEM DATA SUBMITTED BY THE UTILITY?

A. Yes, there were three situations apart from the numerous capacity changes previously mentioned. First, is the case of Ocala Oaks. The MFRs submitted by the Utility for Ocala Oaks actually comprise data for 12 water systems in Marion County. It is difficult to determine exactly how the MFRs arrive at a single used and useful value for these systems. Discovery responses received from the Utility on this issue reveal that the Utility has considered each system individually and maintains that as a whole the Marion County systems are 100% U&U

I evaluated each system individually based on the available data. Much of the information on well capacities was obtained from Sanitary Surveys and my inspections. For both the unaccounted for water and growth rates I applied what the utility used for Ocala Oaks as a whole. The individual used and useful analyses generated are as follows:

System	Water Treatment Used and Useful
49th Street Villas	100.00%
Belleaire	100.00%
Belleview Hills	100.00%
Belleview Hills Estates	100.00%
Chappell Hill	100.00%
Fairfax Hills	84.85%
Hawks Point	100.00%

Marion Hills	100.00%
Ocala Oaks	100.00%
Ridgeview	84.14%
Westview	100.00%
Woodbury	100.00%

A combined analysis was prepared by using a weighted average of the used and useful calculations with the connected customers as a weighting factor. The resulting composite used and useful percentage is 99.00%.

The second and third unusual instances are similar to Ocala Oaks and include the combining of Arredondo Farms and Arredondo Estates and the combining of Tomoka and Twin Rivers. In both cases the data of two non-connected systems are combined in the MFRs.

An individual analysis of the Arredondo systems yields the following:

System	Water Treatment Used and Useful
Arredondo Estates	89.99%
Arredondo Farms	100.00% ~~68.89%~~

Combining the used and useful calculations using connected customers as a weighting factor generates an overall percentage of 95.87 ~~76.94~~%, which is used at this time.

The individual used and useful analysis of the Tomoka and Twin Rivers systems yields:

System	Water Treatment Used and Useful
Tomoka	Treatment 50.54%; Storage 100.00%
Twin Rivers	Treatment 27.97%; Storage 100.00%

The weighted average calculation also generates overall component percentages of 46.37% for treatment and 100.00% for storage.

Q. WHAT IS YOUR POSITION ON FIRE FLOW AND USED AND USEFUL?

A. When fire flow is actually provided by the water system, it should be a part of the used and useful calculation. In the MFRs the Utility uses fire flow for 11 systems as follows:

System	Fire Flow Requirements
Chuluota	750 gpm for 2 hours
Hobby Hills	500 gpm for 2 hours
Imperial Mobile Terrace	500 gpm for 2 hours
Kings Cove	500 gpm for 2 hours
Quail Ridge	500 gpm for 2 hours
Silver Lake Estates-Western Shores	500 gpm for 2 hours
Skycrest	500 gpm for 2 hours
Summit Chase	500 gpm for 2 hours
Sunny Hills	700 gpm for 2 hours
Tangerine	500 gpm for 2 hours
Valencia Terrace	500 gpm for 2 hours

In evaluating whether or not a system is actually able to provide fire flow I reviewed the system maps submitted by the Utility. My review consisted of looking for the presence of fire hydrants throughout the service area as well as evaluating the line sizes of the system that fed the hydrants. In cases where the hydrants were not located in sufficient numbers to cover the full service area or when the pipes for the hydrants were less than six inches in diameter, the system was considered not able to provide fire flow and fire flow was not considered in the used and useful calculations. Based on my review, fire flow should not be considered in the following systems:

Chuluota: Hydrants are not located throughout the service area.

Hobby Hills: Maps show no fire hydrants or sufficiently sized lines.

Imperial Mobile Terrace: Maps show no fire hydrants or sufficiently sized lines.

Silver Lake Estates-Western Shores: Hydrants are not located throughout the service area.

Skycrest: Hydrants are not located throughout the service area.

Sunny Hills: Hydrants are not located throughout the service area.

Tangerine: Hydrants are not located throughout the service area.

Q. DESCRIBE YOUR USED AND USEFUL METHODOLOGY FOR WASTEWATER TREATMENT SYSTEMS?

A. I followed the methodology stated in Rule No. 25-30.432, F.A.C. My analysis consisted of a review of the test year Discharge Monitoring Reports (DMRs) that are required to be filed monthly with FDEP. For many systems I found that the DMR flows do not match with what is found in the MFRs. However, in most cases it did not appear to be a significant difference. In my calculations I used the flows that were presented in the DMRs.

The appropriate basis for the calculation was then determined from the system permits. In instances where the permit delineated two permitted capacities, one for treatment and one for effluent disposal, two separate used and useful percentages were produced. For these cases I used the larger of the two used and useful values. Of the 25 wastewater systems three receive treatment through agreements with other utilities and therefore no U&U percentages were provided for these facilities. Exhibit ATW-3 provides a summary sheet of my wastewater treatment used and useful calculations as well as detailed sub sheets for each system.

Q. DESCRIBE YOUR EFFORTS TO IDENTIFY INFILTRATION AND INFLOW IN THE WASTEWATER SYSTEMS?

A. To determine if infiltration and inflow (I/I) is an issue one must first look at the billed

water flow relative to the wastewater flow. Engineering guidelines state that 70% to 90% of water purchased by customers is returned to the wastewater system. In order to determine if I/I is present in a system I used an 80% return ratio. If the wastewater flow is greater than 80% of the billed water flow then I considered the system to have excessive I/I. Some systems have a different number of water and wastewater customers so in these cases I used the ratio of water to wastewater Equivalent Residential Connections (ERCs) to factor the appropriate billed water from the wastewater customers.

I then looked to what would be an allowable amount of I/I for a system. For this analysis I used a value of 500 gpd/in-dia/mi of pipe for allowable infiltration and a value of 10% of the water sold to customers for inflow. Based on this criterion the following systems were found to have excessive I/I and require adjustment to the used and useful calculations:

Interlachen-Park Manor

Jungle Den

Rosalie Oaks

Summit Chase

Q. DESCRIBE YOUR METHODOLOGY FOR DETERMINING THE USED AND USEFUL PERCENTAGES FOR WATER DISTRIBUTION AND WASTEWATER COLLECTION?

A. For determining the U&U of the water distribution and wastewater collection systems I used the ERC to available ERC method. These calculations were determined based upon lot and customer counts from the maps provided with the MFRs. In my calculations I assume that the character of future development will be similar to that of past development in the service area, and that future development will be as dense, with the same ratio of ERCs to developed lots, as is currently present in the service area. A

summary of the used and useful percentage for each system along with detailed sub sheets are shown in Exhibit ATW-4.

Q. AS PERMITTED BY (3) OF THE COMMISSION'S RULE NO. 25-30.4325, F.A.C., DO YOU BELIEVE IT IS APPROPRIATE TO PROVIDE AN ALTERNATIVE CALCULATION FOR CERTAIN WATER TREATMENT SYSTEMS?

A. Yes. There are three systems that I considered exceptions to Rule No. 25-30.4325(4), F.A.C., regarding consideration of 100% U&U for systems with one well. In 19 cases I found single well systems that are considered 100% U&U. However, even though some systems are served by a single well the calculated U&U numbers are actually quite low. In these instances further consideration of the system is required.

In defining my criteria for further consideration I looked at both the calculated U&U and the size of the supply well. If the well is greater than 150 gpm and the calculated U&U is less than 75% I believe further evaluation of the U&U is appropriate.

Q. HOW DID YOU COME ABOUT THESE CRITERIA?

In deviating from the requirements of the one well rule I wanted to be sure that I was only considering systems where a further analysis would have a significant impact. I generated these criteria to provide a conservative basis for isolating special cases to the one well rule. For the U&U criterion I wanted to make sure that I was not including facilities that would be close to 100% U&U without consideration of the one well rule. I set 75% U&U as a threshold so that there would be a significant difference for deviating from the one well rule.

With respect to the well pumps I wanted to conservatively eliminate smaller capacity pumps where a small change in demand could have a large percentage impact on U&U. This recognizes the fact that a smaller well pump could easily approach 100% U&U with

only a few additional customers. Whereas, a larger well serving the same customer base would not see as high of a U&U increase. Based on my review of the systems I believe that 150 gpm is a conservative threshold to account for this.

Q. WHAT SYSTEMS WERE AFFECTED BY THESE CRITIERA?

A. Of the 70 water systems I found three systems with one well that meet the above criteria and should be evaluated for U&U on a calculated basis. These are the Fern Terrace system which has a single 180 gpm pump and a calculated U&U of 56.17%; the Rosalie Oaks system which has a single well of 250 gpm and a calculated U&U of 10.00% and; the Twin Rivers system which has a single well of 268 gpm and a calculated U&U of 27.97%.

Q. DO YOU HAVE ANY COMMENTS REGARDING MR. GUASTELLA'S U&U CALCULATIONS OTHER THAN THE DIFFERENCES IN METHODOLOGIES USED IN YOUR TESTIMONY?

A. In his U&U calculations Mr. Guastella rounds any calculated U&U percentage over 90%, up to 100%. This rounding over estimates the actual U&U of a system at the expense of the customers. I find that it is appropriate to let the U&U percentage remain as calculated without rounding up, which would favor the company, or rounding down, which would favor the customers.

Q. WHAT COMMENTS DO YOU HAVE REGARDING MR. GUASTELLA'S TREATMENT OF U&U FOR WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS?

A. Mr. Guastella's U&U calculations for the water and wastewater piping always use the number of lots served by lines in the denominator. For the numerator he uses the greater of the customers identified on the MFR maps or the flow based ERCs. This does not provide an accurate representation of the usage of the system and seeks to achieve the

highest U&U for the system. When calculating U&U it is important to recognize that the units of the numerator and denominator are comparable, or "apples to apples". So an appropriate U&U calculation would use either developed lots to available lots or ERCs to available ERCs.

Q. WHAT OTHER COMMENTS DO YOU HAVE REGARDING MR. GUASTELLA'S TESTIMONY?

A. Mr. Guastella's testimony indicates that he only applies used and useful for wastewater system piping to the gravity collection system, and not to force mains and lift stations. I find that this assumption ignores the fact that the collection lines, force mains and lift stations act as a system to convey wastewater from the customers to the wastewater treatment plant. In evaluating the used and useful of a wastewater system prudent design would dictate that the lift stations and force mains are sized in a manner consistent with the gravity system. Therefore if a collection system is 50% used and useful it follows that the corresponding force mains and lift stations would have a similar U&U of 50%.

Q. WHAT ARE YOUR COMMENTS REGARDING MR. GUASTELLA'S APPLICATION OF WATER TREATMENT U&U PERCENTAGES TO PLANT ACCOUNTS?

A. I disagree with selective application of the percentages to the accounts under the Source of Supply and Water Treatment. The U&U percentages for treatment should apply to all accounts under these headings. To eliminate plant accounts from used and useful consideration serves to increase the rate base and misrepresent the actual amount of plant investment serving customers. Within the basic assumptions of U&U, is a recognition that the facilities as a whole are considered U&U even though the basis of calculation relies upon specific components of a treatment facility. In the case of water

treatment facilities it is the wells that serve as the basis for the U&U of the entire treatment facility.

Specifically in his testimony Mr. Guastella states the water treatment equipment is considered 100% U&U because it relates to chemical feed equipment for which the cost does not fluctuate with demands. The cost of the pump itself does not fluctuate with demands but if it is only operating at 50% capacity it is certainly not 100% U&U.

Q. WHAT IS YOUR OPINION OF MR. GUASTELLA'S USE OF SYSTEM BUILD OUT TO DETERMINE U&U?

A. Mr. Guastella treats eight systems as 100% U&U because the system are "fully developed as planned". I find that this criteria does not follow the build out language contained in Rule No. 25-30.4325, F.A.C. The rule states that a water treatment system is considered 100% U&U if the service territory the system is designed to serve is built out and there is no apparent potential for expansion of the service territory. In my review of the systems I found that application of this criteria applies to only four water systems. In addition, in some cases it appears that "fully developed as planned" does not consider that fact that there are available lots for service in a service area.

Q. WHAT IS THE IMPORTANCE OF SECONDARY DRINKING WATER STANDARDS TO WATER SYSTEMS?

A. Secondary Drinking Water Standards focus on contaminants that adversely affect the appearance, odor or taste of the water. These standards were promulgated by the EPA in 1979 and have also been adopted by FDEP. These standards are not directly tied to public health like Primary Drinking Water Standards and are not enforceable. Nevertheless, they represent reasonable goals for drinking water quality and are considered industry wide to be the standards that pertain to the aesthetics of the water. As such, whether a utility meets or exceeds these standards speaks directly to the quality of service provided.

Q. DOES THAT CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes.

BY MR. REILLY:

Q. Also, Mr. Woodcock, did you sponsor exhibits which are attached to and a part of your prefiled direct testimony, ATW-1 through 4?

A. Yes.

Q. Do you have any corrections or changes to those exhibits?

A. I do.

Q. Would you share those?

A. The first change is also to reflect the partial stipulations on Items 7, 9, 10, and 11. In addition, on Exhibit ATW-2, page 3 of 62 --

CHAIRMAN CARTER: Hold the phone. Let's go with our composite list of numbers. Let's use the numbering system --

MR. JAEGER: ATW-2 is 96.

CHAIRMAN CARTER: I beg your pardon?

MR. JAEGER: ATW-2 is 96.

CHAIRMAN CARTER: Ninety-six? You may proceed.

THE WITNESS: Okay. Ninety-six, page 3 of 62, the second line on the table, Arrendondo Farms, the third column over, which is identified as used and useful, the number 68.89 should change to 100.00 percent.

Also on that same page, the last line on the table, the average used and useful of 76.94 should change to 96.18.

Also on page 8 of 62 of the same exhibit, the second to the last line, which starts out as used and useful treatment, that number should change to 100 percent.

And my last change is on ATW-4, which I believe would be 98.

MR. JAEGER: Ninety-eight; correct.

THE WITNESS: On page 1 of 3, the fourth line down on the table that starts out with Arrendondo combined, the used and useful number, which is the second column from the right-hand side, should change from 86.69 to 95.87. And that is all my corrections.

CHAIRMAN CARTER: Thank you.

BY MR. REILLY:

Q. Thank you. Do you continue to endorse and sponsor Exhibits -- well, now they're Exhibits 95 through 98 attached to your prefiled direct testimony except as modified today?

A. I do.

MR. REILLY: Okay. At this time, I would ask that Mr. Woodcock's exhibits be identified as previously noted, 95 through 98.

CHAIRMAN CARTER: For the record, Commissioners, 95 through 98, as modified.

BY MR. REILLY:

Q. Have you prepared a summary today to share?

A. Yes, I have.

Q. Would you do so?

A. Sure. Good afternoon. I am Andy Woodcock. The scope of my testimony primarily covers the used and useful of the water and wastewater systems in this case.

As part of my efforts, I consulted the MFRs of the utility as filed not only in this current rate case, but also in the prior rate case in 2007 that was withdrawn. In addition, I reviewed many responses to discovery that were a part of this case. I also contacted the offices of FDEP, and for purposes of service area determination, consulted the property maps of several county appraisers' offices. I made an inspection trip to each of the systems in the rate case and personally inspected the aboveground facilities for each system in the summer of 2007, and in August of 2008, I made several follow-up inspections.

My used and useful calculations for water systems follow the requirements of the Commission's Rule Number 25-4325. In three cases, I found it necessary to provide alternative calculations pursuant to paragraph

(3) of that rule. The Fern Terrace, Twin Rivers, and Rosalie Oaks systems are single-well systems that under the rule would be considered 100 percent used and useful. However, through my evaluation, I found that the calculated used and useful of these systems is so significantly less than 100 percent that their evaluation should be based on a calculated used and useful number.

I found three cases where there were multiple non-interconnected water systems that were combined for rate base and financial purposes. These include Arrendondo Estates and Arrendondo Farms, Tomoka/Twin Rivers, and the Ocala Oaks systems in Marion County. For these cases, I calculated the used and useful for each of the systems individually and then generated a composite percentage for application to rate base based on the number of customers.

I also found water systems that were interconnected, yet accounted for separately for rate base purposes. Even though these systems are considered separate in the rate filing, the interconnection requires them to act as a single system. Therefore, in my analysis, I combined the capacities of these systems for my used and useful.

Also, based on my review, I found that of the

11 systems in the rate filing with fire flow, seven cannot provide fire flow throughout the service area, due to either a lack of available fire hydrants or insufficiently sized water supply lines.

My used and useful calculations for wastewater systems follows the Commission's Rule 25-30.432. In each instance, I used the permitted capacity of the wastewater treatment plant in the used and useful calculation, with the exception of the Chuluota wastewater treatment plant, which has an actual design capacity that is four times the permitted capacity.

My used and useful calculations for both water distribution and wastewater collection utilizes the ERC to available ERC method based on customer counts from the maps provided by Aqua Utilities in the MFRs.

Other than as mentioned above, I disagree with the testimony of Mr. Guastella with respect to his method of determining the used and usefulness of system piping and method of application of the used and useful percentages to plant accounts. I also disagree with Mr. Guastella's rounding of calculated used and useful percentages of 90 percent or greater to 100 percent, which favors the utility. It is my opinion that the used and useful percentages should remain as calculated without rounding up, which benefits the utility, or

rounding down, which would benefit the customers.

Finally, I disagree with Mr. Guastella's use of the term "fully developed as planned" to justify a system as used and useful. The language in the Commission's water used and useful rule says that a system is considered 100 percent used and useful if both the service area is built out and there is no potential for expansion to the service territory.

And that concludes my summary.

MR. REILLY: Okay. We would tender Mr. Woodcock for cross-examination.

CHAIRMAN CARTER: Thank you. Ms. Bradley.

MS. BRADLEY: Thank you.

CROSS-EXAMINATION

BY MS. BRADLEY:

Q. Mr. Woodcock, staff was kind enough to give us a cheat sheet with some of the stipulations and some of those that have not been stipulated.

Looking at the wastewater treatment facilities, I guess most of the calls we've gotten have been about the Chuluota area. And I notice that Aqua rated it as 100 percent used and useful, and you only rated it as 35.63 percent. Can you explain to me why yours is so much lower?

A. Sure. As I understand the filing from Aqua

Utilities, they're using the current permitted capacity of the wastewater treatment plant, which is 100,000 gallons per day. Based on the actual flows that are being received, using 100,000 gallons per day would generate a used and useful number of 100 percent, even greater once you make allowance for growth.

Based on my inspections and my review of documentation provided by the utility, what is actually constructed out there is a 400,000-gallon-per-day treatment plant. It hasn't been permitted for that much, but it has been constructed and installed and is physically on-site, and I inspected it during my inspections. Therefore, I feel like it's appropriate to consider the design capacity of the wastewater treatment plant in the used and useful calculation versus the permitted capacity.

Q. So when you're doing this evaluation, you're looking at how much capacity it has versus how much they're actually using?

A. Yes. In this case, though, we actually have two different types of capacity. You have the permitted capacity, which is pursuant to the Florida Department of Environmental Protection. They say that this plant cannot treat any more than 100,000 gallons per day, when in fact that plant has been expanded and can actually

treat, even though they're not permitted to, but the facilities are on-site and the assets are in place to treat four times that amount.

And in making a used and useful determination, you have to take a look at what are the assets that are actually out there, what is the capacity of those assets physically. Frequently, the two match up. Usually you see that a design capacity is the permitted capacity. This is a special case, and that's why I considered the design capacity over the permitted capacity.

Q. How does this 100 percent versus 35 percent affect the rates as far as the customers and what they're paying?

A. We may be getting a little bit out of my realm, but generally, as I understand it, the used and useful percentage is applied to the net plant in service of the plant, in other words, what is the value of that plant on the books. Whatever is non-used and useful gets deducted from rate base, and therefore also gets deducted from rates.

Q. So if I'm understanding that, if you apply a 100 percent rate, then it's going to be 100 percent used and useful, and it's going to be much higher than with the 35 percent?

A. A 100 percent used and useful system will

generate higher rates than a system -- that same system calculated at 30 percent; correct.

Q. And that would be true of all these other differences that we see between the utility and your calculations?

A. Yes.

Q. Okay. Did you hear the testimony today about sewage backing up in the street and some of that testimony?

A. Yes, I did.

Q. Does that have any factor in used and useful?

A. No. In used and useful, generally we're looking at the physical assets that are in place and to what extent they're being utilized. With the sewage backing up issue, there you're looking more at quality of service, company response to a problem. They're more operational type issues.

Q. So that's more of a gross rate versus a used and useful?

A. Correct.

Q. Okay. Did you hear the testimony today about all the flushing that's going on with the system?

A. Yes, in Chuluota.

Q. How does that affect the water usage in that area?

MR. MAY: Mr. Chairman, I'm going to object. I think this goes well beyond Mr. Woodcock's prefiled testimony in this proceeding.

CHAIRMAN CARTER: Ms. Bradley?

MS. BRADLEY: Well, he was talking about water and wastewater usage and this type of thing, and I certainly would like to know if this affects that.

CHAIRMAN CARTER: Ms. Helton?

MS. HELTON: I'm in a little bit of a quandary, because I know at least one of you sitting up there on the bench had some questions about flushing. I'm not sure, though, that OPC's witness would be the appropriate witness to direct those questions to. I think -- and correct me if I'm wrong, please. I'm thinking maybe the DEP witness might be more appropriate. As I understand Mr. Woodcock's testimony, he's talking about used and useful percentages.

MS. BRADLEY: Well, I think there's two different factors here, one, the effect that it may have on the aquifer, if there's any TTHMs that are being put back into the aquifer, or bacteria or something, versus how much is being used and allocated to the customers. And I think this would go to, you know, who's paying for this water, are the customers having to pay for that, or how does it affect, if at all, his calculations.

CHAIRMAN CARTER: But is this the right witness for that?

MS. BRADLEY: Well, I don't think DEP would certainly be the person to respond to that.

MS. HELTON: Mr. Chairman, can I make a suggestion? Let's see if Mr. Woodcock can answer the question, and then --

CHAIRMAN CARTER: Hang on a second. Just one second, please.

I want to be fair to all the witnesses.

"What is the purpose of your testimony?"

Answer, "The purpose of my testimony is to offer used and useful testimony on the 70 water systems and 25 wastewater systems included in the rate case. I will also provide testimony regarding the importance of meeting secondary potable water standards for utilities."

Does that fall within the ambit of that, Ms. Helton? I mean, I want to make sure that we're fair to the witnesses. If you've got a witness on -- the person is on notice and the parties are on notice what a person is going to be testifying to, and if it's outside of the scope of that, then we'll just --

MS. HELTON: Since I'm not really an engineer, can I hold on one minute?

CHAIRMAN CARTER: Okay. We'll take a minute.

(Off the record briefly.)

MS. HELTON: Mr. Willis just suggested that if it has anything to do with unaccounted-for water, then it could have some application to what the used and useful calculation would be, so there's a possibility.

MR. MAY: I'll withdraw the objection.

CHAIRMAN CARTER: Okay. If you can answer, then we'll do that. If not, we'll just -- I mean, if it's outside of the scope of your expertise, just say, "I can't answer it," and we'll move forward.

THE WITNESS: I can answer the question, but if you could restate it for me.

CHAIRMAN CARTER: Okay.

MS. BRADLEY: I'll try, after all that.

BY MS. BRADLEY:

Q. There was testimony this morning about all the flushing that's going on and how often. You know, I think one person said they had calculated four to five hours every other week, and I think their calculation was something like 200 gallons per minute. You know, I'm sure that's subject to check and would defer to your expertise, but it looks like -- and I don't know whether you saw the pictures, but a substantial amount of water that's being flushed out every other week. Does that

factor in or influence your calculations at all?

A. Yes, it does.

Q. How so?

A. There are several components to water demand in a water system. You have the water that's pumped, which is the water that physically leaves the plant. That water generally, once it leaves the plant, it falls into two -- or three categories. It either gets billed to the customers, it goes to system flushing or other operation needs, or it's unaccounted for, we don't know what happened to it.

So to the extent there is excessive flushing in the system, it's raising the demand on the water treatment plant and would therefore lend itself to a higher used and useful percentage.

Q. So the customers are going to be getting charged a higher rate?

A. Essentially, yes.

Q. Okay. Does the consumptive use permit have anything to do with your calculations?

A. It's something I consider, but it has no direct impact.

Q. Okay. When you say you consider it, what do you mean?

A. I look at it in the same way that we had the

DEP permit issue versus design capacity. You know, the water management district consumptive use permit is something that I would look at to get an overall sense of the system when I'm evaluating its used and useful. It would not directly plug into the calculation anywhere, but it is something that I would consider.

Q. The fact that they have not gotten a consumptive use permit, how does that factor in, if at all?

A. It doesn't. That's more of a -- it is an engineering issue. It is a quality of service issue, I suppose. It doesn't impact directly the used and useful calculation.

Q. Okay. You mentioned something about fire flow, I thought you said. And did I understand you to say that there were several areas that didn't have fire flow?

A. There are several areas that -- in the utility's filing, there were several systems. There were 11 of them that they claimed had fire flow. Fire flow is something that directly influences a water used and useful calculation.

In my opinion, for a system to actually be able to provide fire flow, it has to do so throughout its service area, which means it has to have

appropriately located hydrants, and it has to have appropriately sized lines to be able to provide the entire service area.

What I found was, of the 11 systems, that seven of them, they had some hydrants. They weren't throughout the service area. They weren't sufficiently spaced to provide fire protection to the entire service area. And in some cases, they just didn't have big enough lines to carry a fire flow. So for those systems, I did not include a fire flow in my used and useful calculations.

Q. Do you remember where the areas were that did not have fire flow?

A. I've got them in my testimony and can read them to you. The systems that the utility has in this filing considered for fire flow that I have not are the Chuluota water system, Hobby Hills, Imperial Mobile Terrace, Silver Lake Estates/Western Shores -- that's a combined system -- Skycrest, Sunny Hills, and Tangerine.

Q. And do I understand that these are areas where if there was a fire, they wouldn't be able to bring in --

A. In these systems, there is some element of fire protection for most of them. There are maybe hydrants in the system, let's say, but they're not

hydrants that are spaced close enough to provide fire protection for the entire service area.

In my mind, in order to include a fire flow into the used and useful number, all customers have to be able to receive the benefit of that fire flow. And in many of these cases, that were a few hydrants, but not by any means that could be practically used by a fire department to provide fire protection for the entire service area.

Q. Okay. And you also testified about some interconnected areas?

A. Yes.

Q. And you said that -- I'm trying to remember your testimony, but something to the effect of if they were interconnected, but they haven't been included as one in the rate request, then you separated them out, but if they -- I may have that just backwards. In other words, you looked at the rate to determine whether or not to count them as one versus several?

A. Yes. What I found is that there were a couple of systems that are -- they're financially -- rate base wise, they're tracked completely separately, but physically, they are interconnected as a water system.

Now, when you do your used and useful calculation, one of the things that's very important is

that you take a look at a water treatment plant. You look at its wells. You remove the largest capacity well from the used and useful calculation, because that is provided as a backup for the system. It just doesn't enter into the calculation.

Well, if you've got two water plants running one system, I added up all those wells and removed the largest one. Now, if those systems weren't connected, I would look at this system and remove the largest one, and I would look at this system and remove the largest one, which would generate, you know, two different used and useful numbers. And what I found is that for those systems that are interconnected, even though they may be considered separately in the MFRs, for a used and useful number, there needs to be a combined percentage, and then that applied to both systems, that reflects the interconnected nature of them.

MS. BRADLEY: Okay. I don't think I have any further questions. Thank you.

THE WITNESS: Thank you.

CHAIRMAN CARTER: Thank you. Before -- this is just kind of a housekeeping matter. When we dealt -- everybody kind of hold yourself in place there. When we dealt with Mr. Guastella on -- I guess we'll do his rebuttal after we do Mr. Woodcock; is that correct?

MR. JAEGER: That's correct, Chairman.

CHAIRMAN CARTER: Okay. Staff, questions for this witness?

MR. JAEGER: Did you want to do the utility first? Staff has no questions.

CHAIRMAN CARTER: Okay. Mr. May.

MR. MAY: I thought I had no questions, but in light of that, I have just a couple. I understand --

CHAIRMAN CARTER: You're recognized.

MR. MAY: I understand the time is waning here.

CHAIRMAN CARTER: You may ask your questions.

CROSS-EXAMINATION

BY MR. MAY:

Q. Good afternoon, Mr. Woodcock.

A. Good afternoon.

Q. Do you consider yourself knowledgeable with respect to the Commission's rules and policies regarding used and useful adjustments?

A. Yes.

Q. Good. I'm going to have my partner show you a Commission policy that I would like you to read into the record, if you would, and I want to ask you a couple of questions about it.

MR. MAY: Mr. Chairman, I'm not going to

identify this as an exhibit. This will just be a demonstrative exhibit. We'll distribute to it counsel and you all and the parties, but I don't intend to offer it into evidence, in that it's an order of yours, so I don't think there's any need to do that.

BY MR. MAY:

Q. Mr. Woodcock, while she's distributing that, were you in the room most of the day today to hear the dialogue between and the witness and the counsel and the Commission?

A. Yes, I was.

Q. Okay. Good.

This is an excerpt from Order No. PSC-01-2514-FOF. It's a 2001 order where the Commission adopted return on equity for water and wastewater utilities. And I've highlighted on page 17 a portion of a paragraph there, and I would like you to read it into the record.

A. Okay.

MR. REILLY: I would impose an objection on this. I'm not sure what this exhibit has to do with Mr. Woodcock's testimony.

MR. MAY: I'm voir diring the witness, Mr. Chairman. He said that he was an expert in Commission policy, and I'm going to ask him a question

about it, if you don't mind.

MR. REILLY: On used and useful?

MR. MAY: Yes.

CHAIRMAN CARTER: You may proceed.

BY MR. MAY:

Q. Please read the highlighted section into the record.

A. "Another risk factor facing Florida's water and wastewater industry is regulatory risk. There are two primary regulatory risk factors that have a profound effect on these utilities. First, water and wastewater utilities face significant exposure to used and useful adjustments. These adjustments impact cash flow and financial integrity. Unlike electric utilities who have the opportunity to sell excess generation capacity on the wholesale market, water utilities have limited revenue producing options for excess capacity, even though it may be prudent to build for future growth."

Q. Thank you, Mr. Woodcock. What did the Commission mean when it said that water utilities have limited revenue producing options for excess capacity, even though it may be prudent build for future use? Future growth, excuse me.

A. Can you repeat that question again? I'm sorry.

Q. Yes. What did the Commission mean -- you said you were an expert in Commission policy, so I wanted to know, what did the Commission mean when it said water utilities have limited revenue producing options for excess capacity, even though it may be prudent to build for future growth?

A. I don't want to speak for the Commission, but I will interpret this.

Q. Sure.

A. I think probably the best example is in the sentences right above it, where water and wastewater utilities do not have the ability to sell excess capacity on a wholesale market like electrical utilities do.

Q. So if there was a used and useful adjustment to an electric utility plant, the portion of the plant that was not used and useful, the electric utility could recover that investment through wholesale sales; right?

A. I have no idea about electric utilities.

Q. Okay. But that opportunity is not as prevalent for water and wastewater utilities; correct?

A. It is not.

Q. Okay. Please turn to page 11 of your testimony. I think in your response to the friendly cross from Ms. Bradley, you indicated that there was

a -- several systems that you did not believe were entitled to a fire flow adjustment.

A. Okay. I'm there.

Q. Okay. Am I correct that you have proposed to eliminate fire flow from used and useful calculations for these systems because hydrants are not located throughout the service area?

A. Well, it's different for each system. I would be happy to read my testimony to you about it.

Q. But is that one of the reasons?

A. Yes, that is one of the reasons.

Q. And is another reason that when pipes for hydrants were less than six inches in diameter?

A. That is correct, yes.

Q. Mr. Woodcock, are you stating today that the utility has been cited by the appropriate authority for not having adequate fire protection in Chuluota?

A. I'm not saying that at all.

Q. Are you suggesting that the utility has been cited by the appropriate authority for not having adequate fire protection in Hobby Hills?

A. I am not. What I am saying is, for used and useful purposes, I do not find that these systems adequately provide enough fire protection to be considered in the used and useful calculation.

Q. But you're not suggesting that the appropriate authority has deemed or charged the utility for failure to have adequate fire flow, are you?

A. I am not.

Q. Okay. Could you please turn to page 14, lines 16 and 17 of your testimony?

A. Okay.

Q. Isn't it true that the Public Service Commission has consistently found that water systems with one well are 100 percent used and useful unless it appears that the system was not prudently designed?

A. I'm sorry. Could you repeat that again?

Q. Yes. Isn't it true that the Commission has consistently found that water systems with one well are 100 percent used and useful unless it appears that the system was not prudently designed?

A. Yes, that is my understanding.

Q. Now, you're proposing that the Commission deviate from that rule, are you not?

A. I am, pursuant to the Commission's rule, for purposes of a few systems, proposing an alternative calculation.

Q. So under your approach, you would propose that the Commission deviate from the one-well rule if the well is greater than 150 gallons per minute and the

calculated used and useful is less than 75 percent; is that correct?

A. That would be my recommendation to the Commission. That is what I consider would be an appropriate threshold for doing the alternative calculation.

Q. So if both of those criteria were met, you would just do the math, apply the ratio, and whatever fell out would be the used and useful adjustment?

A. Well, I would say rather than just blindly saying that's a one-well system and calling it 100 percent used and useful, that there are some systems that require further scrutiny.

Q. But I guess my question to you, if a well had a greater capacity than 150 gallons per minute and the calculated used and useful was less than 75 percent, you would impose the adjustment? You would apply the ratio?

A. I would recommend using the calculated used and useful number, yes.

Q. And you would impose that ratio without considering prudency of investment; is that correct?

A. I did not see anything that was imprudent in any of my evaluation of these systems. Prudency is a separate issue from used and useful. I did not see anything imprudent about the three systems that are in

question here.

Q. So you just apply the math? You don't look at the prudency of the investment?

A. Oh, no. I looked at the prudency of the investment. I find that the investment appears to be prudent. I certainly can't find it imprudent. And I did a calculated used and useful number rather than just making it 100 percent.

Q. But I thought you said at the beginning of our dialogue that the Commission has consistently found that if a water system with one well is 100 percent used and useful -- would be 100 percent used and useful unless it appears that the system was not prudently designed.

A. That is true. I'm --

Q. I'm having a difficult time --

A. May I continue?

Q. Yes.

A. I'm proposing an alternative calculation that is allowed by the used and useful water treatment rule approved by the Commission, and I've provided in my testimony the criteria for why I think that should apply.

MR. MAY: I'm just trying to understand how you do your math. And that concludes my questions.

CHAIRMAN CARTER: Thank you. Mr. Reilly.

MR. REILLY: Just a couple of brief redirect.

REDIRECT EXAMINATION

BY MR. REILLY:

Q. When you did your alternative calculation, is that allowed in the Commission's rule? Would you like to have a copy of that rule to read the factors that can be considered?

A. If you would like me to read it, I would. It is in the rule. It is allowed.

Q. My question is, is your alternative calculation, in your judgment, consistent with the rule, that it -- if you can read that (3)?

A. Would you like me to read it?

Q. If it's your pleasure.

A. From the Commission's rule, (3) of 25-30.4325, Water Treatment and Storage Used and Useful Calculations. "Separate used and useful calculations shall be made" -- yes. "Separate used and useful calculations shall be made for water treatment system and storage facilities. An alternative calculation may also be provided along with supporting documentation and justification, including service area restrictions, factors involving treatment capacity, well drawdown limitations, changes in flow due to conservation or a reduction in the number of customers and alternative

peaking factors."

Q. In those systems that you did the alternative calculation, was there a major unused portion of water treatment?

A. Yes, there was.

Q. And that was one of the several bases that you relied upon to bring it to the attention of the Commission that they should consider the alternative calculation under (3) of the rule?

A. That's true. My threshold was 75 percent, but what I actually found for these three systems was that Fern Terrace, the water treatment was 56 percent; for Rosalie Oaks, 10 percent; and for Twin Rivers, 28 percent.

Q. And in light of those extreme conditions, you made a recommendation on only those three systems?

A. That is correct.

Q. The last kind of follow direct question, you were asked some questions about this order and the increased risks that water companies are exposed to because of used and useful adjustments. Do you recall those questions?

A. Yes.

Q. Are you familiar with the allowance for funds prudently invested means of water companies collecting

for prudently constructed plant that is not considered used and useful?

A. Only in a very general sense.

Q. But it is your understanding that the Commission has mechanisms in place to allow companies to recover --

A. Non-used and useful, yes, that is correct.

MR. REILLY: Thank you. I have no further direct, or redirect.

CHAIRMAN CARTER: Let's see. Commissioners, Exhibits Numbers 95, 96, 97, and 98. Mr. May, any objections?

MR. MAY: No, Commissioners.

CHAIRMAN CARTER: Without objection, show it done, 95, 96, 97, 98.

(Exhibits 95, 96, 97, and 98 were admitted into the record.)

CHAIRMAN CARTER: Also, Commissioners, now we're back on witness Guastella, which has been stipulated for rebuttal. Anything further on this witness? Did we move the -- the prefiled testimony of the witness will be entered into the record as though read, moved by the party.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

AQUA UTILITIES FLORIDA, INC.

REBUTTAL TESTIMONY OF JOHN F. GUASTELLA

DOCKET No. 080121-WS

Q. Please state your name and business address.

A. My name is John F. Guastella. My business address is Guastella & Associates, Inc., 6 Beacon Street, Suite 410, Boston, Massachusetts 02108.

Q. Have you previously testified in this docket?

A. Yes. The primary purpose of my testimony was to determine the used and useful percentages of various plant components, which were then used to establish the rate base for each of the Company's utility systems.

Q. Are you sponsoring any exhibits to your rebuttal testimony?

A. Yes, I'm sponsoring Exhibit JFG-1.

Q. Have you examined the testimony and exhibits of Mr. Andrew T. Woodcock that he submitted on behalf of the Office of Public Counsel?

A. Yes.

Q. Do you have any comments with respect to Mr. Woodcock's testimony?

A. Yes. The primary purpose of Mr. Woodcock's testimony is to address the issue of used and useful investment in utility plant in service. Mr. Woodcock's testimony and exhibits reflect both agreement and disagreement with the used and useful percentages that I provided, as revised in some instances.

Q. Am I correct that the revisions to which you refer were made as a result of discovery, and were submitted in response to discovery?

A. Yes.

Q. Have you prepared a comparison of Woodcock's and your used and useful percentages, by system?

A. Yes. I have attached Exhibit JFG-1 containing four schedules: Schedule 1 compares Mr. Woodcock's used and useful percentages for water treatment plants with mine; Schedule 2 compares our respective used and useful percentages for wastewater plants; Schedule 3 is a similar comparison with respect to water transmission and distribution systems; and Schedule 4 compares collection system percentages. I do not provide a similar schedule for water storage facilities because Mr. Woodcock and I agree that all such facilities are 100% used and useful.

Q. How have you organized your schedules?

A. The systems that are listed first (i.e., the top of the list) are those that both Mr. Woodcock and I find are 100% used and useful. The rest of the systems are those for which we differ, and show both Mr. Woodcock's and my used and useful percentages along with the percentage differences. I would note, however, that there is an exception on Schedule 1, Water Treatment Plants, for the systems that are interconnected with systems that are not owned by the Company and do not have their own treatment or supply facilities. Mr. Woodcock characterizes them 0% used and useful, while I characterize them 100% used and useful. Setting those different characterizations aside, we apparently both agree that no used and useful adjustment should be made to the utility plant in service for these systems with respect to "water treatment plant," even though the differences are shown on Schedule 1 as a negative 100%.

Q. Are you and Mr. Woodcock in agreement with respect to adjustments related to unaccounted for water?

A. No. I have made exceptions for 10 systems where the unaccounted for water exceeded 10% but was less than 13%; Mr. Woodcock used the 10% limit without exception.

Q. Would you please describe your findings and treatment with respect to unaccounted for water?

A. I found that unaccounted for water was less than 10% for 31 out of the 57 water systems. There are 16 systems for which the unaccounted for water exceeded 13%, in which case the excess over 10% was used as an adjustment in the used and useful calculations. (Jasmine Lakes, Welaka/Saratoga Harbour, Oakwood, Tomoka/Twin Rivers, Palms MHP, Harmony Homes, Arredondo Estates/Farms, Zephyr Shores, Leisure Lakes, Beecher's Point, Sebring Lakes, Holiday Haven, Wootens, Village Water, Interlachen Lake/Park Manor and Summit Chase.) Accordingly, for the most part my used and useful calculations did adjust for unaccounted for water in excess of 10%.

I did, however, find 10 exceptions where the excess over the 10% limit (an additional 0.8% to 2.9%) produced an obvious circumstance in which the cost of identifying the cause of the water losses only slightly in excess of 10% and taking the steps necessary to implement a solution outweigh the benefits. This is the very kind of exception discussed by the FPSC in its March 27, 2008 memorandum in *In re: Proposed Adoption of Rule 25-30.4325, F.A.C., Water Treatment Plant Used and Useful Calculations*, Docket No. 070183-WS, Issue 14, Analysis and Conclusion, page 37,

> "Excessive unaccounted for water is both an economic and an environmental issue. Water utilities are expected to operate their systems in the most cost effective manner possible, while striving to preserve and protect Florida's water resources. However, there are

> circumstances in which the cost of identifying the cause of water losses and taking the steps necessary to implement a solution outweigh the benefits. This provision of the proposed rule identifies the types of mitigating circumstances the Commission will consider in determining whether adjustments to plant and operating expenses should be made for excessive unaccounted for water. This is not an alternative calculation for the utility, but rather provides flexibility to the Commission in deciding whether those adjustments should be made."

Staff testimony in that docket also noted that,

> "For systems that have slightly over 10% unaccounted for water the adjustments on such small amounts would be immaterial."

For all 10 systems, the estimates of water used for flushing and line breaks were more than the differences between 10% and 13% unaccounted for water, and in most cases the quantity of water losses in excess of 10% was only a small fraction of the estimates of losses due to flushing and breaks. In other words, the water represented by the excess over 10% may very well be attributable to an underestimate of the water used for flushing and main breaks. Even assuming that the estimates for flushing and main breaks were perfectly accurate, the average loss in gallons per minute per system is only about 2.3 gpm, which is probably not detectable considering that it could represent very small seepage at a number of the many main joints and service lateral connections scattered throughout the systems.

From a cost perspective, the average cost of power and chemicals, per system, attributable to the unaccounted for water in excess of 10%, is only about $430 annually; the highest is about $2,200 and the remaining less than $700, with half of the systems less than $100. These immaterial and highly doubtful cost savings simply do not justify spending thousands of dollars per system to reduce the estimate to 10% or less, or to make an adjustment for rate setting purposes, because it would not be economically feasible to do so. See

Rule 25-30.4325(10), F.A.C.

Q. On pages 6 and 7 of his testimony, Mr. Woodcock lists, except for Ocala Oaks, the systems in Marion County (Ocala Oaks systems) as well as Gibsonia Estates and Zephyr Shores, along with the capacities of their respective wells. Do you agree with the well capacities he shows for those systems?

A. Yes. Except for Gibsonia Estates and Zephyr Shores, eleven of the systems Mr. Woodcock lists are the "Ocala Oaks" systems in Marion County that the Company treats as one system, including the Ocala Oaks system, for accounting, rate base and rate setting purposes. Although I agree with the well capacities, I disagree with the ultimate conclusion Mr. Woodcock reaches regarding the combined used and useful percentage of 99.0% for the Ocala Oaks systems. As shown on page 9 and 10 of his testimony, Mr. Woodcock calculates that Fairfax Hills is 84.85% and "Ridgeview" (Ridge Meadows) is 84.14% used and useful, and the remaining 10 systems are 100% used and useful. Because Fairfax Hills is fully developed, I consider that system to be 100% used and useful, instead of Mr. Woodcock's 84.85%, which is consistent with the FPSC's recently adopted Rule 25-30.4325(4), F.A.C., for water treatment plant used and useful calculations. That change would bring Mr. Woodcock's combined used and useful percentages even closer to 100%. In my opinion, when used and useful percentages, strictly based on demand/capacity ratios, are calculated as 90%, the system(s) should be considered 100% used and useful for rate setting purposes.

Q. On page 15 of his testimony, Mr. Woodcock disagrees with your 90% threshold, stating that, "this rounding over estimates the actual used and

usefulness of a system at the expense of the customers." Would you explain your position?

A. As I stated in my pre-filed direct testimony, used and useful is a regulatory rate setting term that provides for the recovery of all or a portion of costs as allowances in the determining of revenue requirements. The used and useful allowances must, as the FPSC recognizes in its recently adopted Rule 25-30.4325(2), take into account prudency of investment, economies of scale and other relevant factors. When strict application of the ratio of demand to capacity fails to even consider let alone account for those evaluations, the result may be unreasonable. Considering a system to be 100% used and useful when the applicable formula produces a ratio of 90% is not merely an arithmetic rounding, as Mr. Woodcock opines, but an evaluation of the costs that should be recognized as necessary to provide service to existing customers, taking into account prudency of investment, economies of scale and other factors, which Mr. Woodcock has ignored.

Utilities incur capital costs on the basis of the design of their water or wastewater systems. Those designs typically and intentionally assume greater demands than are ultimately realized, so that adequate and reliable service is assured. The used and useful calculations are based on actual demands projected for margin reserve (growth), not on designed criteria. When systems are reasonably designed they should have 10% to 20% unused capacity even when fully developed, if they were prudently designed.

From another perspective, intentionally designing a water system with 10% - 20% more capacity that will actually be reached not only assures adequate service, but the cost is not significantly higher than for a system with slightly

less capacity. This economy of scale is especially apparent for small systems. For example, although the capacity of a well could vary significantly between any given well diameter and the next diameter, or the next step up in the pump horsepower, the incremental cost differences are not proportional to the capacity differences. And, there is no difference in the other components of the water source and treatment, such as the land, well and pump structures, chemical feed equipment and structures, well housing, piping, electrical supply and controls, and fencing. With respect to all construction there is no difference in such costs as design, permitting, construction mobilization, construction supervision and administration, etc. Moreover, in the longer term, both the existing and future customers benefit from lower rates because the larger capacity wells represent prudence of investment and economically efficient expenditures as compared to installation of multiple wells and pump components that have smaller capacities and will ultimately cost more.

Q. Does the FPSC establish rates for new water utilities on the basis of less than a full compliment of customers?

A. Yes. Applications for initial rates of newly established water and wastewater utilities are based on operations at 80% of build out, as well as 80% of each phase of the development. I believe this is a clear recognition that the design capacities of utility systems typically exceed expected actual demands.

Q. If a system is treated as 100% used and useful where there is still growth anticipated beyond the test year, should there be a concern that the utility may "over-earn" after the permanent rate becomes effective?

A. No. First, I would stress that if a system is treated for rate setting purposes as 100% used and useful, considering prudence of investment, economies of

scale and related factors, as well as ratios of demand to capacity, then the resultant rates reflect the cost of serving existing customers as best as the rate setting process is able to estimate it. Just as there is no concern after a rate determination that the actual return might be less than the allowed return, similarly there should be no concern that on a prospective basis the actual return might exceed the allowed return. In my opinion, it would be improper to deny a portion of a full rate increase that is based on proper used and useful determinations because of uncertainty about whether future earnings may exceed allowed returns. In any event, it has been my experience that in almost every instance, future earnings do not exceed allowed returns. The difference in the impact of revenue requirements related to a used and useful determination of 100% compared to 90% is invariably less than future inflationary increases in operating expenses and the installation of plant replacements that are considerably more costly than the historical cost of the plant being replaced.

Q. Mr. Guastella, returning to the systems Mr. Woodcock lists on pages 6 and 7, in addition to Ocala Oaks (Marion County) systems, he shows Gibsonia Estates with two wells having a capacity of 305 gpm and 180 gpm, and also Zephyr Shores with an additional 500 gpm well. Do you agree with those capacities?

A. Yes. With respect to Gibsonia Estates, upon review the Company found that the well capacities of 305 gpm and 180 gpm are correct and the use of 55 gpm instead of 305 gpm was probably a typo. Correcting the used and useful calculation produces a percentage of 60.6% instead of 100% as filed. With respect to Zephyr Shores, although I agree that a 500 gpm well was added, it

was not added until April 2008 after the test year, and its cost is not included in the revenue requirement and rates. Accordingly, as a single well system during the test year, Zephyr Shores should be considered 100% used and useful, as filed.

Q. On page 8 of his testimony, Mr. Woodcock discusses his calculations of growth. Do you agree with his method?

A. I agree with the use of a 5 year growth period. Mr. Woodcock uses MFR Schedules F-9 and F-10, or average consumption ERCs. My growth or margin reserve for treatment plants, however, is based on MFR Schedule F-8 or growth in ERCs based on meter equivalents (relative meter capacity ratios). Because the meter capacity ratios are based on the relative maximum flow through various size meters, and the design of treatment plants are also based on maximum demands, it is more consistent to use the growth in ERCs from Schedule F-8.

Q. On page 8 Mr. Woodcock also discusses systems that he treats as interconnected. Would you address each of these?

A. Mr. Woodcock treats the East Lake Harris Estates and "Friendly Estates" (Friendly Center) as one interconnected system. Because each system was originally designed and developed individually and subsequently interconnected for reliability, it is not appropriate to use a combined used and useful calculation. The cost of those systems reflects separate systems, not a combined system. Moreover, used and useful determinations should not be geared to simply finding the lowest ratio of demand and capacity, particularly if such used and useful determinations have the effect of discouraging utilities from finding after-the-fact opportunities to improve reliability. This falls

within one of the "other relevant factors" that Rule 25-30.4325(2) specifies that the Commission will consider in its used and useful evaluation.

In addition to disagreeing with Mr. Woodcock's approach with respect to East Lake Harris Estates and Friendly Center, it appears that while he includes the capacity of both wells in these systems, his calculation of used and useful only includes the 49.03 gpm peak hour demand of East Lake Harris Estates but not the peak hour demand at Friendly Center, adjusted for margin reserve, or 45.58 gpm. Had he done so, his used and useful calculation would be 94.6% (which I would consider 100%) instead of his 49.03%. In any event, these systems should be treated as single well systems and 100% used and useful.

With respect to Hermits Cove and St. John's Highlands, I agree with Mr. Woodcock that these systems should be treated as one interconnected system, but the reason is that St. John's Highlands has no source of supply. With respect to Sebring Lakes and Lake Josephine, those systems were originally developed as separate systems and, moreover, the interconnection is only for emergencies. The Company reports that DEP requires the interconnection to remain closed except for emergencies. Accordingly, these systems should not be treated for used and useful purposes as one integrated system, as Mr. Woodcock proposes.

With respect to Welaka and Saratoga Harbour, while I do not disagree with treating these systems as one system, I do differ with Mr. Woodcock regarding the capacity and number of wells. He shows three wells at 188 gpm, 110gpm and 110 gpm, which is not the case. There are only two wells at 110 and 76 gpm.

Q. Although the Company treats Arredondo Estates and Arredondo Farms, as well as Tomoka and Twin Rivers, as single water systems, Mr. Woodcock treats all four of these systems as individual systems. In each case his used and useful calculations produce less than 100%. Do you agree?

A. No. These systems are fully developed and, according to the new used and useful Rule 25-30.4325(4), should be treated as 100% used and useful.

Q. On page 11 and 12 Mr. Woodcock proposes to eliminate fire flows from the used and useful calculations with respect to Chuluota, Hobby Hills, Imperial Mobile Terrace, Silver Lake Estates/Western Shores, Skycrest, Sunny Hills and Tangerine. Do you agree?

A. I disagree with Mr. Woodcock with respect to Chuluota, Silver Lake Estates/Western Shores, Sunny Hills and Skycrest. Mr. Woodcock's objection is based on his claim that "hydrants are not located throughout the service area." On the basis of a review of the system maps and responses to data requests previously submitted, those systems do have hydrants and provide fire protection. Accordingly, fire flows should be considered. If Mr. Woodcock believes that a system does not have a sufficient number of hydrants or that the spacing of hydrants is inadequate, adjusting used and useful calculations is not an appropriate recommendation. Instead, if he believes it is worthwhile, he should recommend that the Company install additional hydrants and also propose that additional investment be included in the revenue requirement, resulting in higher rates related to the new hydrants. With respect to Imperial Mobile Terrace and Tangerine, Mr. Woodcock has determined that those systems are 100% used and useful, so that fire flow is

immaterial.

With respect to Hobby Hills, this system is built out and, according to the recently adopted Rule 25-30.4325(4), is 100% used and useful.

Q. On page 14, Mr. Woodcock is asked whether he believes that it is appropriate, "as permitted by (3) of the Commission's Rule No. 25-30.4325, to provide an alternate calculation for certain water system calculations." He responds in the affirmation and goes on to propose using a demand/capacity formula for single well systems. Do you agree that the cited section provides for alternative determinations for single well systems, or with Mr. Woodcock's proposed alternative?

A. No. As a participant in Docket 070183-WS in which the new used and useful rule was established, it is my understanding that after many years of trying to limit controversy and cost associated with used and useful determinations, this rule would simplify such determinations for water treatment and storage facilities. While Rule 25-30.4325(3) provides for alternative calculations under certain conditions that would affect the formulas set forth in the rule, subsection (4) of that Rule identifies two conditions, a built out system and single well systems, for which the treatment would be considered 100% used and useful, without calculation. This provision eliminates the need for a calculation and controversy for obviously small systems (single well) or built out systems that clearly should be considering 100% used and useful. In my opinion, proposing alternative calculations for a single well system tends to reverse the efficiencies and cost-savings for which the new rule is designed to accomplish. That said, the relatively minor cost of down-sizing a well or well pump is simply not consistent with prudence of investment or economy of

scale considerations.

Q. Do you have any other remaining issues with Mr. Woodcock's used and useful determinations regarding water treatment plants?

A. Yes. I found what appears to be an inadvertent error in his calculation of the water treatment plant of Piney Woods. He apparently subtracted the lowest not the highest yield well from the total well capacity. Correcting this error would bring his U&U from 52.06% to 100%.

Q. With respect to water distribution and wastewater collection systems Mr. Woodcock states on page 15 that your use of ERCs to lots served by lines "does not provide an accurate representation of the usage of the system and seeks to achieve the highest U&U for the system." Would you please respond to that statement?

A. It seems from that statement that Mr. Woodcock does not have a complete understanding of the rate setting principles that should govern such concepts as used and useful. The entire water transmission system and the entire wastewater collection system are used to meet the actual maximum demands of existing customers. Thus, if "usage of the system" were the used and useful standard, it would rarely if ever drop below 100%.

The ultimate purpose of used and useful calculations is to establish the cost of providing service, not to simplistically achieve the highest U&U -- or the lowest in order to keep rates low. The importance of establishing the cost of providing service is to assure that a utility will be able to maintain financial viability and attract capital -- so that it will be able to continue to provide safe and adequate service.

Q. Why did you use the ratio of ERCs to lots on lines in calculating the used

and useful percentage of mains?

A. That ratio recognizes that when there is a mix of customer classes and customers with varying demands, the ratios of lots to lots or ERCs to ERCs do not provide sufficient costs for mains that are designed to meet demands as well as cover distances. While the ratio of ERCs to lots on lines appropriately recognizes costs that better represent the design of systems, even that ratio does not add anything for fire demands, or for example distribution grids where mains at intersection require more footage than captured by any of the ratios.

Q. Has the FPSC recognized the use of the ratio of ERCs to lots, and in fact rejected the use of lots to lots with respect to water and wastewater mains?

A. Yes. The FPSC has accepted the ratio of ERCs to lots instead of lots to lots in a number of cases including those involving Marco Island Utilities [Docket No. 850151-WS], Southern States Utilities [Docket No. 950495-WS] and Palm Coast Utility Corp. [Docket No. 951056-WS]. Furthermore, Florida's First District Court of Appeal in *Southern States Utilities v. Florida Public Service Commission*, 714 So. 2d 1046 (Fla. 1st DCA 1998), as well as in *Palm Coast Util. Corp. v. State of Florida, Public Service Commission*, 742 So. 2d 482 (Fla. 1st DCA 1999), rejected attempts by the FPSC to change its policy of using ratios of ERCs to lots and convert to using ratios of lots to lots or ERCs to ERCs, because there has been no basis for such a change.

I would add that Mr. Woodcock's "apples-to-apples" argument does not support the use of lots to lots or ERCs to ERCs, because such ratios are not adequate for establishing costs that reflect the designed and installation of

varying size mains to meet demands as well as cover all distances in a grid system.

Q. Do you have any other observations regarding Mr. Woodcock's allowances for water distribution systems?

A. Yes. I would note that with respect to Beecher's Point, Mr. Woodcock apparently used the wrong map for his lot count for the water system.

Q. What is the major difference between Mr. Woodcock and you with respect to wastewater treatment plants?

A. It appears that Mr. Woodcock did not give consideration to the systems that are fully built out. In his testimony he states that only four water systems have no potential "for expansion of the service territory." We consider a system to be built out if there is no or virtually no room for growth where there are mains. In most cases, there is no room for growth in the entire service areas of those systems considered built out. We also consider a system to be built out if all or nearly all lots are connected to existing mains. We do not disqualify a system from being considered built out if there are vacant areas within the service area but no mains, which is consistent with the FPSC rules regarding new systems and initial rates.

Q. Do you know why Mr. Woodcock's I&I figures differ from yours?

A. It seems there are two areas that cause the differences. One is that Mr. Woodcock estimates the amount of water sold to wastewater customers by applying the ratio of water ERCs to wastewater ERCs; whereas I obtained specific data from the Company as to water sales to wastewater customers. Another is that Mr. Woodcock estimates the quantity of water returned to the wastewater plant by applying 80% to all water sold to wastewater customers;

whereas I apply 80% to residential customers and 96% to commercial customers as I believe is typically used by the FPSC. In addition, with respect to the Jungle Den system, Mr. Woodcock does not seem to take into account that its wastewater customers receive an unknown amount of water from an unrelated utility, making it impossible to determine an accurate level of I&I for that system.

Q. Do you agree with Mr. Woodcock's analysis regarding the accounts to which the used and useful percentages should be applied?

A. No. It seems that Mr. Woodcock's determination of used and useful relies solely on the arithmetic ratios of demand to capacity or ERCs to ERCs, without any consideration of prudence of investment, economies of scale and other factors, or that used and useful allowances are only one component of the primary goal of rate setting, which is to establish the cost of providing reliable service to existing customers in an ongoing basis. Mr. Woodcock proposes that used and useful percentages of wells be applied to all accounts within the general "Source of Supply and Water Treatment" that would include such items as land, generators and chemical feed equipment. These items of plant are entirely necessary for reliable and adequate service to the existing customers, and their cost would not be any less even though the wells may be less than 100% used and useful.

Q. Should similar considerations be applied to force mains as opposed to gravity mains?

A. Yes. Unlike gravity mains, there are no individual customers connected to force mains; they accommodate wastewater and from multiple customers as well as inflow and infiltration, and are designed to enable the transfer of

wastewater to treatment plants as necessary to span natural elevation differences in the service areas, which is independent of the number of customers. The related lift stations also collect wastewater from multiple customers; their structures would not be any smaller in size or cost; and although the lift pumps could be scaled as the flows increase, this is typically not economical particularly for relatively small systems. Applying the same used and useful percentages of gravity mains to force mains and lift stations does not take these differences into account or recognize the actual cost of serving the existing customers.

Q. Does that conclude your rebuttal testimony at this time?

A. Yes.

CHAIRMAN CARTER: Any exhibits for this witness?

MS. ROLLINI: Yes, Mr. Chairman.

CHAIRMAN CARTER: Okay.

MS. ROLLINI: We respectfully request to move into evidence Exhibit JFG-1 identified by staff as Exhibit 145.

CHAIRMAN CARTER: Okay. For the record, Exhibit Number 145 in your records, Commissioners.

Mr. Reilly, any objections?

MR. REILLY: No objections.

CHAIRMAN CARTER: Without objection, show it done.

(Exhibit 145 was admitted into the record.)

CHAIRMAN CARTER: That completes it for witness Woodcock and witness Guastella.

And this looks like a good enough breaking point, Commissioners, in terms of where we are now and the remainder of the day. We'll start tomorrow at 9:30 bright and early.

Mr. Reilly?

MR. REILLY: May we excuse Mr. Woodcock?

CHAIRMAN CARTER: Oh, sure. Absolutely. Thank you.

So be there, be square. We're adjourned until

tomorrow, 9:30 a.m. tomorrow, 9:30 a.m.

(Proceedings concluded at 4:56 p.m.)

(Transcript follows in sequence in Volume 4.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA:

COUNTY OF LEON:

I, MARY ALLEN NEEL, Registered Professional Reporter, do hereby certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages numbered 173 through 360 are a true and correct record of the aforesaid proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor relative or employee of such attorney or counsel, or financially interested in the foregoing action.

DATED THIS 9th day of December, 2008.

MARY ALLEN NEEL, RPR, FPR
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