BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 020071-WS

In the Matter of

APPLICATION FOR RATE INCREASE IN MARION, ORANGE, PASCO, PINELLAS, AND SEMINOLE COUNTIES BY UTILITIES, INC. OF FLORIDA.
_____/

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VOLUME 2

PAGES 166 THROUGH 266

PROCEEDINGS:	HEARING
BEFORE:	COMMISSIONER J. TERRY DEASON COMMISSIONER BRAULIO L. BAEZ COMMISSIONER RUDOLPH "RUDY" BRADLEY
DATE:	Wednesday, August 20, 2003
TIME:	Commenced at 9:30 a.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	TRICIA DeMARTE, RPR Official FPSC Reporter (850) 413-6736
APPEARANCES:	(As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

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P R O C E E D I N G S

(Transcript continues in sequence from Volume 1.)

FRANK SEIDMAN

continues his testimony under oath from Volume 1:

CONTINUED CROSS EXAMINATION

BY MR. REILLY:

Q Did you really personally prepare the F Schedules in the MFRs, or did someone else prepare them and you simply reviewed them and adopted them?

A I prepared them.

Q Could I direct your attention to Page 5 of your prefiled direct on Lines 4 through 5?

COMMISSIONER BRADLEY: Which page again?

MR. REILLY: This is Page 5, Lines 4 and 5.

THE WITNESS: Okay.

BY MR. REILLY:

Q And here you say, "In general, UIF is composed of small, simple, built out systems scattered through the several counties served." Your statement concerning built out; is that really correct? Do you stand by that testimony today?

A Yes. In general, they're composed of small, simple, built out systems, yes.

Q But did you ever calculate the degree of build out at each system by comparing the total connected ERCs to the total available ERCs?

A Not on all of them, no.

Q Would it surprise you to learn that 16 out of the 17 water systems are less than 100 percent built out with some systems as low as 73.9 percent?

A No, it wouldn't surprise me. I think it's part of my rebuttal testimony, addressing that.

Q And even with this type of a percentage, you don't have any problem calling it built out?

A No. I think if you take a look at the maps of these systems and see how the distribution of the unserved lots are distributed through them, that virtually these systems are built out. We're going back to systems that have not changed in any great respect from the last time they were reviewed by the Commission, and they were determined to be 100 percent built out then, although they obviously couldn't have had all the lots built out at that time.

Q So then your testimony and recommendation is more based on prior determinations made?

A It's based on a combination. The systems -- most of these systems were determined to be built out on a distribution/collection basis in prior dockets. Okay. I talked to the company, and I looked at the system maps. And after looking at them and talking to the company and saying, you know, what kind of activity do we have in these places, I came to the conclusion that there hadn't been any significant

change from the last time the Commission reviewed them. So, in those cases, I didn't go ahead and do anything. There were a couple of systems that I did.

Q Do you have any personal knowledge as to what extent those earlier determinations were contested or not contested?

A I can't be sure. I mean, I know some weren't. I don't know if all of them were or weren't.

Q Is it your understanding that this Commission is not bound by some of these earlier determinations if, in fact, current evaluations indicate that the -- those distribution systems are really far less than fully utilized?

MR. WHARTON: Objection. That calls for a legal conclusion.

COMMISSIONER DEASON: There's been an objection.

MR. REILLY: I would like to hear what the witness's opinion is as to what extent this Commission is bound.

COMMISSIONER DEASON: Objection overruled. This witness has great experience before the Commission in its regulatory policies and procedures, and to the extent he has an opinion, he may express it.

THE WITNESS: Does that mean I should answer the question?

MR. REILLY: I think it does.

COMMISSIONER DEASON: Yes.

THE WITNESS: Oh, okay.

Well, I don't know whether I agree that the Commission is not bound by anything it's done in a case that hasn't been heard. I mean, that sort of makes me feel a little uneasily, that a lot of these PAA cases that are out there suddenly have no value. But, in general, I think the Commission is bound to what it's determined to be proper from other cases unless something can be shown that in those decisions something was done -- was wrong or there was inaccurate information or mistakes or something that nature.

BY MR. REILLY:

Q The kind of information that could be shown that you're referring to, would this be this, in the case of distribution, lot-by-lot analysis and comparing lot served versus lots not served? Is that the kind of information the Commission would consider for this case?

A They could consider that, sure.

Q And if, in fact, that analysis showed percentages, you know, in the 60 and 70 and 80 percent, that that could be information this Commission could consider in this case to determine for purposes of this case that these systems are, in fact, not built out?

A They can consider it, sure.

Q When you calculated the used and useful percentages for water systems, you used an instantaneous demand taken from a chart of maximum instantaneous flows for residential areas

for a community water system source book published in North Carolina; is that correct?

A Yes, that's correct.

Q The instantaneous flows you used in your calculations of demand are greatly in excess and many times the value of max day flow; is that correct?

A I would expect so. I'd be greatly surprised if they weren't.

Q Please show us in the Ten States Standards or in any other DEP sizing rule where such demand flows are required in designing and sizing components of water systems.

A I don't think that there's anything in there that requires it --

Q Can I direct your attention -- excuse me.

A -- nor does it exclude it.

Q But it's not contemplated --

A I don't know.

Q -- at DEP?

A At 3.2.1.1 it says, "equal or exceed." You can read a lot into the word "exceed." You can make a determination that you may want to evaluate other things other than average or max day flow. You would be within the standards.

Q So that means, really, you could pretty well build it as large as you want it?

A And meet the standards?

Q Uh-huh.

A As long as it was operable, yeah.

Q And what would be the economic effect of such decisions to this Commission?

A Well, if you just went to the max without any -- applying any reason, it would be uneconomical.

Q And highly costly to the customers.

A And highly costly, absolutely.

Q Could I direct your attention to Page 7 of your prefiled direct, Lines 10 through 15?

A Yes.

Q On these lines you state, "Finally, I made a calculation of the used and useful using the Commission's standard formula of dividing the sum of the peak demand plus fire flow minus excess unaccounted for water plus property needed to serve five years after the test year by the firm reliable capacity;" is that correct?

A Yes.

Q Is it not true that the Commission has no such standard formula using the kind of peak flows you're talking about and divided by the firm reliable capacity, that this is really your formula?

A The formula I have here is a Commission formula, peak demand. If you're asking me whether the Commission has written somewhere that peak demand means max day or something else,

that's different. I'm not trying to indicate here what the peak demand is in this formula. It's peak demand plus fire flow minus excess unaccounted for water.

Q So you're suggesting that that peak flow could well be the max day or some other --

A Sure.

Q -- peak that you have chosen to use?

A Sure. The Commission has no rule on this. This is a subject that comes up in every case, interpretation of how to do this. There's nothing that I'm aware of in any Commission rule that dictates how to do this. We tried to get one in a previous rulemaking proceeding, but --

Q All right. Now, to another element of this formula is this -- comparing it to firm reliable capacity. Are you suggesting this is an established Commission practice?

A Pretty much so. I think as far as a practice, when you're talking about a practice with the Commission and staff, it's generally done over time. Yes, I think so.

Q But isn't firm reliable capacity really only to source of supply and is -- in any publication that we're aware of, it makes no reference to treatment, storage, or any other components of water treatment -- or water systems?

A Well, the Commission practice is what the Commission practice is. It's what they have been doing. Whether or not they've tried to tie that to some other publication that you

have in mind, I don't know.

Q Can you -- I have trouble understanding your answer. Firm reliable capacity, would you define that for me? What constitutes firm reliable capacity?

A Basically, it's capacity that could be depended on with some unit, some important unit out of service.

Q Is it important unit or with the largest well out of service?

A Well, when it comes to well capacity, it's a well. I think you can apply the same logic to other types of equipment. You can apply it to treatment plant, and you can make it without some pump out of service or some other portion of the treatment facility.

Q Can you give us a reference of any case ever rendered by this Commission that used firm reliable capacity to evaluate water treatment, water storage, what, with the largest storage facility out of service? Do you have any case that you could point us to where that was ever done in this jurisdiction?

A That's really pushing now my memory. I think, yes, but I just can't swear to it at this time. I'd have to go back and look.

Q So you have no precedent at all for either treatment or --

A No, that's not what I said. You know, you're asking me here to go back and recall all of the Commission cases that

I've been involved with or anybody else has been involved with that asked -- and make a statement as to whether or not the Commission took into consideration firm reliable capacity for components other than wells, and I can't recall those.

Q Okay. Is it your understanding that Commission staff's use of firm reliable capacity for anything other than source of supply would be in the most recent two or three years, or you really just don't have any testimony on that today?

A I haven't dealt with any testimony in that sense in the last few years.

Q In your used and useful calculation methodology, you basically just ignored FDEP sizing standards; is that correct?

A I ignored what?

Q FDEP sizing criteria. You did not feel that was relevant.

A I don't know that I said I ignore it. I'm aware of it.

Q Is it relevant to know what those sizing criteria are before making your used and useful calculations?

A Only to the extent that the company has to have met those standards. And the test of that is, has DEP issued them permits? Are they under any order or anything like that from DEP? If they have been issued the permits, they have met the standards. They are not under any orders. They have continued

to meet the standards.

Q Why did you perform only used and useful analysis for wastewater plants and no such analysis for the collection systems?

A I didn't perform analysis on the collection systems for the same reason as the water distribution systems. You're talking about the same systems that are virtually built out as far as the distribution and collection systems themselves.

Q Could you define "virtually"?

A Very few lots left, the system is so backbone that it's not going to make any difference to cost whether or not those other units ever get put into place, those other units are ever built, residences, whatever.

Q I guess defining the term "virtually" with "few" doesn't get me to where I'm trying to go. Are we talking 5 percent, 10 percent, 15, 20, 25 percent?

A It's subjective.

Q What is your subjective opinion?

A My subjective opinion in this case was that these systems were built out.

Q Why did you not perform an analysis of infiltration and inflow in the five wastewater systems?

A To tell you the truth, I forgot.

Q Well --

A I mean, I did it in rebuttal, but --

COMMISSIONER DEASON: I'm sorry. You forgot to do it, or you forgot the reason why you did not do it?

THE WITNESS: No, I really forgot to do it at the time. And it wasn't until Mr. Biddy's testimony came out that I realized, uh-oh, there's something here that has to be looked at.

BY MR. REILLY:

Q Did you prepare or help prepare the system maps or subsequently corrected maps furnished with the MFRs?

A No.

Q And so you don't know why the system maps fail to show the information to provide the sewer quantities to calculate I/I?

A No. I had nothing to do with putting the maps together.

Q But are these quantities generally needed to properly calculate inflow and infiltration -- well, infiltration?

A Well, certainly if they were marked up that way, they'd certainly be helpful. There are other sources for information on footages. And I guess the other side of that is, with regard to providing this information, I'm not -- well, I'm not quite sure it was required on the maps under the rule to indicate the footages and size.

Q Have you ever presented used and useful rationales to the PSC using instantaneous flows?

A Have I ever?
Q In the past, uh-huh.
A Yes.
Q And what was the result of those presentations?
A Let's see, we just had a case that was on a PAA, which has no standing, obviously. The Commission rejected it. I brought it up in the original Summertree PPW case. At that time, though, I got into the idea of the instantaneous demand concerns, but at that time I was using peak hour as a proxy for instantaneous demand. That goes back, like, to 1992 or something.
Q Do you agree with full consideration of 24 hours pumping when calculating firm reliable capacity for water supply versus 12 hours that's been at issue in this case?
A I guess it would depend on the case. I'm aware that there is literature out there that says that for small systems basically it's a valid assumption that most demand occurs over a 12-hour period, most demand occurs over a 12-hour period.
Q But, however, did you not use the 24 hours of pumping in your analysis before the staff suggested that you use 12 hours when you first filed the case?
A Yes, I did not use 12.
Q Okay. Do you know any fire insurance rating bureau or agency such as the Insurance Services Office that recognizes fire flow for a hydro-pneumatic tank water system?

A That -- did you say recognize?

Q That any such insurance rating bureau that would recognize a hydro-pneumatic tank water system as meeting any fire flow.

A I'm not aware one way or the other.

Q And if a fire flow is not recognized by insurance rating agencies, all customers in these areas would receive no insurance rate benefit --

A I don't know. I have no familiarity with the insurance and that type of analysis.

Q Can you explain why you think the water systems of Orangewood and Oakland Shores should receive fire flow allowance even though almost all of these systems have small lines with no fire hydrants?

A Well, those systems have a limited number of hydrants that are, I believe, on lines that are sufficient to provide that capacity. And regardless of whether you have one hydrant or a hundred hydrants, if you have to serve it, you have to be able to deliver the flows required for the duration required, and that's a factor of, you know, your capacity of the system. It's something that they have to do.

Q Now, you say it makes no difference whether there's one hydrant or a hundred hydrants. If you have to do it, you have to do it. Is that what your testimony is?

A If they're obligated, yes.

Q But how does an obligation create the ability to provide the service? I mean, just because someone is obligated to provide a service, that doesn't mean they're going to provide it, does it?

A Maybe I'm misunderstanding you, but I thought these regulated Commissions -- utilities under the regulation of this Commission were obligated to provide service.

Q These local jurisdictions for Orangewood and Oakland Shores, it's your understanding that they have a fire flow requirement?

A It was Orangewood. What was the other one?

Q It's Orangewood and Oakland Shores.

MR. REILLY: We are coming to the end of this.

COMMISSIONER DEASON: You anticipated my question.

THE WITNESS: According to what I have in the MFRs, I do show that there was a requirement by the county for Oakland Shores under the comprehensive plan, and that's with regard to what the fire flow is. I don't show anything like that for Orangewood. And in either case I have no idea whether or not the counties came to them and said, you must do this, or whether there was a requirement by the customers or how it got there.

BY MR. REILLY:

Q And you don't have any specific knowledge as to these one or two or few fire hydrants, what those fire hydrants are

actually used for, whether it's for flushing, whether it happens to be a fire hydrant that just is near the plant where the line is fairly large? You don't know the configuration of the fire hydrants in these two systems and to what extent they --

A My understanding is that the fire hydrants in those systems are there for fire, not just for flushing, but that's something, I think, Mr. Orr will be back on the stand and you can ask him.

Q And it's your testimony that if a fire flow is required and the system only has -- and should probably have a hundred fire hydrants, you said it didn't matter whether it was one fire hydrant or a hundred hydrants, a fire flow allowance should be provided?

A Yes. I'm not sure how to get around that. If the fire hydrants are there and there's a requirement for fire, I mean, I think a utility would be negligent not to provide the service.

Q But if they are not capable of providing the service because under this scenario they only have one fire hydrant, then --

A They can provide it to wherever that location is.

Q Okay. But if I'm one of these poor people that's 40 blocks down the road that's far away from this one little fire hydrant that's there and my house is burning up, what good has

that fire flow allowance that's been provided by this Commission provide to that particular customer?

A It might have helped to replenish the water in the fire trucks that come out.

Q Let me just give you a couple of hypotheticals and we'll be finished. Is it your testimony that if a jurisdiction has no fire flow requirement and a particular utility provides no fire flow protection, that this Commission should not provide any fire flow allowance in the used and useful calculation? That's my hypothetical.

A Say it again.

Q My hypothetical is, no fire flow requirement, no actual fire flow provision, should the Commission provide a fire flow allowance in the used and useful calculation?

A If there are fire hydrants that use the plant and the company asks for fire flow allowance and they're capable of providing it, then, yes, the Commission should allow it.

Q That's not my hypothetical.

A Okay.

Q My hypothetical is, there's no requirement for fire flow protection from --

A By "no requirement," you mean no governmental --

Q Correct, in that particular locality.

A Okay.

Q And the hypothetical says there is not a capability

to provide the flow that is required for fire flow, so there's neither the ability to provide it, nor the local jurisdictional requirement to provide it. In that hypothetical, should any fire flow be given --

A No.

Q -- allowance?

Okay. And the second hypothetical, we have a local requirement to provide fire flow protection, but for whatever reason, the utility has not invested the money nor provided the diameter of lines nor even the number or amount of fire hydrants to actually provide that fire flow. In that hypothetical, do you believe it's appropriate for this Commission to grant this utility a fire flow allowance in its used and useful calculation?

A I guess I'm going to still have to ask you to state it again. You've got a lot into your questions.

Q Okay. Stating it simply, fire flow requirement is being made locally, but there's not a practical ability to provide that fire flow by that system. The question is, should that utility get a fire flow allowance in its used and useful calculation?

A No. If the utility doesn't have the capability, no.

MR. REILLY: Okay. I think that concludes our questions.

COMMISSIONER DEASON: Very good. Staff, do you have

questions for this witness?

MS. GERVASI: Yes, sir. We have about two pages' worth of questions. We can break now if you'd prefer.

COMMISSIONER DEASON: Yes, that will be fine.

MS. GERVASI: Okay.

COMMISSIONER DEASON: We will take a lunch break until two o'clock.

(Lunch recess.)

COMMISSIONER DEASON: Call the hearing back to order. Staff.

MS. GERVASI: Thank you.

CROSS EXAMINATION

BY MS. GERVASI:

Q Mr. Seidman, you prepared the engineering used and useful calculations for this rate case; right?

A Yes.

Q Can you please take a look at your MFR Schedule F-5, F, as in Frank, 5, which is included within composite Exhibit 5 at Page 207 of that exhibit.

A Is it in one of your staff exhibits?

Q No. This is in the MFRs, Schedule F-5.

A What I have here with me is just the F-5s for the different systems. I can either get the actual document if you can tell me which system it is.

Q This is with respect to the Jansen system.

A Okay. I can do that.
Q And it's stamped Page 207 if that helps you.
A No, the page number doesn't help. That's just it. Okay. Okay. I have F-5 for the Jansen system.
Q Can you take a look at the particular schedule for the Jansen system and tell me what the total well pumping capacity is for this system?
A 430 gallons per minute.
Q And the firm reliable pumping capacity for this system?
A 190.
Q And the instantaneous demand for the Jansen system?
A 528 gallons per minute.
Q Would you agree then that the utility doesn't have enough well capacity or firm reliable capacity to meet that instantaneous demand?
A Well, based on the numbers the answer would be no. I guess as a practical matter, it has been sufficient.
Q And that's based on what?
A That they've met the demand.
Q Okay.
A I guess it's a problem in -- as I was talking about with -- when Mr. Reilly was questioning me. The instantaneous demand is a pretty short period of time. Whether it was met or not, we don't know. And this, of course, is not necessarily

the measured demand for the customers but a design demand.

Q Okay. During the test year, did the Jansen system or any of UIF's water systems have the instantaneous demand that you show on this Schedule F-5?

A I do not know.

Q Would you please refer, if you have it there, to a copy of Witness Redemann's testimony and prefiled exhibits. Do you have a copy of that accessible?

A Of Mr. Redemann?

Q Yes.

A I have it.

Q Thank you. Would you please refer to his prefiled Exhibit Number RPR-4.

A Yes. Okay.

Q Do you see on that schedule he has a column labeled, "Firm Reliable Capacity"?

A Yes.

Q And then the last column labeled, "Seidman's Instantaneous Demand GPM, Schedule F-5"?

A Yes, I see it.

Q Do those numbers represent your prepared numbers from the engineering calculations for this case?

A Yes.

Q If you compare the instantaneous demand column and the firm reliable capacity column in Mr. Redemann's exhibit, in

each instance would you agree that the instantaneous flow numbers are higher?

A Yes, I would agree.

Q If these instantaneous flows were actually occurring, would you expect that the utility would be having pressure problems?

A That I don't know. And again, this was something that Mr. Reilly brought up. It's because it's a short period. It may not be something that customers felt that was bad enough or long enough to cause them problems with their quality of service.

Q Are you aware of any specific pressure problems that have occurred in any of the UIF systems during the test year or up to the present time?

A No. Their service quality is very good.

Q Have you recommended to the utility to increase the water treatment plant capacity in any of these systems?

A No, I haven't.

Q Looking back again to your MFR Schedule F-5, that same schedule for the Jansen system, part of Exhibit 5, you indicate the amount of usable hydro-pneumatic storage capacity; is that right?

A Yes, I do.

Q Can you please explain the purpose of a hydro-pneumatic tank in a water system.

A It's to help the system maintain pressure within a reasonable range.

Q Would you agree for the Jansen system there's a 6,000-gallon hydro-pneumatic tank?

A Yes, that's correct.

Q And about 2,000 gallons of usable hydro-pneumatic storage capacity; right?

A That's what I've indicated, yes.

Q Would you agree then that for Jansen there are about 2,000 gallons of water immediately available or instantaneously available for use by the customers in the distribution system?

A Yes, it probably would be. Yes.

MS. GERVASI: Thank you. That's all we have.

COMMISSIONER DEASON: Commissioners?

Redirect.

MR. WHARTON: Yes.

REDIRECT EXAMINATION

BY MR. WHARTON:

Q Mr. Seidman, how many years experience do you have in utility regulation, management, and consulting?

A Nearly 40 years.

Q Have you been accepted as an expert in prior judicial or quasi-judicial water and wastewater proceedings?

A Yes.

Q Have you ever been tendered as an expert and not

accepted?

A Not in this state. One time I was -- it had to do with rate of return.

Q Have you been accepted as an expert in testimony before the Public Service Commission on these -- on categorically the same issues that you're testifying in your testimony here today?

A Yes.

Q And in those prior testimonies before the Public Service Commission, did your opinions necessarily rely on your knowledge of DEP's rules and regulations and the design considerations therein for water and wastewater systems and the manuals and accepted authorities on those same subjects?

A In the broad sense that -- of my knowledge of them and their -- and the necessity of the utilities to comply with them.

Q Mr. Reilly asked you several questions and made a remark to the extent that you were going head-to-head with Mr. Biddy in this case. In fact, on some of those issues on which you and Mr. Biddy have contrary opinions in this case, is there prefiled testimony from the staff engineer that agrees with your position?

A In this case?

Q In this case.

A With the results, yes.

Q Is it your understanding that the design rules which DEP has in place are minimum criteria that are to be applied to new systems?

A Yes, that would be my opinion.

Q And would the same thing be true of the Ten States Standards, that they are design guidelines used by DEP for approval of new systems?

A They are used by the DEP according to the rule as a basis for reviewing permits for construction.

Q Let's talk about the issue of instantaneous flows and instantaneous demand for a second. In your opinion, is DEP's design criteria for new systems necessarily the best way to calculate real world demand on systems like the small Utilities, Inc. systems that you have testified about?

A I don't know that the word "calculated" is what I would use, to evaluate. I don't think it is.

Q Do you think in this case is the -- is it -- in your opinion, is the concept of instantaneous demand a better representation than an application of the DEP criteria to what is really happening in these small systems?

A For these small systems I think it is. Yes. I think it points out something that otherwise is lost.

Q Is it a reasonable assumption that if you take something like a max hour and you then divide it by 60, that that max hour would have been achieved by 60 equal minutes, or

in fact, would that demand have fluctuated within that max hour?

A No. The demand over any period of time is -- basically is an average over that period.

Q So it may be that demand during a given one-minute period would be much greater than demand during another minute period in that max hour?

A That's correct.

Q And in these systems that don't have any storage, is it your opinion that the demand has to be met instantly by the wells?

A Yes, except for the very minor storage available through the hydro-pneumatic tank. Yes.

Q And was it that instantaneous demand that you were attempting to project and approximate by your use of the instantaneous demand formula?

A Yes. Basically I'm trying to account for that period of time between max day, max hour, and the instantaneous periods that we know flows are happening and we know have to be met directly on from the well pumps, somehow to capture that requirement and give it some weight in the used and useful analysis.

Q Is it your opinion that Mr. Redemann's suggestion that the use of max hour is appropriate is an attempt to once again come up with the most accurate approximation of what is

really occurring in that system without storage?

A I believe it is. I think we're looking at the same goal here. And often you'll see when these -- this subject is discussed even in some Commission orders where the Commission has used peak hour as a basis for evaluating demand. They've talked about the needs to meet the instantaneous demand, and therefore, they have used peak hour as a means of measuring it.

I think what's evident from that is everybody knows that peak hour is not the same as instantaneous. Yet the thought is there that we're trying to capture that higher demand that's not captured through max day or average day on a system that can't react through some type of buffer for those periods of time.

Q Is the concept of instantaneous demand one that has been under consideration by the Commission in one form or another for an extended period?

A Basically, yeah. My involvement with it and my knowledge of it with regard to the Commission goes back some ten years, when the Commission was evaluating used and useful rulemaking, trying to put together some rules to -- by which we could standardize how to evaluate used and useful in a rate proceeding. And that goes back, gosh, into the early '90s and maybe the late '80s when that kind of review was going on. There was a lot of discussion with the Commission and the staff. There was some hearings; there was workshops. There

was several versions of rules to consider, and in those there was all sorts of things that were trying to be captured. One of them was instantaneous demand. And also, when I look back on that period, there was indications in the staff that there was concern there that something had to be recognized, and maybe what they were looking at at peak day wasn't quite enough.

Q Mr. Seidman, does the fact that the Public Service Commission has decided in a few selected orders not to adopt your testimony on the concept of instantaneous demand, does that change your belief that it is still the best way to approximate the instant demand on the wells in these types of systems in this case?

A No, it doesn't change anything. And the only case I'm aware of, I believe, is the Cypress Lakes case, which was a PAA just recently heard by the Commission. That's the only time I think we've really addressed it head-on. In the PPW case that I talked about before, a case which I must indicate the Commission never ruled on with regard to used and useful because there was a question in that as to whether the plant itself could be -- whether the cost of the plant was actually supported by the record, it was a case where plant was purchased and an original cost study had not been put into the record and the Commission threw out all plant in the original order; came back at another time, considered original cost and

put it back in.

In that case -- and the staff recommendation covered the testimony that had to do with the demand on the system. That's not a Commission recognition officially, but the staff had recognized in its wording in the recommendation that instantaneous demands were what were being seen in that particular system, and in that case we used peak day -- excuse me, peak hour as a proxy.

Q Mr. Reilly asked you some questions about one of the systems where more was being sold than pumped, and I just want to make sure the record is clear. Could there be more than one explanation for why the schedules reflect that more water was sold than pumped? I think Mr. Reilly suggested that, well, doesn't that indicate that that means the well meters are faulty on the low side. Could there be other explanations for that discrepancy?

A Yes. There could be incorrect readings, records, whatever, and I think one of the cases may have involved purchases that were not properly recorded.

Q Can you -- can a development be built out as the Commission has considered that term and as you consider that term without 100 percent of the lots being sold?

A Yes.

Q And, in fact, the staff engineer's testimony in this case is consistent with that concept, isn't it?

A That's correct.

Q Okay. Mr. Reilly asked you a couple of questions about the prior determinations for Utilities, Inc. on used and useful. Have you ever looked at PSC orders that weren't contested or that involved cases in which Public Counsel did not participate as having some greater status than other PSC orders?

A No. I've just looked at the orders to see what the subject matter was.

Q And in this case you did determine that certain matters had been -- certain items had been determined to be used and useful 100 percent in the prior dockets, and you went back and made a determination that nothing had changed with regard to those particular items?

A Basically, yes. And in some of those orders, they refer to orders prior to that one where there was 100 percent determination, and they were carrying it forward from order to order from several orders. And there were indications that there had been no additional capacity. So there was no change, no additional capacity requirements. Nothing else had really happened. No facilities were added so that the outcome was the same.

Q Mr. Reilly asked you several questions about the utilization in this proceeding and in your methodology of DEP sizing criteria. Do you recall that?

A Yes.

Q And that's consistent with Mr. Biddy's prefiled testimony, isn't it?

A That's correct, yes.

Q Do you know whether DEP takes into account in that sizing criteria economics, for instance?

A Not to my knowledge.

Q What about economies of scale?

A Not to my knowledge.

Q Is there a consideration, to your knowledge, by DEP of used and useful in terms of sizing criteria?

A Definitely not.

Q Is there a consideration by DEP in that sizing criteria of what the Public Service Commission statute says about concepts like margin reserve or used and useful?

A Not to my knowledge.

Q Have you reviewed other Public Service Commission orders in which Mr. Biddy has suggested that DEP sizing criteria should be applied by the Commission in the used and useful formula or an issue such as I/I when that testimony has been rejected by the Commission?

A Yes, I've reviewed most of the orders. I don't recall them all, but I have reviewed them.

Q Mr. Seidman, you indicated that your opinion that these systems were built out was your subjective opinion.

A With regard to the collection and distribution systems.

Q In that case, do you mean that it is your subjective opinion within the context of your expertise?

A Yes.

Q Let me give you a hypothetical on the issue of fire flow. Do you recall that Mr. Reilly gave you a hypothetical on that issue?

A Yeah.

Q I want you to assume that there is an existing utility that is already in place. A developer comes and develops a certain portion of that utility, and the development order requires that he puts in a certain number of hydrants. The hydrants are installed on the utility. The hydrants are in service on the utility systems. The hydrants are tested by local government when they are put into place, and the flow through the hydrants is deemed to be adequate. In that case, do you believe it is appropriate for the Commission to give that utility a fire flow allowance?

A Yes.

MR. WHARTON: That's all we have.

COMMISSIONER DEASON: Exhibits. I believe Exhibit 7 is Mr. Seidman's prefiled exhibits.

MR. WHARTON: We would like to move them.

COMMISSIONER DEASON: Without objection -- hearing no

objection, show that Exhibit 7 is admitted.

(Exhibit 7 admitted into the record.)

MR. REILLY: Is it permissible for recross, one question?

COMMISSIONER DEASON: Just wait until Mr. Seidman takes the stand on rebuttal.

MR. REILLY: Okay.

COMMISSIONER DEASON: Thank you, Mr. Seidman. You will be taking the stand again, I think.

(Witness temporarily excused.)

COMMISSIONER DEASON: Okay. Mr. Friedman, your next witness.

MR. FRIEDMAN: Yes, I guess this is the stage where we finished our direct witnesses and we wanted to -- although we're moving along pretty quickly, I still don't want to risk Ms. Ahern's schedule. If we could go ahead and take her rebuttal testimony at this time, if that'd be all right.

COMMISSIONER DEASON: Please proceed.

MR. FRIEDMAN: Okay. Thank you.

PAULINE M. AHERN

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

DIRECT EXAMINATION

BY MR. FRIEDMAN:

Q Would you please state your name.

A My name is Pauline M. Ahern, A-H-E-R-N.
Q And were you sworn earlier today when everybody else was?
A Yes, I was.
Q And have you prefiled rebuttal testimony in this proceeding?
A Yes, I have.
Q And are there any changes or corrections that you have at this time to your testimony?
A No, there are none.
Q So if I ask you the questions in your prefiled testimony, you would answer the same as in that testimony?
A Yes, I would.
Q And do you have any exhibits with your testimony?
A Yes, I do. The first exhibit consists of Appendix A which are my professional qualifications, and the second exhibit consists of one schedule with 15 pages.
MR. FRIEDMAN: I would like those marked, Commissioner. Do you want to do them as a composite or --
COMMISSIONER DEASON: We can do that as a composite, and it will be composite Exhibit 8.
(Exhibit 8 marked for identification.)
MR. FRIEDMAN: And I would like to ask that Ms. Ahern's testimony be inserted in the record as read.
COMMISSIONER DEASON: Without objection, it shall be

so inserted.

MR. FRIEDMAN: Thank you.

REBUTTAL TESTIMONY OF PAULINE AHERN

I. INTRODUCTION

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

A. My name is Pauline M. Ahern and I am a Vice President of AUS Consultants - Utility Services. My business address is 155 Gaither Drive, P.O. Box 1050, Moorestown, New Jersey 08057.

Q. Please summarize your educational background and professional experience.

A. I am a graduate of Clark University, Worcester, MA, where I received a Bachelor of Arts degree with honors in Economics in 1973. In 1991, I received a Master of Business Administration with high honors from Rutgers University.

In June 1988, I joined AUS Consultants - Utility Services as a Financial Analyst and am now a Vice President. I am responsible for the preparation of all fair rate of return and capital structure exhibits for the principals of AUS Consultants - Utility Services, including myself. I have offered expert testimony on behalf of investor-owned utilities before fifteen state regulatory commissions. The details of these appearances, as well as details of my educational background, are shown in Exhibit (PMA-1) _____ supplementing this testimony.

I am also the Publisher of C. A. Turner Utility Reports, responsible for the production, publication, distribution and marketing of these reports.

C. A. Turner Utility Reports provides financial data and related ratios covering approximately 150 public utility companies on a monthly, quarterly, and annual basis including electric, combination gas and electric, gas distribution, gas transmission, telephone, water and international utilities to about 1,000 subscribers, which include utilities, state utility commissions, federal agencies, individuals, brokerage firms, attorneys and public and collegiate libraries.

I also calculate and maintain the A.G.A. Index under contract with the American Gas Association (A.G.A.). The A.G.A. Index is a market capitalization weighted index of the common stocks of about 70 corporate members of the A.G.A.

I have co-authored an article with Frank J. Hanley, President, AUS Consultants - Utility Services entitled "Comparable Earnings: New Life for an Old Precept" which was published in the American Gas Association's Financial Quarterly Review, Summer 1994. I also assisted in the preparation of an article authored by Frank J. Hanley and A. Gerald Harris entitled "Does Diversification Increase the Cost of Equity Capital?" published in the July 15, 1991 issue of Public Utilities Fortnightly.

I am a member of the Society of Utility and Regulatory Financial Analysts, formerly the National Society of Rate of Return Analysts. In 1992, I was awarded the professional designation "Certified Rate of

Return Analyst" (CRRA) by the National Society of Rate of Return Analysts. This designation is based upon education, experience and the successful completion of a comprehensive written examination.

I am an associate member of the National Association of Water Companies and a member of the Energy Association of Pennsylvania, formerly the Pennsylvania Gas Association.

Q. What is the purpose of your testimony?

A. The purpose is to provide rebuttal testimony on behalf of Utilities, Inc. of Florida (UIF or the Company) in response to the Office of Public Counsel (OPC) Witness Mr. Mark A. Cicchetti regarding his recommendation that the 50 basis points small utility premium adjustment to the leverage formula which recognizes the risk of small water and wastewater systems allowed in Order No. PSC-02-0898-PAA-WS dated July 5, 2002 and Order No. PSC-01-2514-FOF-WS be disallowed in this proceeding. My testimony will show that not only should Mr. Cicchetti's recommendation be rejected, but also that the 50 basis points small utility premium is very conservative relative to empirical data which supports a much larger small company premium.

Q. Have you prepared an exhibit which supports your recommended common equity cost rate?

A. Yes, I have. It has been marked for identification as Exhibit (PMA-2) _____ and consists of 1 schedule.

II. SUMMARY

Q. Please comment upon OPC Witness Cicchetti's recommendation that "the 50 basis point premium for small utilities should not be applied to Utilities, Inc. of Florida" (see page 3, lines 23-24 of OPC Witness Cicchetti's direct testimony.)

A. Although OPC Witness Cicchetti is correct when he states that UIF "is one of the largest water and wastewater utilities in Florida" (page 3, line 25 – page 4, line 1 of OPC Witness Cicchetti's direct testimony), the PSC was clear in Order No. PSC-02-0898-PAA-WS that the 50 basis points small utility premium should be applied to <u>all</u> water and wastewater utilities in Florida when it stated:

> Based on the foregoing, it is . . .
> ORDERED that the leverage formula methodology approved in this Order shall be applied to all water and wastewater utilities that currently have an authorized return on equity.

Moreover, the proper comparison to make when assessing the applicability of a small utility premium to UIF is UIF's size vis-à-vis the nine natural gas utilities which comprise the leverage formula's Natural Gas Index and not the other water and wastewater utilities in Florida. The return on equity which forms the basis of the leverage formula and to which the 40 basis points bond yield differential, the 50 basis points private-placement premium and the 50 basis points small-utility risk premium are added is based upon the market data of the much larger (and, therefore, less business risky based on size) nine natural gas

utilities. Because size is a factor which affects business risk, the size differential between UIF and the nine natural gas utilities must be reflected in the allowed common equity cost rate for UIF. All else equal, size has a bearing on risk.

Q. Please explain why size has a bearing on risk.

A. Smaller companies are less capable of coping with significant events which affect sales, revenues and earnings.

The loss of revenues from a few larger customers, for example, would have a greater effect on a small company than on a much larger company with a larger customer base. Because the Company is the regulated utility to whose rate base the Florida Public Service Commission's (PSC) ultimately allowed overall cost of capital and fair rate of return will be applied, the relevant risk reflected in the cost of capital must be that of the Company, including the impact of its small size on common equity cost rate. Size is an important factor which affects common equity cost rate, and the Company is significantly smaller than the average company in the Natural Gas Utility Index whose market data is utilized in the leverage formula based upon either total revenues or market capitalization.

Table 1

	2001 Total Revenues(1) ($ millions)	Times Greater than The Company	Market Capitalization(1) ($ Millions)	Times Greater than the Company
Nine Natural Gas Utilities In the Leverage Formula Natural Gas Index	$1,219.428	598.1x	$957.949	109.7x
Utilities, Inc. of Florida	2.039		8.734	

(1) From Schedule 1, page 3 of Exhibit (PMA-2) _____.

I have also made a study of the market capitalization of the nine natural gas utilities and UIF. The results are shown on page 3 of Schedule 1 of Exhibit (PMA-2) _____ which summarizes the market capitalizations as of December 31, 2001.

UIF's common stock is not publicly traded. Consequently, I have assumed that if it were publicly traded, its common shares would be selling at the same market-to-book ratio as the nine natural gas utilities, or 181.7% at December 31, 2001. Hence, the Company's market capitalization is estimated at $8.734 million as of December 31, 2001. In contrast, the market capitalization of the average natural gas utility utilized in the leverage formula was $957.949 million on December 31, 2001, or 109.7 times larger than the Company's estimated market capitalization. It is conventional wisdom, supported by actual returns over time, and a general premise contained in basic finance textbooks, that smaller companies tend to be more risky causing investors to expect

greater returns as compensation for that risk.

Q. Does the financial literature affirm a relationship between size and common equity cost rate?

A. Yes. Brigham[1] states:

> A number of researchers have observed that portfolios of small-firms have earned consistently higher average returns than those of large-firms stocks; this is called "small-firm effect." On the surface, it would seem to be advantageous to the small firms to provide average returns in a stock market that are higher than those of larger firms. In reality, it is bad news for the small firm; what *the small-firm effect means is that the capital market demands higher returns on stocks of small firms than on otherwise similar stocks of the large firms.* (italics added)

Q. What is the small size premium indicated by comparison of the size of UIF relative to the new natural gas utilities used in the leverage formula.

A. It is between 424 and 429 basis points, or 4.24% to 4.29%. This premium is based upon data contained in Chapter 7 entitled, "Firm Size and Return" from Ibbotson Associates' Stocks, Bonds, Bills and Inflation-Valuation Edition 2002 Yearbook. The determinations are based on the size premiums for decile portfolios of New York Stock Exchange (NYSE), American Stock Exchange (AMEX) and NASDAQ listed companies for the 1926-2001 period and related data shown on Schedule 1 of Exhibit (PMA-2) _____. The size premium for the 5th decile in which the nine natural gas utilities fall has been compared to the

[1] Eugene F. Brigham, Fundamentals of Financial Management, Fifth Edition, The Dryden Press, 1989, p. 623.

size premium for the 10th decile in which UIF falls, if its stock were traded and sold at the December 31, 2001 average market/book ratio of 181.7% experienced by the nine natural gas utilities. As shown on page 1 of Schedule 1 of Exhibit (PMA-2) _____, the size premium spread between the nine natural gas utilities and UIF is 4.29% based upon S&P 500 benchmarks and 4.24% based upon NYSE benchmarks. The 50 basis point leverage formula small size premium is an extremely conservatively reasonable estimate of the magnitude of an adjustment needed to reflect the business risk differential between UIF and the nine natural gas utilities. Page 2 contains notes relative to page 1. Page 3 contains data in support of page 1 while pages 4 through 15 of Schedule 1 contain relevant information from the Ibbotson Associates' Valuation Edition 2002 Yearbook discussed previously.

In view of all the foregoing, the small size premium included in the leverage formula should not be eliminated by the PSC in determining the allowed return on equity for UIF. The 50 basis point small size premium is both conservatively reasonable and consistent with the PSC's Orders PSC-02-0898-PAA-WS and PSC-01-2514-FOF-WS.

Q. **On page 4, lines 11-13 of his direct testimony, OPC Witness Cicchetti states that the "bond yield differential of 40 basis points [is] to compensate for the fact that Florida water and wastewater utilities are smaller than the companies used in the indexes to calculate the**

cost of equity." Please comment.

A. Mr. Cicchetti is incorrect in characterizing the 40 basis points bond yield differential premium as compensation for the size, and hence size related risk, differential between the nine natural gas utilities used in the index used to calculate the base cost of equity in the leverage formula and the water and wastewater utilities in Florida. Referring to the 40 basis points bond yield differential, Order PSC-02-0898-PAA-WS clearly states:

> A bond yield differential of 40 basis points to reflect the difference in yields between an A/A2 rated bond, which is the average bond rating for the NG utility index, and BBB-/Baa3 rated bond. Florida WAW utilities are assumed to be comparable to WAW companies with the lowest investment grade bond rating, which is Baa3. This adjustment compensates for the difference between the credit quality of "A" rated debt and the credit quality of the minimum investment grade rating.

In addition, Order PSC-01-2514-FOF-WS makes a clear distinction between the three adjustments to the leverage formula when it states:

> Moreover, we find that an adjustment for a bond yield differential and a private placement premium is appropriate. This would be in agreement with all the witnesses' testimonies. As for the small size premium, we find that an adjustment is justified in light of the new information presented in witness Lester's testimony concerning the size of Florida's WAW utilities.

Note that OPC Witness Cicchetti was a witness in that proceeding and therefore, is included in the PSC's reference to the bond yield differential being "in agreement with all the witnesses' testimonies."

It is clear from Order Nos. PSC-01-2514-FOF-WS and PSC-02-0898-PAA-WS, that the 40 basis points bond yield adjustment is separate and

distinct from the small size premium. Moreover, as previously discussed it is clear from these orders that the leverage formula and all three adjustments be applied to all water and wastewater utilities in Florida. Hence, it is imperative that the 50 basis points small utility premium be included in the cost of common equity resulting from the leverage formula when they PSC determines the allowable rate of return on common equity applicable to UIF.

Q. Does that conclude your direct testimony?

A. Yes.

BY MR. FRIEDMAN:

Q Ms. Ahern, would you briefly summarize your prefiled testimony?

A Certainly. My testimony recommends that this Commission reject OPC's recommendation that the 50 basis point small-utility premium, which is included in the leverage formula methodology, be disallowed for UIF. My testimony demonstrates that this 50 basis point premium is very conservative in light of empirical data which supports a small size premium of approximately 425 basis points.

My testimony also shows that in Order Number PSC-02-0898-PAA-WS, which was the latest order I had in my possession at the time, states that the leverage formula methodology is to be applied to all water and wastewater utilities in Florida and makes no size distinction among them.

My testimony also cites supporting academic literature; namely, a professor, Eugene F. Brigham, who states, and I quote, capital markets demand higher returns on the stocks of small firms than on otherwise similar stocks of larger firms, close quote. Moreover, I maintain that the proper size comparison with UIF in assessing its risk is with the size of the companies that comprise the natural gas index used in the leverage formula and not other water and wastewater utilities in Florida. These gas companies are nearly 600 times the size of UIF based on revenues and more than 100 times

larger based on estimated market capitalization. That supports the notion that the 50 basis point premium is very conservative, reasonable, and should not be disallowed in setting the rate of return for UIF. And that concludes my summary. Thank you.

MR. FRIEDMAN: That's all we have.

COMMISSIONER DEASON: Mr. Burgess.

MR. BURGESS: We have no questions.

COMMISSIONER DEASON: Staff.

MS. GERVASI: We have two questions.

CROSS EXAMINATION

BY MS. GERVASI:

Q Ms. Ahern, if UIF obtained financing through privately placed bonds, do you believe there would be a significant size and liquidity premium because it's a small company?

A Yes, I do.

Q Is it correct that bond rating agencies consider small size to be a negative business risk factor?

A I would say that they consider small size to be -- I wouldn't classify it as a negative business risk factor. It puts pressure on the credit quality and the ability to, you know, meet bond indentures and to meet coverage target ratios. It is also only one factor which the rating agencies consider in making a bond rating assessment.

MS. GERVASI: Thank you. That's all we have.
COMMISSIONER DEASON: Redirect.
MR. FRIEDMAN: None.
COMMISSIONER DEASON: Exhibits. Exhibit 8.
MR. FRIEDMAN: Yes, we would move Ms. Ahern's exhibits.
COMMISSIONER DEASON: Without objection, show that Exhibit 8 is admitted.
(Exhibit 8 admitted into the record.)
COMMISSIONER DEASON: Thank you.
THE WITNESS: Thank you.
MR. FRIEDMAN: And she may be excused then?
COMMISSIONER DEASON: Yes.
MR. FRIEDMAN: Thank you.
(Witness excused.)
COMMISSIONER DEASON: Mr. Reilly, I believe the next scheduled witness is yours.
MR. FRIEDMAN: Commissioner Deason, I do have one other thing that the staff brought to my attention that they wanted us to take care of, and that is that we had filed the original of the affidavit of mailing of the notice of both the customer meetings and of this agenda conference. And the staff thought it would be appropriate to introduce it into evidence as an exhibit. I have no preference on that, but obviously the original is with the clerk. I do have a copy of it if you'd

like to give it an exhibit number.

COMMISSIONER DEASON: And this is just, what, proof of publication of --

MR. FRIEDMAN: Proof of notice.

COMMISSIONER DEASON: Proof of notice. Okay. If you will just give the copy that you have to the court reporter. I understand that the original is in the clerk's office, but if you'll give that copy to the court reporter, we will identify that as Exhibit 9.

MR. FRIEDMAN: Okay. Thank you very much.

(Exhibit 9 marked for identification.)

COMMISSIONER DEASON: Any objection to Exhibit 9? Show that Exhibit 9 is admitted.

(Exhibit 9 admitted into the record.)

COMMISSIONER DEASON: Okay. Mr. Reilly.

TED L. BIDDY

was called as a witness on behalf of the Office of Public Counsel and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. REILLY:

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

A My name is Ted Biddy, B-I-D-D-Y. The address is 2308 Clara Kee Boulevard, Tallahassee 32303.

Q Were you previously sworn this morning?

A Yes.

Q Did you prefile direct testimony including attached exhibits in this docket?

A I did.

Q If I were to ask you the same questions posed in your prefiled direct testimony, would your answers be the same as those outlined in your testimony dated June 2nd, 2003?

A I have three small corrections. On Page 15, Line 9 of my testimony, I'd like to change the cite to "Chapter 62-555" rather than "62-500," just a typographical error.

The same thing is true in my Exhibit TLB-2 at the second page, seventh line from the bottom of the page. The citation should be changed to "Chapter 62-555, Florida Administrative Code."

In addition, I have one revision to my Exhibit TLB-6 on computation of excessive I/I, and it volumes the Ravenna Park/Lincoln Heights system in Seminole County where I revised the allowable I/I and the results of that I/I after I received sewer quantity information that I did not have when I prepared my testimony. And that's all the changes.

MR. REILLY: If the pleases the Commission, we do have for the Commission, the court reporter, as well as parties, a revised Exhibit TLB-6 which provides that calculation difference on Ravenna Park/Lincoln systems. Is that something I can hand out at this time, or what's your

pleasure?

COMMISSIONER DEASON: Yes, please hand that out, subject to any objection for updated information.

MR. WHARTON: Well, I guess the question that is begged, Commissioner, is whether you want me to do that when they admit it or now? And the basis of my objection is not that this is being done at the 11th hour and 59th minute and 59th second, it's something else.

COMMISSIONER DEASON: We will -- seriously, you have an objection to this exhibit?

MR. WHARTON: Yes.

COMMISSIONER DEASON: Okay. We might as well just go ahead and deal with that now.

MR. WHARTON: Okay. Mr. Biddy revealed in his deposition that these recalculations are being done because he did not have the information the staff had received but which had not come to his attention. He said it was his understanding the staff had the information in a discovery response before he filed his testimony. He's not sure whether or not OPC had it, and that he thinks it just fell through the cracks. In other words, I think this information was out there.

It sounds to me like the discovery gets copied to all the lawyers, and obviously I'll withdraw my objection if there's some demonstration that's not the case, but that the

information didn't get passed to Mr. Biddy, and so we didn't have it when we did our rebuttal --

COMMISSIONER DEASON: So you're not objecting to the accuracy of the information, just the timing of it, or the fact that this was not included earlier than today?

MR. WHARTON: That is the real basis of my objection, that it was not included earlier even though the information was available. It was discovered through the fact that it had inadvertently not made available on no fault of Utilities, Inc.

COMMISSIONER DEASON: Sounds like the shoe's on the other foot. There's been an objection, Mr. Reilly. You may respond.

MR. REILLY: Mr. Biddy made his I/I allowances based on his 10 percent assumption because he did not have the diameter -- you know, specific information on the configuration of the sewer system. He was criticized as it relates to this one system in the company's rebuttal testimony because they said it was available, this information was available on this particular system, and Mr. Biddy did not do a correct calculation. So, frankly, this amendment to Exhibit TLB is in response to the company's criticism of his testimony because of not using this information. So he felt it proper to update his calculation based on this information. And that's essentially what's happened here in TLB-6.

COMMISSIONER DEASON: We're going to proceed with

this witness and see how the cross-examination goes. I'll be particularly interested if there are any questions about this particular exhibit, and then I will reserve ruling on the objection.

You may proceed with your witness.

BY MR. REILLY:

Q So, Mr. Biddy, your answers would be the same with the exception of those corrections you've made as to the questions posed?

A Yes.

Q And you would continue to endorse and support your exhibits which are attached to your prefiled testimony again with the exception of this one change?

A That's correct, yes.

COMMISSIONER DEASON: Mr. Reilly, could we have the witness specifically identify the change to TLB-6?

BY MR. REILLY:

Q Would you please do that.

A Yes. It's Item Number 3, Ravenna Park/Lincoln systems, Seminole County (as revised). I revised this system, the calculation of excessive I/I, based on the rule of 200 gallons per day per inch of diameter per mile of sewer now that I had the sewer quantities, which I did not have before. Previously I had said, okay, since I don't have these quantities, I'm going to take an approximate 10 percent and say

that's the limit of the allowable I/I, but that's not really the way you do it. You're supposed to have quantity of sewer and then test it based on a rule.

This particular rule is the DEP rule for new sewers: 200 gallons per inch of diameter per mile of sewer. I actually came out with more I/I this way than the staff did with their 500 gallon per minute rule. So the adjustment that staff proposes is about $45,000 based on a 500 gallon per minute rule. We only computed 30,000 based on a 10 percent rule. And all my other calculations of excessive I/I are on the 10 percent rule which shows that that is greatly in favor of the utility, but I simply did not have the quantities, sewer quantities to compute them for the other system. So that is the change that I made to this system because I did have the correct sewer quantities.

COMMISSIONER DEASON: You may proceed, Mr. Reilly.

MR. REILLY: At this time I would move that Mr. Biddy's prefiled testimony be inserted into the record as though read, and that his exhibits be assigned a composite exhibit number. I guess Number 9.

COMMISSIONER DEASON: Okay. Without objection, the prefiled testimony is inserted in the record.

Mr. Reilly, just for clarity in the record, I'm going to assign a composite exhibit number to all of the prefiled exhibits TLB-1 through 8, and that will be composite

Exhibit 10. The revised Exhibit TLB-6 will be identified as a separate exhibit, and that will be Exhibit 11.

(Exhibits 10 and 11 marked for identification.)

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is Ted L. Biddy. My business address is 2308 Clara Kee Boulevard, Tallahassee, Florida 32303.

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

A. I am self-employed as a professional engineer and land surveyor.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE?

A. I graduated from the Georgia Institute of Technology with a B.S. degree in Civil Engineering in 1963. I am a registered professional engineer and land surveyor in Florida, Georgia, Mississippi and several other states. I was the vice president of Baskerville-Donovan, Inc. (BDI) and the regional manager of their Tallahassee Office from April 1991 until February 1998. I left the employment of BDI on September 30, 1998. Before joining BDI in 1991, I had operated my own civil engineering firm for 21 years. My areas of expertise include civil engineering, structural engineering, sanitary engineering, soils and foundation engineering and precise surveying. During my career, I have designed and supervised the master planning, design and construction of thousands of residential, commercial and industrial properties. My work has included: water and wastewater facility design; roadway design; parking lot design; stormwater facilities design; structural design; land surveys; and environmental permitting.

I have served as the principal and chief designer for numerous utility projects. Among my major water and wastewater facilities designs have been a 2,000 acre development in Lake County, FL; a 1,200 acre development in Ocean Springs, MS; a 4-mile water distribution system for Talquin Electric Cooperative, Inc. and a 320-lot subdivision in Leon County, FL. As senior project manager while employed by Baskerville-Donovan, my projects included the complete refurbishment of the water supply and distribution system for the City of Apalachicola; the complete refurbishment of the wastewater collection system and treatment

plant for the City of Apalachicola; water and wastewater system improvements at Carrabelle; water supply and several distribution systems for developments on St. George Island; water and wastewater systems at correctional facilities for the Florida Department of Corrections; and numerous smaller water and wastewater projects.

After leaving the Baskerville-Donovan firm in 1998, I again entered private practice offering my services to the public in the disciplines of Civil, Structural & Forensic Engineering. A resume detailing my background and experience is attached hereto as Exhibit TLB – 1.

Q. WHAT ARE YOUR PROFESSIONAL AFFILIATIONS?

A. I am a member of the Florida Engineering Society, National Society of Professional Engineers, Florida Institute of Consulting Engineers, American Consulting Engineers Council and the American College of Forensic Examiners.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE A STATE OR FEDERAL COURT AS AN ENGINEERING EXPERT WITNESS?

A. Yes, I have had numerous court appearances as an expert witness for cases involving roadways, utilities, drainage, stormwater, water and wastewater facilities designs.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION (PSC OR COMMISSION) FOR USED AND USEFUL ANALYSIS AND OTHER ENGINEERING ISSUES?

A. Yes, I have testified before the PSC for Docket Nos. 940109-WU, 950495-WS, 950387-SU, 951056-WS, 950387-SU, 960329-WS, 960545-WS, 971065-SU, 991643-SU, 991437-WU and 010503-WU on various engineering issues, water quality issues and used and useful analyses.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to offer testimony on the twenty-two systems included in this

case and whether the plant in service amounts shown by Utilities, Inc of Florida (Utilities, Inc. or the Utility) is reasonable and matches the actual physical plant items existing at the twenty-two systems. I will also provide testimony on the correct and appropriate rationale for calculating used and useful percentages for each system (Exhibit TLB-2) and furnish correct used and useful percentage calculations (Exhibit TLB-3).

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

A. I have studied all of the PSC filings by the Utility, including the Minimum Filing Requirements and the direct testimonies and exhibits of the Utility's Engineer Frank Seidman; Accountant Steven Lubertozzi; and Vice-President Donald Rasmussen.

I obtained and studied the Utilities annual reports for 1997, 1998, 1999, 2000 and 2001. I also visited the Orlando and Tampa Offices of the FDEP and copied documents from the Utility systems' files including permits, sanitary reports and other documents of interest. I also received and studied copies of the Utility's responses to many interrogatories and production of documents requests.

I made an inspection trip to Marion, Pinellas, Pasco and Seminole Counties and personally inspected eight of the Utility's larger water systems and four wastewater systems.

I also obtained schedules from the Utility for each system showing the claimed plant in service for each of the 22 systems. These documents were analyzed in detail in comparison to the actual physical facilities existing at each plant site.

I also analyzed the system maps of each system in relation to the number of connected customers and vacant lots and the existence or not of fire flow capacities. In some instances, the Utility furnished corrected and revised system maps after I and the Commission staff

questioned some of the maps.

From the data furnished by the Utility, I analyzed each water system to determine if excessive unaccounted for water had been experienced and analyzed each wastewater system for the presence of excessive inflow and infiltration.

From the data obtained from the Utility and the analyses I performed, I then calculated used and useful percentages for each system.

I also researched prior PSC cases cited by the Utility as supporting the rationale of calculating used and useful percentages using instantaneous flows to see if the PSC had ever allowed such a calculation rationale.

Finally, I prepared the exhibits to my testimony that are attached hereto.

Q. PLEASE DISCUSS YOUR REVIEW AND STUDY OF THE LAST FIVE YEARS ANNUAL REPORTS OF THE UTILITY.

A. In past cases I have been able to determine the improvements in individual systems over the years and to compare the claimed improvements over the last 5 years to actual plant in service as verified by my field inspections. However, in some of the past years, the Utility's annual reports had some individual systems combined. Therefore, it was necessary to request that the Utility furnish a schedule of Plant in Service for each system for the past five years.

I was able to determine a great deal of information from the Utility's 2001 annual report since this calendar year report matched the test year for this rate case and individual system data was furnished in this report. As such, the data reported to the PSC in the annual report of 2001 should essentially match and supplement the test year data as reported in the Minimum Filing Requirements (MFRs).

From the 2001 annual report, I was able to determine the percentages of unaccounted for water in each water system as well as identify which wastewater systems could have excessive

inflow and infiltration in their systems. The annual report also gives the size and capacities of wells and treatment plants, flow records for the 5 year period and average usage per equivalent residential connection (ERC). One can also determine the growth rate of the various systems from the reports.

Q. WHAT IS THE ISSUE CONCERNING PLANT IN SERVICE FOR THE 22 SYSTEMS IN THIS CASE?

A. I routinely check each utility system I investigate for physical presence in the field of major components claimed in plant in service by the Utility. In this case, I generally verified all the water system components for the 17 water systems but have serious questions concerning three out of the five wastewater systems.

Q. WHAT ARE YOUR QUESTIONS CONCERNING THE PLANT IN SERVICE AMOUNTS CLAIMED BY THE UTILITY FOR THE THREE WASTEWATER SYSTEMS?

A. The three wastewater systems in question are the Ravenna Park and the Weathersfield systems in Seminole County and the Summertree system in Pasco County, each of which pump their wastewater to the City of Sanford, the City of Altamonte Springs and Pasco County respectively for treatment and disposal. Since the MFR Schedules A did not contain the detailed breakdown of wastewater plant in service for each individual system, the detailed schedules for wastewater plant in service for the 5 individual wastewater systems were obtained from the Utility by discovery.

The schedules for wastewater plant in service for each of the three systems in question still contain large amounts for treatment plant and disposal equipment. Furthermore, Schedule A-7 of the MFRs shows zero amounts for Non-Used & Useful Plant. Amounts still shown in wastewater plant in service for such items as treatment plant, sewer lagoons, disposal

equipment, buildings, structures and land total $392,822 at Ravenna Park; $149,237 at Weathersfield and $254,432 at Summertree . These three amounts total $796,491.

It appears obvious to me that the amounts shown for these treatment plant related facilities should have been removed by the Utility from plant in service or else shown as 100% Non-Used and Useful. Obviously, these items are no longer in service and are providing no benefit at all to the ratepayers.

I posed the question by interrogatory to the Utility, "Should not all of these facilities related to wastewater treatment now be removed from plant in service or alternatively that these facilities should be considered 0% used and useful?" The Utility's response to the interrogatory question for Ravenna Park and Weathersfield was, "No, the treatment plant, sewer lagoon, buildings and structures should be treated as any other asset that has a depreciable base." The Utility's response to the question for Summertree was, "Per the Utility's plant in service accounts, no plant remains in the sewer plant account for year ended 2001."

Unless there is some accounting magic that I am not familiar with, the Utility is wrong in this matter and has overstated their wastewater plant in service by at least $796,491. I attach hereto, as Exhibit TLB-5, a spreadsheet analysis of plant in service amounts for all water and wastewater systems in this case based on the schedules furnished to me by the Utility for each system. I also attach to Exhibit TLB-5, the individual schedules of plant in service for 2001 as furnished by the Utility for the three wastewater systems in question.

Q. WHAT DID YOUR ANALYSES REVEAL CONCERNING UNACCOUNTED FOR WATER?

A. I analyzed the flow records for each of the 17 water systems by subtracting the Total Water Sold" and other permitted uses such as fire flows, line flushing, etc. from the "Total Water

Pumped" and dividing this difference by the "Total Water Pumped". This value yields the total percentage for unaccounted for water in each system. These calculations revealed that 10 out of the 17 water systems had unaccounted for water during the test year in excess of 10% with one as high as 22%. Historically, of course, unaccounted for water in excess of 10% has been considered by the Commission to be excessive and appropriate to be deducted from the "demand" when calculating the used and useful percentages for a system. The excessive unaccounted for water was deducted from the demand in all of my used and useful calculations contained in Exhibit TLB-3. My calculations of unaccounted for water are included herein as Exhibit TLB-4.

In the MFRs, the Utility shows "Acceptable Unaccounted for Water" as 12.5%. While this percentage may be the Utility's acceptable amount of unaccounted for water, the historical policy of the Commission is a limit of 10% which I held to in my calculations.

Q. WHAT DID YOUR ANALYSES REVEAL CONCERNING EXCESSIVE INFLOW AND INFILTRATION (I/I) IN THE FIVE WASTEWATER SYSTEMS IN THIS CASE?

A. I analyzed each of the five wastewater systems for evidence of I/I. The first test that I applied was to subtract 80 percent of the total water sold from the total amount of wastewater treated. The value obtained was then divided by the total wastewater treated to obtain a percentage that is the approximate I/I. (The 80 percent of total water sold is approximately the amount of water that is returned to the system in the form of wastewater.)

I found that 4 of the 5 wastewater systems had approximate I/I percentages considerably in excess of 10% which is about the limit of I/I that should be allowable. Only the Wis-Bar system was found to have I/I less than 10%.

The Summertree system was found to have 25.62% I/I; the Ravenna Park/Lincoln Heights

system was found to have 21.47% I/I; the Weathersfield system was found to have 11.23% I/I; and the Golden Hill/Crownwood system was found to have 11.43% I/I.

Normally, I would proceed to an analysis of the collection lines themselves to determine the amount of I/I per inch of sewer diameter per mile of sewer and than compare these amounts to accepted allowable criteria. However, in this case, the Utility did not furnish sizes of collection mains or reasonable maps to determine the quantity of sewer lengths. Therefore, in the absence of this information, I considered all I/I above 10% as being excessive.

The calculations in Exhibit TLB-6 show the excessive I/I percentages. However, since 3 of these 4 systems with excessive I/I have no wastewater treatment plant for applying the excessive I/I to the individual treatment plants, I have made the statement and my conclusion is that these excessive I/I percentages should be applied by the accountants to the operational cost of pumping the wastewater to others for treatment and to the cost of purchased treatment. This method of accounting for the excessive I/I seems reasonable.

Q. HOW DID YOU APPLY THE STATUTORY 5 YEARS GROWTH IN YOUR USED AND USEFUL CALCULATIONS?

A. Most of the systems have very small average percentage growths except Summertree in Pasco County and Golden Hills in Marion county, both of which have an annual growth rate of about 3%. Regardless of the small increases in many of the systems, I applied the 5 year growth factor per the statute and the Commission's prior policy of strict consideration of the 5 year rule. In similar fashion, I also applied the negative growth rates of three of the water systems and one wastewater system for the 5 year period. The statutory rule must apply both ways to have any meaning and one's opinion of the statute has no bearing on its applicability.

I used the growth factors as furnished by the Utility in the MFRs or discovery data. The 5 years growth factor is of course applied to the "demand" in the numerator of used and useful

formulas.

Q. HOW DID YOU TREAT FIRE FLOW IN YOUR USED AND USEFUL CALCULATIONS?

A. Fire Flow was recognized where fire flow was actually furnished. If fire flow is actually furnished, I added the fire flow to the "demand" in the numerator of used and useful calculations. Through discovery, I obtained from the Utility the fire flow test data for all the systems where fire flow was claimed. I did not include fire flow in systems where only a small portion of the service area was furnished fire flow with the majority of the service area being composed of small water mains with no fire hydrants. The fire flow test data as furnished by the Utility through Discovery is attached as Exhibit TLB-7.

Q. WILL YOU NOW ADDRESS THE USED AND USEFUL ISSUES AND THE RATIONALE THAT THE UTILITY USED IN ITS CALCULATIONS?

A. Yes I will.

Q. HOW DID THE UTILITY CALCULATE THE USED AND USEFUL PERCENTAGES FOR THE WATER SUPPLY, PUMPING, TREATMENT AND STORAGE FACILITIES AND DO YOU AGREE WITH THE RATIONALE?

A. The Utility's engineer, Mr. Frank Seidman proposed a novel rationale for these used and useful (U/U) calculations in his testimony and the F schedules of the MFRs he prepared. For most systems he proposes using a demand in the numerator of the U/U formula based on an instantaneous demand that he derives from a table of instantaneous demands charted for various numbers of residences served. The table that Mr. Seidman attaches to his calculations is labeled "Table XXI" from the publication "Community Water Systems Source Book" authored by Joseph S. Ameen, S.M., Sanitary Engineer, Third Edition from the Technical Proceedings, High Point, North Carolina. Mr. Seidman then computes the value of his

numerator in his U/U formula by adding to this peak flow the fire-flow and five years growth and subtracting excessive unaccounted for water.

Mr. Seidman completes his U/U calculation by dividing the numerator as explained above by a denominator equal to a "firm reliable capacity" that he derives either as the high service pumping capacity or the daily flow with the largest well removed.

I do not agree with Mr. Seidman's rationale which is obviously proposed to try to obtain a U/U percentage of 100% for all systems. Both Mr. Seidman's derivations of numerator and denominator in his U/U formula are flawed and should be summarily rejected. Such a formula almost guarantees a 100% U/U percentage because of the huge instantaneous flow that he derives for the numerator in the calculation. His derivation of the capacity used in the denominator is also incorrect. Nothing in Mr. Seidman's rationale recognizes anything connected with the sizing criteria for water plants as mandated by the FDEP.

Without explanation, Mr. Siedman states in his testimony, "Based on the availability of well capacity, storage capacity and high service pumping capacity I made a determination as to whether demand should be evaluated on the basis of maximum day demand or instantaneous demand."

Q. WHAT DID YOU DO TO INVESTIGATE MR. SEIDMAN'S USE OF INSTANTEOUS FLOWS IN THE DEMAND PORTION OF HIS USED AND USEFUL FORMULAS?

A. Office of Public Counsel (OPC) Interrogatory question No. 58 asked the Utility whether the used and useful calculation rationale for water plants using instantaneous flows had ever been used or approved by the Commission in any prior cases and if so, to please specify the cases. The Utility's response cited four cases with discussion of how the Commission dealt with the instantaneous flow issue in each case.

I obtained each of the cases cited by the Utility from the PSC records and analyzed each case.

My analysis of each case is attached hereto as Exhibit TLB-8.

After analyzing each of the four cases cited by the Utility as providing past evidence of the Commission approving instantaneous flow in used and useful calculations, my conclusion is that the Commission has never approved or even commented on any such rationale.

Q. HOW DID THE UTILITY CALCULATE THE USED AND USEFUL PERCENTAGES FOR THE WATER DISTRIBUTION SYSTEMS AND WASTEWATER COLLECTION SYSTEMS AND DO YOU AGREE WITH THE UTILITY'S RATIONALE AND METHODOLOGY?

A. The Utility ignored the long standing and Commission approved rationale and methodology for calculating the used and useful percentages for these systems which is to simply compare total connections (Connected ERCs) to total available connections. (Total available ERCs). This is a very fair rationale and methodology that has been recognized by the Commission for many years.

The Utility did not calculate any U/U percentages for the water systems but simply stated that the water distribution systems had been previously considered 100% U/U in a prior docket and that the system had experienced no significant changes and therefore remained 100% U/U. I do not agree with the Utility that these systems are automatically to be considered 100% U/U because some changes have occurred to each system. The systems are also not built out. The only way to determine the correct U/U percentage is to actually count the connected ERCs and divide that total by the count of available ERCs. I used this long standing and approved rationale and methodology in my U/U calculations included in Exhibit TLB-3.

The Utility also did not bother to calculate a U/U percentage for the wastewater collection systems but instead reasoned that either the system was completely built out or that the system

had been found 100% U/U in a prior case or that the facilities required to deliver wastewater to a City or County for treatment are considered to be 100% U/U. I disagree with the Utility's reasoning because the wastewater systems are not built out and excess capacity does exist in these system. Used and Useful percentages considerably less than 100% are found when the appropriate lot to lot or connected ERCs to total available ERCs rationale or methodology is correctly applied. My calculations in Exhibit TLB-3 demonstrate the correct U/U percentages by applying the Commission's long recognized methodology.

Q. HOW DID THE UTILITY CALCULATE THE USED AND USEFUL PERCENTAGES FOR THE WASTEWATER TREATMENT PLANTS AND DO YOU AGREE WITH THE UTILITY'S RATIONALE AND METHODOLOGY?

A. I have not agreed with any of the Utility's rationales and methodologies of calculating U/U percentages for the items as discussed above and I am also in disagreement with the Utility for the correct method of U/U calculation for wastewater treatment plants. The Utility has simply not used any of the longstanding and Commission recognized and approved methodologies for any of its U/U calculations. It seems that the Utility is intent on breaking new ground and is asking the Commission to change its long standing approved methodologies for U/U calculations.

The one U/U calculation performed for the Crownwood Treatment plant by the Utility's engineer, Frank Seidman was calculated according to his testimony by, "dividing (peak demand – excess inflow & infiltration + property needed to serve five years after the test year) by the rated capacity of the system." This methodology is obviously at odds with the Commission's long standing and approved methodology of dividing the demand (appropriately modified by any excessive I/I and 5 years growth), determined on the same basis as the FDEP permitted capacity. My U/U calculations in Exhibit TLB-3 follow this

correct rationale and methodology.

Just as disturbing as the erroneous calculation of the U/U percentage for the Crownwood Treatment Plant is the Utility's failure to calculate a 0% U/U percentage for the three wastewater treatment plants that transport their wastewater to others for treatment and disposal. The Utility sees no reason to calculate a U/U percentage for these plants since the plants have been taken out of service. But, as I discussed above at length, the individual "Plant in Service Schedules" furnished to OPC in response to interrogatories still show large amounts for various treatment and disposal facilities. Three of these systems still show Plant in Service for wastewater treatment and disposal Facilities totaling $796,491. I contend the obvious, that the Utility can not have it both ways. Either these treatment and disposal facilities must be removed from plant in service or each such plant must be considered 0% used and useful.

Q. DO YOU HAVE ANY PROBLEMS WITH THE PSC STAFF'S FORMULAS ANTICIPATED TO BE USED IN THE CALCULATION OF USED AND USEFUL PERCENTAGES?

A. I have not yet seen Staff's testimony on the used and useful issue or their calculations. But reading one of Staff's interrogatories to the Utility where Staff tells the Utility that they have wrongly used a 24 hour pumping period for their smallest well instead of a 12 hour period as advocated by Staff lets me know that Staff is still promoting an overall water plant "Firm Reliable Capacity."

I do have a basic disagreement with Staff concerning the formula or rationale used to calculate used and useful percentages for water plants. Within the last few years, at the direction of Mr. Bob Crouch, retired PSC Engineering Supervisor, Staff engineers have developed a rationale for calculating the used and useful percentages for a water treatment

plant that combines supply wells, treatment facilities, storage facilities and pumping into one overall plant used and useful percentage. This rationale considers the demand to be the average 5 max days of max month flow, adjusted for five years growth, added to fire flow, and then divided by a firm reliable plant capacity that is developed from the flow of all of the wells for only 12 hours, with the largest well not included, added to the capacity of any storage facility. This hybrid and novel rationale does not follow any FDEP sizing criteria for the various components of a water plant, and the overall plant used and useful percentage obtained is often an inordinately high and unjustifiable percentage. I contend that the sizing criteria required by the regulatory agencies should be utilized in the U/U calculation rationale, since these criteria directly control the size of components required to be installed by the Utility. Sizing any of the plant components grossly larger than required for the demand, with an already built in 5 years growth, is an expense that is unreasonable and the customers should not have to pay for these large components, often installed by the utility for distant future growth. Each water plant component should be separately considered and individual U/U percentages calculated by comparing the demand of the average of 5 max days of the max month to the daily capacity of the component as required by the FDEP. Of course, the demand should still be modified by adding 5 years growth and subtracting any excessive unaccounted for water.

The formula for calculating the used and useful percentage of a water distribution system or wastewater collection system by comparing total connected ERCs to total ERCs available for service in the system is a long established and settled rationale for calculating distribution and collection systems used and useful percentages. Sometimes Staff and I have differences in the count of connected and potential connections but I have no problem with the basic rationale.

I contend that individual U/U percentages should be calculated for each major component of a

water plant and that proper demands and capacities be used and comparisons made with regard to the sizing criteria required by the FDEP for each component. I will explain below the rationales for calculating U/U percentages for the various water plant components with due consideration for the FDEP sizing requirements for the minimum required sizes.

Q. WHAT IS THE PROPER METHOD FOR DETERMINING THE USED AND USEFUL PERCENTAGE FOR SOURCE OF SUPPLY AND PUMPING?

A. The proper method is to evaluate the source of supply and pumping in accordance with the FDEP rule for design of these facilities. This rule is a FDEP design guideline under Chapter 62-555 ~~62-500~~, FAC, which sets forth Section 3.2.1.1 of *Ten States Standards* as the governing rule which is as follows:

> Section 3.2.1.1 of *Ten States Standards* states: "The total developed groundwater source capacity shall equal or exceed the design maximum day demand **and** equal or exceed the design average day demand with the largest producing well out of service." (Firm Reliable Capacity)

From this rule, it is clear that two comparisons are required, namely Total Maximum Day Demand to Total Capacity and the Average Day Demand to the Firm Reliable Capacity. It is obvious that the largest percentage of the two comparisons must be used to satisfy the Ten States Rule.

When computing the maximum day capacity and firm reliable capacity, the well pumping rate should be taken for the full 24 hour period since we are dealing with extreme cases of short duration and well pumps can operate at full flow for these periods. Modern pumps are guaranteed to run continuously for several thousand hours. Rarely are these pumps running continuously except perhaps during peak demand times since controls shut the pumps off for brief periods when enough pressure exists in the distribution system. Therefore, there is no

reason to restrict the flow to a 12 hour period when calculating a firm reliable capacity of a well. The recently changed Staff rationale restricting the flow of the well or wells to 12 hours (with the largest well flow not considered) is simply without merit or reason and is probably due to a misunderstanding of a FDEP rule requiring operating personnel a minimum time on site of 12 hours, which bears no relationship to pump run time.

The demand in these calculations must be modified by three factors. First, by Florida law, a five year growth factor must be added to the demand. Secondly, the appropriate fire flow, if furnished, must also be added to the demand. Finally, the demand flow should be reduced by any excessive unaccounted for water.

Finally, Staff and I have most always disagreed concerning the amount of fire flow to be included in the demand. Staff invariably will include a fire flow of 750 to 1,000 gallons per minute (gpm) for a two hour duration although certainly no fire flow is presently included in many of these small systems. I contend, at most, that the fire flow demand, (as required by local jurisdiction) should be considered and that only if such fire flow is actually furnished.

Q. WHAT USED AND USEFUL PERCENTAGE DO YOU OBTAIN FOR THE SOURCE OF SUPPLY WELLS WHEN YOU USE THE TEN STATES STANDARDS RULE AND HOW DOES THIS COMPARE WITH THE UTILITY'S REQUESTED PERCENTAGE?

A. All of my calculations of used and useful percentages are shown in detail in Exhibit TLB-3. I computed the various flows that are necessary to evaluate the two comparisons required by Section 3.2.1.1 of *Ten States Standards.* The used and useful percentages I calculated varied from a low of 13.2% to a high of 100% compared to a used and useful percentage of 100% calculated by the Utility for all systems.

Q. WHAT IS THE APPROPRIATE METHOD FOR DETERMING THE USED AND

USEFUL PERCENTAGE FOR THE STORAGE FACILITIES FOR THE VARIOUS SYSTEMS?

A. The FDEP recognizes both American Water Works Association (AWWA) and Ten States Standards guidelines for storage facilities and these criteria should both be evaluated for the storage facilities.

As discussed above, AWWA M32 suggests that equalization storage is about 20 to 25 percent of the Average Day Flow(ADF). Fire storage is to be included if fire flow is provided. Emergency storage is an owner's option and is not strictly required. Ten States Standards requires fire flow storage if fire flow is provided. Ten States sets up a minimum storage equal to ADF for systems not providing fire flow. This requirement may be reduced when the source of supply and treatment facilities have sufficient capacity with standby power to supplement peak demands of the system. Emergency storage is not mentioned in this reference.

When the system is furnishing fire flow, a half day ADF of storage is used in the test formula developed below. That amount is more than adequate for peak hour demand storage compared to the 20 to 25 % ADF suggested in the AWWA M32. The one day ADF storage criteria mentioned in Ten States Standards was reduced to one half day because MDF design flow was used for supply wells and all wells are required to have emergency power. Fire storage was used. No emergency storage was included. Considering all of the guidelines, the following U/U formulas for storage facilities have been developed by OPC.

For systems without fire flow:

U/U = One Day ADF / Total System Capacity

For systems with fire flow::

U/U = (½ ADF + F.F.) / Total System Capacity

The ADF is, of course, adjusted for 5 years growth and for excessive unaccounted for water.

Q. WHAT USED AND USEFUL PERCENTAGE DID YOU COMPUTE FOR THE STORAGE FACILITIES USING THE METHOD YOU DESCRIBED AND HOW DOES THIS U/U PERCENTAGE COMPARE WITH THE UTILITY'S REQUESTED PERCENTAGE?

A. Using the system's ADF, as adjusted for 5 years growth and excessive unaccounted for water, and fire flow as previously discussed, used and useful percentages of 100% were calculated for the 5 water systems that furnish storage. The utility's calculations show 100% for each of these systems.

My detailed calculation are included in Exhibit TLB-3.

Q. **IN YOUR USED AND USEFUL CALCULATIONS, DID YOU USE MAXIMUM DAY FLOW OR THE AVERAGE OF THE 5 MAXIMUM DAYS OF MAXIMUM MONTH FLOW FOR THE SYSTEM'S MAXIMUM FLOW AND WHY DID YOU USE THIS FACTOR.**

A. It is always better and more representative of the true maximum day flow to use the average of the five maximum days of the maximum month, and that is what I used for the maximum flow. Using the average of the five maximum days of the maximum month rather than the single maximum day of the year lets one avoid such anomalies as fire flow, broken mains or other large leaks.

Q. **WHAT IS THE APPROPRIATE ALLOWANCE FOR UNACCOUNTED FOR WATER FOR THESE WATER SYSTEMS AND WHAT DID YOU USE IN YOUR CALCULATIONS?**

A. A maximum allowance of 10 percent of Average Daily Flow (ADF) is reasonable for unaccounted for water (UFW) for any reasonably maintained water system. In this case, I

found excessive UFW greater than 10% in 10 of the 17 water systems. It should be noted that the Utility's data in the MFRs was faulty for two of the systems with more water shown as sold than pumped.

I applied the excessive percentages of UFW for the 10 systems found with excessive UFW to all calculations of system demand.

Q. WHAT IS THE APPROPRIATE METHOD FOR DETERMINING THE USED AND USEFUL PERCENTAGE FOR THE WATER DISTRIBUTION SYSTEMS AND THE WASTEWATER COLLECTION SYSTEMS?

A. The appropriate method to calculate a fair U/U percentage is to compare Total Connected Equivalent Residential Connections (ERCs) to Total Available ERCs for each system. As I discussed above, I have no differences with the Staff on the calculation rationale.

Q. HOW DID YOU DETERMINE THE TOTAL CONNECTED ERCs AND THE TOTAL AVAILABLE ERCs IN THE VARIOUS SYSTEMS AND WHAT USED AND USEFUL (U/U) PERCENTAGES DID YOU COMPUTE FOR EACH SYSTEM?

A. I counted the total connected ERCs and the total available ERCs of all water distribution systems and wastewater collection systems from the system maps furnished by the Utility in combination with my onsite inspections of a number of systems. OPC had to request corrected system maps for several systems after my inspections revealed a number of errors in the originally furnished maps. The final counts so derived were used in the used and useful calculations shown in Exhibit TLB-3.

The U/U percentages that I calculated for the 17 water distribution systems varied from a low of 73.9% at the Oakland Shores System to a high of 100% at the completely built system of Davis Shores in Orange County. The Utility showed 100% for all systems, although as discussed above, no calculations were performed.

The U/U percentages that I calculated for the 5 wastewater collection systems varied from a low of 51.47% at the Golden Hills/Crownwood System to a high of 97.20% at the Wis-Bar System. The Utility showed 100% for all systems but no calculations were performed in support of the claimed percentages.

Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A. Yes, it does.

BY MR. REILLY:

Q Mr. Biddy, would you provide a brief summary of your testimony?

A Yes. I little over a year ago I was assigned this case from the Office of Public Counsel. I first read all of the case material that was available, including all the MFRs, and the direct testimony of the utility personnel, including their engineer, Mr. Seidman.

I then went to the FDEP office in Orlando, looked at the permitting records for all the systems that fall under the Orlando office jurisdiction. I went to the Tampa DEP office and looked at the DEP records where they have jurisdiction, which is Pinellas and Pasco Counties. The other are Seminole County and Orange County and Marion County over in Orlando's jurisdiction.

I then arranged with the utility to do an inspection of a representative number of their systems. I visited, I believe, 12 out of the 22 total systems and did a reasonably detailed inspection and look-see of the facilities that existed physically in the field.

The first thing I noticed was that they had three plants that they were claiming plant in service that weren't there, and that was the sewage treatment plants at three different locations. Of course, I pointed that out in my testimony, and I think that's maybe been stipulated to now.

But they were claiming three plants in service, about $800,000 worth of plant, that really was already abandoned, and they made hookups to counties and cities.

When I read all of the MFRs, I anticipated finding systems that were built out in just the routine examination of these systems. I found quite the opposite. I found that most of the systems were not built out. If you judge a system that's 70 percent built out to be built out, then that defies math to me. But this is what the utility is trying to do, is from 70 to 90 percent most of them are built out, they're saying are built out.

Worse yet, I found that they sometimes say that because the distribution system or the collection system is built out, then automatically that the treatment facilities and the supply is built out, which is sheer nonsense. Our position and the position I took -- OPC takes in preparing our testimony is that the used and usefulness of a system should be judged by the design criteria that forces the capacity on the utility plus the statutory five years of growth plus fire flow, if it is furnished, and allowing 10 percent of unaccounted for water. All these things added to the design flow that the FDEP forces upon you gives you quite an allowance for peak flows. These systems have always met peak flows. There's been no pressure problems.

Peak flows are best handled by storage facilities and

high service pumping. We all know that. In this case they only have those on a few of the systems. Most of them are hydro-pneumatic tank and just large wells that have been oversized. Now, it is not cost-effective at all to use wells to furnish peak flow. It's just not. It's far more expensive to build these big wells than it would be to go in and build a storage tank.

I did take those -- that general guideline and use the criteria as dictated by FDEP, which is mostly the -- what we call the Ten States Standards, use those guidelines. I computed the used and usefulness of all the systems, and I got used and useful factors from 13 percent to 100 percent, with most of them being in the middle 40s and 50s range for their source of supply and pumping. Their distribution system and collection system is anywhere from 70 to 100 percent. So it's far from being built out.

And I looked at the utility's testimony, and I think staff's as well, that the Commission previously called it 100 percent, and therefore, it had to be 100 percent now. I didn't agree with that at all. Many things could happen. Number one, most of those were never contested. They were just agreed to and not computed for used and useful. In this case the utility didn't bother at all to compute the used and useful factors for distribution systems or collection systems, and hardly any cases did they do it on the rest of the plant. They

just took a lot of assumptions.

For instance, in one place Mr. Seidman -- no, Mr. Redemann, I believe, said he assumed that the wells were not oversized. Well, that's a wrong assumption. They are grossly oversized. If you had your high service pumping and a small ground tank, as it is, the wells are having to furnish the peak flow, but they're doing it at a premium. And it's a penalty to the ratepayers to have to have these big systems in when you should have a high service pump and a ground tank. And that's a brief summary of my testimony.

MR. REILLY: We tender Mr. Biddy.

COMMISSIONER DEASON: Mr. Wharton.

CROSS EXAMINATION

BY MR. WHARTON:

Q Good afternoon, Mr. Biddy.

A Hello.

COMMISSIONER DEASON: See, what I told you.

MR. WHARTON: Unaccounted for water.

(Laughter.)

BY MR. WHARTON:

Q Mr. Biddy, you were just discussing the used and useful in the prior determination by the Commission as it relates to the distribution and collection systems --

A That's correct.

Q -- and you were talking about the utility making --

COMMISSIONER DEASON: Mr. Wharton, can you hold on for just a second?

MR. WHARTON: Okay.

(Off the record.)

COMMISSIONER DEASON: Mr. Wharton, you may want to start over.

MR. WHARTON: Yes.

BY MR. WHARTON:

Q Mr. Biddy, you had just talked in your summary about the prior determinations on the part of the Commission of distribution and collection systems as being 100 percent used and useful, and we're talking about assumptions the utility made in that regard, but then you mentioned Mr. Redemann. Now, Mr. Redemann is the staff engineer; correct?

A Yes.

Q And he has also made some of these assumptions that you believe are faulty?

A Yes, I do.

Q Isn't it true that, in fact, Mr. Seidman's testimony and schedules reveal that even in the case where the Commission had made a prior determination, that he did go back and review those matters?

A I saw no computations, and I think he testified that he did not look at them from that standpoint of comparing connected ERCs to total available. And I didn't see where he

did that anywhere.

Q Is it your habit that when testifying, such as you were doing in this case, that you go back and revisit everything from the ground up that the Commission has determined in prior orders to be 100 percent used and useful?

A Absolutely, every single thing.

Q And if the utility did that, do you think that OPC would complain about the rate case expense?

A I don't think the utility would have any grounds to complain based on the amount of work they've done on this one.

Q Does the determination of something in a prior Commission order with regard to a particular utility at least create a presumption in your mind that that is the fact?

A Well, as I said in my summary, I anticipated that I would find a totally built out system in all 22 systems. The way the direct testimony of Mr. Seidman read and the way the calculations had been shown, or at least a spreadsheet that showed 100 percent for everything except, I think, one system, yeah, I was surprised when I found that it was not. You would expect that it probably would be in a large amount anyway.

Q And respectfully, Mr. Biddy, does that mean that the answer to my question is yes? When you read something that the Commission has determined about a particular utility in a prior order, you presume that to be correct?

A You give it a presumption, of course.

Q Okay. Are you aware of the fact that OPC hasn't taken a position on quality of service in this case?

A I have testified in deposition to quality of service. The quality of service is good, very good, I think. Pressures are good; neat, orderly system; well-maintained facilities; well-painted and spruced up buildings and so on. I thought it was very good quality.

Q And you actually went out and toured 10 to 12 of these 17 systems, didn't you?

A That's right, 12 of them. Yes.

Q Okay. And you were given full access to the facilities?

A Absolutely.

Q And the people who took you around were courteous, and they tried to answer your questions?

A Very much so, yes.

Q And you've also reviewed records at various offices of the Department of Environmental Protection, have you not?

A Yes, two offices, Orlando and Tampa.

Q And during the course of the review of those records, isn't it true that you neither discovered any regulatory concerns on the part of Utilities, Inc., you didn't see anything coming down the road either?

A No, I did not.

Q Okay. Let's talk about the issue of infiltration and

inflow for a second. What is the difference between infiltration and inflow?

A Infiltration is that water that gets into your sewer through open joints in pipes or cracks in pipes or through cracks in manholes from beneath the surface of the ground. Inflow is that water that gets into your sewer from rainfall runoff primarily by either physically hookups to your sewer, which are mostly illegal if they're there, or manholes catching the water and taking the water into the sewer system.

Q You would agree that there are a significant number of source materials out there that differ in their opinions about what a reasonable amount of I/I is; correct?

A Yes.

Q And you would also agree that when one is attempting to determine whether a reasonable amount of I/I has occurred in the system, and by that I mean an amount that I guess would be less than an excessive amount, that you have to take into account things like the materials and the age of the system and the soils, et cetera?

A Well, those factors you mentioned will cause varying amounts of I/I if the system is not maintained. Our position is simply that the system should be well maintained, and therefore, the reasonable allowance of I/I should be closer to the new sewer rule than the old sewer rule.

Q But, in fact, Mr. Biddy, aren't there a number of

accepted materials out there, some of which are incorporated in the DEP rule that you testified about by reference, which do say things like age of materials, things like composition of materials affect the amount of I/I which can reasonably be expected?

A When you use the word "reasonably," I don't know that that's the case, but yes, different kinds of materials do cause different amounts of I/I. Yes.

Q So what is an acceptable amount of I/I might vary from system to system?

A Well, I think it's probably closer -- it may not be as low as the 200 gallons per inch of diameter per mile, but it's certainly closer to that than it would be to the 500 gallon per inch of diameter per mile, which is for really old sewers that are not well maintained. So we -- my policy and OPC's policy is to adopt the stringent requirement and hope that the utility keeps the sewers well maintained enough to meet that standard.

Q Did you testify in a case which resulted in a 1996 order which was the Palm Coast rate case?

A Yes.

Q Do you recall that in that case the Commission actually accepted an infiltration and inflow allowance for up to 50 percent for each ERC or 40 gallons per capita per day?

A I don't remember the outcome. I testified in the

case, but I didn't read the outcome of the case.

Q Well, in fact, the 200-gallon standard that you have just referenced comes from the DEP rules; correct?

A That's correct.

Q It comes out of the Ten States Standards?

A It is part of the Ten States Standards, yes.

Q Okay. Now, you testified about that 200 standard in the Palm Coast case, didn't you?

A I think I did, yes.

Q And the Commission did not accept that, did it?

A I don't remember what the circumstances were there that caused that. I testified in engineering matters. I am not an accountant nor a rate analyst. The case is over when I tell you what I know about the engineering part of it and the used and usefulness of the components of the system. I don't follow it up usually. I don't read the decisions.

Q You don't tend to go back and read the orders in the cases you're involved in?

A I go back and read them when they're referenced in another case, yes, I do. But I give the engineering facts, the used and usefulness as impartially as I know how, and then it's up to the Commission to make the decision.

Q And before we go any further, let's clarify for the record that the 200 gallons per day standard is that amount that you believe should go into the formula in determining how

much I/I can come into the system within a certain length that should be allowable, considered not excessive?

A That's right.

Q Okay. Well, now, you also testified about the 200-gallon standard in the so-called mega docket in 1996, didn't you?

A You mean the Southern States case?

Q Yes.

A Yes, I did.

Q And the Commission did not accept your testimony in that case, did they?

A I don't know.

Q But the orders would bear that out, whichever way it went?

A I accept your word for it if you say that.

Q Okay. And you also testified about it in the 1999 -- or I'm sorry, the 2001 Aloha case?

A Yes, I did.

Q And do you know whether or not the Commission accepted your testimony in that case?

A I don't know.

Q Okay. In fact -- so you have not gone back and read the Aloha order?

A No. I usually get some kind of a general overview of what happened with the order, but I rarely, if ever, read the

orders that come out.

Q Do you recall the testimony of a DEP witness in that case, Mr. MacColeman?

A No, I don't.

Q Are you aware that that particular order determined that based on the testimony, and particularly the testimony of Mr. MacColeman, that the Ten States Standards methodology utilizing 200 was determined to not be appropriate for existing systems but rather only for new systems?

A Well, if he testified to that, that's his opinion. Our opinion and my opinion as a professional engineer who's been in the business 40 years is that if a system is well maintained, I'm talking about a gravity collection system, well maintained and when leaks occur and you start having a problem you get in and fix it, you can approximate that 200. It's not easy to get. You have to stay on top of your system. But most utilities that I have looked at in Florida don't do a good job of maintenance. They let it go, and as a result you get some higher infiltration.

Q Do you understand that some of these systems date back to the '50s?

A Yes, I do.

Q So it is your testimony, as we sit here today, that you believe that the types of materials that were installed in the '50s should be able to maintain the same I/I levels in 2003

as brand new materials with brand new construction techniques?

A Depends entirely on the maintenance effort that's been put into it.

Q Have you -- do you know -- to what extent do you understand that utilities would be able to pass on the costs to ratepayers if they were repairing the systems that you have said you understand are not usually well maintained based on your experience?

A Well, I think it's a justifiable expense, and I would certainly have no objection to it.

Q Have you ever tried to put pen to paper and figure out whether it would cost the ratepayers more for the utilities to go in and be keeping these systems up to modern design standards or whether the ratepayers actually benefit by the inclusion in used and useful of the lower I/I levels?

A No. To transport and treat large quantities of water, and that's basically what you're doing, dirty water along with your wastewater is certainly not a cost-effective thing to do. It's also not an efficient way to treat sewage, to have it weakened down by excessive inflow and infiltration. I have seen cases, large cases where it had extreme high I/I that affected the system so bad that you couldn't get proper treatment at your treatment plant. So it's not a good thing under any circumstance.

Q But is it fair to say, Mr. Biddy, that you have never

attempted to determine --

A No, I have not.

Q -- which benefits the ratepayers more, if you've got a system that has I/I of 500 gallons per day per inch diameter per mile for the pipes that is not considered excessive and therefore allowed into rate base, or if the utility goes back and repairs that system where it meets the 200 gallon per day standard?

A I have not made an analysis of that. I would hope that the repair, if you stay on top of it especially and it didn't get to be extensive, would be the cheaper way.

Q Just so the record --

A I don't know. I have not made the comparison.

Q You have not. Just so the record is clear, you do agree that the 200 gallon per day standard is a technical specification that someone constructing brand new sewer facilities must meet?

A That is correct.

Q Okay. And you're not aware of any cases where the Public Service Commission has accepted the 200 gallon per day standard?

A No, I don't know. I haven't researched them.

Q And, in fact, in this case both the staff engineer, Mr. Redemann, and the Utilities engineer, Mr. Seidman, agree that the 500 gallon per day standard is the standard that

should be applied?

A That's what they have said.

Q But it is your position that the DEP guideline for new construction should be strictly applied by the Commission even to systems such as this that are 40 or 50 years old?

A Yes. It will certainly encourage the utilities to make necessary repairs and keep the maintenance up on its system. If you've got leaks as bad as 500 gallons per inch of diameter per mile, that's a lot of leaking, and it just means they have let it go and didn't repair it, didn't spend the maintenance money. And that was their choice, but then when it comes time to measure that, it's excessive as far as I'm concerned.

Q And yet, as we sit here right now, is it your opinion or your testimony that you reject or have some other criticism of the sources that Mr. Redemann and Mr. Seidman have used for this 500 gallon per day standard?

A Well, it was a standard that was -- the Federal Water Pollution Control Administration put out in the 1970s, I believe, maybe even one of them was in the '60s. It's a very liberal standard, and I think perhaps they were doing that in recognition of what was going on rather than what was desirable.

Q You were here when Mr. Reilly asked Mr. Seidman about the instantaneous demand and the fact that he had testified

about it several times even though the Commission had in one order determined that it would go with a different methodology. Is this 200 gallon a day standard something that you intend to keep testifying about no matter how many times the Commission rejects it?

A It is a standard that I believe as an engineer and the OPC believes as an organization is a fair standard that would be indicative of a well-maintained collection system. And we would hope that the Commission would promote the maintenance of systems by holding to that. Granted, it's a stringent requirement, but it needs to be.

Q Let's talk about the issue of unaccounted for water.

A All right.

Q I think you told me in deposition that in all the cases you had worked on, the Commission had accepted the 10 percent rule for unaccounted for water?

A Yes.

Q You are aware of the fact, are you not, that the Southwest Florida Water Management District routinely puts in the permits that it currently issues that it considers any water losses over 12 percent to be excessive?

A Yes, I understand they do.

Q And a significant portion of the territory that falls within the jurisdiction of that particular water management district is in a water caution use area; correct?

A Some of it is. The Pasco County part of it.

Q Now, Mr. Redemann's testimony was that if a utility had performed a water audit and it's in the process of reducing their water losses, no adjustment should be made for excess unaccounted for water; is that right?

A That was his testimony. I don't agree with that, but that was his testimony.

Q And why do you not agree with that?

A Well, it's a matter of timing. We're looking at the test year. If here in 2003 they want to finally get around to doing something, fine, but you didn't do it in 2001, which was the test year, and therefore -- that's what we're looking at, is the test year, and it had the excessive unaccounted for water in large amounts in most of the systems.

Q Is your goal with this particular testimony, though, Mr. Biddy, to hold down the rates of the utility, or is it to see that the unaccounted for water is eliminated or reduced?

A Well, it's twofold. Number one, it's in an attempt to find a fair balance for the ratepayers, and number two, conservation of water is very important as well.

Q You do agree, though, that it would be good policy for the Commission to create incentives for utilities to reduce unaccounted for water?

A Oh, yes.

Q Are you aware, Mr. Biddy, that there are also --

well, strike that.

You had indicated to me in deposition, I think, that it was your understanding the Commission had applied the 10 percent rule across the board.

A Yes.

Q Are you aware of the fact that the Commission, in fact, allowed a 12.5 percent unaccounted for water as allowable in the Palm Coast case in which you were a witness?

A No, I'm not.

Q Okay. You told me in deposition that it would affect your opinion if you knew the utility was going to go ahead and take the next step with regard to unaccounted for water and implement some kind of program, but that you saw nothing in the record at the time of that testimony to indicate that was occurring.

A That's correct. During that entire period, the test year period, I saw something they had done or were doing to alleviate that situation. I have heard and seen some of the documents in this year that they've had the Florida Rural Water Association doing water audits. I heard testimony this morning that they're actually doing some meter replacements and some leak repairs. Well, all that's good, but it didn't occur in the test year.

Q But you would agree that those things are desirable?

A Absolutely.

Q You would agree that you would like to see those efforts be ongoing as the testimony indicated they would be?

A Yes.

Q And you agree that it would be a good thing for the Commission to establish and set as policies such that such efforts would be encouraged as opposed to discouraged?

A Well, yes. And I think they would be if -- when the -- if the utility will look at the rate base that they're suffering loss of by the unaccounted for water, I think it would probably more than make up for it, the cost of the repairs, if they would go forward. So I think the incentive is already there. It's just a matter of using that incentive.

Q But you agree it's a good thing for a utility to address unaccounted for water no matter what it was that motivated it to --

A For the tenth time, yes.

Q Okay. You had talked a little in your testimony about fire protection. Do you agree -- well, you do agree, don't you, that in the systems of Oakland Shores and Orangewood there are fire hydrants on the system?

A Very few at the very front of the systems near the well. Most of the systems are small lines with no fire hydrants and no fire flow and no fire protection for the people within those systems.

Q And the company needs to have the capacity and the

flow so that the hydrants will work if they're ever needed in an emergency, don't they?

A Those few, yes, but they also need lines in the same subdivision and fire hydrants in the same subdivision to have that same flow in order to be said to have fire flow. They simply don't have it now. They have it in a very miniscule part of it. If you want to take 1 percent credit or 2 percent credit for the subdivision having fire flow, somehow work out a formula, yeah, they have it in a little corner of the subdivision near the wells, but nowhere else. Therefore, we say they have none. I didn't know how to use that to allocate some small percentage, so I say no fire flow for those two systems.

Q As we sit here today, do you have any personal knowledge as to how the local fire departments might use those hydrants in those locations in order to fight a fire in the neighborhoods that Utilities, Inc. serves?

A Well, certainly they would hook a hose to it and it would go as far as it could go, but I think 500 feet is a general rule. And, you know, these subdivisions are spread out that most of them would be just -- you know, the house would just burn down. There would be no fire flow available.

Q Do you know whether the hydrants that are in existence in these two service areas have been tested upon their installation and deemed sufficient by a local government

when they were put in?

A Yes. I got the fire flow test from the utility by interrogatory or production of document request one. And, yes, a hydrant -- I think one hydrant in one and two in the other one, perhaps -- I've forgotten the exact number -- but they did have fire flow on those particular hydrants.

Q Mr. Biddy, with regard to the sizing of certain utility components which are at issue in this rate case, it seems to me that the crux of your testimony was based upon two subjects. One was that you believe that DEP establishes the sizing criteria that should be utilized by the PSC with regard to certain components, and the other is that you believe the statute imposes a very strict five-year horizon for growth. Is that a fair characterization?

A Well, I said, number one, DEP's sizing criteria establishes the minimum size. For instance, there's wells and well pumps, treatment plants, storage, et cetera. By law, we do add a five-year growth factor to it. We also add fire flow if it's available. We also allow 10 percent unaccounted for water. So we're adding a lot over and above the minimum to the demand on the system. Therefore, if you want to say that that furnishes the instantaneous flows or the peak flows, something does, obviously. I think it's probably a combination of that and the large pumps on the wells that's being done in an inefficient manner but in place of storage facilities and high

service pumps.

Q You do agree that an engineer who is not constrained by any rule or statute who is deigning a system for a client is not going to attach any magical significance to a five-year horizon?

A Well, he's going to meet his client's needs, obviously, and if his client sees a five-year horizon as being plenty, or if his client wants to design, has got a pocket full of money and don't mind paying the interest he would have earned on the money, you might do a 20-year horizon. If you're working for a public agency and they get a grant, they certainly want to stretch it out to 20 years if the DEP will approve it.

Q But you agree that, in fact, there are cases where an engineer in designing a system might determine that, say, accommodating seven years' worth of growth would recognize economies of scale that would save money for the utility and the ratepayers over the long haul?

A And I also know -- I will give you a yes, but I'll say I also know that two years in some instances might be enough.

Q So you think it could work both ways?

A Yeah.

Q However, you interpret the statute, that provision of Chapter 367 which imposes the five-year margin reserve as not

allowing for consideration of economies of scale, don't you?

A I don't remember anything in that statute about economies of scale.

Q So the answer to my question is, yes, you believe the five-year statute must be applied strictly?

A Well, our philosophy is simply this, Mr. Wharton. The ratepayers should pay for what they are using. They should not have to pay for facilities that have been designed with excessive capacity so that somebody down the road, five years, would use it. There's ways to set a rate structure to allow that so that people could put in oversize material such as allowance for funds prudently invested or large tap-on fees, contributions in aid of construction.

Q But with all do respect, Mr. Biddy, I'm asking you about your expert engineering opinions as opposed to OPC's philosophies.

A Well, I'm telling you it varies all over the board. It depends on the deepness of the pocket of your client.

Q You in this case did not apply any economies of scale factor to any of your used and useful calculation?

A I did not.

(Transcript continues in sequence with Volume 3.)

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STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, TRICIA DeMARTE, RPR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 29th DAY OF AUGUST, 2003.

TRICIA DeMARTE, RPR
FPSC Official Commission Reporter
(850) 413-6736