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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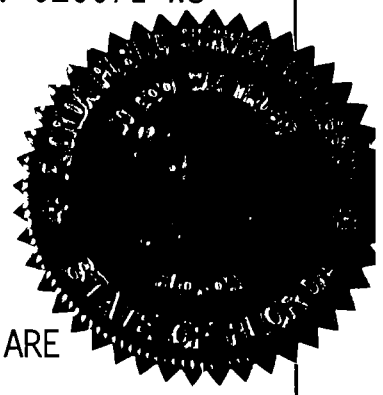

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VOLUME 3

PAGES 267 THROUGH 325

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. Concluded at 5:12 p.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	JANE FAUROT, RPR Official FPSC Reporter (850) 413-6732
APPEARANCES:	(As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
12	Biddy FDEP Applications/Permit Package	295	324
10			324
11			324

P R O C E E D I N G S

(Transcript continues in sequence from Volume 2.)

TED L. BIDDY

continues his testimony under oath from Volume 2:

CONTINUED CROSS EXAMINATION

BY MR. WHARTON:

Q Let's talk about a related concept, and that is your application of the five-year horizon in the statute to the concept of negative growth?

A All right.

Q Now, you have never had a case in the past where you have attempted to apply the five-year horizon to what you would perceive to be a negative growth situation, have you?

A No, I haven't. I have not seen negative growth systems before. We have three out of the 22 in this system that have negative growth.

Q But you think the statute should cut both ways, even in a case where it appears the utility and the regulators made the proper decision at the time, but that for whatever reason events unfolded afterwards which lead to a negative growth rate?

A Well, it is a case of let the developer beware. If he is accurate in his projections, fine, but he is at liberty to make those decisions to build things any size he chooses

over and above the minimum. If he builds them too large and then he doesn't get the growth, or even if he gets a negative growth, that was a business decision he made.

Q Is it your understanding that Utilities, Inc. is related to or controlled by a developer?

A Utilities, Inc. is a utility company.

Q You used the word developer in your answer.

A Well, it is a investor-owned utility, which is essentially the same thing.

Q Okay. Just so that the record is clear about your prior answer, you think there may be circumstances where the utility made an investment that was prudent when it was made, it was reasonable when it was made, and because of subsequent events that may not have been foreseeable at the time, there is a situation of negative growth, that therefore the statute should be applied in the way you have suggested in your testimony?

A Yes, I do. And let me give you a for instance. One of the systems, the utility sold off the Druid Hills piece of a system, and I forgot exactly which one it was, but they sold off part of it. Therefore, they have got extra capacity now. Nobody made them sell off part of their customers, their system, but they did so.

Q You made no attempt in this case to go back and make a determination as to whether Utilities, Inc. should or should

not have reasonably anticipated this, what you have termed as negative growth?

A I made no attempt, no.

Q Now, you don't know whether or not the system is growing in terms of real numbers as opposed to the equivalent approach, do you?

A I accepted the utility's growth numbers, and I looked at their ERCs, and in 11 out of the 17 water systems, there was positive growth more than -- there was positive growth. One -- three systems had no growth at all, zero percent growth, and three systems had negative growth. So, 11 positive growth, three at zero growth, and three at negative growth for the water systems.

Q But, again, Mr. Biddy, you don't know whether those particular systems are growing in terms of real numbers as opposed to the equivalent approach?

A Well, they appeared to be from looking at the -- well, I do know that based on the maps, as well, too, that there has been real growth. Small but real growth.

Q You didn't know it at in your deposition or I wouldn't have asked you.

A Well, sorry about that, I just remembered the maps.

Q Let's talk about something that you have alluded to several times and that is the utilization of the DEP sizing criteria?

A Yes.

Q I think we talked about the fact that you have, in fact, testified several times that the DEP sizing criteria is appropriate to use, at least as it relates to I/I and that is the 200-gallon per day standard?

A That is not a sizing criteria, that is a testing method for collection systems.

Q Okay. But its source is the same manual that is incorporated by reference in the same rule?

A Yes.

Q The Ten-State Standard.

A Yes.

Q Do you agree that on the face of the DEP rules there are no sizing criteria for water or wastewater plants?

A When you say on the face, you want me to ignore the mandatory references that say you shall follow.

Q Well, the DEP rules incorporate by reference about 10 or 15 different engineering treatises, don't they?

A That's right.

Q But the rules, themselves, do not set forth any such criteria?

A Well, Mr. Wharton, during my 40 years in this business I have been in the DEP office many times with utility systems, plans. The very first thing they do is reach and get the Ten-State Standards and make sure you have complied with

them. Otherwise you go back and revise it.

Q Now, DEP doesn't have any economic jurisdiction, does it?

A Economic jurisdiction, no.

Q And DEP doesn't take into account economic factors in making their decisions or in setting their rules?

A Well, that's a broad statement. You know, we discussed in my deposition the fact that if they put money into it, certainly they are going to look at the economics of it.

Q Okay. So in those cases involving construction which does not involve public money --

A Right.

Q -- DEP does not take into account economic factors in making their decisions, do they?

A No, I don't think they really do.

Q Now, DEP, in fact, takes the position that they never look at the used and usefulness of a particular matter or a component or a plan?

A Well, that is not quite accurate. It is accurate so long as the operation of the system will work. For instance, a sewage treatment plant, you couldn't oversize it, double, for instance, you need certain amounts of flow in order to make the treatment plant work.

Q In other words, if there is an operational reason that a certain component should not be oversized, DEP might

take that into consideration?

A Yes.

Q But they would not do that on an economic basis?

A I don't think so. I don't know that it concerns them.

Q I think you told me in deposition that the bigger you build it, the better DEP likes it, and that they don't look they economy of the system?

A That's right, they are not economists.

Q In fact, do you stand by your testimony in the deposition that if the utility builds something for future capacity, DEP could care less?

A That's right. You know we are talking about businessmen, private people now, we are not talking about governmental agencies.

Q Now, you are not aware of any PSC or DEP order or case that has indicated that the Ten-State Standards set forth the sizing criteria that are required for sizing plants or their components, are you?

A You say am I aware of a Commission policy or rule?

Q Any PSC or DEP order.

A Well, DEP certainly has the rule, mandatory rules. I know nothing that the PSC has dictated by order or rule. It is a sizing criteria that the regulatory agency forces the utility to install, as a minimum, and then we add a lot of other things

to that.

Q And isn't it true that you are not aware of anything from any source revealing or indicating any instance in which DEP has said that someone applying for a permit has to build an exact size of plant?

A A minimum size of plant is what they will tell you. And, you know, let's face it, 99 out of 100 that take plans into the DEP will have the minimum size, with maybe just a little contingency added to it design, simply because everybody is very conscious of dollars.

Q Well, that raises a point, but let me make sure I got an answer to my question. You are not aware of anything from any source revealing or indicating any instance in which DEP told someone this is the exact size of plant you need to build in order to get a permit?

A Just the minimum size, that's right. They don't dictate size after that.

Q Now, Ms. Gervasi asked you a couple of questions in your deposition about the forms that DEP prints out for you to apply for permits on.

A Yes.

Q And do you agree that all of those forms mandate that the professional engineer, in his judgment, is the one who is responsible for designing the project?

A Well, certainly. That is true in everything you do.

Q Do you agree that the Ten-State Standards apply to the design of new plants?

A Absolutely, has for many years.

Q Is there anything in the Ten-State Standards of which you are aware that says this is an appropriate standard to be applied to, say, a 20-year-old utility?

A The Ten-State Standards existed 20 years ago. They would have been used as the guidelines 20 years ago. It has been the guideline as long as I have been in the business.

Q Well, then I guess what I'm asking you is whether when they were printed 20 years ago they had a sentence in there that would have been referring to a utility that would now be 40 years old?

A I don't know.

Q Okay. You are not aware of anything like that in the Ten-State Standards?

A No.

Q Do you agree that historically engineers have designed to a standard of about 350 gallons per connection?

A Per ERC, yes. Years ago that was -- say 40 years ago, especially when I first got into the business, that was the standard, that every household was going to use 350 gallons a day. That whole idea has dramatically changed in 40 years. And today it is, you know, somewhere around 200 gallons per day.

Q That 350 standard is still a standard, though, that DEP would accept?

A 350 gallons per day is a very, very conservative standard. It may still be taught in school, but I'm sure that the real data that is available now has also pointed out to students that water consumption and water use patterns have greatly changed in the last 40 years, and that water use per connection is way down.

Q Does DEP still evaluate on the basis of 350?

A I think so.

Q Let's talk about the concept of instantaneous demand that you testified quite a bit about. First of all, I think that you said in your summary that it was not cost-effective to use the wells to handle peak periods, is that right?

A That is correct.

Q Have you attempted in this case to engage in any analysis to determine whether or not the ratepayers would have been better off if, in fact, there were large storage tanks located out of these systems as opposed to the inclusion in rate base of parts of the wells that you think should not otherwise be included?

A Just intuitively, just by inspection looking at the systems. Seeing these very large wells and pressure tanks versus, maybe, a 50 or 100,000-gallon ground storage tank and a pump. I know very well that from my experience that wells are

very, very expensive to install. So, it is just not cost-effective by observation to use wells to meet peak flows.

Q But, again, Mr. Biddy, in this case did you do any specific analysis of that? For instance, determining where such storage tanks might be located, what the cost of the land would be?

A No, I did not do it. I didn't have time to do that kind of in-depth analysis of the systems.

Q Okay. You do agree with Mr. Seidman's basic point that in the case of facilities that have no storage or very little storage it is the capacity at the source which needs to be able to meet the demand during peak periods?

A Yes, we just differ on what the demand would be. He has used a very unreasonably large instantaneous flow that he got from a chart. That hourly peak or instantaneous flow has been greatly dampened by change in water use patterns and conservation of water. But, yes, in answer to your question, whatever demand has to be met by the pressure tank and the well.

Q You do agree that if max day is a certain number, that the demand in the hours in that day is not going to be as simple as dividing max day by 24? Some hours are going to be higher demand, some lower, and they all total up to what the max day is, correct?

A That is correct.

Q So it is Mr. Seidman's number or his concept that you disagree with? His concept was to try to get as close as he could to the instant in instantaneous demand.

A The chart he is using is just an unreasonable high chart, very ultraconservative that somebody in North Carolina produced that gives you very high instantaneous flows. Even Mr. Redemann's numbers are extremely high and overboard, and he only used a peaking factor of two times maximum daily flow. But your maximum daily flow, you see, has other things added to it as I have explained, so this absorbs and dampened that peak.

Q Do you know whether the concept of instantaneous demand is one that the Commission has reviewed and discussed in numerous cases?

A Well, now, I asked the utility by interrogatory to tell me whether the Commission had ever ruled on instantaneous flow. The utility sent me four cases, or sent back and said here is the four places. Now, that is an exhibit in my testimony where I examined those, and I found that in that each case cited by the utility that the Commission had not so much as considered the instantaneous flow cases.

One was the rulemaking case where it never went anywhere. Others were cases where it was either agreed to and they had a settlement out of court, so to speak, or whatever, but all of that is Exhibit TLB-8 to my testimony.

Q But respectfully, Mr. Biddy, I asked you whether you

were aware that the Commission has at least considered or discussed instantaneous demand in over a dozen cases?

A I think certainly it has been brought up. Mr. Seidman has tried to bring it up several times, I think.

Q Your testimony, I'm not sure if that is a typographical error, seems to make it indicate that Mr. Seidman invented the concept. That is not your understanding, is it?

A No, he didn't invent the concept. He invented this used and useful formula he is trying to use, though.

Q Now, just so the record is clear, you do agree the concept of instantaneous demand as described by Mr. Seidman is what is occurring in several of Utilities, Inc.'s smaller systems in terms of the demand, it is instant?

A Except for it is a much lower amount than he or Mr. Redemann either one is proposing.

Q Mr. Biddy, even though the issue was stipulated, in your summary you seemed to talk about the three plants that you believe are included in service but that have been taken out of service in a not too flattering way. In fact --

A I meant it that way.

Q Well, you don't know anything about the concept of forced abandonment or prudent retirement, do you?

A Well, I know that three systems were abandoned. And when we by interrogatory and request for production of documents received actual plant-in-service schedules for those

three plants, over three-quarters of a million dollars of plant-in-service was still indicated to be in service. I thought that was atrocious. And had it been the first time I had seen it from Utilities, Inc. it wouldn't irk me so much, but I have seen it before.

Q But you have no idea as we sit here today what the appropriate accounting treatment of those plants, given their status, is or should have been, do you?

A I'm not an accountant, I don't do any of that.

Q Okay. Mr. Biddy, you included in some of your figures in attempting to determine the used and usefulness of wastewater plants in which I think Utilities, Inc. is -- well, perhaps they are booked and perhaps not. But in order to determine wastewater flows at some of the systems, you assumed that 80 percent of water that is utilized by residential users is returned to the wastewater plant?

A I did, yes.

Q Now, in fact, in doing your calculations you used that 80 percent across the board, didn't you?

A I did.

Q Okay. Isn't it true that general service customers are considered to return a higher amount because they don't have irrigation needs normally?

A Yes, that is true.

Q Now, Mr. Redemann's testimony is that 96 percent for

commercial and general service would be a more appropriate figure?

A Well, 90 plus, yes.

Q So even you acknowledge it should be 90 or over?

A For the very limited number of general service customers, yes.

Q And can you tell me what those numbers are as we sit here right now?

A No, I cannot.

Q Okay. Is your failure to use that higher percentage for the number of commercial or general service customers mean that your figures, in fact, are in error?

A My figures are approximate.

Q They are certainly skewed in an unfavorable light to Utilities, Inc, are they not, because you didn't use the higher return figure?

A Well, again, let me point out that my 10 percent that I used as an allowable was a very liberal allowance to the utility based on what we see in the Ravenna Park System where I actually computed it and where the Staff computed using a 500-gallon per day rule. As I said, our adjustment, our accountants took my numbers and adjusted the cost by about $30,000. Mr. Redemann adjusted it by $45,000. Now that I have the sewer quantities to do it correctly, it would be somewhere in the neighborhood of $58,000 that I have shown in my exhibit.

Q Do you agree with the testimony of Mr. Redemann that the Commission typically assumes that 96 percent of the water purchased by general service customers is returned as wastewater?

A Probably so.

Q Do you believe that that 96 percent figure is an appropriate figure?

A Well, you know, these are approximate numbers, you can't say it is real accurate. It is approximate. It is somebody's best estimate of how much a general service customer, and there is a lot of different kinds of general service customers, how much of their water is returned to the sewer. In general, the 80 percent rule has been established for a long time. Or I say rule, rule of thumb has been established for residential structures.

Q For residential customers?

A Yes.

Q Why didn't you make that breakdown in your figure between general service and residential?

A A matter of time probably, and not going into that fine a detail, and probably did not have the number of general service customers handy.

Q Mr. Biddy, are you aware of the fact that the strict application of that kind of a formula in the Summertree system might not be appropriate?

A Well, I understand that there are a number of purely irrigation meters in the Summertree system. I asked through two different series of interrogatories for that explanation and I never did get a completely clear answer from the utility as to exactly what they had. They sell 45 million gallons of water, Summertree, in the test year. Only 20 million of it wound up in the sewer, and I wonder where is it going. That is will lot of water, 25 millions gallons of water going somewhere.

I was told they had a number of irrigation meter connections. No breakdown of that was given to me, whether that was in homes, in each home, or for parks and golf course and areas. Now, I did notice when I was at Summertree inspecting the system that there is a large golf course there. I suspect a great deal of that 20 million gallons of water is going to water that golf course.

Q But you did use the same 80 percent when you were making your calculation for Summertree?

A Yes, of the water that was sold to sewer customers.

Q And you do acknowledge that in a service area in which there is a separate irrigation system, that figure is likely to be much greater than 80 percent that is returned to the water system?

A If that is true, yes. If that is true, what you are saying. If these -- the difference between 20 million gallons

that were sold to sewer customers and the 45 million gallons of water that is sold, if that is the result of separate meters at lots for irrigation water, then, yes, it is skewed some. Not a whole lot, but some.

Q But despite the fact that you knew there were separately metered irrigation wells out there, you went ahead and used the 80 percent figure?

A Well, again, restraints of time and budget.

Q On the revised Exhibit TLB-6, you have proposed an allowable in-flow for Ravenna of 5 percent, is that correct?

A That is correct.

Q And what information did you utilize to arrive at your conclusion?

A The in-flow should be approximately that equal to or less than your infiltrating in the system as a general rule that you will see in sewer systems. The allowable infiltration here, using the 200-gallon per day rule, turned out to be a 1,224,000 gallons in the year. Five percent of the water sold to sewer customer is a 1,038,000 gallons, so it is about equal using the 5 percent rule.

Q And, once again, in these calculations that you have gone to Ravenna, you have assumed 200 gallons per day per inch diameter per mile of sewer, correct?

A That is correct.

Q And that is the DEP criteria for new systems?

A That is correct.

Q Now, this is the exhibit that I think it was represented that you were not able to put together until you received some discovery responses?

A Yes, until after I had filed my direct testimony.

Q Do you know whether, in fact, the discovery responses were received by the parties in this case before you filed your testimony?

A I do not know.

Q You don't know one way or another?

A I do not know.

Q Did you ask Public Counsel about that?

A No, I did not.

Q But it is your understanding that the Staff had the information before you filed your testimony?

A I'm not sure if Staff had it before I filed my testimony. I saw it in Staff's -- when Staff came out with their testimony and was surprised.

Q Do you recall, Mr. Biddy, that I took your deposition on August 1, 2003?

A Yes, I do.

Q And on Page 14, Line 24, I asked you is it your understanding that the Staff had the information before you filed your testimony, and your answer was yes.

A They could have. That was not a real strong yes,

because I don't know. I have no idea. I saw it for the first time in Staff's testimony. And I said, hey, where did this come from? Well, it turns out it was an interrogatory that Staff proposed to the utility.

Now, in defense of everybody as far as handling all of these interrogatories, I will have to say that this case had the most interrogatories and requests for production of documents of any case I have ever been involved in, and many times they had to be restated over and over. So there was a lot of paper shuffling back and forth, and I don't doubt that one might have gotten misplaced.

Q Mr. Biddy, do you have Utilities, Inc.'s responses to interrogatories up there with you?

A Yes, I think I have most of them.

Q I want you to take a look at Interrogatory Number 106 from OPC to Utilities, Inc.

And I can show it to you, Mr. Biddy, if you are having a problem laying your hands on it?

A Please do.

MR. WHARTON: May I approach, Commissioner?

COMMISSIONER DEASON: Yes.

Mr. Wharton, while Mr. Biddy is reviewing that, how much more do you have for this witness?

MR. WHARTON: I'm almost done.

COMMISSIONER DEASON: Okay.

THE WITNESS: I see it.

BY MR. WHARTON:

Q Okay. Now, in fact, that interrogatory response does set forth the information on the Summertree irrigation that you indicated that was unclear to you, does it not?

A Yes, it does.

Q Okay. Why didn't you use that instead of going with the 80 percent across the board when you did your calculations?

A A good question. If I had had this, I would have. What I had was Staff's testimony that had the footages of sewer in it. I don't know that I have ever seen the actual interrogatory response. They indicated in their testimony that they received those numbers by interrogatory request for production of documents. Nowhere in this interrogatory does it talk about footages of sewer, it talks about quantities of sewer.

Q So is it possible, Mr. Biddy, that you didn't receive all the information from the Office of Public Counsel that was exchanged between the parties in these cases?

A Well, first and last I guess I did, except perhaps for that one. But with as many papers as were moving back and forth, that is always a possibility.

MR. WHARTON: Give me just one second, if you will, Commissioner Deason.

COMMISSIONER DEASON: Mr. Biddy, while they are

conferring, let me ask you a question on the revised Exhibit TLB-6.

THE WITNESS: Yes, sir.

COMMISSIONER DEASON: For Item 3, the Ravenna Park/Lincoln System, you have indicated that you utilized an allowable in-flow of 5 percent of water sold, correct?

THE WITNESS: Of water sold to sewer customers, yes, sir.

COMMISSIONER DEASON: And where did that come from?

THE WITNESS: Where did my 5 percent figure come from?

COMMISSIONER DEASON: Yes.

THE WITNESS: Nothing but general knowledge that in-flow is about equal to infiltration in most systems, and 5 percent of the 20 million gallons is a little over a million gallons. Your allowable infiltration is a little over a million gallons. Five percent is just a rule of thumb that is used in the industry. It is an approximate value that there is no real proof of.

COMMISSIONER DEASON: And your infiltration amount that you calculated, that was not -- was there any rule of thumb applied there or did you use actual numbers?

THE WITNESS: I used actual numbers. The rule for testing a system is the 200-gallon per inch diameter per mile of sewer rule of DEP's. Simply multiplying that by the miles

of sewer gives you the 1,224,000 gallons per year.

COMMISSIONER DEASON: So you used the 200 gallons per day per inch diameter per mile.

THE WITNESS: Yes, sir.

COMMISSIONER DEASON: And applied that to actual numbers.

THE WITNESS: Yes, sir, and then added the 5 percent of in-flow to it.

BY MR. WHARTON:

Q And, again, Mr. Biddy, when you are talking about the 200-gallon per day standard, you are talking about the DEP standard for testing new systems?

A I have said that several times here.

Q And your answer is still the same?

A It is.

Q Okay. I just want to make sure of something you said earlier that I may have misheard. It is not your testimony, is it, that Utilities, Inc. included growth for plant in any case other than Summertree and Golden Hills?

A The ones they computed, they used whatever growth factor they had. Most of them they didn't compute, they didn't bother to.

Q But are you aware, other than for plant, anything other than Summertree and Golden Hills a growth factor that was utilized by Utilities, Inc.?

A Yes.

Q In what cases?

A I agreed with you that that is what they did.

Q I'm sorry, you are agreeing with me. Okay. Now, you did go out and visually inspect the service areas and drove through some of the subdivisions, correct?

A Yes, I did.

Q And you did see some homes occupy more than one lot, correct?

A I could have. I didn't make specific note of it, but I could have, yes.

Q And you saw that some of the lots out there in the various service areas may not have been suitable for development?

A I don't remember any of those, but there is always one or two.

Q But you didn't attempt to quantify those numbers?

A No, I did not.

MR. WHARTON: That's all I have.

COMMISSIONER DEASON: Staff, do you have questions for this witness?

MS. GERVASI: Yes, Commissioner, we have a considerable number of questions for him.

COMMISSIONER DEASON: Okay. We will recess until 4:15.

(Recess.)

COMMISSIONER DEASON: Call the hearing back to order. Before we resume cross-examination of Mr. Biddy, I have had a number of inquires concerning scheduling and that sort of thing and what we are planning on doing tonight. I would like -- I know it is still early, this is the first day of a three-day hearing, but I would welcome some input as to whether there is any sentiment as to whether we may could finish the hearing tomorrow. And I know that it is sometimes kind of like looking into a crystal ball, and it is difficult to estimate, but to the extent I could get any guidance, I would appreciate that.

So, Mr. Friedman, do you have anything to offer?

MR. FRIEDMAN: I think there is a very good likelihood that we will finish up tomorrow, especially if we started at 9:00 o'clock or so.

COMMISSIONER DEASON: There are a number of appointments already set in Commissioners' offices, so 9:30 will be the earliest we could start tomorrow. Given a 9:30 starting time, do you still think that tomorrow is doable? Not a guarantee, but doable.

MR. FRIEDMAN: I think very doable. I don't have a lot of cross-examination of a lot of those folks.

COMMISSIONER DEASON: Mr. Reilly?

MR. REILLY: I would share that view.

COMMISSIONER DEASON: Staff?

MS. GERVASI: Yes, we share that view, as well. We really only have a good amount of questions for Mr. Biddy and then again for Mr. Lubertozzi. Just a very small amount of questions for some of the other witnesses that are coming up.

COMMISSIONER DEASON: Well, it would be my desire, if possible, to try to finish Mr. Biddy this evening. And when we finish Mr. Biddy, he will be the last witness for today. And then I assume we would pick up with Ms. DeRonne first thing in the morning at 9:30. So that is kind of the general game plan that we are going to go forward with. Staff, you may proceed.

MS. GERVASI: Thank you.

CROSS EXAMINATION

BY MS. GERVASI:

Q Mr. Biddy, I believe I heard you say in your summary that you provided of your testimony this afternoon that using wells to provide peak flows is not economically feasible, is that correct?

A I didn't say it was not economically feasible, I said it was not cost-effective nor a very effective way of doing the job.

Q What would be a more effective way of doing the job, in your opinion?

A With a ground storage tank and a high service pump.

Q What about elevated storage, would that work?

A Elevated storage for these systems would probably be

cost prohibitive.

Q For the UIF systems that have no storage, would you recommend that storage be added?

A Ground storage and high service pumps, yes, I think the systems cry out for it.

Q In your opinion, is it best under the circumstances of this case or not that UIF continue to meet peak flow demands using the water facilities already in place?

A Well, they picked a very inefficient and expensive way of doing it, both for themselves and for the ratepayers. And as I mentioned in my testimony, the insurance services offices do not recognize hydro-pneumatic tank systems for fire flow. So the ratepayers get no break on their fire insurance. It is classified as the worst rate they could have. Yes, I think it would be good if they would -- in the larger systems especially, if they would install some ground tanks and high service pumps.

Q Thank you.

MS. GERVASI: We passed out what we would like to now label, mark as the next available exhibit number, please?

COMMISSIONER DEASON: Exhibit 12.

MS. GERVASI: Thank you. And these are FDEP permit applications.

(Exhibit 12 marked for identification.)

BY MS. GERVASI:

Q Do you have a copy of that exhibit that has been marked as 12, Mr. Biddy?

A I do have, yes.

Q Now, you say in your testimony that you have designed and supervised the master planning, design, and construction of thousands of residential, commercial, and industrial properties, is that correct?

A I have, yes.

Q And as part of your work as a professional engineer, when you worked on all of those properties, have you had occasion to sign, date, and seal applications to the Florida Department of Environmental Protection?

A Many times, yes.

Q Do you agree that the DEP has forms for applying for a public drinking water facility construction permit and a general permit for construction of an extension to a public drinking water distribution system?

A Yes, I do.

Q Will you take a look at that exhibit that has been marked as 12 and tell me if you recognize its contents?

A Yes, I do. The --

Q Do these -- I'm sorry.

A The first one is a construction permit for a drinking water facility, and the second one is a general permit for construction of an extension to a public drinking water

distribution system.

Q Do these appear to be true and correct copies of those permit applications?

A From all appearances, yes.

Q Would you please refer to Page 2. Let me get the correct page number for you, it would be Page 12 of the exhibit, bottom right-hand corner, four zeros and a 12?

A All right.

Q And this is with respect to the DEP general permit for the distribution system, correct?

A Yes.

Q Public drinking water distribution system. Do you see at the top of this Page 12 where it says professional engineer and responsible charge of designing project?

A I do, yes.

Q And you have probably prepared many of these?

A I have signed and filled out this form, yes.

Q Would you please turn to Page 17 of this same exhibit?

A I'm there.

Q And do you see where it says design projected maximum hour water demand for proposed altered new distribution facilities under this project?

A I do.

Q Do you agree that the DEP looks at and requires

maximum hour calculations on permit applications for proposed water distribution systems?

A Absolutely.

Q And do you agree that the water distribution systems should be sized for maximum hours?

A Yes.

Q Now, would you please refer back to Page 2 of this Exhibit 12. And this is the public drinking water facility construction permit, correct?

A It is.

Q Do you see where it says on this page, "Professional engineer and responsible charge of designing project"?

A Yes.

Q And you have prepared many of these permit applications, as well, correct?

A I have.

Q Please turn to Page 4 of the exhibit where it says design population and water demand for system. Do you see that?

A I do.

Q And Paragraph 18 states, "Projected maximum hour water demand in design year and basis of projection," correct?

A Yes, it does.

Q So the DEP looks at and requires maximum hour calculations on water treatment plant construction permit

applications, isn't that right?

A Well, they require the information. The criteria is the greater of a comparison of max day flow to the maximum capacity, and another comparison compare average daily flow to firm reliable capacity. And this is for water wells and pumps at the water wells. They do require you to show them what the projected maximum hour is, what the fire flow is, and all the rest. But the design basis is the maximum daily flow and average daily flow. Those two comparisons from Ten-State Standards is an absolutely rule that is enforced.

Q Okay. Do you know why the DEP requires the maximum hour calculations for the sizing of water treatment plants on the application form?

A Well, I think probably they want to look at the distribution system in relation to it and make sure that you can distribute to the distribution system and meet that maximum hour. Normally, as I have said, that is done with a storage tank at the end of your treatment facility and a high service pump.

Q But you don't advocate the use of maximum hour or peak out demand in calculating used and useful for water plant in this case, is that correct?

A For water treatments plants, no, that is not the rule.

Q Can you explain why you don't advocate the use of the

maximum hour? You say it is not the rule?

A No, ma'am. I take the position that the sizing criteria of the DEP, which is not maximum hour, it is max day for treatment plants and for water wells. Yes, it is maximum hour for your distribution system, because obviously you have got to have maximum hour handled by your pipes, but that is usually furnished with a, like I say, with storage and high service pumps. So that is the reason that I said that.

Q Is this based on the Ten-State Standards rule, is that the rule you are referring to?

A Yes, it is.

Q On what basis do you conclude that the Ten-State Standards should govern how to calculate used and useful for water treatment plants?

A If you will look at the DEP Code, Florida Administrative Code, I have it here if you want me to take the time to find it, it says that these guidelines are mandatory. They are not optional or you do some percentage of them, they are mandatory. These are the guidelines for sizing wells and treatment plants. You have different guidelines for designing water distribution systems. You have a different guideline for designing storage facilities. You should have storage facilities at each one of these facilities.

Q Do you know whether that Ten-State Standards rule is what DEP relies exclusively on as the governing rule?

A Well, in the 40 years I have been in business, the first thing you do when you go in with your design is they pull the Ten-State Standards and make sure that you have complied with all of those rules.

Now, if you go above that, no, they won't have a whole lot to say about it, so long as it is an operational system, but those are the minimum required.

Q So they don't use the Ten-State Standards exclusively, is that what I understand you to say?

A No, I did not say that. I said that each and every time they pull the Ten-State Standards and check your designs by that.

Q Do you know whether other design manuals or resources exist?

A There are others, yes, lots of others. All the AWWA manuals, various and sundry other publications by the U.S. EPA and so on. But the Ten-State Standards is the Bible as far as sizing the size of treatment plants and wells, source of supply well pump.

Q Do you know whether the DEP will rely on any of those other design manuals such as the AWWA that you just mentioned?

A Well, I think they look at them some as guidelines. As I said, they are not opposed to you going higher, but these are the maximum size. And in a rate case proceeding where we are talking about what is fair for the ratepayers, we feel and

it is my policy and the policy of the OPC that the minimum size that is required plus the other factors we have talked about as cushions, should be the basis of how you judge a utility's system to see how much used and useful it is.

Q Are you familiar with the DEP Rule 62-555.330, and it is called engineering references for public water systems?

A Yes, I think I have it here if you will give me a minute.

Q Sure.

A Yes, I have it in front of me.

Q Isn't it true that that rule references seven specific Waterworks manuals and technical publications to be applied, including an AWW -- one or two AWWA publications, among others?

A Yes, it does.

Q And this is for the purposes of determining whether applications to construct or alter a public water system shall be issued or denied by the DEP, is that correct?

A That is correct.

Q Have you read the testimony of Utility Witness Seidman filed in this case?

A Yes, I have.

Q Are you aware that Mr. Seidman references instantaneous demand, instantaneous peak demands in his testimony?

A I am.

Q And have you read the testimony of Staff Witness Redemann?

A Yes, I have.

Q Are you aware then that he references a peak hour demand in his testimony?

A Yes, I have seen both testimonies.

Q So Mr. Seidman and Mr. Redemann both consider that there are peak demands other than the maximum day demand, isn't that a true statement?

A True. And I have testified that that is true, of course you have peak demands in the system. I'm saying two things about that. Number one, the change in water patterns and conservation of water has dampened that peak somewhat over the years, quite a bit over the years. Number two, we don't just take the maximum daily flow in the used and useful test, we add five years of growth to it, number one, that is quite a lot, and we add fire flow which is a big flow, and then we add -- or at least give them 10 percent unaccounted for water in that demand. So we add a lot to the demand that takes care -- obviously it does because we have had no pressure problems in these systems -- takes care of the peak flows. However, my testimony is that that is not an efficient and cost-effective way to meet peak flows.

Q And, therefore, the peak flows in this case, in your

opinion, should not be recognized beyond the maximum day?

A Yes. I think because of the factors I have mentioned, that the peak hourly, which Mr. Redemann obtained by doubling maximum daily, and the instantaneous flow which Mr. Seidman took from a chart from North Carolina, are both inordinately high, much too high. They guarantee 100 percent used and useful for everything. It just makes the numerator so large in the used and useful equation.

Q Mr. Biddy, in your general engineering practice, haven't you used a peak hour or peak factor of two in other cases besides this case?

A Have I used a peaking factor of two?

Q Yes, sir.

A Yes, I have, in designing water distribution systems, the actual pipes and mains and even transmission lines in the ground.

Q And why is it that you decided in this case not to use a peak factor of two?

A Well, you know, you have got to understand that we are talking about components here. There is one component which is your source of supply, that is your well and your pump. Peak hourly flow doesn't apply to that. You know, no competent engineer would tell you that. The DEP, I can tell you, rigidly enforces the Ten-State Standards. Now, if you wanted to go way beyond their standards, I don't know anybody

that has done that, but you could design that well for a peak hourly flow or an instantaneous flow based on these old standards that both Mr. Redemann and Mr. Seidman have quoted.

But, the second component is the treatment facilities themselves, which varies from just a chlorinator and a tank up to aeration and storage tanks, and high service pumps and all the rest. Another set of rules by the DEP apply there. The only place that the peak hourly flow or the instantaneous flow applies when you are designing is to the pipes, the actual distribution system, and the pump that gets it there, which is your high service pump.

Q Thank you. Now, you have provided a breakdown of the used and useful percentages by system components, correct?

A Yes, I provided that in Exhibit TLB-3.

Q And that has been marked for Exhibit 10 for the purposes of the record. Can you please refer to Pages 14 and 15 of your prefiled testimony.

A All right.

Q Starting at the bottom of Page 14 at Line 24 and continuing on to Page 15, here you are explaining why used and useful should be calculated for each of the major water plant components, correct?

A Yes.

Q Can you first explain, please, sir, what the term economies of scale means to you?

A Will I explain that before we look at this?

Q If you would, please.

A Is that what you are saying?

Q Yes.

A Well, economies of scale is a factor you may look at in some projects where you would install a larger item, whatever it might be, that may be, say, 50 percent larger than you would have installed, that you really needed, but that it only costs 25 cents more, that is an economy of scale. And you see those kind of things, of course.

Q You have testified this afternoon that you didn't apply an economies of scale factor to any of your used and useful calculation in this case, is that correct?

A I did not, no.

Q Do you believe that prudency of a utility's investment or economies of scale should ever be factored into the types of calculations that you make for the major plant components that you have made in this case?

A Well, these are existing systems and you can hardly make that analysis on existing systems that have been in the ground for a long time. I have no idea what they cost originally when they were installed. I know roughly what the comparison of the sizes would have been, but I did not consider any economies of scale. I would have considered economies of scale and have in rate proceedings like this where a utility

comes in and says we are going to build a 30 million-gallon per day treatment plant, and we want to do that, although we only need 20, because it is going to cost a good deal less proportionately. And we have examined, I have examined that from a standpoint of an economy of scale. And that is where that properly lies is in something you are going to do, you would weigh that to see if it was a good situation or not. In that case it would be good for both the utility and the ratepayers. In this case it is all one-sided for the utility if you were going to apply any of those economies of scale to existing facilities.

Q Thank you. On your Exhibit TLB-3, Composite Exhibit 10, which is your summary of used and useful calculations, you have made several component adjustments and particularly to source of supply and pumping, correct?

A Could you repeat your question, please.

Q Yes, sir. On this Exhibit TLB-3 you have made several component adjustments, is that correct, and particularly to source of supply and pumping?

A I have calculated the used and useful percentages. I don't know what you mean by adjustments. I have calculated used and useful percentage adjustments for each component in TLB-3, yes.

Q Yes, that is what I mean.

A Yes, I have.

Q Thank you. In your opinion should the utility have put in smaller wells to more closely match the demand you project?

A Yes.

Q And would that have caused the wells to be closer to 100 percent used and useful then?

A Yes.

Q Did you consider the size of the distribution and collection lines installed when you calculated used and useful?

A No. When you calculate used and useful for distribution systems, it has been a longstanding policy of the Commission to compare connected ERCs to total available ERCs. So the sizes are there, they are in the ground, they are what they are. In most cases they are adequate. In those two systems where I said we shouldn't give fire flow, they are not adequate, they are very small and undersized. But, in general, I did not consider the sizes of the pipes in the ground.

Q Doesn't the DEP, the AWWA, and the Ten-State Standards have recommended sizes for distribution and collection lines?

A Yes.

Q But you didn't elect to take a look at what those sizes were when you calculated used and useful?

A Well, the minimum size sewer line is 8 inches in the road, and I believe this system is supposed to have 8-inch

sewers in the road. Now, from what I know, from the pressure existing in the system, the distribution system piping does meet the minimum pressure requirements which is 20 pounds per square inch at the end of the line. However, I don't know quite what you mean by -- when you say I didn't consider them, I don't know how you would consider them from a standpoint of size as it relates to used and useful. Unless there is some new rule, I have no idea what it is.

Q You say there is a minimum distribution pressure rule?

A Yes.

Q DEP rule, right?

A Yes.

Q What is the minimum distribution pressure required by DEP?

A 20 pounds per square inch.

Q Can you tell me what happens when the pressure drops below that?

A Well, you know, it gets very weak and very feeble water flow. Twenty is not real good. I have been at places where they had 20 pounds of pressure on the end of the line. In the past, back when they used to do all of these Farmer's Home systems, that is the way they were designed, that is the way Farmer's Home wanted them designed, where they telescope down to a two-inch line at the very end and stretch them out as

far as they would go to get water to all the rural areas.

Well, that was a way to do it, but at the end of the line you had a very low pressure. Now, when it gets below that, it just keeps getting lower, and lower, and lower until finally the flow quits.

Q Are you aware of whether any of UIF's systems involved in this rate case had any water pressure problems during the test year?

A Not that I am aware of, no.

Q Regarding fire flow now, do you believe that the utility should be made to test its fire hydrants before fire flow can be considered used and useful?

A Well, as a matter of fact, they have. And by interrogatory and production of document request, I received those tests and verified that all but two of the systems that they were claiming indeed had fire flow. So, they were fine for, I forgot how many they were, but all but two, and those two we discussed earlier did not have enough fire hydrant coverage, even though they had fire flow at a hydrant or two at the front of the development, but the vast majority of the development had no fire flow. So we don't believe it is fair to the ratepayers to call it fire flow when it doesn't exist but on a tiny percentage of the development.

Q Is there any PSC requirement that you are aware of, whether it be a rule or a policy pronouncement in an order that

provides that fire hydrants have to be tested before fire flow will be considered in the used and useful consideration?

A Well, I don't know. If there is not, it should be. But I'm not aware that the PSC has a rule.

Q Regarding the water plant, if we have a plant that cannot meet maximum day flow requirements, is it true that another practical result could be that the distribution system probably would lose pressure?

A It could. It could. And if it was greatly lower than the needs out in the distribution system, probably what would happen is you would just have weak pressure in the system and you would start getting a lot of pressure complaints coming in.

Q Now, I believe you have testified that you have counted the number of potential lots in each of the utility's service areas, is that correct?

A I'm sorry, repeat the question.

Q Did you testify that you have counted the number of potential lots in each of the utility's service areas?

A I did that based on the service area maps that were furnished to us. The first set was not very good and you couldn't tell a whole lot about them. We asked for accurate maps of their system. Finally we did get maps that we could see each and every lot, which ones were occupied, which ones were not. And, yes, that is the way I determined the total

available ERCs. They actually colored up for me the number of ERCs that were connected. And, of course, in the Schedule F of the MFRs you can find the total ERCs, as well. So, that is the way I determined those two quantities.

Q And I believe you testified that you made an inspection trip to Marion, Pinellas, Pasco and Seminole Counties, correct, and personally inspected eight of the utility's larger water systems and four of the wastewater systems?

A Right. That is exactly right. Twelve systems.

Q Did you visually inspect the service areas by driving through the subdivisions and down each of the streets that the utility provides service to?

A Well, I can't say I went down each street. I went through and did a cursory examination of the service area, yes.

Q Did you notice whether some of the customers have their own well and septic tanks?

A I did not go into that detail. I did not get out and go behind the homes and so on and check that.

Q I have some questions for you about infiltration and in-flow. You say on Page 8 of your testimony, and this is on Lines 3 through 5, basically that the normally accepted method for calculating I/I is to allow a certain amount of infiltration based on the length and diameter of the sewer collection pipe, correct?

A That is correct, yes.

Q Do you know of any other methods that are used for calculating I/I allowances besides that one?

A Well, as I have postulated in my testimony before I got the sewer quantities on Ravenna Park, I was proposing an approximate value, a limitation of allowable of 10 percent of the total water sold. That is an approximate rule of thumb. But the recognized Ten-State Standards and water pollution control federation rules are a certain amount of gallons per day times the inch of diameter of sewer times the miles of sewer.

Q On Page 8 of your testimony at Lines 5 through 7, you state that 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 percent as being excessive.

Does this testimony change because of the fact that you revised your Exhibit TLB-6, what has been marked for identification as Exhibit 11?

A It changes insofar as the Ravenna Park system is concerned. I've got good quantities there, I assume. I take these quantities at face value, if the utility quotes them to me, that they're true. If those quantities are good -- I first saw them in Mr. Redemann's testimony. He got them by

interrogatory from the utility, as I understand it. I didn't receive that, but when I finally got it I used that for the Ravenna Park system. But the other systems I still held to the 10 percent rule.

Q Why did you choose 10 percent instead of 15, or 20, or something higher?

A Well, it is a rule of thumb that I first heard about in school many years ago, 40 years ago. I have heard it along through the years. I don't think it is something that is in general use. And as it turned out it was far more lenient to the utility than it should have been, because it was nowhere -- it was only about three-fourths of what Mr. Redemann computed based on his 500-gallon-per-day rule, and it was way less than that compared to my 200-gallon rule that I have done on this revised exhibit. So a 10 percent value is ultimately fair to the utility, if that is all you have to go by.

Q Can you provide a reference to any engineering design manual that indicates that I/I of over 10 percent is unreasonable?

A No, I honestly don't have my design book from 1963 at Georgia Tech. It probably, you know, wore out, or got old, or whatever. I don't have that book. As I remember it, we did in that class discuss the infiltration and in-flow and that 10 percent was a reasonable number. It is probably low now, to tell you the truth. It is probably closer to 15 percent, 20

percent maybe.

Q With respect to your revised Exhibit TLB-6, marked as Exhibit 11, Commissioner Deason asked you a question concerning how you arrived at that 5 percent for allowable in-flow. And can you tell us whether the Commission has ever used that 5 percent before?

A I don't know whether they have or not. I don't know. I have not examined all of their cases to find out. I don't know.

Q Okay. As part of your engineering analysis, did you determine the type of pipe as well as the size of pipe that the company has in their collection system?

A General sizes of pipe, I determined. Types of pipe, I had read that they had a good bit of vitrified clay pipe, and from the age of the system I would assume so. Any newer pipe would probably be PVC pipe, because everybody has quit laying vitrified clay pipe several years ago. To that extent only, I did find out.

Q Did you take that into account in your engineering analysis?

A Well, as I earlier testified over and over to Mr. Wharton, we believe that any pipe that was reasonably maintained ought to meet somewhere close to this 200. I wouldn't be hide bound to 200 gallons per minute. Somewhere around the 200 gallons per minute. That is a pretty stringent

requirement, and that is for new sewers. But if the utility kept the system maintained and tight, and just didn't let it go, you could approximate that 200.

Q For each of the wastewater collection systems that you believe have an infiltration and in-flow problem, do you know what type of pipe is in the ground?

A Honestly, no. Other than just the general what I have heard here today testifying and what I have read in some of the case materials. I did not get down and examine the collection system to determine that myself.

Q Let me refer you back, please, sir, to Page 8 of your testimony again. And you're testifying that the excessive amount of I/I should be used to reduce the operation cost of pumping wastewater and to the cost of purchased wastewater treatment, correct?

A Yes.

Q And you conclude that this method of accounting for the excess I/I is reasonable?

A It seems reasonable to me. And you have got to understand I'm not an accountant, so it should be applied to whatever cost factors there are in moving the wastewater from the home to the treatment plant. And I think those are the basic ones for the pumping and electricity, the cost of the purchased treatment itself.

Q Can you explain, please, why you believe this method

to be reasonable?

A The accounting method?

Q Yes, sir.

A It just seems reasonable to me that any -- well, if you have excess and you identify a certain amount as excess, if it costs you X dollars per thousand gallons to transport and treat that sewage, then I think proportionally it ought to be reduced by that. I think that is very reasonable. To my engineering mind it is. I am not an accountant and don't claim to be.

Q Did you consider any other accounting methods before concluding that this method --

A No, I did not.

Q -- was reasonable?

A I did not.

Q Concerning system growth, you state on Page 8 of your testimony that you applied the Commission's rule on growth for both positive and negative system growth, is that correct?

A That is correct.

Q And you used negative growth on three water systems and on one wastewater system, right?

A That is correct.

Q What are the reasons for your use of negative growth in these systems? And if your reasons differ, we can go one-by-one. If your reasons are the same for all of them, you

can tell me in one answer.

A There is a five-year statutory requirement. Excuse me.

Q Sure.

A Okay.

Q Can you tell me what your reasons are for recommending a negative growth for those systems that I mentioned?

A Well, it just seems to me, and after discussing it with the attorneys at OPC, that if the statute is to have any weight it must cut both ways. Years ago OPC opposed any margin reserve at all. It just felt like the customers, you know, the sizes ought to be exactly what the customers need. At that time the Commission was allowing about 12 months for lines and, I think, 18 months growth period for treatment facilities. Shortly thereafter, and this has been within the last eight or ten years, the legislature passed a law that requires that in your used and useful calculation that you include a five-year growth factor for the demand of the system. So, if growth is negative, it seems to me, and the attorneys agreed that it ought to be subtracted as well as added if it is increasing.

Q Do you know why these particular systems are experiencing negative growth?

A Well, in one case I do. They went out and sold off part of the system.

Q Which case is that, Mr. Biddy?

A They sold off the Druid Hills system, and let me see if I can -- (Pause.) Yes, I believe it was the Oakland Shores system that shows 4.5 percent negative growth averaged over the last five years. The first system maps the utility furnished me had the Druid Hills system still on the system. And I thought what is going on here, it doesn't match anything? And so they revised that map and cut the Druid Hills system off and told me they had sold it.

Well, if they are going to sell part of their clients to others, their customers, perhaps, you know, they should suffer the consequences of such an action.

Q Would you expect the negative growth to continue on a going-forward basis for the Oakland Shores system?

A I don't know.

Q Do you know what the reasons are for the negative growth in the Weathersfield Water System?

A I don't know.

Q How about for the Weathersfield Wastewater System, do you know?

A Do not know.

Q The Park Ridge Water System?

A I do not know.

Q Would you expect the negative growth to continue on a going-forward basis with respect to any of those systems?

A Well, Little Wekiva, Park Ridge, Phillips, Crystal Lake Systems, I computed that they were completely built out as far as pump, well, and treatment facilities were concerned. And each one of those has a very limited number of customers like, you know, 75, say. If they lose one customer, the next year maybe they have got 74, and the next year they may have 77, but it is that kind of thing in those particular systems.

Q What about for the systems that I mentioned to you, Weathersfield Water/Wastewater and Park Ridge Water, do you have any reason to expect the negative growth to continue on a going-forward basis for those systems?

A You know, I have no way to judge that. I have not made a population study or growth study of that area, I just don't know.

Q Do you know whether the Commission has recognized a negative growth factor in any other cases that you are aware of?

A I think I was asked that at deposition and I said we may be breaking new ground, but it seems fair to me.

Q Thank you. Would you please look at your Prefiled Exhibit TLB-3 again. This is part of Composite Exhibit 10 at Page 4 for the Crownwood Subdivision in Marion County.

A What are you looking at?

Q TLB-3.

A Page 4?

Q I believe so, let me make sure. I may have the wrong page. For the Crownwood subdivision in Marion County you have available ERCs of 136 somewhere, do you remember where?

A Yes, it is the top of Page 4 that you are referring to.

Q Thank you. Yes, I see it, too.

A Under the wastewater collection system, available ERCs, 136. Yes.

Q Thank you. What is the source of this number of ERCs?

A It is the system maps that I have, I have here somewhere that the utility furnished to me, and my going to the system and look at it. These systems are quadruplexes, or maybe eight, even, although I have forgotten, but they are set up in a very definite pattern around a circle. And there is -- if you count them, and the ones that are not occupied, you come up with 136 total that could be served by the pipes that are in the ground, and the existing treatment plant that is there now, within the capacity of the existing plant. So, that is where the available ERCs of 136 comes from.

Q Do you know whether there were water and wastewater lines in place during the test year to serve 136 ERCs at Crownwood?

A Yes. Because of the configuration of the way they are laid out in a circle, yes, they were.

Q How many ERCs can be served with the existing water and wastewater lines in Crownwood, do you know?

A I think it is about that 136. It would be roughly 300 times that 136, 300 gallons per day, so that is about 40,000 gallons a day, and that is the capacity of that plant. So 136 it would serve.

MS. GERVASI: Thank you, sir. I have no further questions.

THE WITNESS: All right.

COMMISSIONER DEASON: Redirect?

MR. REILLY: We have a little bit of redirect. One set of redirect relates to Revised TLB-6. Can I forego that, if you have something to say?

MR. WHARTON: We will withdraw our objection.

COMMISSIONER DEASON: Very well.

MR. REILLY: So I will withdraw my redirect on that. So just a little bit of redirect.

REDIRECT EXAMINATION

BY MR. REILLY:

Q And it relates to the line of questioning, Mr. Biddy, concerning your calculation of I/I for Summertree. I think there was a line of questions that suggested you had not considered separately metered irrigation use before applying your 80 percent water expected to be returned to the plant. Do you remember that line of questioning?

A Yes, I do.

Q My question to you is did you subtract irrigation use from total water sold before applying your 80 percent?

A Yes, I did.

Q And how did you go about doing that?

A I took the amount of irrigation water, 23 million gallons, and subtracted that from the total sales of 45 million gallons, and that gave me 22 million gallons of water sold to wastewater customers. I took 80 percent of that water as the water that was returned to the sewer.

Q Do you have an exhibit that outlines these computations that you did?

A That outlines those computations?

Q That you just described.

A Yes. That is number one on Exhibit TLB-6. It shows the total wastewater treated being 23 million gallons, the total water sold to account for the wastewater customers as 22 million gallons. These were numbers that I received by interrogatory from the utility.

MR. REILLY: No further redirect.

COMMISSIONER DEASON: Exhibits? I believe we have Exhibits 10, 11 and 12.

MR. REILLY: And we would like to move those exhibits into the record.

COMMISSIONER DEASON: Any objection? Hearing no

objection, show that Exhibits 10, 11 and 12 are admitted.

(Exhibits 10, 11, and 12 admitted into the record.)

COMMISSIONER DEASON: Thank you, Mr. Biddy.

We are going to conclude for this evening. And just let me express, again, the desire to try to conclude tomorrow. It would be efficient and certainly would cut down on expenses for all parties involved if we can do that. We would like to start early, however there are a number of appointments that have been scheduled for tomorrow morning, so we cannot start until 9:30, but we will begin promptly at 9:30 is our anticipation.

Is there anything we need to discuss before we adjourn for the evening?

MS. GERVASI: Not that I am aware of.

COMMISSIONER DEASON: Hearing none, then, we will stand in adjournment until 9:30 tomorrow.

(The hearing adjourned at 5:12 p.m.)

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

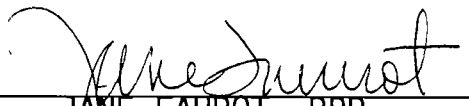
COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Office of Hearing Reporter Services, FPSC Division of Commission Clerk and Administrative Services, 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' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 3rd day of September, 2003.



JANE FAUROT, RPR
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