

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application by Southern States Utilities Inc. for rate increase and increase in service availability charges for Orange-Osceola Utilities, Inc. in Osceola County, and in Bradford, Brevard, Charlotte, Citrus, Clay, Collier, Duval, Hernando, Highlands, Hillsborough, Lake, Lee, Marion, Martin, Nassau, Orange, Osceola, Pasco, Polk, Putnam, Seminole, St. Johns, St. Lucie, Volusia and Washington Counties.

Docket No. 950495-WS



SECOND DAY - LATE AFTERNOON SESSION

VOLUME 9

PAGES 864 through 925

PROCEEDINGS: HEARING

BEFORE: CHAIRMAN SUSAN F. CLARK  
 COMMISSIONER J. TERRY DEASON  
 COMMISSIONER JULIA L. JOHNSON  
 COMMISSIONER DIANE K. KIESLING  
 COMMISSIONER JOE GARCIA

DATE: Wednesday, May 1, 1996

TIME: Reconvened at 3:10 p.m.

PLACE: Betty Easley Conference Center  
 Room 148  
 4075 Esplanade Way  
 Tallahassee, Florida

REPORTED BY: LISA GIROD JONES, RPR, RMR

APPEARANCES:

(As heretofore noted.)

DOCUMENT NUMBER-DATE

04946 MAY-28

FPSC-RECORDS/REPORTING

## I N D E X - VOLUME 9

## WITNESSES

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## EXHIBITS

NUMBER	IDENTIFIED	ADMITTED
93 - (Hartman) Final Order Denying Application for Increased Rates & Charges, with Attachments	882	
94 - (Hartman) (Late-filed) DEP 500-Foot Setback Requirement	909	
95 - (Hartman) Staff's Draft Rules on Used and Useful with May 12, 1995 Rule Attached	913	
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## PROCEEDINGS

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(Transcript continues in sequence from  
Volume 8.)

CHAIRMAN CLARK: We'll reconvene the hearing.  
Mr. Riley.

MR. FEIL: Madam Chairman, if I may -- one  
preliminary item before we start up with Mr. Hartman,  
again. Mr. Edmunds, who is two witnesses after  
Mr. Hartman, had informed me late last week that he had  
an emergency meeting scheduled in Ocala tomorrow  
morning. If we are unable to finish with Mr. Edmunds  
this evening, we can have him come back on Friday, but  
he is going to be unavailable all day Thursday. I'm  
mentioning this so we could all keep that in mind in  
terms of pacing the order of witnesses.

CHAIRMAN CLARK: Okay. Thank you. Go ahead,  
Mr. Riley.

GERALD C. HARTMAN, P.E.  
resumed the stand on behalf of Florida Cities Water  
Company, and having previously been duly sworn,  
testified as follows:

CONTINUED CROSS EXAMINATION

BY MR. RILEY:

Q Mr. Hartman, I've been assured in the break  
that the as-built drawings of the tank, as it's



1 connected to the pump, which is drawing water out of the  
2 tank, should tell you what the lowest level of the water  
3 would be and still be able to be drawn out of the tank,  
4 and that it would be dictated by the NS -- the NPSH of  
5 this high service -- or the pump that's drawing the  
6 water out or the net positive suction head of that  
7 particular pump. That is not your understanding, that  
8 the as-built drawings of this tank connected to the pump  
9 will not reveal the lowest level that the water can  
10 reach and still be pumped out of the tank?

11 A Sorry. Some do, some don't is the answer to  
12 that. I mean, a very thorough professional engineer  
13 with a good contractor, once things are constructed,  
14 many times makes that denotation, but I've seen many  
15 storage tanks without the denotation made.

16 Q But it's true that ground storage does not  
17 always have a ten percent dead storage; it depends on  
18 the particular situation?

19 A Ten percent is a good average. It's not --  
20 again, that's an averaging versus taking a higher and  
21 lower figure based on each pump analysis and the  
22 elevation of the pump and the speed of the pumps.

23 Q We did accomplish a few things in the break,  
24 as we oftentimes do, to not plow over areas that have  
25 been perhaps sufficiently plowed over, so if I can, I

1 would direct your attention all the way to Page 47 of  
2 your rebuttal testimony, on Lines 5 through 9. And on  
3 those lines you state that the ERC numbers in Schedule F  
4 need not match the Schedule E for rate design; is that  
5 correct?

6 COMMISSIONER GARCIA: I'm sorry, where are you  
7 at now?

8 MR. RILEY: I'm sorry, this is Page 47, Lines  
9 5 through 9. And I'll just read it here quickly. The  
10 ERCs in the F Schedules represent ERCs based on plant  
11 flows and/or meter equivalency factors for used and  
12 useful purposes. The figures in the E Schedules are  
13 prepared for rate design purposes and need not match  
14 those of the F Schedules.

15 WITNESS HARTMAN: I understand your point in  
16 the word "need," and I would change that to "may not,"  
17 because they are two different sets of numbers.

18 Q (By Mr. Riley) Do they need to match or do  
19 they not need to match, is my question.

20 A As long as the appropriate ERCs are used for  
21 rate making purposes, then the rate design would be  
22 correct and the appropriate number of ERCs being used  
23 for used and useful purposes, the allocation percentage  
24 would be correct. So therefore, theoretically, they  
25 need not match, and I should have used "may not match."

1           CHAIRMAN CLARK: Mr. Riley, does that answer  
2 your question?

3           MR. RILEY: No, it doesn't, but I was going to  
4 try to ask it another way.

5           CHAIRMAN CLARK: Doesn't answer mine either.  
6 I don't understand why they don't need to match. The  
7 logic behind -- it would seem to me they need to match,  
8 and you need to explain to me why they wouldn't match  
9 and why that's okay.

10           WITNESS HARTMAN: Because there's a percentage  
11 sometimes used for line losses, and what we did, we  
12 looked at the plant itself. So the total flow coming  
13 out, and sometimes what's billed to a customer is less  
14 than, or most of the time, less than what comes out of  
15 the plant because of line losses. So that there's a  
16 difference there. And as long as it's accounted for  
17 appropriately --

18           CHAIRMAN CLARK: Well, then is the only thing  
19 it is is the difference between what you may bill for  
20 and what you're producing?

21           WITNESS HARTMAN: Yes.

22           CHAIRMAN CLARK: Is line losses?

23           WITNESS HARTMAN: And anything else that may  
24 be lost, yes.

25           CHAIRMAN CLARK: What else? Absent legitimate

1 things like line losses, it seems to me they ought to  
2 match. I'm sorry, I don't want to infer that a line  
3 loss is legitimate; I just mean that's an explanation I  
4 can understand.

5 WITNESS HARTMAN: Well, sometimes there's  
6 other uses of water off the system. Sometimes you tap  
7 the system and bring the water back through the plant  
8 for wash-down and other things like that. So -- it  
9 should be a very -- they should be very close, but they  
10 need not be --

11 CHAIRMAN CLARK: One is the difference between  
12 water produced and water actually metered for --

13 WITNESS HARTMAN: Yes.

14 CHAIRMAN CLARK: -- as consumed. Okay.

15 Q (By Mr. Riley) But is it not true that to the  
16 extent that you can have a higher number of ERCs for the  
17 F Schedules, the engineering schedules, that helps the  
18 company by causing the plant to be more used and useful;  
19 is that correct? If the number of ERCs are greater in  
20 number in the F Schedules, that's good for the company  
21 because more of the plant in service is needed?

22 A I didn't even look at it that way. All I  
23 looked at is what are the ERCs.

24 Q But is that true? Excuse me, is that true or  
25 false that the higher the number of ERCs for the F

1 Schedules, that helps the company --

2 A As active ERCs?

3 Q Excuse me, to finish the question -- to  
4 increase the revenue requirement?

5 A Again, you're in rate design, and I would ask  
6 you to ask another witness on that. I'm not into that.

7 Q But isn't it an engineering question that as  
8 the ERC numbers increase, the plant which is there is  
9 more utilized? Is that true or false?

10 A Yes, if you have more ERCs -- depending on the  
11 circumstances, yes, it would -- it should be more  
12 utilized.

13 Q And to the extent that you can understate the  
14 ERCs in the E Schedules, that helps the by increasing  
15 the rates; is that not --

16 A I've never looked at the E schedules, so I  
17 don't know. You're asking the wrong witness.

18 CHAIRMAN CLARK: That's it?

19 MR. RILEY: That concludes our questions.

20 CHAIRMAN CLARK: Mr. Twomey?

21 MR. PELLEGRINI: Chairman, before you go on, I  
22 might suggest that the order of Mr. Elliott and  
23 Mr. Edmunds may be inverted if that would help.

24 CHAIRMAN CLARK: We will if we need to. Thank  
25 you.

1           Go ahead, Mr. Twomey.

2           MR. TWOMEY: Thank you, Madam Chairman.

3                           CROSS EXAMINATION

4 BY MR. TWOMEY:

5           Q     Good afternoon, Mr. Hartman.

6           A     Good afternoon.

7           Q     Were you here this morning when the customer  
8 testified?

9           A     I was here this morning, yes, sir.

10          Q     Did you hear the gentleman say that he  
11 considers his water rates to be so high that he and his  
12 wife restrict the flushing of their toilets?

13          A     I heard that, yes, sir.

14          Q     One of the things, I take it, that you're --  
15 let me start over. The Commission presently, in the  
16 SSU's last order, adopted their Staff recommendation to  
17 use the average of the five highest days in the maximum  
18 month for calculating the used and useful portion of  
19 water plant, right? Is that how -- what is -- they use  
20 the average of the five highest days in the maximum  
21 month for the calculation of what, Mr. Hartman?

22          A     For water supply and treatment, the Staff has  
23 utilized the average of the five maximum days, yes.

24          Q     To calculate used and useful, right?

25          A     Associated with used and useful, yes.

1 Q And the Company witness has proposed, and as I  
2 understand it you adopt, the use of the single maximum  
3 day of the year for making that calculation; is that  
4 correct?

5 A That's correct.

6 Q And of mathematical necessity, absent the  
7 average being equal to the highest day, that means that  
8 your recommended methodology would necessarily result in  
9 a higher used and useful calculation; isn't that  
10 correct?

11 A That's correct.

12 Q So if the Commission -- if the Commission  
13 wants to increase the rates to those people this  
14 morning, and the increasing the used and useful  
15 calculation, all other things being equal, will result  
16 in higher rate base and higher rates, right? Or do you  
17 know?

18 A Well, I think that the proper used and useful  
19 should be determined -- analysis be determined, and the  
20 higher the used and useful the more rate base there is,  
21 and all things being equal, the cost per customer would  
22 be greater.

23 Q Right. So -- and I don't mean to be tricky  
24 about this, but if the Commission wants to increase the  
25 rates more than they already are under the methodology

1 they used in the last case, they will adopt your  
2 recommendation and increase the used and useful, right?

3 A The characterization of that question, I  
4 just -- first, I can't speak for the Commission, number  
5 one; and number two, I'm stating regulatory requirement  
6 and the reality of service, and the investment that is  
7 placed in service is for the maximum day. And now we're  
8 talking about whether or not the Company can recover its  
9 regulatory requirement.

10 Q I understand that. And my simple question to  
11 you is, is if they accept your recommendation and depart  
12 from what they're doing now, it will increase rates,  
13 right?

14 A I don't know. I'm not in the rate design  
15 aspect.

16 Q It will increase used and useful, of  
17 necessity?

18 A The single maximum day per water plant is  
19 greater than the five maximum days, yes.

20 Q Now, one of the other things that you  
21 suggested in your summary that you were doing was that  
22 you wanted to increase the margin reserve, right?

23 A I believe the reasonable margin reserve for  
24 water and wastewater plants should be three and five  
25 years, not the 18 months proposed by Staff, but we



1 concurred -- or utilized the same margin reserve for  
2 pipelines as one year.

3 Q Right, but on the whole, your recommendation  
4 and what the Company has asked for is a departure from  
5 what the PSC did in the Company's last case, correct?

6 A The PSC Staff recommended 18 months.

7 Q That's a yes answer, is that right,  
8 Mr. Hartman?

9 A That's correct.

10 Q And that departure, if the Commission makes  
11 it, will, of necessity, whether it's right or wrong,  
12 increase rate base, right?

13 A It increases the used and useful and therefore  
14 increases the rate base in that calculation, yes.

15 Q Good.

16 A And it is the same types of margin reserves as  
17 shown in the -- well, there's three years and three  
18 years in the Staff's proposed rules, in the May 1995  
19 proposed rules.

20 Q There isn't -- you said proposed rule?

21 A Well, draft rulemaking.

22 Q There isn't any -- am I correct in  
23 understanding --

24 A I misspoke, draft.

25 Q Right. And so I'm correct in understanding

1 that there isn't any rule to that effect, right?

2 A Yes. It was a draft in May of 1995, May 12th.

3 Q So it has no effect?

4 A That's correct.

5 Q Now, another thing I heard you say that you  
6 supported that the Company wanted was the hydraulic  
7 model analysis, is that right, or did I describe it  
8 properly, the hydraulic modeling?

9 A Yes, for four systems.

10 Q For four systems. And Mr. Terrero testifies  
11 to that, correct?

12 A And Mr. Edmunds and Mr. Elliott.

13 Q I understand, I think, the reasons you gave in  
14 support of that, but let me ask you a bottom line  
15 question, Mr. Hartman, and that is, for the four  
16 systems -- let me ask you this. Why didn't the Company  
17 propose hydraulic modeling for all of the systems  
18 involved in this case?

19 A I don't know.

20 Q Didn't you ask?

21 A I was not involved in that decision.

22 Q Yes, sir. That wasn't my question. You have  
23 adopted that position, correct?

24 A I believe that hydraulic analysis should be  
25 provided for all the systems, yes. I mean just as in

1 the '82 Staff and Commission policy for looking at used  
2 and useful to look at a hydraulic analysis, as well as a  
3 state requirement, FDEP requirement, that says all lines  
4 must be designed with a hydraulic analysis in the state  
5 of Florida, by statute.

6 Q And I think Public Counsel covered that well.  
7 My question to you is, do you know for the four  
8 systems -- did you analyze the analysis of the four  
9 systems involved?

10 A No.

11 Q Sir?

12 A No.

13 Q So you can't -- you're just -- are you going  
14 to analyze them at all?

15 A No.

16 Q Can you say whether the -- strike that. I  
17 understood you to suggest in your testimony and your  
18 prefiled and your testimony live here, that the  
19 hydraulic analysis for the modeling was more reasonable  
20 to the utility because it gave it greater recognition of  
21 what was actually necessary in the system to serve the  
22 existing customers, right?

23 A That's correct. And it's a regulatory  
24 requirement that you do a hydraulic analysis for the  
25 design which then means those are the facilities that

1 are invested in, so the investment is based upon a  
2 hydraulic analysis by statute, by requirement of the  
3 FDEP, so therefore that's the requirement for  
4 investment.

5 Q I understand, and let me just -- I don't plan  
6 to take -- I don't want to take very long, but I  
7 think -- and I don't object if you give all the  
8 explanation if you want to, Mr. Hartman, but I think a  
9 yes would have sufficed there, especially since you've  
10 given all that before. But if you want to stop with a  
11 yes or no with me, that will be fine; if you want to  
12 explain, that's fine as well. I would just like you to  
13 get credit for the explanation.

14 Does it follow then, that for the four systems  
15 for which the Company has proposed hydraulic modeling in  
16 this case, that the Company necessarily would get more  
17 used and useful and therefore a larger rate base as a  
18 result thereof?

19 A Theoretically, the regulatory requirement  
20 would come up with a higher number than the lot count  
21 method because there's no substantiation for it. But  
22 other than that, I think you need to ask Mr. Edmunds,  
23 Mr. Elliott and the people that did the work. I'm the  
24 wrong witness for that.

25 Q Okay. But the answer would be, to your

1 knowledge, yes, it would result in a larger used and  
2 useful calculation and a larger rate base; is that  
3 correct?

4 A Theoretically.

5 Q Well, let me ask you, do you know?

6 A I don't know.

7 Q But --

8 CHAIRMAN CLARK: Wait a minute. Wait a  
9 minute. What does he know or not know?

10 MR. TWOMEY: I'm trying to ascertain whether  
11 he knows --

12 CHAIRMAN CLARK: You need to finish your  
13 question before he answers. Go ahead. Do you know  
14 what? I don't get the question and answer.

15 Q (By Mr. Twomey) Do you know whether or not  
16 the hydraulic modeling proposed for the four systems in  
17 this case result in higher used and useful percentage  
18 than the lot count methodology would for those same  
19 systems?

20 A That's what I inferred your question before to  
21 be, and the answer is I don't know.

22 Q Right, but didn't I correctly hear you say  
23 that you assume, or theoretically, it would do so?

24 A Because the regulatory requirement is not  
25 recognized in the lot count method.

1 Q Wouldn't it be consistent, Mr. Hartman, with  
2 the rest of what the Company has proposed and what  
3 you're adopting, that it would result in a higher rates  
4 rather than lower rates?

5 A Again, I'm not your witness for that.

6 Q Do you know who that would be?

7 A I don't know the rate design witness.

8 Q You're listed as being a witness in support of  
9 the Company's position on Issue 27, is that correct,  
10 which is, what is the correct wastewater treatment plant  
11 capacity to use for calculation of SSU's used and useful  
12 percentage of Sugarmill Woods, right?

13 A One of them, yes.

14 Q Yes, sir. And you take the position that it's  
15 500,000 gallons per day, correct?

16 A I believe so. It initially was 500,000  
17 gallons per day. I believe there's an engineer who  
18 wrote a letter indicating his opinion there's clarifier  
19 limitations on that plant, and I think Mr. Bliss is more  
20 knowledgeable of that than me.

21 Q I'm sorry, an engineer?

22 A Mr. Bliss is more knowledgeable of the  
23 engineer's letter.

24 Q But just to the extent that you know, an  
25 engineer from where wrote --

1           A     I don't know. That's why I said, you could  
2 ask that question of Mr. Bliss. I anticipated your next  
3 question.

4           Q     So is it your testimony that as far as that  
5 position goes, you don't know? I mean, are you properly  
6 a witness in support of that position?

7           A     Well, I know the -- I've been to the Sugarmill  
8 Woods plant. I know the Sugarmill Woods system. I  
9 don't know what questions you would be asking me  
10 regarding those facilities.

11          Q     Okay. Let me ask you some and we'll see.  
12                If I could have an identification number,  
13 Madam Chairman.

14               CHAIRMAN CLARK: 93.

15               MR. TWOMEY: 93, thank you.

16               (Exhibit No. 93 marked for identification.)

17          Q     (By Mr. Twomey) If you know these answers,  
18 you can tell me. If not, Mr. Hartman, the same. Your  
19 position on 27 is that it should be the 500,000 gallons  
20 per day as indicated on the current operating permit on  
21 Page 661 of Volume 11, Book 15 of 17. If you'll look at  
22 Page 61 of this handout, the exhibit, which I hand-wrote  
23 these numbers, Madam Chairman, but I --

24               CHAIRMAN CLARK: That's good enough.

25               MR. TWOMEY: But I wrote them just the same.

1 Q (By Mr. Twomey) My first question to you is  
2 this permit appears to be expired. Is this the permit  
3 y'all mean?

4 A Is that a question to me?

5 Q Yeah, I'm sorry. Let me refer you to the  
6 first page, which is 61 in the lower right-hand corner,  
7 and it's Page 661 which y'all have referenced in your  
8 position on Issue 27. And my first question to you is,  
9 is that it appears that the permit, if it's the proper  
10 one, and it is shown for Sugarmill Woods Wastewater  
11 Treatment Plant, expired September 1st, 1995.

12 A That's what this document shows. Again,  
13 Counselor Twomey, I would like to mention to you that  
14 your question might be more fruitful with another  
15 witness, and that would be Mr. Bliss.

16 Q Let me ask you, since you did say you were  
17 familiar with Sugarmill Woods -- and why are you  
18 familiar with Sugarmill Woods?

19 A I've again been out to the site and -- but I'm  
20 not the engineer of record of all the facilities or  
21 anything like that.

22 Q This may be more appropriate for Mr. Bliss,  
23 but it's my understanding that -- well, let me ask you  
24 this, isn't it true that on Page 661, that it says that  
25 the -- in the second paragraph, it's for operation of a



1 0.5 million gallon per day Type I oxidation plant?

2 A Yes, on your page numbered 61, 1 of 10, and  
3 661 on the bottom, it's a half million gallon per day  
4 Type I oxidation ditch domestic wastewater treatment  
5 plant.

6 Q Now, it's my understanding that Southern  
7 States Utilities has had for some years, or until  
8 recently, a permit, construction permit, to increase the  
9 size of this plant to .7 million gallons per day. Were  
10 you aware of that?

11 A I'm aware that the expansion of the plant to  
12 .7 was a consideration by the Company, but I don't have  
13 all the other information.

14 Q Do you know why -- if in fact they haven't  
15 done that, do you know why they haven't done it?

16 A Again, it would be better for you to ask the  
17 Company witness.

18 Q Just briefly, Mr. Hartman, you had a  
19 discussion with Mr. Riley that the nature of the lots,  
20 zoning may change in subdivisions after they're platted  
21 and so forth. Do you recall that?

22 A Yeah, they could be replatted and changed.

23 Q Let me ask you if you know this, and if you  
24 don't, you can say so. Isn't it true that the state of  
25 Florida requires developers to file -- pardon me, I want

1 to get the right name for this -- a Florida Public  
2 Offering Statement for their developments?

3 A I'm not familiar with the financial aspects of  
4 development.

5 Q This is not -- I'm sorry, this is not  
6 necessarily financial, but are you aware of whether or  
7 not developers have to file such statements for the  
8 purposes, including stating specific dates by which they  
9 will have their infrastructure in place?

10 A Well, what, the Division of Land Sales? I  
11 don't know exactly what you're talking about.

12 Q Yeah, land sales.

13 A There are -- I'm familiar with -- I'm not very  
14 familiar at all in this area. I specialize in water and  
15 wastewater utilities. My whole practice is --

16 Q I don't mean to ask you any questions that's  
17 not your area.

18 A Thank you.

19 Q Now Commissioners, and Commissioner Kiesling,  
20 I apologize for this, but this just came up in the  
21 course of Mr. Riley's cross, so I don't have copies, but  
22 I want to -- just one page. I want to refer you to --  
23 you had a discussion about the fact that Mr. Riley asked  
24 you, I think, if there was a notion of developers having  
25 prepaid CIAC, right? And I think you said that it was

1 relatively rare?

2 A No. My answer was that to rely upon that to  
3 pay for the expanded capacity, the -- is remote. What  
4 happens is they will -- they may prepay a little bit of  
5 capacity relative to a portion of their development, or  
6 for even their entire development, but their development  
7 may not necessitate or fund the full cost of the  
8 treatment plant expansion. So to rely on that doesn't  
9 make a whole lot of sense.

10 Q Yes, sir, but let me ask you this. Do you  
11 have access to Volume 12, Book 9 of 27?

12 A Volume 12?

13 Q Yes, sir, 12, 9 of 27?

14 A No. It's not in the F Schedule. I don't have  
15 it.

16 Q Does the Company have a copy of it here?

17 MR. FEIL: Perhaps, but not readily available.

18 CHAIRMAN CLARK: Mr. Twomey, what are you  
19 looking for?

20 MR. TWOMEY: Volume 12, Book 9 of 27.

21 MR. FEIL: It's in the additional engineering  
22 information.

23 MR. TWOMEY: I'll just show him my copy or  
24 give it to Mr. Feil. (Pause)

25 WITNESS HARTMAN: I have Page 415 here.

1 Q (By Mr. Twomey) Do you have the page that  
2 shows Sugarmill Woods and shows the dollar amounts for  
3 prepaid CIAC, or did we flop a page there?

4 A This says nonused and useful.

5 MR. FEIL: The only thing that says prepaid  
6 CIAC for plant is what somebody has handwritten on this  
7 schedule. The schedule itself does not indicate prepaid  
8 CIAC.

9 (Pause)

10 Q (By Mr. Twomey) I apologize for this, since I  
11 don't have the book now. Since it's nonused and useful,  
12 in that category, doesn't it have to be prepaid?

13 A No.

14 Q Well, we'll have to work on that.

15 MR. TWOMEY: Commissioners, I would like to  
16 ask you to refer to -- I have not made separate copies  
17 of this. I would like to refer Mr. Hartman to an  
18 exhibit in Mr. Woelffer's testimony. If you have that  
19 testimony, I didn't see any necessity in having it  
20 entered twice.

21 While they're getting that, Mr. Hartman, let  
22 me ask you -- do you have someone getting it for you?

23 WITNESS HARTMAN: That testimony, I've got  
24 that in the trunk of my car.

25 MR. TWOMEY: I'm sure someone else here has

1 it -- I would suspect someone else has it and can get  
2 it for you.

3 Let me ask you while they're doing that, is it  
4 your testimony in your prefiled testimony, in your  
5 responses to Public Counsel, that you think it's  
6 appropriate that --

7 CHAIRMAN CLARK: Mr. Feil, give him this one  
8 and I'll look at Commissioner Garcia's.

9 Q (By Mr. Twomey) Do you think it's appropriate  
10 that current customers should pay for future growth? Do  
11 you think it's appropriate and fair that current  
12 customers should pay for future growth?

13 A All customers pay for the system -- the  
14 facilities, excuse me. All customers pay for the  
15 facilities that serve them. So to the extent that  
16 growth happens, that's natural for a system. So all  
17 customers pay.

18 Q So your answer is yes?

19 A Well, all customers pay, yes. All customers  
20 pay.

21 Q Let me ask you to look at Page 28 at the  
22 bottom, which is Page 3 of 15 of Exhibit MTW-1.

23 A Sure.

24 Q And it's your pleasure, Madam Chair, if you  
25 want to -- if you want to identify this now or --

1           CHAIRMAN CLARK: No, I don't think so, because  
2 we don't have extra copies. We don't have independent  
3 copies of it. I don't have anything to give the clerk.

4           MR. TWOMEY: I'll just refer to it as  
5 Mr. Woelffer's MTW-1.

6           CHAIRMAN CLARK: That would be fine.

7           COMMISSIONER GARCIA: This is Page 3 of 15?

8           MR. TWOMEY: Yes, sir.

9           Q     (By Mr. Twomey) And I would like to ask you  
10 first, in this case, Mr. Hartman, help me be clear in  
11 understanding, in terms of calculating used and useful,  
12 it's my understanding that SSU has calculated the  
13 wastewater treatment plant used and useful percentage by  
14 taking the ratio of the average daily use of the high  
15 use month to the plant's permitted capacity. Is that  
16 generally correct?

17          A     For wastewater treatment plant, I believe most  
18 of the calculations, or all the calculations, are based  
19 upon the maximum month utilization, yes.

20          Q     Right, but just so I'm clear, because I'm not  
21 necessarily as knowledgeable in this as I would like to  
22 be, the maximum month necessarily means the average of  
23 the days of the maximum month, right?

24          A     That's correct.

25          Q     Now, isn't it -- isn't the purpose of

1 calculating the used and useful percentage for  
2 wastewater treatment plant to assign the capital asset  
3 responsibility to the current customers and separate  
4 that capital asset responsibility from that that's  
5 responsible for future customers; is that right?

6 A No, not necessarily. I mean it's -- the used  
7 and useful analysis is to recover the prudent  
8 investment, regulatory requirements, and for assets  
9 serving all the -- the customers that effectively get  
10 the service.

11 Q Current -- don't you mean current customers?

12 A With margins of reserve, yes.

13 Q And in fact, isn't it true, if you know, that  
14 in the Company's calculations for the used and useful  
15 percentages of all the systems for which they're  
16 included in this case, that they base their wastewater  
17 treatment plant used and useful calculations on 1996  
18 projected numbers, correct?

19 A I believe so.

20 Q I'm sorry, is that --

21 A I believe so.

22 Q Do you know?

23 A Yes. I believe they have. I'm agreeing.

24 Q I'm sorry. The -- by that you mean yes, they  
25 did? Is that what you mean?

1           A     Yes, in the used and useful analysis for the  
2 test year, you would use a test year period, of course.

3           Q     I don't mean to quibble, Mr. Hartman. I'm  
4 just trying to get a distinction between whether you  
5 know for sure, yes, they did or you think they did  
6 maybe.

7           COMMISSIONER GARCIA: Mr. Twomey, why don't  
8 you ask the question again, because now I'm lost about  
9 what you're looking for. I thought he answered you in  
10 the affirmative, but I'm not sure.

11           MR. TWOMEY: I asked him if he knew, wasn't it  
12 true that SSU in this case based their wastewater  
13 treatment plant used and useful percentages on 1996  
14 projections, and you said?

15           WITNESS HARTMAN: Yes. It's a test year.

16           Q     (By Mr. Twomey) Good. And isn't it true that  
17 to the 1996 projections, the Company added the five-year  
18 margin of reserve that it's seeking in this case?

19           A     That's correct.

20           Q     In order to take plant out to the year 2001,  
21 correct?

22           A     That's the effect, yes.

23           Q     And again, as we've discussed earlier, I  
24 think, the intention there, or the result, irrespective  
25 of the intention, is to assign the current customers of



1 this utility rate base responsibility for what the  
2 Company says the used and useful percentages will be in  
3 1996, as well as the next five years, right?

4 A Yes, that's -- margin reserve provides for  
5 that period for implementation, as well as variability  
6 in demand, or usage -- flow characteristics, excuse me.

7 Q Now, in this exhibit, MTW-1, which begins on  
8 Page 26, it is printed on your letterhead. Do you  
9 recognize it?

10 A Yes, I did it.

11 Q I'm sorry, you prepared this analysis,  
12 correct?

13 A It's for the Englewood Water District.

14 Q And it's titled -- or Subject: Wastewater  
15 System, Capital Contribution Charge, right?

16 A Impact fees or capital charges for  
17 not-for-profit entity. It's not a used and useful  
18 analysis.

19 Q I'm sorry, that wasn't my question. The  
20 subject is, on Page -- the first page, Wastewater  
21 System, Capital Contribution Charges, right?

22 A That's correct.

23 Q Turn to Page 28, please, which is Page 3 of  
24 your report.

25 You say in the first sentence, "The purpose of

1 a capital contribution charge is to assign, to the  
2 extent practical, growth-related capital costs to those  
3 customers responsible for such additional cost." And by  
4 that you mean future customers, right?

5 A That's correct. It's following the Dunedin  
6 case on impact fees.

7 Q Because that's your stated goal, is it not,  
8 Mr. Hartman, to assign costs which are -- by definition,  
9 the capital contribution costs go to future customers,  
10 right?

11 A No, there are some on present customers and  
12 future customers, both. There's a capital recovery in  
13 the rate, a significant capital recovery in the rate.

14 Q I'm sorry. I thought this study was intended  
15 to derive capital contribution charges for impact fees,  
16 as you stated.

17 A That's correct. And it allocates the impact  
18 fee for public entities, not-for-profit situation, with  
19 full cost recovery, not equity contribution, following  
20 the Dunedin case. But also, to have a correct answer to  
21 your question, a large portion of the capital is within  
22 the rate itself.

23 Q My question to you is, though, did you intend  
24 to have these charges be paid for by then existing  
25 current customers of the system, or -- as opposed to

1 future customers after the charge was derived?

2 A Oh, of course, the charges would be effective  
3 after the date of implementation for all future  
4 customers.

5 Q Thank you. You say in the same paragraph, on  
6 Page 3, in the middle, "Generally, this practice has  
7 been labeled as, 'growth paying its own way,' without  
8 existing user cost burden," right?

9 A Uh-huh. That's correct.

10 Q Now, the middle of the page, you say, "As  
11 mentioned previously, it is important to ensure that  
12 only those assets associated with future customers be  
13 reflected in the calculation of the capital contribution  
14 charges. Thus, the district's existing assets need to  
15 be allocated between existing and future customers."  
16 Correct?

17 A That's correct.

18 Q Now, if I understand you correctly, at the  
19 bottom of that same paragraph you refer to Page -- or  
20 Table 1, and you say, "As can be seen, the total  
21 wastewater flow treated during this time was 172.9  
22 million gallons. The average daily flow treated by the  
23 district's wastewater system was therefore approximately  
24 0.474 MGD," or million gallons per day.

25 Now, did you -- does that mean, Mr. Hartman,

1 that -- I've done the math on this to check it. It  
2 appears to me that you took a straight average, that you  
3 divided 172.9 million gallons by 365 days. Is that what  
4 you did?

5 A Yes.

6 Q Because that -- the result is that it  
7 assigns -- let me put it in the form of a question.  
8 Isn't the result that this methodology assigns a  
9 large -- a larger percentage of existing assets to  
10 future customers than if you use some other methodology?

11 A Well, what is the other methodology you're  
12 talking about?

13 Q Well, for example, doesn't your methodology  
14 described on Page 3 result in a lower number assigned to  
15 current customers than if you took an average of the  
16 highest month use?

17 A You would be breaching the Dunedin case.  
18 There's provisions. This is an impact fee study, not a  
19 used and useful study.

20 CHAIRMAN CLARK: Mr. Hartman, let me interrupt  
21 you just for a minute. I have trouble following you  
22 when I don't hear a yes or a no to what Mr. Twomey  
23 said.

24 WITNESS HARTMAN: The answer is yes. You  
25 could come up with another methodology to lower the

1 impact fee. That's true.

2 Q (By Mr. Twomey) And if my clients were  
3 prepared to stipulate now that they would accept their  
4 used and useful calculations based upon average daily  
5 flows on a yearly basis, would you recommend that to  
6 your client?

7 My client is prepared right now to stipulate  
8 that they'll accept a used and useful formulation based  
9 upon average daily flows over the course of the year.  
10 Would you recommend that to SSU?

11 MR. FEIL: Can I ask for clarification? Which  
12 clients are you referring to? You represent a number of  
13 associations, and I guess for clarification purposes I  
14 would like to know which clients you're referring to.

15 MR. TWOMEY: I'm referring to SSU. Oh, my  
16 clients?

17 MR. FEIL: Yes, sir.

18 MR. TWOMEY: All of them.

19 WITNESS HARTMAN: Number one, I don't  
20 negotiate for the Company any settlement offer. I think  
21 that's between you and the other attorneys. You guys  
22 could talk about it. I can't answer that.

23 COMMISSIONER DEASON: I believe his question  
24 was would you recommend that to your client?

25 WITNESS HARTMAN: Absolutely not, because it

1 doesn't follow these things, but if the Company wants to  
2 do whatever they want to do. I mean, it's not my  
3 purview.

4 COMMISSIONER GARCIA: Absolutely not because?

5 WITNESS HARTMAN: Because it's not right. One  
6 is an impact fee and the other is a used and useful  
7 analysis. One is a public entity and this is a  
8 regulated utility. Totally different situation. It's  
9 apples and oranges. (Pause)

10 MR. TWOMEY: I apologize. Did the  
11 commissioners -- did the commissioner ask you if you  
12 would recommend it, not --

13 CHAIRMAN CLARK: Yes, Mr. Twomey. It was  
14 asked if he would recommend it. He said absolutely not.

15 Q (By Mr. Twomey) I'm sorry, and why not?

16 A Because one is a used and useful analysis and  
17 the other is an impact fee study, totally -- it's apples  
18 and oranges. Two totally different things. It's not  
19 right.

20 Q Well, isn't the -- again, you say in the  
21 middle of Page 3, Mr. Hartman, "It is important to  
22 ensure that only those assets associated with future  
23 customers be reflected in the calculation of capital  
24 contribution charges," right?

25 A Yes. We're talking about rates and charges

1 here versus capital contribution.

2 Q I understand that. But my question to you is,  
3 if you get the -- if you segregate the assets associated  
4 with future customers, what's left?

5 A Well, first, what's left under this analysis  
6 is assets associated with existing customers, of  
7 course. But that's a different -- and that's solely on  
8 plant. Understand that this doesn't incorporate a lot  
9 of the other aspects.

10 Q Right, but to be clear I understand you, you  
11 concede that what's left after you determine what is  
12 segregated for future customers is for current  
13 customers, right?

14 A In this impact fee analysis for Englewood  
15 Water District, that's correct.

16 Q That's a yes answer, correct?

17 A That's correct. I'm saying a yes answer for  
18 the treatment of plant component only, and that's all  
19 this recovers, less 100 percent recovery. It's a  
20 totally different situation.

21 Q And for water or wastewater treatment plant,  
22 if you know, in a rate case situation, isn't that  
23 designated used and useful?

24 A Totally different.

25 Q What is it called, in a rate case context,

1 Mr. Hartman?

2 A Well, used and useful analysis takes in all  
3 the considerations that go in the regulation for used  
4 and useful. An impact fee analysis follows the Dunedin  
5 case in the state of Florida, for 100 percent recovery  
6 of capital costs, as well as recovery of capital costs  
7 in rates and charges. So it's a totally different  
8 animal. I've been involved in both, and quite a few  
9 rate studies, and capital fee studies and all that kind  
10 of stuff.

11 Q Let me ask you this. And I don't mean to beat  
12 a dead horse on this, but if you took only the assets  
13 associated with current customers, couldn't that be  
14 called, or shouldn't that be called, used and useful  
15 rate base for current customers?

16 A All assets associated with existing customers  
17 for their service should be considered in used and  
18 useful, yes.

19 MR. TWOMEY: That's all I have.

20 CHAIRMAN CLARK: Staff?

21 Mr. Hoffman, will you give me that testimony  
22 back?

23 CROSS EXAMINATION

24 BY MR. PELLEGRINI:

25 Q Good afternoon, Mr. Hartman.



1           A     Good afternoon.

2           Q     To begin with, I want to take you back to  
3 portions of your summary statement earlier this  
4 afternoon, and at one point you stated that the state of  
5 Florida requires hydraulic analysis. Is that for used  
6 and useful determinations?

7           A     No, sir. That's in the design of the  
8 facilities. It's by reference to Ten States Standards,  
9 Section 8, Pages 114 and 115.

10          Q     Thank you. Are you advocating no formulas for  
11 determining used and useful and recommending the use of  
12 engineering judgment on a case-by-case basis instead?

13          A     No. I have absolutely no formulas at all, but  
14 the formula by itself, I believe, taken out of context,  
15 doesn't represent investment necessary to serve a  
16 customer in the way it's being applied today. If you  
17 took into consideration the economies of scale, took  
18 into consideration the necessary facilities to meet  
19 regulations, which it states you're supposed to, versus  
20 just counting lots, then you could count lots also. And  
21 that's something, but I think you should consider it and  
22 should weigh it against the hydraulic analysis of the  
23 system, which was stated in 1982 by the Commission Staff  
24 and basically accepted by the Commission.

25          Q     Can you cite the case?

1           A     It's in my rebuttal testimony. It's in the  
2 workshop. It's the memoranda, Page 13 of GCH-7, and it  
3 has formulas in it and it references-- it's a memorandum  
4 from J.O. Collier to Dale Knapp dated November 14th,  
5 1982, talking about the Staff, water and sewer  
6 presentations of the Commission.

7           Q     We have that citation. I thought you were  
8 making reference to a case.

9           A     No, no. May 3rd, 1982.

10          Q     So then your position is that you would favor  
11 the use of formulas supplemented by engineering judgment  
12 on a case-by-case basis. Is that a fair statement of  
13 your position?

14          A     Well, first, I think it's inverse of that.  
15 It's -- if you flipped it, it would be the fair  
16 estimate. The first thing you look at is what is the  
17 regulatory requirement? Then there's no need to use a  
18 formula because if it's a regulatory requirement for  
19 that investment, it should be recovered, okay? So  
20 that's 100 percent used and useful.

21                   The consent order situation investment that's  
22 talked about before, the design criteria imposed by the  
23 state, local and federal agencies, as stated on Page 12  
24 of that memoranda, is supposed to be in there. And then  
25 once that's done, then you also provide for capacity

1 sufficient for down time, that's Item 7, seasonal  
2 variations, Item 8, safe withdrawal levels, which was  
3 Item 9, and Mary Clark's finding of fact and conclusions  
4 of law in the Cocoa vs. Corporation of the President  
5 case in 1990, confirm that same statement as the  
6 prevailing requirements, and provide for fire flow  
7 requirements. If you look at economy of scale, then you  
8 apply a formula. So it's the inverse of what you're  
9 saying. First you go through what you have to invest.  
10 You should recover what you've got to spend to serve  
11 somebody. And then you look at the formula.

12 Q Is it not the case that the formulas that you  
13 refer to in the 1982 memorandum apply only to two  
14 components, that is plant and lines?

15 A That's correct. Things have changed. How  
16 used and useful has been applied has changed over the  
17 years. In 1982, in place in 1983, and I think a lot of  
18 the assets were acquired -- negotiated and acquired in  
19 '84 and '85. These were the criteria.

20 Q That's different from what the Company is  
21 proposing now, that is by component; would you agree?

22 A That's correct.

23 Q Would you agree that it's appropriate to  
24 consider fire flow for appropriate components, depending  
25 on if a facility has -- depending on whether or not a

1 facility has storage?

2 A That's correct.

3 Q You spoke earlier of your involvement with  
4 Sarasota County.

5 A Yes.

6 Q That county is not under PSC jurisdiction; you  
7 would agree?

8 A I would agree. And in Sarasota County they  
9 were looking to acquire VGU, Venice Gardens Utilities,  
10 and to make that investment, yet they allowed 100  
11 percent used and useful all the regulatory requirements,  
12 and they knew they were going to have to turn around and  
13 purchase the system. So it shows that the other county  
14 entities that have taken back jurisdiction do recognize  
15 regulatory requirements in setting rates and charges.

16 Q But the rate making process in Sarasota County  
17 may be very different from the Commission's rate making  
18 process; isn't that true?

19 A There are some differences.

20 Q You at several points use the term adequate  
21 and/or sufficient storage, emergency storage, storage.  
22 Can you define that -- can you define what you mean by  
23 "adequate storage"?

24 A Meeting all the storage service needs. And  
25 that would be, number one, to provide for the

1 fluctuating demand; number two, to provide for fire  
2 flow; number three, to provide for emergency storage;  
3 and number 4, to provide for the facility storage  
4 necessary for vortexing -- or dead storage.

5 Q Again, at several points you talked about the  
6 aquifer as being the largest source of supply.

7 A It is.

8 Q Of course it is. Would an appropriate  
9 inference from that be that utilities should not build  
10 storage?

11 A No. You have to assess the situation.  
12 Storage is quite beneficial. It depends on the  
13 circumstance. But to state that you cannot economically  
14 meet your peaking needs from the aquifer is  
15 inappropriate. That's all I was responding to.

16 Q In the DEP rule having to do with the  
17 five-year planning period; is that planning period  
18 called margin reserve?

19 A No, it's not.

20 Q Is five years planning necessary if there is  
21 no or little anticipated growth?

22 A If there's no growth, it's a moot point. Then  
23 the margin reserve would be zero. So it's probably just  
24 a good practice to provide for it, because in the  
25 implementation, if there's no growth or no provision,

1 then you're looking at no impact.

2 Q Much of the ground that I had planned to cover  
3 has been covered by OPC and by Mr. Twomey, so I'm going  
4 to be very careful, try to be very careful not to  
5 recover that ground. But I want to ask you a question  
6 or two at this point concerning your testimony relative  
7 to reuse.

8 Let me ask you this. Do you believe that a  
9 reuse system should be -- I believe you did state that a  
10 reuse system should be considered 100 percent used and  
11 useful.

12 A Yes, and I believe the only reuse systems that  
13 are applied for in this case, for 100 percent used and  
14 useful, are the beneficial public access reuse systems;  
15 not even all four that you could apply for, it's just  
16 the top one.

17 Q Are dual percolation pond facilities  
18 considered a reuse system if there is no reduction in  
19 customer demand?

20 MR. FEIL: I'm sorry, were you referring to no  
21 reduction in customer demand for water?

22 MR. PELLEGRINI: On the water resource, yes.

23 WITNESS HARTMAN: I believe if it's part of a  
24 rapid infiltration basin system, it falls in the lowest  
25 category, with dual systems, dual ponds. If it's just a

1 singular perc pond or that type of thing, I don't  
2 believe that it would fall in that classification.

3 Q (By Mr. Pellegrini) If one percolation pond  
4 does not constitute a reuse system -- and I think that  
5 was your testimony earlier?

6 A Yes. Personally, I was asked how I look at  
7 it. I don't consider it reuse.

8 Q What has materialized with a second  
9 percolation pond such that now the dual -- such that now  
10 the two ponds do constitute a reuse system?

11 MR. FEIL: I'm sorry, I thought he already  
12 answered this question. He said that two ponds, if they  
13 were used as part of an infiltration basin.

14 WITNESS HARTMAN: A rapid infiltration basin.  
15 That's a recharging system. Now if it's just an  
16 effluent disposal facility, of course not. But there's  
17 a design -- the problem you're venturing into is you can  
18 design them to have only two and a rapid infiltration  
19 recharge system with a wetting and drying cycle, and  
20 therefore it would be the lowest form of reuse as  
21 aquifer recharge. You're treading on that. And that's  
22 why I can't answer you. If it's effluent disposal only,  
23 of course it's not reused.

24 Q (By Mr. Pellegrini) Would you agree,  
25 Mr. Hartman, that the DEP does not permit utilities with

1 less than 100,000 gallons per day capacity to have a  
2 reuse system?

3 A Does not allow them to have one?

4 Q Yes. That's the question.

5 A They are not -- there are certain requirements  
6 that are lessened, and they're not considered reuse --  
7 they're not mandated to consider a reuse feasibility  
8 study, that's correct, but not -- to preclude them from  
9 having one, I don't think that's correct, because  
10 there's quite a few small systems that have reuse, you  
11 know. I don't think there's a preclusion. It's just  
12 that the requirements are not there and you are not  
13 forced toward it. They don't consider it cost-effective  
14 below 100,000 gallons a day, and it's not as  
15 significant. (Pause)

16 Q Mr. Hartman, in your opinion, are percolation  
17 ponds an efficient method for recharging the aquifer?

18 A If designed in the rapid infiltration basin  
19 format, yes.

20 Q But in reality, do they operate as an  
21 efficient method for recharging the aquifer?

22 A If not designed in that method, they are not  
23 maintaining the bottom and therefore they don't  
24 percolate well, they go out laterally. The rapid  
25 infiltration basins are disked and cleaned in the bottom



1 and therefore are efficient. The others are not. So  
2 because the requirements may not be done like that, it  
3 would be inefficient if not in the rapid infiltration  
4 basin category.

5 Q Well, in your experience are percolation ponds  
6 for the most part well designed as rapid infiltration  
7 systems?

8 A That's a difficult one. I mean, it depends.  
9 I've seen some that are well designed and some that, you  
10 know, I would make modifications to.

11 Q The point of the questioning, of course, is to  
12 determine whether in your opinion percolation ponds are  
13 indeed serving to efficiently recharge the aquifer?

14 MR. FEIL: For clarification, you've made  
15 three references now to efficiently. I assume you are  
16 referring to efficiently from an engineering technical  
17 standpoint and not efficient from a financial or --  
18 standpoint.

19 MR. PELLEGRINI: Yes, I'll accept that  
20 limitation to the question.

21 WITNESS HARTMAN: And I hate to answer you the  
22 same way, but my answer was, if designed as a rapid  
23 infiltration basin, they are efficient. If not, and not  
24 maintained and not cleaned and disked and that kind of  
25 thing, usually they're not very efficient because over

1 time salts accumulate and basically plug the  
2 percolation.

3 Q (By Mr. Pellegrini) Mr. Hartman, let me turn  
4 your attention to your rebuttal testimony at Page 45,  
5 please.

6 A Yes, sir.

7 Q At Lines 1 and 2, you discuss a DEP  
8 requirement controlling the -- a DEP requirement  
9 concerning setback distance of a minimum of 500 feet  
10 from the wetted perimeter. Do you see that?

11 A Yes, from new sources, yes.

12 Q Can you -- would you cite for me please the  
13 particular DEP requirement?

14 A I would have to give that to you as a  
15 late-filed. I didn't bring that with me.

16 Q All right. Should we identify that, Chairman  
17 Clark?

18 CHAIRMAN CLARK: Yes, Mr. Pellegrini. Can you  
19 give me a title?

20 WITNESS HARTMAN: I would entitle it DEP 500-  
21 Foot Setback Requirement.

22 CHAIRMAN CLARK: That would be Late-filed  
23 Exhibit 94.

24 (Late-filed Exhibit 94 identified.)

25 Q (By Mr. Pellegrini) Next I have a few

1 questions concerning the economies of scale.

2 A Yes, sir.

3 Q And again, with reference to your rebuttal  
4 testimony at Pages 3 and 4.

5 A Yes, sir.

6 Q You got there before I did. There you give an  
7 example of economies of scale wherein a 10,000 gallon  
8 per day water treatment plant could cost \$6,000 to  
9 build, but 100,000 gallons per day at the plant would  
10 cost \$250,000 to build, that is \$6 per gallon versus  
11 \$2.50 per gallon; is that correct?

12 A That's correct.

13 Q If we add some more data to this hypothetical  
14 example. Assume, if you would, that your system has 30  
15 ERCs today, with each ERC using between 300 and 350  
16 GPD.

17 A Okay.

18 Q Then these 30 existing customers would bear  
19 the cost of any system built today; would you agree?

20 A Sure.

21 Q Would you agree that the \$60,000 divided  
22 between 30 customers equalling \$2,000 per customer --  
23 well, that the \$60,000 divided amongst the 30 customers  
24 would equal \$2,000 per customer, while \$250,000 divided  
25 by that same number of customers would equal over \$8300

1 per customer?

2 A Yes, that's the calculation there.

3 Q Would you agree then that those existing 30  
4 customers, that these 30 existing customers, are  
5 economically penalized to the advantage of the utility?

6 A No. What we're saying, again, is that it  
7 would pay for -- in the economy of scale evaluations,  
8 you would pay for whatever that investment was. So if  
9 the necessary investment was \$60,000 for those 30  
10 customers-- and that's what they would have paid for the  
11 10,000 gallon per day plant, okay? Well, that \$60,000  
12 should go into rate base versus the 250,000. So it  
13 would only be, say, 25 percent, or 20 percent of -- 25  
14 percent of used and useful. But if you looked at 10,000  
15 gallons to 100,000 gallons, it would show you at 10  
16 percent used and useful, or you would only have \$25,000  
17 in rate base. So what I'm saying, we're not advocating  
18 that the existing customer be harmed at all. No  
19 additional cost to the existing customer, but giving the  
20 opportunity to reach the economy of scale and save money  
21 in the future.

22 Q I want to turn your attention to the exhibit  
23 in your rebuttal testimony, GCH-7, Pages 14 through 17.

24 A 14, yes.

25 COMMISSIONER GARCIA: Sorry, Mr. Pellegrini, I

1 missed that.

2 MR. PELLEGRINI: GCH-7. Pages 14 through 17.

3 Q (By Mr. Pellegrini) Do the formulas shown  
4 there, Mr. Hartman, include an economies of scale  
5 allowance, in Pages 14 through 17?

6 A No, they don't. These are the default  
7 formulas.

8 Q Yes. In fact, Mr. Hartman, would you agree  
9 that it's difficult, if not impossible, to account for  
10 economies of scale by means of formula? Used and useful  
11 formulas, I mean.

12 A No, because my whole report is formulas  
13 showing the economies of scale. That's not true. What  
14 is true, a formula, on a very small system, I agree,  
15 going back to Page 13, the Staff said, a formula for a  
16 very small system is often very difficult or impossible  
17 to apply. So the actual default formulas were shown not  
18 to be terribly applicable in small systems. It requires  
19 a great amount of flexibility to develop reasonable  
20 allocations which result in reasonable rates to the  
21 customer, and that's Page 13, right before Page 14. And  
22 the Staff did state that formulas are very difficult to  
23 apply by themselves without judgment.

24 Q I'm going to refer your attention to an  
25 exhibit which I'm about to hand out, Mr. Hartman, in

1 fact two exhibits, which I will refer to in due course.

2 CHAIRMAN CLARK: Mr. Pellegrini, which one are  
3 you going to refer to first?

4 MR. PELLEGRINI: I'm going to refer first,  
5 Chairman Clark, to the 5-12-95 Draft of Proposed Rule.

6 CHAIRMAN CLARK: That will be identified as  
7 Exhibit 95. That is the copy of Staff's Draft Rules on  
8 Used and Useful with May 12, 1995 Rule Attached. And  
9 SSU's response to OPC interrogatory -- or is that POD?

10 MR. PELLEGRINI: Yes, it's improperly  
11 identified. It should be POD No. 121.

12 CHAIRMAN CLARK: That will be marked as  
13 Exhibit 96.

14 (Exhibit Nos. 95 and 96 marked for  
15 identification.).

16 Q (By Mr. Pellegrini) But first, Mr. Hartman, I  
17 want to refer you to your rebuttal testimony on Pages 20  
18 and 21.

19 A Yes, sir.

20 Q There you have testimony regarding fire flow.  
21 My question is, do you believe that in order for a  
22 utility to be allowed fire flow provisions in used and  
23 useful there should be some means of providing fire  
24 flow?

25 A Yes.

1           Q     Would you agree with the -- referring you now  
2 to the proposed rule, used and useful rule, would you  
3 agree with Commission Staff -- Commission Staff's draft  
4 of the proposed rules regarding fire flows? Let me cite  
5 you to Page 8 of the rule. (Pause)

6           A     Well, the last sentence on Point 1, Page 8,  
7 provides a penalty, if a fire flow is not shown to be  
8 adequate, of 50 basis points until adequate fire  
9 protection is once again attained. Up until that,  
10 that's a rate making and subjective -- something that in  
11 rulemaking the Commission would have to consider. But  
12 up to that point, on one, I would agree.

13          Q     You're stating that you have no opinion on  
14 that last sentence, but that otherwise you would agree  
15 with the rule; is that right?

16          A     With Item 1 of that. I haven't -- and two, so  
17 far, looks fine.

18          Q     Take your time.

19          A     Again, reasonable timetable, again, that --  
20 the timetable aspect and the enforcement aspects, again,  
21 would be discretionary to the Commission.

22                     And three is -- are the typical requirements.  
23 And since there's a provision for regulatory  
24 requirements, it looks very much appropriate.

25                     And four is appropriate for a reconciliation.

1 So fire flow aspects of this -- other than the two  
2 things that, really, as an engineer, I have no say in.  
3 But the technical aspects seem very appropriate.

4 Q Mr. Hartman, would you please refer now to  
5 your direct testimony at Pages 12 and 13?

6 A Yes, sir.

7 Q There, Mr. Hartman, you state that the only  
8 time used and useful should be reevaluated is when  
9 capacity was added to a component since the last  
10 evaluation of used and useful; is that correct?

11 A Yes, and I would modify that slightly,  
12 verbally, to in the summary saying that if there's an  
13 obvious error, but that should be a remote --

14 Q Yes, I recall that.

15 A If there's ever an error, of course it should  
16 be corrected.

17 Q I wanted to ask you about used and useful for  
18 mains, apart from the four water facilities for which  
19 SSU is proposing the hydraulic modeling methodology. In  
20 the current rate proceeding SSU is proposing a  
21 methodology for determining used and useful for  
22 transmission and distribution mains and for collection  
23 systems, a methodology which you adopt and endorse,  
24 which differs significantly from the methodology  
25 proposed and used in the last rate proceeding. Would



1 you agree with that?

2 A It does differ between the two.

3 Q Here in the present proceeding the utility is  
4 comparing projected meters in service to the number of  
5 lots available; would you agree?

6 MR. FEIL: For clarification, Mr. Bliss is the  
7 listed witness on this issue. So perhaps it would be  
8 more effective for you to refer these questions to  
9 Mr. Bliss. Although Mr. Hartman did accept the  
10 methodologies used, I don't know that he is intimately  
11 familiar with every detailed calculation regarding that  
12 methodology.

13 MR. PELLEGRINI: It is our understanding that  
14 Mr. Hartman is familiar with the respective  
15 methodologies, that is the methodology being proposed in  
16 this case and the methodology used in the prior case.

17 MR. FEIL: Well, if he knows the answer, he  
18 knows the answer. If he doesn't, he doesn't. Go  
19 ahead.

20 Q (By Mr. Pellegrini) Should I repeat the  
21 question?

22 A You asked if the connected customers versus  
23 lots as a ratio for lot count method.

24 Q Well, I asked if you would agree that the  
25 utility in the present proceeding is comparing projected

1 meters in service to the number of lots available.

2 A I don't recall that.

3 Q You don't --

4 A I don't know if that's exact -- again, Chuck  
5 Bliss is the one that did most of this work. I talked  
6 to him about the engineering standards and that kind of  
7 thing.

8 Q Well, given your understanding -- your  
9 understanding that the two methodologies are different  
10 in some respects, the question really is this: If the  
11 new methodology is found to be the more appropriate,  
12 should it be the one to be used in the present  
13 proceeding?

14 A If the Company is filing in the F Schedules  
15 for used and useful with a request for, and it's found  
16 to be appropriate, I think the used and useful should be  
17 adopted, and if it differs from a previous one and  
18 picked up the correction, or something else, then it  
19 should be adopted.

20 Q Turning to a different topic for a moment,  
21 Mr. Hartman. Is it correct -- is it correct that you  
22 charged SSU a flat fee of \$25,000 for preparing  
23 testimony, attending depositions and hearings and  
24 discovery in this proceeding, in this rate proceeding?

25 A No. I didn't charge a flat fee. I charged --

1 it's hourly. My services are on an hourly basis. That  
2 might be the upset limit.

3 Q I'm sorry, what was the last?

4 A That might be an upset limit or something. I  
5 don't know. Things on our contracts that get out of --  
6 to get --

7 COMMISSIONER GARCIA: That might be a what?  
8 I'm sorry, I didn't hear your answer.

9 WITNESS HARTMAN: It could be an upset limit,  
10 which would be like you cannot exceed a budget of  
11 \$25,000. But all my charges are hourly. There's no  
12 lump sums or flat fees. I just get paid hour by hour  
13 for my services.

14 Q (By Mr. Pellegrini) Are you aware that the  
15 invoice -- the invoice shows a charge of 24 -- on the  
16 tracking log shows an amount of \$25,000?

17 A I am not aware of that. I am not involved in  
18 our billing.

19 Q Let me turn your attention to the second  
20 exhibit that is SSU's Response to OPC's Interrogatory --  
21 POD No. 121, Exhibit No. 96.

22 Isn't it true that this response, dated July  
23 18, 1995, states that there are no reports, studies or  
24 other documents in the Company's custody or control  
25 which address the subject of economies of scale?

1           MR. FEIL: Commissioner, I do have an  
2 objection to this interrogatory. It's dated July of  
3 '95. Mr. Hartman's name is not listed as a witness or  
4 a respondent here. And Mr. Hartman says in his  
5 testimony on Page 3, Lines 8, when -- Page 3, Lines 5  
6 through 11, when the economy of scale evaluation was  
7 completed and when it was provided to the parties. So  
8 in terms of relevance, I don't see how this --

9           CHAIRMAN CLARK: Mr. Feil, I think he can be  
10 asked a question on this.

11           MR. FEIL: Very well.

12           CHAIRMAN CLARK: Go ahead, Mr. Pellegrini.

13           Q     (By Mr. Pellegrini) Mr. Hartman, let me ask  
14 you again, isn't it true that this response, dated July  
15 18, 1995, states that there are no reports, studies or  
16 other documents in the Company's custody or control  
17 which address the subject of economies of scale?

18           A     Of the Company's storage, treatment,  
19 collection and distribution systems, or storage,  
20 treatment, collection, distribution systems of water and  
21 sewer companies in general. And the respondent was  
22 Charles E. Wood, and the response was none available.

23           Q     Well, all right. The answer to my question,  
24 as I phrased it, is yes?

25           A     Yes, it says "none available," right there.

1 Q Did you prepare an economies of scale study?

2 A Yes, we did.

3 Q Did you charge the utility approximately  
4 \$47,000 for that economies of scale study?

5 A In the \$40,000 range was my recollection of  
6 the budget, yes.

7 Q In the \$40,000 range?

8 A Somewhere in there, between 40- to \$50,000.  
9 Again, I'm not the guy that does that. It sounds about  
10 correct for the study.

11 Q Now Mr. Hartman, I'm going to direct your  
12 attention to a further exhibit. This is entitled  
13 Invoice Tracking Log dated 10-27-95.

14 CHAIRMAN CLARK: That will be Exhibit No. 97,  
15 and it's Invoice Tracking Log for Hartman & Associates,  
16 being the vendor.

17 WITNESS HARTMAN: I have it.

18 (Exhibit No. 97 marked for identification.)

19 Q (By Mr. Pellegrini) Could you read for me,  
20 Mr. Hartman, the figure at the lower right-hand corner?

21 A Current contract amount, \$44,710.

22 Q And this is -- this represents an invoice from  
23 Hartman & Associates?

24 A No, it's just a tracking log of the invoices.  
25 Our invoices are shown there on the left, Invoice Nos.

1 1, 2, 3, 4, 5 and 6, and they vary from 3,000 to 9,600.

2 Q Yes. And the -- would you read for me the  
3 project description?

4 A Economy of Scale Evaluation.

5 Q And the SSU project number?

6 A 95RA100.

7 Q Would you read the date associated with  
8 Invoice No. 1, please?

9 A Invoice date was May 26, 1995.

10 Q Let me turn you back to the previous exhibit,  
11 Exhibit 96, having a response date of 7-18-95.

12 A Yes, sir.

13 Q And we've agreed that that response indicates  
14 that no reports, studies or other documents in the  
15 Company's custody or control, that there are no such  
16 reports, studies or documents addressing the subject of  
17 economies of scale, haven't we?

18 A That's correct.

19 Q And yet we've just established that an economy  
20 of scale evaluation was underway, at least by May 26th,  
21 1995, some two months earlier?

22 A Yes. I believe the connection there would be  
23 that I don't think our firm provided a draft report to  
24 the Company prior to July 18th, 1995. So that's  
25 probably the situation. We were contracted and we were

1 working on the project, and we would submit a draft  
2 report and then a final report.

3 Q My concern, however, is that there was an  
4 awareness on 7-18-95 that an economies of scale study  
5 was at least underway. Is that not true?

6 A There should be. It was underway.

7 Q To your knowledge was that study prepared for  
8 some other purpose than for this rate proceeding, the  
9 economies of scale study?

10 A We were asked to prepare the economy of scale  
11 study, and one of the purposes for the preparation was  
12 for the rate proceeding, but there were other purposes  
13 also.

14 Q Were you aware of other purposes?

15 A Yes, use of the study for cost-effective  
16 sizing. It's a very good document for that.

17 Q To your knowledge, was it prepared for the  
18 purposes of used and useful rulemaking?

19 A I wish I was in their head. I can't state to  
20 you.

21 Q Only if you know.

22 A All I can say to you is that we prepared the  
23 work. We're a technical company. You would have to ask  
24 Ralph Terrero -- I guess is here as the project  
25 manager -- of the purposes for that report.

1 Q I think one final question on this subject,  
2 Mr. Hartman. What would you consider to be the useful  
3 life of this study?

4 A Oh, a very long time. It's all indexed to the  
5 Engineering News Record, 5-5 -- I believe a lot of the  
6 stuff is -- it's indexed. So all you have to do is go  
7 back to the Engineering News Record and change the  
8 indices and intermittently update it, but it would be a  
9 very useful tool for a long time. I did a similar study  
10 for Orange County in 1980, and they still use it, 1996.

11 Q By a long time, would you mean, for example,  
12 30 years?

13 A Probably the technology would change in 30  
14 years, but you know, 10 years it can be used, once it's  
15 updated. That's an estimate.

16 Q I want to take you back to the subject of  
17 reuse for just a moment. In both the DEP statute and in  
18 the PSC statute concerning reuse, the terms "prudent" or  
19 "prudently incurred" appear. Do you agree?

20 A That's correct.

21 Q You agree?

22 A Yes.

23 Q Why, in your opinion, do those terms appear in  
24 those statutes?

25 A Well, when you're recovering costs, you should



1 only recover costs of prudent investment. So some crazy  
2 situation or imprudent investment, you know, why should  
3 there be a -- the person making the decision for the  
4 imprudent investment probably would have the burden of  
5 risk.

6 Q Well, let me ask you this. Would you not --  
7 would you not distinguish "prudently incurred costs" for  
8 a reuse project from "all costs" incurred in a reuse  
9 project?

10 A I don't know of any imprudent costs in a reuse  
11 project. I don't know -- I can't cite you any examples,  
12 because the consultant looks at it first and provides a  
13 cost-effectiveness study. The client reviews it. The  
14 Water Management District reviews it. Then you have --  
15 the financial lending institution looks at, why are you  
16 doing this thing, and they do a due diligence. And then  
17 here at the Staff they're looking at it, so -- as well  
18 as DEP as a guideline.

19 Q I recall you testified to that earlier, but if  
20 we accept your thesis, then those phrases would seem to  
21 be superfluous in the statutes; would you agree?

22 A Yes. But I think that the -- yes, my answer  
23 would be yes. A diligent company with honest, you know,  
24 intellectually honest people doing their work and going  
25 through the whole process, it should be superfluous.

1 Q Nevertheless you would agree they exist in the  
2 statute and those phrases are there?

3 A Because sometimes people do crazy things. I  
4 don't know.

5 Q One final question, does the phrasing of the  
6 PSC statute suggest to you that the legislature has  
7 charged this Commission with the responsibility to  
8 determine the prudence of costs incurred in reuse  
9 projects?

10 A The prudence of the costs incurred?

11 Q Yes.

12 A I don't know. I don't, I don't -- because you  
13 would have to relate the statute, since 100 percent of  
14 the costs to be recovered -- I'm thinking this out now.  
15 It's a good question. And then the prudence of it --  
16 well, if you went through all the steps, of course there  
17 would be a review by the Staff here on the prudence of  
18 the investment.

19 MR. PELLEGRINI: No further questions. Thank  
20 you, Mr. Hartman.

21 CHAIRMAN CLARK: Commissioners? Redirect?

22 (Transcript continues in sequence in  
23 Volume 10.)  
24  
25

**DOCKET** 950495-WS

**EXHIBIT NO.** 93

**CASE NO.** 96-04227

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Application by Southern States Utilities )  
Inc. for rate increase and increase in service )  
availability charges for Orange-Osceola Utilities, )  
Inc. in Osceola County, and in Bradford, Brevard, )  
Charlotte, Citrus, Clay, Collier, Duval, Hernando, )  
Highlands, Hillsborough, Lake, Lee, Marion, )  
Martin, Nassau, Orange, Osceola, Pasco, Polk, )  
Putnam, Seminole, St. Johns, St. Lucie, Volusia, )  
and Washington Counties. )  
\_\_\_\_\_ )

DOCKET NO. 950495-WS

93

CUSTOMER CROSS-EXAMINATION EXHIBIT NUMBER \_\_\_\_\_

FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET  
NO. 950495 EXHIBIT NO. 93  
COMPANY/  
WITNESS:  
DATE: 7/24/96

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for a rate increase)	
in Citrus, Martin, Marion, and )	DOCKET NO. 900329-WS
Charlotte/Lee Counties by SOUTHERN )	
STATES UTILITIES, INC.; in Collier )	ORDER NO. 24715
County by MARCO ISLAND UTILITIES )	
(DELTONA) and MARCO SHORES UTILITIES )	ISSUED: 6/26/91
(DELTONA); in Marion County by MARION )	
OAKS UTILITIES (UNITED FLORIDA); and in)	
Washington County by SUNNY HILLS )	
UTILITIES (UNITED FLORIDA) )	
_____ )	

The following Commissioners participated in the disposition of this matter:

BETTY EASLEY  
GERALD L. GUNTER

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DOCUMENT NUMBER-DATE

06399 JUN 26 1991

PSC-RECORDS/REPORTING

①

FINAL ORDER DENYING APPLICATION  
FOR INCREASED RATES AND CHARGES

BY THE COMMISSION:

BACKGROUND

Southern States Utilities, Inc., (SSUI) Deltona Utilities, Inc. (DUI) and United Florida Utilities Corporation (UFU), herein after also referred to as "utility", are Class A utilities with many different systems located across the State of Florida. All three utilities are wholly-owned subsidiaries of the Topeka Group, Inc. (Topeka)

As of December 31, 1989, all of the utility systems under this rate increase application had 11,976 water customers and 6,917 wastewater customers. The combined water systems had actual operating revenues of \$1,166,547 and a net operating income of \$99,871 for the year ended December 31, 1989. The wastewater systems had actual operating revenues of \$2,518,745 and a net operating income of \$319,967 for the same period.

On July 13, 1990, the utility filed its minimum filing requirements (MFRs) for a rate increase which were determined to be deficient. On September 28, 1990, the utility refiled the MFRs which were accepted as complete and that date was established as the official date of filing. On October 15, 1990, the utility filed an amended application for increased rates which reflected the changes made in the MFRs on September 28, 1990. October 15, 1990 was established as the official date of filing. The test year for final rates is the projected twelve-month period ended December 31, 1991, based on the historical year ended December 31, 1989. The utility requested that this case be scheduled for formal hearing and not processed pursuant to the proposed agency action process.

The applicant has requested final water rates designed to generate annual revenues based on four uniform rate structures for the systems included in this application which have like types of treatment. It further states that the final rates requested would be sufficient to recover an 11.93 percent rate of return on rate base.

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PAGE 3

The Commission held four service hearings in this case. The first service hearing, which covered Marion and Citrus counties, was held on October 25, 1990, in Ocala, Florida. Fourteen customers presented testimony. The second service hearing, which covered Collier, Lee and Charlotte Counties, was held on November 27, 1990, in Naples, Florida. Seven customers testified. The third service hearing, which covered Washington County, was held on December 3, 1990, in Sunny Hills, Florida. Twelve customers testified. The last service hearing covered Martin County and was held in Stuart, Florida, on January 3, 1991. At this hearing sixteen customers testified.

The Commission acknowledged the intervention of the Office of Public Counsel (OPC) by Order No. 23496, issued on September 17, 1990. On November 26, 1990, the Commission issued Order No. 23803 granting the intervention of the Cypress and Oak Villages Association.

The utility requested interim water rates, in total designed to generate \$1,667,066. These revenues exceeded test year revenues by \$500,519, for an increase of 42.91 percent. The utility requested interim wastewater rates designed to generate annual revenues of \$3,510,010. These requested revenues exceeded test year revenues by \$991,265, for a 39.36 percent increase. The utility stated that this increase in revenue would be sufficient to recover operating expenses and a reasonable return on its rate base. The interim test period is the twelve-months ended December 31, 1989.

On December 11, 1990, the Commission issued Order No. 23860 which suspended the proposed rates and granted interim rates. The Commission granted a county-wide uniform percentage increase for both water and wastewater. The interim increase is subject to refund and secured by corporate undertakings filed by SSUI, DUI and UFU.

The prehearing conference was held on January 22, 1991, in Tallahassee, Florida. The hearing, also in Tallahassee, was held February 11-16, 1991. Briefs from all parties were filed with the Division of Records and Reporting on April 1, 1991.

During the hearing in this case, OPC made two motions to dismiss. The first was based on OPC's view that the MFRs were incomplete and thus the utility did not carry its burden of proof. The second was based on OPC's belief that the customers have been

3

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denied due process because of the additional information allowed in after the filing. The utility responded by stating that the argument goes to the weight of the evidence and that will be determined by the Commission in its final order.

Upon consideration, the Commission denied both motions at the conclusion of the hearing on the basis that it believed there was an adequate record upon which to make a decision. The Commission noted that it is not uncommon for companies to have problems with their filings - some to a greater or lesser degree than others - and that companies often do not realize what they have asked for. Essentially, the Commission stated it would review the record and determine whether the utility had carried its burden of proof for the increases requested.

FINDINGS OF FACT  
AND CONCLUSIONS OF LAW

Having heard the evidence presented at hearing and having reviewed the recommendation of staff, as well as the briefs of the parties, we now enter our findings and conclusions.

The burden of proof is upon the utility to show that its present rates are unreasonable, fail to compensate the utility for its prudently incurred expenses and fail to produce a reasonable return on its investment. South Florida Natural Gas v. Florida Public Service Commission, 534 So.2d 695 (Fla. 1988); Florida Power Corporation v. Cresse, 413 So.2d 1187 (Fla. 1982). In this proceeding, our review of the record before us leads us to unanimously conclude that the utility did not carry its burden of proof to show by a preponderance of the evidence that it was entitled to a change in its rates. We have jurisdiction to determine the water and wastewater rates of SSUI, DUI, and UFU pursuant to Sections 367.011 and 367.081, Florida Statutes.

The utility filed its case seeking increases for 34 of its systems located in 7 counties. It included those systems which were allegedly earning below their authorized rates of return. The utility was also seeking to have uniform rates applied to these systems.

When analyzing the record, we repeatedly were confronted with fundamental flaws in the utility's case. An example is rate base. The utility could not justify its expenditure for land purchased from Deltona Corporation pursuant to the 1989 purchase by Topeka,

the utility's parent. Supporting detail was lacking regarding original cost or fair market value. The utility is required to keep its books in accordance with the Uniform System of Accounts published by NARUC. Plant received as part of an acquired operating unit should be recorded at the cost to the person who first devoted it to public service. The recorded amount for subsequently purchased plant should be the cost incurred by the utility.

As part of the Topeka purchase of the DUI and UFU utility systems, Topeka acquired existing plant sites and sites for future utility use. The record shows that some of the land described as future use property had been in utility service when acquired. The utility's witness did not know whether the asking price for existing sites conformed with the original cost when first devoted to utility service. He did not know whether Topeka performed any tests to assure itself that the asking price equalled the cost incurred by the Deltona Corporation. He testified that appraisals would be performed later to establish the market value of the acquired properties in three of the counties in this case. Appraisals were also being performed to determine the value of land when it was first utilized for service. He admitted that a larger purchase price would increase the credit acquisition adjustment relating to the purchase. Thus, we could not include the reported land costs of approximately \$3,963,400 if we were to determine rate base.

Most troubling perhaps, was that the utility's construction budget showed the errors in the utility's own projections. Exhibit 39 compared the 1990 budgeted amounts for construction projects by county as shown in the MFRs with the actual year-end expenditures. It also compared the 1991 amounts in the MFRs with the current revised 1991 budgets. For both years, the figures shown in the MFRs were incorrect by over 50 percent. The 1990 MFR forecasted total was \$15,821,560; the 1990 actual expenditures were \$7,285,083. The 1991 MFR forecasted total was \$10,647,177; the 1991 current revised budget was \$21,256,836. The record shows that the planned improvements were either not made, delayed beyond the test year, or more or less expensive than projected.

Rate base is to ratemaking what a foundation is to a house since it is the basis upon which the utility's earnings are determined. If the utility's own forecasts are so severely in error, it casts a deep shadow on the credibility of the data

(S)



submitted and makes it very difficult to build a house that will remain standing.

The utility's operating budgetary process was also problematic. While called "zero-based budgeting," the utility's presentation indicated to us that its budgeting process was more of a "continuation budget" than zero-based budgeting as that term is commonly understood. In reviewing the budgetary process, one would have to accept that the 1989 expenditures would stand the test of scrutiny. However, there is a difference to this Commission between expenditures stated and expenditures justified. The South Florida Natural Gas and Florida Power Corporation cases previously cited support the concept that stating what an expenditure is, is not the same as justifying why that expenditure was made so that we can determine its reasonableness. Producing cost data does not in and of itself show the reasonableness of that data. The record does not contain justification for the underlying 1989 data upon which the 1990 and 1991 projections were based.

The utility's allocation method used for administrative and general (A & G) expenses of the Apopka office (overhead) was also troublesome. Using the utility's method results in the Sunny Hills system, which has approximately 400 water and 180 wastewater customers, being allocated approximately \$36,000 in A & G expenses. This not only raises the question of the correctness of the allocation method, but whether such allocations are in the public interest. Out of over \$5 million in A & G expenses for the utility as a whole, approximately \$2 million is allocated to the 34 systems in this case. The utility has not justified this level of expense or allocation in our view.

While the utility is seeking to apply uniform rates to these systems, its approach to the case was far from uniform. The record reflects that the utility's consultants used varying methods of treatment on numerous issues. This resulted in inconsistent treatment of the same issue. Further, for Citrus County, the utility did not include all the systems in this county, yet it wanted uniform rates applied to that county. This would leave the other systems in that county with different rates. When asked why the other systems in that county were excluded from the filing, the witness indicated time constraints and the earnings level of the excluded systems as the reasons. Yet we note that the utility had time to refile its sizeable MFRs because the first filing contained so many deficiencies.

ORDER NO. 24715  
DOCKET NO. 900329-WS  
PAGE 7

Looking at the record as a whole, we find the utility's data to be so flawed and incomplete as to have little probative value. Because we cannot depend on the base year data, we cannot in good faith make adjustments to try to save the utility's case. We know of no way to alternatively group these systems or design a rate structure based on persuasive data in the record. The rates requested by the utility were based on the investment and expenses shown in the MFRs and that data has been shown to be suspect. If we were to utilize an alternative 1989 test year and design system - specific rates, we would be basing that design on underlying data that was not justified during the course of the hearing. At various times during the six days of the hearing, we expressed our frustration with the quality of the evidence being presented. We allowed utility witnesses to return to the stand to present additional evidence. However, the utility was unable, in our view of the record, to present credible evidence that could withstand our scrutiny. Since it is not our responsibility to make the utility's case, we will not do so.

Accordingly, based on the evidence before us, we conclude that the utility has not carried its burden of proof of entitlement to increased rates. Its application is hereby denied in its entirety. The interim rates granted in Order No. 23860, must therefore be refunded with interest, pursuant to Rule 25-30.360, Florida Administrative Code.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the application of Southern States Utilities, Inc. Deltona Utilities, Inc. and United Florida Utilities Corporation for increased rates and charges for 34 systems in Citrus, Charlotte/Lee, Collier, Marion, Martin and Washington Counties, is hereby denied. It is further

ORDERED that the interim water and wastewater rates authorized in Order No. 23860 shall be refunded, with interest, pursuant to Rule 25-30.360, Florida Administrative Code. It is further

ORDERED that the utilities shall file revised tariffs reflecting the rates that were in effect prior to the issuance of Order No. 23860. It is further

ORDERED that this docket shall be closed upon the verification of the completion of the refund.

(7)

ORDER NO. 24715  
DOCKET NO. 900329-WS  
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By ORDER of the Florida Public Service Commission, this 26th  
day of JUNE, 1991.

  
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STEVE TRIBBLE, Director  
Division of Records and Reporting

( S E A L )

NSD

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water or sewer utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900 (a), Florida Rules of Appellate Procedure.

8

# WORKSHEETS

SSU ANSWER TO PSC INTERROGATORY  
27R-A - CITRUS CO. SYSTEMS.  
DOCKET No. 930880-W5.

**SCHEDULE OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER & SEWER**  
**- Plant Additions and Ending Balances -**

PLANT ADDITIONS AND ENDING BALANCES

PLANT NAME	PLT#	PROJECT DESCRIPTION	ALLOCATION FACTOR	1993 Additions	1993 End Bal	1994 Additions	1994 End Bal	1995 Additions	1995 End Bal	1996 Additions	1996 End Bal	1997 Additions	1997 End Bal
Apache Shores	990 W	Upgrade Water Lines-Distribution System			0		0		0		0	10,000	10,000
		Auxiliary Generator			0		0		0		0		0
		Additional Well			0		0		0		0		0
		Allocated General & Miscellaneous Plants	0.107291%	5,526	5,526	5,423	10,949	5,993	16,943	6,767	23,710	7,374	31,083
				5,526	5,526	5,423	10,949	5,993	16,943	6,767	23,710	17,374	41,083
Apache Shores	990 S	Replace & Upgrade Collection System			0		0		0	15,000	15,000	15,000	30,000
		Allocated General & Miscellaneous Plants	0.073241%	3,772	3,772	3,702	7,474	4,091	11,566	4,619	16,165	5,034	21,219
				3,772	3,772	3,702	7,474	4,091	11,566	19,619	31,185	20,034	51,219
Citrus Springs	906 W	Generator / Well #3			0		0		0	35,000	35,000		35,000
		Interconnect with Pine Ridge			0		70,000	70,000		70,000	140,000		140,000
		Well #2 Addition			0		0		0	20,000	20,000		20,000
		1.0 MGD Storage Tank/HS Pump Building			0		0		0		550,000	550,000	
		Allocated General & Miscellaneous Plants	1.123668%	57,874	57,874	56,799	114,673	62,767	177,441	70,871	248,311	77,225	325,536
				57,874	57,874	56,799	114,673	132,767	247,441	195,871	443,311	627,225	1,070,536
Citrus Springs	906 S	Upgrade Lift Station 2/A			0	35,000	35,000		35,000		35,000		35,000
		WWTP Upgrade			0	0	60,000	60,000	60,000	60,000	120,000	60,000	180,000
		Allocated General & Miscellaneous Plants	0.437517%	22,534	22,534	22,116	44,650	24,439	69,089	27,595	96,684	30,069	126,753
				22,534	22,534	57,116	79,650	84,439	164,089	87,595	251,684	90,069	341,753
Crystal River WILANPS	984 W	WTP Improvements		45,369	45,369		45,369		45,369		45,369		45,369
		Distribution System Improv. Investigation			0		0		0		0		0
		Allocated General & Miscellaneous Plants	0.044330%	2,283	2,283	2,241	4,524	2,476	7,000	2,796	9,796	3,047	12,843
				47,652	47,652	2,241	49,893	2,476	52,369	2,796	55,165	3,047	58,212
Golden Terrace	992 W	Abandon WTP #1 & WTP #2			0		0		0		0		0
		Interconnect with City of Inverness		32,694	32,694		32,694		32,694		32,694		32,694
		Allocated General & Miscellaneous Plants	0.066174%	3,408	3,408	3,345	6,753	3,696	10,450	4,174	14,623	4,548	19,171
				36,102	36,102	3,345	39,447	3,696	43,144	4,174	47,317	4,548	51,865
Gospel Island	986 W	Allocated General & Miscellaneous Plants	0.005782%	298	298	292	590	323	913	365	1,278	397	1,675
				298	298	292	590	323	913	365	1,278	397	1,675
				298	298	292	590	323	913	365	1,278	397	1,675

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SSU ANSWER TO PSC INTERROGATORY  
 2TR-A - CITRUS CO. SYSTEMS  
 DOCKET No 930880-WS

SCHEDULE OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER & SEWER  
 - Plant Additions and Ending Balances -

PLANT ADDITIONS AND ENDING BALANCES

PLANT NAME	PLT#	PROJECT DESCRIPTION	ALLOCATION FACTOR	1993 Additions	1993 End Bal.	1994 Additions	1994 End Bal.	1995 Additions	1995 End Bal.	1996 Additions	1996 End Bal.	1997 Additions	1997 End Bal.
Oak Forest	993 W	Water Distribution System			0		0	5,000	5,000		5,000	5,000	10,000
		WTP Upgrade & Aux Power			0	30,000	30,000	30,000	60,000		60,000		60,000
		Allocated General & Miscellaneous Plants	0.089302%	4,599	4,599	4,514	9,114	4,988	14,102	5,632	19,734	6,137	25,872
				4,599	4,599	34,514	39,114	39,988	79,102	5,632	84,734	11,137	95,872
Pine Ridge Utilities	907 W	Redrill Well #3 & Interconnect with Well #			0		0		0	100,000	100,000	10,000	110,000
		Hydraulic Analysis/Loop System			0	0	60,000	60,000	60,000	120,000	120,000		120,000
		Hydrants		15,164	15,164		16,164		16,164		16,164		16,164
		Well #2 / Auxiliary Generator			0		0	40,000	40,000		40,000		40,000
		Additional Well			0	125,000	125,000	125,000	250,000		250,000		250,000
		Allocated General & Miscellaneous Plants	0.307097%	15,817	15,817	15,523	31,340	17,154	48,494	19,369	67,863	21,106	88,969
				31,981	31,981	140,523	172,504	242,154	414,658	179,369	594,027	31,106	625,133
Point O' Woods	987 W	WTP Iron Filters		11,080	11,080		11,080		11,080		11,080		11,080
		Allocated General & Miscellaneous Plants	0.221650%	11,416	11,416	11,204	22,620	12,381	35,001	13,980	48,981	15,233	64,214
				22,496	22,496	11,204	33,700	12,381	46,081	13,980	60,061	15,233	75,294
Point O'woods	987 S	Allocated General & Miscellaneous Plants	0.082878%	4,269	4,269	4,189	8,458	4,629	13,087	5,227	18,315	5,696	24,010
				4,269	4,269	4,189	8,458	4,629	13,087	5,227	18,315	5,696	24,010
Rolling Green	985 W	Water Main Upgrade			0		0		0	0	0	0	0
		Allocated General & Miscellaneous Plants	0.051397%	2,647	2,647	2,598	5,245	2,871	8,116	3,242	11,358	3,532	14,890
				2,647	2,647	2,598	5,245	2,871	8,116	3,242	11,358	3,532	14,890
Rosemont	988 W	Water Main Upgrade			0		0		0	0	0	0	0
		Allocated General & Miscellaneous Plants	0.029553%	1,522	1,522	1,494	3,016	1,651	4,667	1,864	6,531	2,031	8,562
				1,522	1,522	1,494	3,016	1,651	4,667	1,864	6,531	2,031	8,562
Sugar Mill Woods	989 W	0.5 MGD GST		136,635	136,635	500,000	636,635		636,635		636,635		636,635
		1 MG Ground Storage Tank			0		0		0	550,000	550,000	550,000	1,100,000
		Abandon WTP #1			0	15,000	15,000		15,000		15,000		15,000
		Hydrants		2,590	2,590	3,000	5,590	3,000	8,590	3,000	11,590	3,000	14,590
		Additional Wells			0	125,000	125,000	125,000	250,000		250,000		250,000
		Allocated General & Miscellaneous Plants	1.261797%	64,988	64,988	63,781	128,770	70,483	199,253	79,583	278,836	86,718	365,554
				204,213	204,213	706,781	910,995	198,483	1,109,478	632,583	1,742,061	639,718	2,381,779

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SSU ANSWER TO PSC INTERROGATORY

ZTR-A - CITRUS CO SYSTEMS.

PROJECT No. 930880-W9.

SCHEDULE OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER & SEWER  
- Plant Additions and Ending Balances -

PLANT ADDITIONS AND ENDING BALANCES

PLANT NAME	PLT#	PROJECT DESCRIPTION	ALLOCATION FACTOR	1993 Additions	1993 End Bal	1994 Additions	1994 End Bal	1995 Additions	1995 End Bal	1996 Additions	1996 End Bal	1997 Additions	1997 End Bal
Sugar Mill Woods	989	Collection System (Air Release)			0		0	5,000	5,000		5,000		5,000
		New Lift Stations (3)		15,543	15,543	50,000	65,543	16,000	81,543	32,000	113,543		113,543
	S	Pond Cleaning			0		0		0		0		0
		I & I Investigabon			0		0	0	0	0	0	0	0
		Lift Station Upgrades			0	10,000	10,000	20,000	30,000	15,000	45,000	10,000	55,000
		0.5 MGD WWTP Expansion		102,815	102,815	150,000	252,815	500,000	752,815	1,200,000	1,952,815		1,952,815
		Allocated General & Miscellaneous Plants	1.212970%	62,473	62,473	61,313	123,787	67,756	191,542	76,503	268,046	83,362	351,408
				180,831	180,831	271,313	452,145	608,756	1,060,900	1,323,503	2,384,404	93,362	2,477,766

NOTE: ORIGINAL ZTR-A HAD ALL WATER & SEWER SYSTEMS LISTED

ALPHABETICALLY. THE CITRUS CO. SYSTEMS WERE CUT OUT

& REASSEMBLED FOR THIS EXHIBIT.

BLH

2/17/94

SUMMARY OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER

DOCKET 930880-109

PLANT NAME	PLT#	PLANT ADDITIONS					Total	PLANT ENDING BALANCES				
		1993 Additions	1994 Additions	1995 Additions	1996 Additions	1997 Additions		1993 End. Bal.	1994 End. Bal.	1995 End. Bal.	1996 End. Bal.	1997 End. Bal.
FPSC UNIFORM RATE SYSTEMS:												
Amelia Island	1518	43,050	382,250	46,690	212,718	57,444	742,151	43,050	425,300	471,990	684,707	742,151
Apache Shores	990	5,526	5,423	5,993	6,767	17,374	41,083	5,526	10,949	16,943	23,710	41,083
Apple Valley	332	103,363	140,592	133,806	98,171	136,593	612,524	103,363	243,954	377,760	475,931	612,524
Bay Lake Estates	784	2,151	2,111	2,333	10,134	2,870	19,598	2,151	4,262	6,594	16,728	19,598
Beacon Hills	886	607,897	1,440,216	99,696	112,567	122,659	2,383,035	607,897	2,048,114	2,147,809	2,260,376	2,383,035
Beecher's Point	472	75,422	1,331	1,471	1,661	1,810	81,696	75,422	76,753	78,225	79,886	81,696
Burnt Store	2202	207,015	1,306,885	7,608	8,590	9,361	1,539,459	207,015	1,513,900	1,521,508	1,530,098	1,539,459
Carlton Village	555	9,052	138,800	4,199	4,741	5,166	161,958	9,052	147,852	152,051	156,792	161,958
Chuluota	335	22,170	121,758	79,045	122,149	94,583	439,705	22,170	143,929	222,973	345,122	439,705
Citrus Park	1117	13,104	12,860	14,211	31,046	32,485	103,706	13,104	25,964	40,175	71,221	103,706
Citrus Springs	906	57,874	56,799	132,767	195,871	627,225	1,070,536	57,874	114,673	247,441	443,311	1,070,536
Crystal River	984	47,652	2,241	2,476	2,796	3,047	58,212	47,652	49,893	52,369	55,165	58,212
Daetwyler Shores	105	4,169	4,092	4,522	5,106	5,563	23,452	4,169	8,261	12,783	17,889	23,452
Deltona Lakes	1806	1,698,890	1,752,510	2,561,760	1,314,840	1,395,667	8,723,667	1,698,890	3,451,400	6,013,160	7,328,000	8,723,667
Dol Ray Manor	336	28,544	1,916	2,117	2,391	2,605	37,574	28,544	30,460	32,578	34,968	37,574
Druid Hills	334	44,202	103,216	9,080	10,252	11,171	177,920	44,202	147,418	156,498	166,749	177,920
East Lake Harris	557	5,691	125,586	6,173	6,970	7,594	152,014	5,691	131,277	137,450	144,419	152,014
Fern Park	324	6,122	6,008	56,639	7,496	8,168	84,434	6,122	12,130	68,769	76,265	84,434
Fern Terrace	552	26,395	129,157	129,594	5,187	5,652	295,984	26,395	155,552	285,146	290,333	295,984
Fisherman's Haven	673	78,195	5,066	35,598	6,321	6,888	132,069	78,195	83,261	118,860	125,181	132,069
Fountains	772	397	390	431	486	50,530	52,234	397	787	1,217	1,704	52,234
Fox Run	679	3,177	3,118	3,445	3,890	4,239	17,868	3,177	6,294	9,739	13,629	17,868
Friendly Center	556	695	3,182	10,754	851	927	16,409	695	3,877	14,631	15,481	16,409
Golden Terrace	992	36,102	3,345	3,696	4,174	4,548	51,865	36,102	39,447	43,144	47,317	51,865
Gospel Island	986	298	292	323	365	397	1,675	298	590	913	1,278	1,675
Grand Terrace	575	3,474	123,410	3,768	4,255	4,636	139,543	3,474	126,884	130,653	134,907	139,543
Harmony Homes	326	2,151	2,111	2,333	2,634	2,870	12,098	2,151	4,262	6,594	9,228	12,098
Hermits Cove	438	39,936	5,781	6,388	7,213	7,859	67,177	39,936	45,717	52,105	59,317	67,177
Hobby Hills	558	5,965	38,312	3,661	4,133	4,504	56,575	5,965	44,278	47,938	52,071	56,575
Holiday Haven	573	3,805	3,735	7,127	7,660	8,078	30,405	3,805	7,540	14,667	22,327	30,405
Holiday Height	121	23,914	1,721	1,902	2,148	2,340	32,025	23,914	25,635	27,537	29,685	32,025
Imperial Terrace	570	9,595	80,391	8,721	9,847	10,729	119,283	9,595	89,986	98,707	108,554	119,283
Intercession City	780	48,328	128,573	59,474	10,697	11,657	258,730	48,328	176,901	236,375	247,073	258,730
Interlachen Lakes	470	7,247	7,112	7,859	8,874	9,670	40,762	7,247	14,359	22,218	31,092	40,762
Jungle Den	1802	3,838	3,767	4,163	8,700	5,122	25,591	3,838	7,606	11,768	20,469	25,591
Keystone Heights	1094	142,366	82,151	85,529	40,116	43,712	393,873	142,366	224,516	310,045	350,161	393,873
Kingswood	1701	2,151	2,111	2,333	2,634	2,870	12,098	2,151	4,262	6,594	9,228	12,098
Lake Ajay	773	15,384	1,396	1,543	1,742	1,899	21,964	15,384	16,780	18,323	20,066	21,964
Lake Braniffey	325	2,416	32,371	2,620	2,958	3,223	43,587	2,416	34,786	37,406	40,364	43,587
Lake Conway Park	104	2,879	2,825	3,122	3,525	3,841	16,193	2,879	5,704	8,826	12,352	16,193
Lake Harriet	323	9,563	9,385	10,372	11,711	37,760	78,791	9,563	18,948	29,320	41,030	78,791
Lakeview Villas	1054	463	455	502	567	618	2,606	463	918	1,420	1,988	2,606
Leilani Heights	675	49,675	42,795	14,140	15,965	17,397	139,972	49,675	92,471	106,610	122,576	139,972
Leisure Lakes	2401	22,470	7,924	8,757	9,887	10,774	59,811	22,470	30,394	39,150	49,038	59,811
Marco Shores	2602	11,955	85,996	9,941	11,224	12,231	131,346	11,955	97,951	107,891	119,116	131,346
Manion Oaks	1106	96,895	93,811	231,987	368,088	251,793	1,042,573	96,895	190,706	422,692	790,780	1,042,573

INTERSECTION APPENDIX 27R-A  
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SUMMARY OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER

PLANT NAME	PLT#	PLANT ADDITIONS					Total	PLANT ENDING BALANCES				
		1993 Additions	1994 Additions	1995 Additions	1996 Additions	1997 Additions		1993 End. Bal.	1994 End. Bal.	1995 End. Bal.	1996 End. Bal.	1997 End. Bal.
Meredith Manor	330	22,402	71,986	134,296	77,433	79,892	386,008	22,402	94,388	228,683	306,116	386,008
Morningview	562	40,717	1,104	1,220	1,378	1,501	45,920	40,717	41,821	43,041	44,419	45,920
Oak Forest	993	4,599	34,514	39,988	5,632	11,137	95,872	4,599	39,114	79,102	84,734	95,872
Oakwood	1702	11,169	6,625	7,321	8,266	9,007	42,389	11,169	17,794	25,115	33,382	42,389
Paisades Park	579	331	325	359	405	100,442	101,861	331	656	1,015	1,420	101,861
Palm Port	440	34,593	3,150	3,481	3,931	4,283	49,437	34,593	37,743	41,224	45,154	49,437
Palm Terrace	1429	39,575	46,840	44,922	58,463	54,808	244,608	39,575	86,416	131,337	189,800	244,608
Palms Mobile Home P	559	1,985	1,949	2,153	2,431	2,649	11,168	1,985	3,934	6,087	8,518	11,168
Park Manor	444	993	974	1,077	1,216	1,325	5,584	993	1,967	3,044	4,259	5,584
Picciola Island	564	9,516	4,254	4,701	5,308	5,784	29,564	9,516	13,770	18,471	23,780	29,564
Pine Ridge Estates	782	52,548	5,618	61,209	7,010	7,639	134,023	52,548	58,166	119,374	126,384	134,023
Pine Ridge Utilities	907	31,981	140,523	242,154	179,369	31,106	625,133	31,981	172,504	414,658	594,027	625,133
Piney Woods	553	13,462	5,586	36,173	6,970	7,594	69,785	13,462	19,048	55,221	62,190	69,785
Point O Woods	987	22,496	11,204	12,381	13,980	15,233	75,294	22,496	33,700	46,081	60,061	75,294
Pomona Park	443	42,701	80,358	5,921	6,686	7,285	142,952	42,701	123,059	128,981	135,667	142,952
Postmaster Village	1095	42,403	5,066	5,598	6,321	6,888	66,277	42,403	47,469	53,068	59,389	66,277
Quail Ridge	578	430	422	467	527	574	2,420	430	852	1,319	1,846	2,420
River Grove	442	3,574	53,507	78,876	4,376	4,769	145,102	3,574	57,081	135,957	140,333	145,102
River Park	439	11,581	11,366	12,561	14,182	15,454	65,145	11,581	22,948	35,508	49,691	65,145
Rolling Green	985	2,647	2,598	2,871	3,242	3,532	14,890	2,647	5,245	8,116	11,358	14,890
Rosemont	988	1,522	1,494	1,651	1,864	2,031	8,562	1,522	3,016	4,667	6,531	8,562
Salt Springs	1115	3,673	8,605	3,984	4,498	4,901	25,660	3,673	12,278	16,261	20,759	25,660
Samira Villas	1118	66	65	72	81	88	372	66	131	203	284	372
Saratoga Harbour	448	1,324	1,299	1,436	1,621	1,766	7,445	1,324	2,623	4,058	5,679	7,445
Silver Lake Estates	574	77,194	205,754	85,313	39,872	43,447	451,581	77,194	282,948	368,261	408,134	451,581
Silver Lake Oaks	473	22,488	909	1,005	1,135	1,236	26,773	22,488	23,397	24,402	25,536	26,773
Skycrest	551	89,075	53,832	4,235	4,781	5,210	157,133	89,075	142,907	147,141	151,923	157,133
Spring Hill	2701	1,163,597	1,309,553	1,855,203	2,184,709	1,615,575	8,128,638	1,163,597	2,473,151	4,328,353	6,513,063	8,128,638
St. John's Highlands	471	2,746	2,695	2,979	3,363	3,665	85,449	2,746	5,442	8,421	11,784	85,449
Stone Mountain	565	232	227	251	284	309	1,303	232	459	710	994	1,303
Sugar Mill	1801	20,251	19,875	21,963	24,799	27,022	113,910	20,251	40,126	62,089	86,888	113,910
Sugar Mill Woods	989	204,213	706,781	198,483	632,583	639,718	2,381,779	204,213	910,995	1,109,478	1,742,061	2,381,779
Sunny Hills	2801	86,855	13,510	17,929	19,857	21,368	159,519	86,855	100,365	118,294	138,151	159,519
Sunshine Parkway	560	7,033	120,292	323	50,365	397	178,410	7,033	127,325	127,648	178,013	178,410
Tropical Park	781	52,051	75,524	44,918	49,989	94,505	316,987	52,051	127,575	172,492	222,481	316,987
University Shores	106	229,524	98,075	258,380	167,373	133,345	886,697	229,524	327,599	585,980	753,353	886,697
Venetian Village	567	40,323	4,319	4,773	5,389	5,872	60,677	40,323	44,642	49,415	54,804	60,677
Welaka	447	3,044	2,988	3,302	3,728	4,062	17,124	3,044	6,032	9,334	13,062	17,124
Western Shores	566	9,596	9,418	10,407	11,751	12,805	53,977	9,596	19,014	29,421	41,172	53,977
Westmont	122	4,302	4,222	4,665	5,268	5,740	24,197	4,302	8,523	13,189	18,457	24,197
Windsong	783	3,640	3,572	3,948	4,457	4,857	20,474	3,640	7,212	11,160	15,617	20,474
Woodmere	888	50,145	61,502	140,338	145,545	49,629	447,159	50,145	111,647	251,985	397,530	447,159
Wooten	446	9,566	650	718	810	883	12,627	9,566	10,215	10,933	11,743	12,627
Zephyr Shores	1427	130,761	16,822	18,590	20,990	22,872	210,035	130,761	147,584	166,173	187,163	210,035
Subtotal FPSC Uniform		6,234,546	9,715,233	7,213,260	6,502,353	6,210,356	35,875,748	6,234,546	15,949,779	23,163,039	29,665,392	35,875,748

OTHER FPSC SYSTEMS

APPENDIX 212-A  
 PAGE 21 OF 98



**SUMMARY OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER**

PLANT NAME	PLT#	PLANT ADDITIONS						PLANT ENDING BALANCES				
		1993 Additions	1994 Additions	1995 Additions	1996 Additions	1997 Additions	Total	1993 End Bal.	1994 End Bal.	1995 End Bal.	1996 End Bal.	1997 End Bal.
Enterprise	1807	6,618	6,495	7,178	8,104	8,831	37,225	6,618	13,113	20,291	28,395	37,225
Geneva Lake Est.	1298	2,813	2,760	3,050	3,444	3,753	15,821	2,813	5,573	8,623	12,068	15,821
Keystone Club Estates	1279	6,046	4,611	5,096	5,754	6,270	27,777	6,046	10,657	15,753	21,507	27,777
Lakeside	??	0	0	0	0	0	0	0	0	0	0	0
Lehigh	2901	840,169	457,789	484,876	521,654	550,493	2,854,981	840,169	1,297,958	1,782,834	2,304,488	2,854,981
Marco Island	2601	1,748,109	955,108	1,549,032	524,728	644,877	5,421,854	1,748,109	2,703,217	4,252,249	4,776,977	5,421,854
Subtotal Other FPSC		2,603,754	1,426,764	2,049,232	1,063,685	1,214,224	8,357,659	2,603,754	4,030,518	6,079,750	7,143,435	8,357,659
<b>FUTURE FPSC SYSTEMS:</b>												
Gibsonia Estates	215	5,526	5,423	5,993	6,767	7,374	31,083	5,526	10,949	16,943	23,710	31,083
Herschel Heights	1902	10,523	10,327	19,412	15,886	17,041	73,188	10,523	20,850	40,262	56,148	73,188
Lake Gibson	210	308,429	25,883	32,602	36,295	39,191	442,399	308,429	334,311	366,914	403,209	442,399
Orange Hill	214	5,592	5,488	21,065	21,848	22,462	76,455	5,592	11,080	32,145	53,994	76,455
Palm Valley	2301	634,971	6,917	7,644	8,631	9,405	667,568	634,971	641,888	649,532	658,163	667,568
Remington Forest	2302	1,092	1,072	1,184	1,337	1,457	6,142	1,092	2,164	3,348	4,685	6,142
Seaboard	1906	85,537	102,949	277,769	289,746	124,138	880,139	85,537	188,486	466,255	756,001	880,139
Sugar Creek	212	2,052	2,013	2,225	2,512	2,738	11,540	2,052	4,065	6,290	8,802	11,540
Valrico Hills	1901	11,846	11,626	12,848	14,506	15,807	66,634	11,846	23,472	36,320	50,826	66,634
Subtotal Future FPSC		1,065,567	171,699	380,743	397,529	239,611	2,255,149	1,065,567	1,237,266	1,618,009	2,015,538	2,255,149
<b>NON-FPSC SYSTEMS:</b>												
Deep Creek	2201	107,794	391,353	400,952	413,985	424,205	1,738,289	107,794	499,147	900,099	1,314,084	1,738,289
Venice Gardens	160X	1,181,076	704,979	358,785	692,196	418,393	3,355,429	1,181,076	1,886,055	2,244,841	2,937,036	3,355,429
Subtotal Non-FPSC		1,288,870	1,096,332	759,737	1,106,181	842,598	5,093,718	1,288,870	2,385,203	3,144,940	4,251,120	5,093,718
<b>TOTAL ALL WATER SYSTEM</b>		<b>11,192,738</b>	<b>12,410,028</b>	<b>10,402,972</b>	<b>9,069,748</b>	<b>8,506,788</b>	<b>51,582,273</b>	<b>11,192,738</b>	<b>23,602,766</b>	<b>34,005,738</b>	<b>43,075,485</b>	<b>51,582,273</b>

**SUMMARY OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM (DEPRECIATION EXPENSE AND ACCUMULATED DEPRECIATION) - SEWER**

PLANT NAME	PLT#	DEPRECIATION EXPENSE					Total	ACCUM DEPRECIATION ENDING BALANCES				
		1993 Additions	1994 Additions	1995 Additions	1996 Additions	1997 Additions		1993 End. Bal.	1994 End. Bal.	1995 End. Bal.	1996 End. Bal.	1997 End. Bal.
<b>FPSC UNIFORM RATE SYSTEMS:</b>												
Amelia Island	1518	1,856	20,257	53,655	75,124	82,772	233,664	1,856	22,113	75,768	150,893	233,664
Apache Shores	990	189	562	952	1,602	2,513	5,818	189	751	1,703	3,305	5,818
Apple Valley	332	276	824	1,395	2,033	2,740	7,267	276	1,100	2,495	4,527	7,267
Beacon Hills	886	10,589	61,013	138,052	181,676	194,995	586,325	10,589	71,602	209,654	391,330	586,325
Beecher's Point	472	26	79	134	195	262	696	26	105	239	434	696
Burnt Store	2202	5,174	10,625	11,210	11,863	12,587	51,458	5,174	15,799	27,008	38,871	51,458
Chuluota	335	1,656	3,881	5,115	6,544	8,170	25,366	1,656	5,537	10,652	17,196	25,366
Citrus Park	1117	433	1,292	2,188	3,883	5,687	13,484	433	1,726	3,914	7,797	13,484
Citrus Springs	906	1,127	4,331	9,298	15,233	21,450	51,439	1,127	5,458	14,756	29,989	51,439
Deltona Lakes	1806	36,158	80,341	97,159	159,537	267,525	640,721	36,158	116,500	213,658	373,195	640,721
Fisherman's Haven	673	374	1,683	2,884	3,449	4,076	12,467	374	2,058	4,942	8,391	12,467
Fl. Central Commerce	340	53	436	823	945	1,081	3,337	53	489	1,311	2,256	3,337
Fox Run	679	7,671	12,716	10,256	10,611	11,005	52,260	7,671	20,387	30,643	41,255	52,260
Holiday Haven	573	8,962	21,551	26,947	30,091	31,748	119,299	8,962	30,513	57,459	87,551	119,299
Jungle Den	1802	503	1,194	1,590	2,033	2,524	7,844	503	1,696	3,286	5,320	7,844
Leilani Heights	675	746	6,010	11,225	12,707	14,350	45,038	746	6,756	17,981	30,688	45,038
Leisure Lakes	2401	855	2,083	2,866	3,740	4,710	14,254	855	2,938	5,804	9,544	14,254
Marco Shores	2602	1,797	12,378	21,588	22,494	23,497	81,755	1,797	14,175	35,764	58,258	81,755
Marion Oaks	1106	4,990	26,789	56,185	72,209	79,321	239,494	4,990	31,779	87,964	160,173	239,494
Meredith Manor	330	45	133	225	329	443	1,175	45	178	403	732	1,175
Morningview	562	2,127	5,699	7,204	7,334	7,478	29,842	2,127	7,826	15,031	22,365	29,842
Palm Port	440	157	469	793	1,156	1,558	4,134	157	626	1,419	2,575	4,134
Palm Terrace	1429	1,808	5,276	10,297	16,146	20,890	54,418	1,808	7,084	17,382	33,528	54,418
Park Manor	444	88	224	323	434	557	1,626	88	312	636	1,069	1,626
Point O'woods	987	213	636	1,077	1,570	2,116	5,613	213	850	1,927	3,497	5,613
Salt Springs	1115	177	1,444	2,727	4,108	5,811	14,267	177	1,621	4,348	8,456	14,267
Silver Lake Oaks	473	43	128	217	316	427	1,131	43	171	388	705	1,131
South Forty	1113	38	113	748	1,391	1,905	4,195	38	152	899	2,290	4,195
Spring Hill	2701	34,483	109,407	182,893	227,589	251,634	806,006	34,483	143,889	326,783	554,372	806,006
Sugar Mill	1801	1,308	4,987	8,444	10,755	13,316	38,810	1,308	6,295	14,738	25,493	38,810
Sugar Mill Woods	989	6,411	21,722	48,969	105,781	148,691	331,574	6,411	28,133	77,102	182,883	331,574
Sunny Hills	2801	288	858	1,524	3,721	7,378	13,770	288	1,146	2,671	6,392	13,770
Sunshine Parkway	560	265	1,971	3,423	3,728	4,035	13,423	265	2,236	5,660	9,388	13,423
University Shores	106	20,452	77,795	136,751	178,329	203,971	617,298	20,452	98,247	234,999	413,328	617,298
Venetian Village	567	139	1,109	2,090	2,411	2,767	8,516	139	1,248	3,338	5,749	8,516
Woodmere	888	2,272	6,265	9,888	13,938	18,425	50,788	2,272	8,537	18,425	32,362	50,788
Zephyr Shores	1427	836	2,609	4,870	7,383	9,965	25,662	836	3,445	8,315	15,697	25,662
<b>Subtotal FPSC Uniform</b>		<b>154,587</b>	<b>508,893</b>	<b>875,986</b>	<b>1,202,390</b>	<b>1,472,379</b>	<b>4,214,234</b>	<b>154,587</b>	<b>663,479</b>	<b>1,539,465</b>	<b>2,741,855</b>	<b>4,214,234</b>
<b>OTHER FPSC SYSTEMS:</b>												
Enterprise	1807	202	602	1,019	1,485	2,001	5,309	202	804	1,822	3,307	5,309
Lehigh	2901	18,744	47,675	69,121	93,090	119,653	348,283	18,744	66,419	135,540	228,630	348,283
Marco Island	2601	12,651	46,724	77,808	91,325	99,377	327,895	12,651	59,375	137,183	228,508	327,895
Tropical Isle	2101	285	998	3,820	6,560	7,288	18,951	285	1,283	5,103	11,663	18,951

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**SUMMARY OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM (DEPRECIATION EXPENSE AND ACCUMULATED DEPRECIATION) - SEWER**

PLANT NAME	PLT#	DEPRECIATION EXPENSE					ACCUM. DEPRECIATION ENDING BALANCES					
		1993 Additions	1994 Additions	1995 Additions	1996 Additions	1997 Additions	Total	1993 End Bal.	1994 End Bal.	1995 End Bal.	1996 End Bal.	1997 End Bal.
Subtotal Other FPSC		31,881	95,999	151,768	192,460	228,320	700,427	31,881	127,881	279,648	472,108	700,427
FUTURE FPSC SYSTEMS:												
Lake Gibson	210	442	1,317	3,202	5,194	7,158	17,313	442	1,759	4,961	10,155	17,313
Seaboard	1906	31,659	67,507	76,158	85,660	96,189	357,173	31,659	99,167	175,325	260,985	357,173
Valrico Hills	1901	577	1,722	5,414	9,248	10,725	27,687	577	2,299	7,713	16,961	27,687
Subtotal Future FPSC		32,679	70,546	84,775	100,102	114,072	402,173	32,679	103,225	187,999	288,101	402,173
NON-FPSC SYSTEMS:												
Deep Creek	2201	6,284	17,797	28,742	40,827	54,076	147,726	6,284	24,081	52,824	93,651	147,726
Venice Gardens	160X	42,942	100,704	130,874	163,195	198,412	636,127	42,942	143,646	274,520	437,715	636,127
Subtotal Non-FPSC		49,226	118,501	159,616	204,022	252,488	783,853	49,226	167,727	327,343	531,365	783,853
<b>TOTAL ALL SEWER SYSTEM</b>		<b>268,372</b>	<b>793,939</b>	<b>1,272,144</b>	<b>1,698,974</b>	<b>2,067,258</b>	<b>6,100,687</b>	<b>268,372</b>	<b>1,062,311</b>	<b>2,334,455</b>	<b>4,033,429</b>	<b>6,100,687</b>

APPENDIX 27R-A  
PAGE 98 OF 98

1992-1995 Capital Budget

BLH

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MEMORANDUM

DATE: January 7, 1991

TO: Bert Phillips Dick Ausman  
 Donnie Crandell Forrest Lucea  
 Chuck Wood Charles Sweet  
 Karla Teasley Randi Kaplan  
 Roula Tsoukas Rafael Terrero  
 Woody Hendricks Joe Mack  
 John Losch Robert Regalado  
 Priscilla Wampler Aaron Perlowich

FROM: Chris Carr

SUBJECT: 1992 to 1995 Capital Budget

Please find attached a copy of the proposed 1992 to 1995 Capital Budget. Amounts marked with an asterisk (\*) represent dollars which have been compounded at a 5% annual increase. Amounts marked with a pound sign (£) are unanticipated projects and do not include a 5% increase. This proposed budget does not include any carryover from the current 1991 budget.

Much credit for the compilation of this report goes to Joe Mack and John Losch for the tremendous amount of effort they made in order to get this report done in the short time allotted.

Please let me know if there are any questions or comments regarding this proposed budget.

Chris Carr  
 Capital Projects Analyst

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01-Jan-91

PLANT	PROJECT	COST	DATE	DESCRIPTION	1992	1993	1994	1995	1990	1991	1992	COMMENTS			
									DATE	DATE	DATE		DATE		
	550	SEWERAGE	0	WTP IMPROVEMENTS	20,000				120	10,000	150	NEW GENERATOR, NEW TANK ON FINE HILL, WTR			
	552	FARM SERVICE	0	WTP IMPROVEMENTS	20,000				130	4,000	200	NEW WELL, NEW GENERATOR & WTR			
	553	PINEY HILLS/SWING LANE	0	WTP IMPROVEMENTS			20,000		130	4,000	200	TRUNK LINES, CALCULUM SYSTEM, WTR & WTR			
	555	CARLETON VILLAGE	0	WTP IMPROVEMENTS			20,000		87	17,100	110	TRUNK HYDRO TANK & WTR			
	556	FOUNTAIN CENTER	0	WTP IMPROVEMENTS	1,000				21	0,000	01	FENCING, SIGN & WTR			
	557	EAST LANE HILLS	0	WTP IMPROVEMENTS		200,000			141	0,000	270	FENCING, NEW GENERATOR, WELL & WTR			
	558	MOORE HILLS	0	WTP IMPROVEMENTS	1,000	2,000			100	0,000	100	TRUNK HYDRO TANK, FENCING & WTR			
	559	PALM HOLLOW HOME PARK	0	WTP IMPROVEMENTS					63	0,000	03	NEW GENERATOR & WTR			
	560	SUNSHINE PARKING							7		30				
	567	UNDISTURBED	0	WTP IMPROVEMENTS		2,000			33	0,000	59	39	0,000	59	WTR UPGRADES
	567	UNDISTURBED	0	WTP IMPROVEMENTS		15,000									CHLORINE DETERM, NEW HYDRO TANK, WTR
	568	WALCROFT 154-000	0	WTP IMPROVEMENTS			5,000		112	0,000	100				ELEC UPGRADE
	568	WALCROFT 154-000	0	WTP IMPROVEMENTS			5,000		10	15,000	07				
	568	WALCROFT 154-000	0	WTP IMPROVEMENTS			5,000		271	10,000	320				WTR UPGRADES
	567	UNDISTURBED	0	WTP IMPROVEMENTS	2,000	25,000			270	7,000	100	04	7,000	06	NEW BLOWER, PIPING, STRUCTURE REPLACEMENT, FENCING & WTR
	567	UNDISTURBED	0	WTP IMPROVEMENTS											WTR UPGRADES
	570	EMERALD SERVICE	0	WTP IMPROVEMENTS	10,000				210	0,000	250				FENCE, WELL & WTR
	572	ACADIAN DRIVE	0	WTP IMPROVEMENTS		5,000			116	0,000	170	59	1,000	104	
	574	SILVER LAKE	0	WTP IMPROVEMENTS	50,000		50,000		259	26,400	1,370				PLANT EXPANSION, NEW GENERATOR, WTR
	575	GRAND TERRACE							30	20,000	05				
	576	BERNARDSON	0	WTP IMPROVEMENTS		100,000			35	25,000	01				NEW WELL, WTR
	577	SILVER LAKE							25		30				
	602	MURKIN COUNTY OFFICE													
	675	FISHERMAN'S HAVEN	0	WTP UPGRADE BRALFIELD COMPT		5,000	5,000		195	4,000	205	100	0,000	100	WTR UPGRADES
	675	FISHERMAN'S HAVEN	0	WTP IMPROVEMENTS		5,000		5,000							WTR UPGRADES
	675	LEILANI HEIGHTS	0	WTP IMPROVEMENTS		5,000	5,000	10,000	307	0,000	307	100	0,000	120	WTR UPGRADES
	675	LEILANI HEIGHTS	0	WTP IMPROVEMENTS			10,000								TRUNK HYDRO TANKS & WTR
	677	ST LOUIS TALLEY							245	14,150	320	236	15,000	305	
	677	ST LOUIS TALLEY							80	10,000	107	83	4,000	39	
	677	ST LOUIS TALLEY													
	701	OSCEOLA COURSE OFFICE													
	727	FOUNTAIN													
	725	EDGE WTP	0	WTP IMPROVEMENTS	3,000				22	30,000	30				FENCING, ABANDON WELL, WTR
	700	EMERALD PARK CITY	0	WTP IMPROVEMENTS			1,000		254	1,500	274				WTR COMPRESSOR, PIPING & WTR
	701	EMERALD PARK	0	WTP IMPROVEMENTS			20,000		554	1,300	560				REFUGIUM GWS & WTR
	703	PIKE RIDGE ESTATES	0	WTP IMPROVEMENTS		1,000	5,000		172	20,000	200				TRUNK HYDRO TANK & WTR
	703	PIKE RIDGE ESTATES	0	WTP IMPROVEMENTS		1,000	5,000		100	0,000	117				WTR UPGRADES
	704	DAY LAKE ESTATES	0	WTP IMPROVEMENTS			10,000	10,000	65	6,000	75				WTR UPGRADES
	705	OSCEOLA COUNTY OFFICE													
	706	REARON HILLS/COMMISSION	0	WTP IMPROVEMENTS	150,000				2,014	14,500	3,432	2,547	14,000	3,300	PLANT (7) GWS, (2) HYDRO TANK, WTR
	706	REARON HILLS/COMMISSION	0	WTP IMPROVEMENTS	300,000	1,400,000			1,055	1,100	1,070	1,000	0,200	1,000	PLANT EXPANSION, S AND
	706	REARON HILLS/COMMISSION	0	WTP IMPROVEMENTS	25,000	20,000									RE S&C PUMPS, INSTRUMENTATION, ELECTRICAL
	706	REARON HILLS/COMMISSION	0	WTP IMPROVEMENTS											
	930	CRYSTAL BEVER	0	NEW WTP FILTERS		3,000			104	5,000	116				
	904	CRYSTAL BEVER	0	WTP IMPROVEMENTS			5,000								WTR UPGRADES
	935	OSCEOLA GREEN	0	WATER TREAT UPGRADE			5,000		23	5,000	07				
	936	GOSPEL ISLAND	0	CHLORINATION & SCALES		5,000			7	9,500	9				
	936	GOSPEL ISLAND	0	REPAIRS & UPGRADE (NEW FILTERS)		1,000									
	936	GOSPEL ISLAND	0	WTP IMPROVEMENTS			5,000								
	936	GOSPEL ISLAND	0	WTP--FENCE, ENLARGE BUILDING	1,000										
	937	POINT STUBBS	0	WTP IMPROVEMENTS		1,000		10,000	312	10,500	302	90	20,000	140	TRUNK HYDRO TANKS, CHLORINE & WTR
	938	ROZEMONT	0	CHLORINATION & SCALES		3,000			52	0,000	52				
	939	SUGAR HILL WOODS	0	WTP ADDITION, U.S. AND EXPANSION	1,500,000				1,071	0,000	2,010	0,000	0,000	2,000	
	939	SUGAR HILL WOODS	0	WTP IMPROVEMENTS		400,000									NEW WELLS & WTR

SSU SERVICES ENGINEERING 4078349116

P.04

(18)

TELEPHONE 8 (1225) 113 2009295 MIL - C. CARD  
01-Jan-90

DATE DATED DATE SEWER SEWER SEWER  
PROJ A03 PROJ PROJ A03 PROJ  
COST COST COST COST COST COST  
1990 RATE 1992 1990 RATE 1992

COMMENTS

PLANT/PROJECT/CITY NAME	U/F/S	DESCRIPTION	1992	1993	1994	1995	1990	1992	1990	1992	COMMENTS	
989 SACRAMENTO VALLEY	U	WTP IMPROVEMENTS - 1.0 MGD STORAGE TANK	1,100,000									
990 APACHE SHORES	S	LIFT STATION UPGRADE		10,000			339	8,240	305	126	8,000	126
991 APACHE SHORES	S	UPGRADE BUILDINGS, ADD CHLORINE ROOM			30,000							
992 APACHE SHORES	S	WTP IMPROVEMENTS	85,000									NEW 70,000 GPD PLANT
993 APACHE SHORES	U	UPGRADE BUILDING, ADD ENCLAVE ROOM			20,000							
994 APACHE SHORES	U	UPGRADE WATER LINES			4,000							
995 APACHE SHORES	U	WTP AUXILIARY GENERATOR			22,300							
996 APACHE SHORES	U	WTP IMPROVEMENTS		8,000								
997 APACHE SHORES	U	WTP IMPROVEMENTS	30,000									REPAIR SLUDGE BED, ABANDON A-1 WELL, REPAIR HYDRO TANK
998 APACHE SHORES	U	WTP IMPROVEMENTS			10,000							REPAIR HYDRO TANK & DISC
999 GOLDEN TERRACE	U	WTP IMPROVEMENTS			10,000							
1000 GOLDEN TERRACE	U	WTP UPGRADE AND BUILDINGS		4,000								
1001 DAN FOREST	U	WTP UPGRADE			21,000							DISC UPGRADES
1002 CIRRUS SPRINGS	S	COMPUTER REPAIR	5,000				1,579	2,900	1,841	691	2,270	720
1003 CIRRUS SPRINGS	S	REPAIR GENERATOR		15,000								
1004 CIRRUS SPRINGS	S	WTP IMPROVEMENTS	30,000	30,000	50,000							CHLORINE BAFFLES, SLUDGE METERS, DISC
1005 CIRRUS SPRINGS	U	1.0 MGD STORAGE TANK		250,000								
1006 CIRRUS SPRINGS	U	RI SERVICE PUMP BUILDING		250,000								
1007 CIRRUS SPRINGS	U	IMPERMEABLE CERAMIC SPRINGS/PIPE ROUGH			100,000							
1008 CIRRUS SPRINGS	U	REN WELL		200,000								
1009 CIRRUS SPRINGS	U	WTP IMPROVEMENTS	50,000	25,000								NEW GENERATOR, PAINT HYDRO TANKS & DISC
1010 PINE RIDGE	U	500,000 GPD STORAGE TANK			175,000		283	90,200	479			
1011 PINE RIDGE	U	RI SERVICE PUMP BUILDING			250,000							
1012 PINE RIDGE	U	UPGRADE FILL IS			25,000							
1013 PINE RIDGE	U	WTP IMPROVEMENTS	50,000	25,000								NEW GENERATOR, REPAIRISH PUMP ROOMS & DISC
1014 CANYON COUNTY OFFICE												
1015 LAKEVIEW VILLAS							88	6,460	70			
1016 KEYSTONE BEACHES	U	ADDITIONAL WTP	100,000	50,000			991	2,930	1,910			INCREASED CAPACITY
1017 MONTICLUIR VILLAGE	U	WTP IMPROVEMENTS	20,000		10,000		145	5,510	161			NEW GENERATOR, CHLORINE & DISC
1018 WATSON COUNTY OFFICE												
1019 SCRAP FORT										33	0,000	23
1020 SALT SPRINGS	S	WTP IMPROVEMENTS			20,000							
1021 SALT SPRINGS	U	WTP IMPROVEMENTS				2,000						
1022 CIRRUS TOWN	U	WTP IMPROVEMENTS				1,000	368	8,000	368	212	8,000	212
1023 SANDRA VILLAGE	U	WTP IMPROVEMENTS				1,000	7	8,000	7			
1024 BATH HOUSE	U						200	2,910	305			
1025 HAZARD CREEK	S	WTP IMPROVEMENTS		500,000			2,173	11,910	2,660	8,371	6,100	8,560
1026 HAZARD CREEK	U	WTP IMPROVEMENTS		8,000								REPAIR HYDRO TANK & DISC
1027 DEERWOOD COUNTY OFFICE												
1028 BELLEVILLE CLUB ESTATES	U	WTP IMPROVEMENTS		1,000	2,000		145	2,420	140			REPAIR HYDRO TANK & DISC
1029 GENERAL LUXE ESTATES	U	WTP IMPROVEMENTS		1,000	2,000		39	5,800	89			REPAIR HYDRO TANK
1030 PASCO COUNTY OFFICE												
1031 TERRY SHORES	S	WTP IMPROVEMENTS	250,000				600	12,900	764	591	12,900	750
1032 TERRY SHORES	U	WTP IMPROVEMENTS			10,000							
1033 PALM TERRACE	S	WTP IMPROVEMENTS	20,000				1,126	8,000	1,126	750	8,000	750
1034 PALM TERRACE	U	WTP IMPROVEMENTS	10,000		2,000							REPAIRISH PRESSURE TANKS, REN WELL, CHLORINATION & DISC
1035 PALM TERRACE	U	WTP IMPROVEMENTS										REPAIRISH PRESSURE TANKS, REN WELL, CHLORINATION, DISC
1036 PALM TERRACE	U	WTP IMPROVEMENTS										REPLACE ROOF, AIR COMPRESSOR, DISC
1037 HUSSAR COUNTY OFFICE												
1038 ORLEANS ISLAND	U	WTP IMPROVEMENTS		20,000	3,000		1,045	10,750	1,400	940	1,400	1,070
1039 SARASOTA COUNTY OFFICE												
1040 VENICE GARDENS	U	WTP IMPROVEMENTS	25,000	25,000			8,799	3,020	7,213	6,263	3,370	7,250
1041 VENICE GARDENS H.O.	U	WTP IMPROVEMENTS AND RI SVC PUMPS	100,000									DISC IMPROVEMENTS RI SVC PUMPS
1042 BREWER COUNTY OFFICE												
1043 KINGSTON HAZARD							65	0,000	65			
1044 HAZARD							200	0,000	200			

**DOCKET NO. 930880-WS  
INVESTIGATION INTO APPROPRIATE RATE STRUCTURE FOR SSU**

**LATE FILED HEARING EXHIBIT NO.32**

**TITLE**

**Five Year Capital Budget Plans for Previous Two Years  
(1991 and 1992)**

**SOUTHERN STATES UTILITIES, INC.  
DOCKET NO. 930880-WS  
INVESTIGATION INTO APPROPRIATE RATE STRUCTURE FOR SSU  
LATE FILED HEARING EXHIBIT NO. 32**

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**Question:**

Five Year Capital Budget Plans for Previous Two Years (1991 and 1992)

**Response:**

Attached are the summary of capital budget plans for 1991 and 1992.

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# SSU & LEHIGH

PROJECTED CAPITAL IMPROVEMENTS  
1992 - 1997

Page 1 of 2

33,914,914 31,449,486 26,465,397 19,722,612 18,186,836 14,297,579 11,226,759

LIN	REG	PLANT NAME	REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
			TYP	DEP	BY:								
327	W	APACHE SHORES	W	E	R	UP GRADE BUILDING, ADD CHLORINE		38,000					
328	W	APACHE SHORES	W	E	G	UPGRADE WATER LINES - DISTRIBUT					10,000		
329	W	APACHE SHORES	S	E	G	WASTEWATER TREATMENT PLANT UPGR	75,727	11,643					
330	W	CITRUS COUNTY OFF	GP	O	O	AIR EXCHANGER/BLOWER-HARNES		1,100					
331	W	CITRUS COUNTY OFF	GP	O	R	CHLORINATORS-EJECTORS		0	4,740				
332	W	CITRUS COUNTY OFF	W	O	R	CHLORINE CYLINDER REPAIR KITS		1,260					
333	W	CITRUS SPRINGS	W	E	G	1.0 MGD STORAGE TANK/H. SERVICE						550,000	550,000
334	W	CITRUS SPRINGS	S	O	Q	AERATOR REPAIR(CHANGE TO FLOATI					35,000		
335	W	CITRUS SPRINGS	W	O	R	CHLORINATORS - EJECTORS		4,740					
336	W	CITRUS SPRINGS	W	O	R	CHLORINE ALARM		700					
337	W	CITRUS SPRINGS	S	O	Q	CLARIFIER REPAIR			8,000				
338	W	CITRUS SPRINGS	W	E	G	GENERATOR/WELL #3		35,000					
339	W	CITRUS SPRINGS	W	E	G	INTERCONNECT CITRUS SPRINGS/PIN					125,000		
340	W	CITRUS SPRINGS	W	E	G	MAIN LINE EXTENSIONS		200,000	200,000	200,000	200,000	200,000	200,000
341	W	CITRUS SPRINGS	S	E	G	MAINLINE EXTENSIONS		100,000	100,000	100,000	100,000	100,000	100,000
342	W	CITRUS SPRINGS	W	E	G	NEW WELL					250,000		
343	W	CITRUS SPRINGS	S	O	Q	UPGRADE LIFT STATION 2/A					25,000		
344	W	CITRUS SPRINGS	W	E	G	WELL #2 ADDITION		20,000					
345	W	CITRUS SPRINGS	S	E	Q	WWTP UPGRADE INCLUDING PAINT		60,000	60,000	60,000			
346	W	CRYSTAL RIVER	W	E	R	BACKWASH BEDS (IRON FILTERS)		2,000					
347	W	CRYSTAL RIVER	W	E	Q	DISTRIBUTION SYSTEM IMPROVEMENT		20,000					
348	W	CRYSTAL RIVER	W	E	R	NEW WELL		30,000					
350	W	GOLDEN TERRACE	W	E	R	INTERCONNECT W/CITY		20,000					
351	W	GOSPEL ISLAND	W	E	G	INTERCONNECT W/POINT 'O WOODS O				25,000			
375	W	OAK FOREST	W	E	Q	WTP IMPROVEMENTS/UPGRADE DIST.S		80,000					
376	W	OAK FOREST	W	E	Q	WTP UPGRADE		16,250	16,000	16,000	16,000	16,000	16,000
381	W	PINE RIDGE	W	O	G	FIRE HYDRANTS			120,000				
382	W	PINE RIDGE	W	E	G	HYDRAULIC ANALYSIS/LOOP SYSTEM					125,000	125,000	
383	W	PINE RIDGE	W	E	G	NEW WELL							
384	W	PINE RIDGE	W	E	G	REDRILL WELL #3/INTERCONNECT W/		200,000					
385	W	PINE RIDGE	W	E	G	WATER MAIN EXTENSIONS		300,000	300,000	300,000	300,000	300,000	300,000
386	W	PINE RIDGE	W	E	G	WELL #2, AUX POWER				35,000			
387	W	PINE RIDGE	W	E	R	WELL #4/PRESSURE TANK/CL2 ELEC/	229,700	15,102					

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SSU & LEHIGH  
 PROJECTED CAPITAL IMPROVEMENTS  
 1992 - 1997

33,914,914 31,449,486 26,465,397 19,722,612 18,386,836 14,297,579 11,226,759

LIN	REG	PLANT NAME	REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
			TYP	DEP	BY:								
388	W	POINT O'WOODS	W	E	R	WTP IRON FILTERS	34,293	187,575					
389	W	POINT O'WOODS	S	E	R	WWTP MODIFICATION/BACKWASH FACI			12,000				
390	W	ROLLING GREEN	W	E	R	ABANDON TWO 4" WELLS			12,000				
391	W	ROLLING GREEN	W	E	Q	WATER MAIN UPGRADE				10,000			
392	W	ROSEMONT	W	E	Q	WATER MAIN UPGRADE				5,000			
393	W	ROSEMONT	W	E	R	WATER TREATMENT PLANT IMPROV. &	245,260	21,070					
420	W	SUGAR HILL WOODS	W	Z	R	1MG GST					550,000	550,000	
421	W	SUGAR HILL WOODS	W	O	R	CHLORINE ALARMS			1,050				
422	W	SUGAR HILL WOODS	GP	O	R	CL2 A REPAIR KIT			1,260				
423	W	SUGAR HILL WOODS	GP	O	O	LABORATORY EQUIPMENT		4,000					
424	W	SUGAR HILL WOODS	S	O	O	LIFT STATION UPGRADE		14,000					
425	W	SUGAR HILL WOODS	S	O	Q	LIFT STATION UPGRADE			25,000				
426	W	SUGAR HILL WOODS	S	O	R	MONITORING WELL PUMPS		3,670					
427	W	SUGAR HILL WOODS	W	E	G	NEW WATER PLANT/2 WELLS/PIPING	858,236	17,740					
428	W	SUGAR HILL WOODS	W	E	G	NEW WELL (EACH YR)			250,000		250,000		250,000
429	W	SUGAR HILL WOODS	S	E	G	WWTP EXPANSION (.5 MGD)/DISPOSA				400,000	400,000		
430	W	SUGAR HILL WOODS	S	E	Q	WWTP FENCE					40,000		

ORIGINAL EXHIBIT CUT & REASSEMBLED TO JUST SHOW CITRUS CO. SYSTEMS.

BLW 7/17/95

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**USED AND USEFUL CALCULATIONS  
WASTEWATER TREATMENT PLANT**

Company: **SSU / FPSC Jurisdiction/All Plants**  
 Docket No. **950495-WS**  
 Schedule Year Ended: **12/31/96**  
 Interim  Final   
 Historical  Projected   
 FPSC Uniform  FPSC Non-Uniform

Explanation: Provide calculations, analyses, and governmental requirements used to determine the used and useful percentages for the wastewater treatment plants for the historical test year and the projected test year (if applicable).

FPSC  
 Schedules F-6(S)  
 Page 5 of 7  
 Preparer: Bliss  
 Recap Sched: A-6, A-10,  
 B-14

Line No.	(1) Description	(2) 1115 Salt Springs	(3) 473 Silver Lake Oaks	(4) 1113 South Forty	(5) 1801 Sugar Mill	(6) 989 Sugarhill Woods	(7) 2801 Sunny Hills	(8) 860 Sunshine Parkway	(9) 106 University Shores	(10) 867 Venetian Village
1	PERMITTED PLANT CAPACITY	85,000	12,900	80,000	270,000	400,000	80,000	280,000	1,145,000	36,000
2	EFFLUENT DISPOSAL CAPACITY	34,000	12,000	80,000	270,000	800,000	80,000	180,000	1,145,000	36,000
3										
4										
6	AVG DAILY FLOW FOR MAX MO. W 5 Yr. MR	28,129	7,290	38,841	183,720	361,821	30,011	141,951	1,440,218	40,283
7	<u>Treatment and Disposal Plant</u>									
8	Treatment and Disposal									
9	CALCULATED PERCENTAGE [5]	34.27%	60.75%	79.88%	68.04%	90.46%	60.02%	66.78%	100.00% [4]	100.00% [4]
10	U&U PER ORDER	49.00%	13.00%	74.00%	78.00%	88.20%	61.00%	61.00%	93.10%	86.00%
11	REQUESTED U & U [3]	49.00%	60.75%	79.88%	78.00%	90.46%	60.02%	66.78%	100.00%	100.00%
12										
13	Effluent Disposal [1]									
14	CALCULATED PERCENTAGE [5]	85.67%	60.75%	79.88%	68.04%	72.38%	60.02%	84.83%	100.00% [4]	100.00% [4]
15	U&U PER ORDER	100.00%	13.00%	74.00%	78.00%	88.20%	61.00%	61.00%	93.10%	86.00%
16	REQUESTED U & U [3]	100.00%	60.75%	79.88%	78.00%	72.38%	60.02%	84.83%	100.00%	100.00%

[1] Amelia Island, Deltona Lakes, Florida Central Commerce Park, Lehigh Marco Island, Plant O'Neals, and University Shores all have reuse facilities that are considered 100% used and useful.

See Schedule F-6 (S) for detail calculations of composite used and useful percentages for the NARUC accounts that require adjusting to recognize the investment in reuse facilities that are considered 100% use and useful.

[2] Deltona Lakes includes flow from Enterprise which is taken out of serv

[3] Composite percentages based on gross plant balances for the NARUC accounts applicable to each component.

[4] If calculated percentage exceeds 100% with MR, then 100% is requested.

[5] See Key to Calculation included in Introduction.

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 Vol VI  
 BK 1 of 2

**USED AND USEFUL CALCULATIONS  
WASTEWATER TREATMENT PLANT**

Company: **BSU / FPSC Jurisdiction/All Plants**  
 Docket No. **950495-WS**  
 Schedule Year Ended: **12/31/96**  
 Interim  Final   
 Historical  Projected   
 FPSC Uniform  FPSC Non-Uniform

Explanation: Provide calculations, analysis, and governmental requirements used to determine the used and useful percentages for the wastewater treatment plants for the historical test year and the projected test year (if applicable).

FPSC  
 Schedules F-6(S)  
 Page 6 of 7  
 Preparer: Bliss  
 Recap Sched A-6, A-10,  
 B-14

Line No.	(1) Description	(2) 883 Woodmere	(3) 1427 Zephyr Shores	(4) 777 Buena Ventura	(5) 2201 Deep Creek	(6) 1907 Enterprise	(7) 2901 Lehigh	(8) 2601 Marco Island	(9) 984 Spring Gardens	(10) 2101 Tropical Isle
1	PERMITTED PLANT CAPACITY	800,000	40,000	1,800,000	Interconn.	Plant taken	2,100,000	3,600,000	20,000	60,000
2	EFFLUENT DISPOSAL CAPACITY	800,000	40,000	1,800,000	With	off line. Flo	2,100,000	3,600,000	20,000	60,000
3					Charlotte	goes to				
4					County	Deit. Lakes				
5	AVG DAILY FLOW FOR MAX MO. W/ 5 Yr. MR	542,428	28,780	1,814,839	N/A	84,400	2,823,766	2,482,614	87,200	62,765
6										
7	<u>Treatment and Disposal Plant</u>									
8	Treatment and Disposal									
9	CALCULATED PERCENTAGE [5]	100.00% [4]	71.95%	89.71%	N/A	N/A	100.00% [4]	71.22%	100.00% [4]	100.00% [4]
10	U&U PER ORDER	100.00%	86.30%	89.90%	N/A	N/A	100.00%	78.00%	N/A	N/A
11	REQUESTED U & U [3]	100.00%	86.30%	89.71%	N/A	N/A	100.00%	78.00%	100.00%	100.00%
12										
13	Effluent Disposal [1]									
14	CALCULATED PERCENTAGE [5]	100.00% [4]	71.95%	89.71%	N/A	N/A	100.00% [4]	71.22%	100.00% [4]	100.00% [4]
15	U&U PER ORDER	100.00%	100.00%	89.90%	N/A	N/A	81.08%	78.00%	N/A	N/A
16	REQUESTED U & U [3]	100.00%	100.00%	89.71%	N/A	N/A	100.00%	100.00%	100.00%	100.00%

[1] Amelia Island, Deltona Lakes, Florida Central Commerce Park, Lehigh Marco Island, Point O'Woods, and University Shores all have reuse facilities that are considered 100% used and useful.

See Schedule F-6 1(5) for detail calculations of composite used and useful percentages for the NARUC accounts that require adjusting to recognize the investment in reuse facilities that are considered 100% use and useful.

[2] Deltona Lakes includes flow from Enterprise which is taken out of serv

[3] Composite percentages based on gross plant balances for the NARUC accounts applicable to each component

[4] If calculated percentage exceeds 100% with MR, then 100% is requested

[5] See Key to Calculation included in Introduction

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**SOUTHERN STATES UTILITIES, INC.**  
**FPSC Plant In-Service Additions by Project**  
**From the Last Rate Case thru 1996**

In-Service Additions - Detail by Project				
Year	Project Number	Description	Project Cost	Priority
<b>1992-94 SUGAR MILL WOODS - WATER</b>				
1992	CP	TRANSMISSION AND DISTRIBUTION LINES	74,153	3-Growth
1992	CP	METERS AND METER INSTALLATIONS	11,924	3-Growth
1992	CP	HYDRANTS	7,140	3-Growth
1993	90CW222	WATER PLANT / 2 WELLS / PIPING	10,398	3-Growth
1994	93CW252	0.5 MGD GST	40,134	3-Growth
1994	94CW877	METER CHANGE-OUTS	29,662	4-Quality of Service
1994	90CW368	PLANT EXPANSION	27,062	2-Regulatory Mandate
1994	94ZZ777	METERS & METER INSTALLATIONS	20,558	3-Growth
1994	94CC077	METER CHANGE-OUTS	8,797	4-Quality of Service
1994	94ZZ777	SERVICE INSTALLATIONS	7,605	3-Growth
1994	92CW114	METERS & METER INSTALLATIONS	6,910	3-Growth
1994	94CW325	FLOW RECORDERS & RATE INDICATORS WTP 1 & 3	5,298	2-Regulatory Mandate
1994	91CW210	PRESSURE REDUCTION VALVES	3,798	1-Safety
1994	94CW079	WATER SERVICES	3,629	3-Growth
1994	90CW362	REBUILD (2) 50 HP PUMPS	3,411	5-General Improvement
1994	90CW215	GAS CHLORINATORS (3)	3,398	2-Regulatory Mandate
1994	93CW251	HYDRANTS - WATER	3,075	3-Growth
1994	92CW457	CL2 ALARMS	2,034	2-Regulatory Mandate
1994	CP	TRANSMISSION AND DISTRIBUTION LINES	1,475	3-Growth
1994	91CW302	IMPROVE 50 HP WELL MOTOR - WTP #3	1,336	5-General Improvement
1994	CP	SERVICES	425	3-Growth
1992-94 Subtotal			272,220	
<b>1995 SUGAR MILL WOODS - WATER</b>				
1995	95CS215 *	NEW METER/CHANGE OUT PRG	4,917	4-Quality of Service
1995	95CN209 *	NEW METERS/CHANGE OUT PRG	4,069	3-Growth
1995	95CW220 *	NEW METERS/CHANGE OUT PRG	3,887	3-Growth
1995	95CO211 *	LG WATER METER RETROFIT	3,422	2-Regulatory Mandate
1995	95CW219 *	WATER SERVICES	3,369	3-Growth
1995	95CS213 *	WATER SERVICES	2,969	3-Growth
1995	95CC202 *	WATER SERVICES	2,916	3-Growth
1995	95CW430	DUAL 150# CL2 SCALES(2)	2,857	5-General Improvement
1995	95CC203 *	NEW METERS/CHANGE OUT PRG	2,342	4-Quality of Service
1995	95CN210 *	WATER SERVICES	1,325	3-Growth
1995	95CN207 *	HYDRANTS	368	4-Quality of Service
1995	95CC331 *	CHLORINATR/BSTR PMP/EJETR	262	2-Regulatory Mandate
1995	95CC201 *	WATER MAIN EXTENSIONS	130	3-Growth
1995	95CO101 *	METER TEST/INSTALL EQUIP	80	2-Regulatory Mandate
1995	95CC200 *	FIRE HYDRANTS	47	1-Safety
1995 Subtotal			32,960	

Note: \* The budget process has regional capital projects for water only and sewer only additions. This detail by plant allocates those budgeted dollars to all water or sewer plants, based on total company number of water or sewer customers.

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# SOUTHERN STATES UTILITIES, INC.

## FPSC Plant In-Service Additions by Project

From the Last Rate Case thru 1996

In-Service Additions - Detail by Project				
Year	Project Number	Description	Project Cost	Priority
<b>1996 SUGAR MILL WOODS - WATER</b>				
1996	95CWEEE	0.5 MG GST/HIGH SERV PUMP	715,903	2-Regulatory Mandate
1996	96RO060 *	METERS	14,061	3-Growth
1996	96RO059 *	MISCELLANEOUS EQUIPMENT	10,761	4-Quality of Service
1996	96RO058 *	SERVICES	10,043	3-Growth
1996	96RO057 *	LARGE METER RETROFIT	4,782	2-Regulatory Mandate
1996 Subtotal			755,550	
Water			1,060,730	
<b>1992-94 SUGAR MILL WOODS - WASTEWATER</b>				
1992	CP	COLLECTIONS SEWER - GRAVITY	121,335	3-Growth
1992	CP	STRUCTURES AND IMPROVEMENTS	62,500	3-Growth
1992	CP	COLLECTIONS SEWER - FORCE	29,666	3-Growth
1992	CP	SERVICES	12,501	3-Growth
1993	91CW209	LIFT STATION UPGRADE	28,186	4-Quality of Service
1993	93CW254	LIFT STATION (3)	20,687	3-Growth
1993	92CW098	MONITORING WELL PUMPS	3,627	2-Regulatory Mandate
1993	93CW356	PUMP	2,616	5-General Improvement
1993	93CW403	REBUILD PUMP	1,463	5-General Improvement
1993	93CW511	ELECTRICAL WIRE FOR NEW LIFT STATION	1,046	3-Growth
1993	93CW370	REBUILD PUMP	857	5-General Improvement
1994	93CW664	LIFT STATIONS (2)	35,185	3-Growth
1994	90CW216	LIFT STATION PUMP (1, 2, 17)	22,864	5-General Improvement
1994	94CW209	PANEL & PUMP @ L/S #1	9,753	5-General Improvement
1994	93CW696	GRAVITY MAIN & SERVICES	8,544	4-Quality of Service
1994	90CW376	INSTALL GRAVITY MAINS	8,491	3-Growth
1994	94CW373	REROUTE SERVICE LINES	7,385	4-Quality of Service
1994	94CW375	L/S PUMP & MOTOR (OAK-B)	6,208	5-General Improvement
1994	93CW640	EMERGENCY PUMPING EQUIPMENT	6,137	4-Quality of Service
1994	91CW374	TELEMETRIC EMERGENCY PHONE DIALERS	4,404	1-Safety
1994	CP	COLLECTIONS SEWER - GRAVITY	2,700	3-Growth
1994	92CW343	PUMP AT L/S #3	2,266	5-General Improvement
1994	91CW305	1 1/2 HP SUBMERSIBLE PUMP	1,026	5-General Improvement
1994	90CW370	LIFT STATION CONTROL PANELS	765	1-Safety
1994	91CW209	LIFT STATION UPGRADE	113	4-Quality of Service
1992-94 Subtotal			400,322	
<b>1995 SUGAR MILL WOODS - WASTEWATER</b>				
1995	93CW255	WWTP IMPROVEMENTS	875,038	2-Regulatory Mandate
1995	95CC204 *	HAND RAILS/WALKWAY	4,100	1-Safety
1995	95CW725 *	LINE EXTENSIONS - SEWER	1,318	3-Growth
1995	95CS212 *	SEWER SERVICES	626	5-General Improvement
1995 Subtotal			881,082	

Note: \* The budget process has regional capital projects for water only and sewer only additions. This detail by plant allocates those budgeted dollars to all water or sewer plants, based on total company number of water or sewer customers.

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**SOUTHERN STATES UTILITIES, INC.**

**FPSC Plant In-Service Additions by Project**

**From the Last Rate Case thru 1996**

In-Service Additions - Detail by Project				
Year	Project Number	Description	Project Cost	Priority

**1996 SUGAR MILL WOODS - WASTEWATER**

1996	96RO073	LIFT STATION MODIFICATION	59,500	4-Quality of Service
		1996 Subtotal	<u>59,500</u>	
		Wastewater	<u>1,340,903</u>	
		<b>Total Sugar Mill Woods</b>	<b><u>2,401,633</u></b>	

**Note:** \* The budget process has regional capital projects for water only and sewer only additions. This detail by plant allocates those budgeted dollars to all water or sewer plants, based on total company number of water or sewer customers.

SSW ANSWER TO PSC INTERROGATORY  
27 R-A - CITRUS CO. SYSTEMS.  
Docket No. 930880-WS.

SCHEDULE OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER & SEWER  
 - Plant Additions and Ending Balances -

PLANT ADDITIONS AND ENDING BALANCES

PLANT NAME	PLT#	PROJECT DESCRIPTION	ALLOCATION FACTOR	1993 Additions	1993 End Bal	1994 Additions	1994 End Bal	1995 Additions	1995 End Bal.	1996 Additions	1996 End Bal.	1997 Additions	1997 End Bal.
Apache Shores	990 W	Upgrade Water Lines-Distribution System			0		0		0		0	10,000	10,000
		Auxiliary Generator			0		0		0		0	0	0
		Additional Well			0		0		0		0	0	0
		Allocated General & Miscellaneous Plants	0.107291%	5,526	5,526	5,423	10,949	5,993	16,943	6,767	23,710	7,374	31,083
				5,526	5,526	5,423	10,949	5,993	16,943	6,767	23,710	17,374	41,083
Apache Shores	990 S	Replace & Upgrade Collection System			0		0		0	15,000	15,000	15,000	30,000
		Allocated General & Miscellaneous Plants	0.073241%	3,772	3,772	3,702	7,474	4,091	11,566	4,619	16,185	5,034	21,219
				3,772	3,772	3,702	7,474	4,091	11,566	19,619	31,185	20,034	51,219
Citrus Springs	906 W	Generator / Well #3			0		0		0	35,000	35,000		35,000
		Interconnect with Pine Ridge			0		0	70,000	70,000	70,000	140,000		140,000
		Well #2 Addition			0		0	0	0	20,000	20,000		20,000
		1.0 MGD Storage Tank/MS Pump Building			0		0	0	0	0	0	550,000	550,000
		Allocated General & Miscellaneous Plants	1.123668%	57,874	57,874	56,799	114,673	62,767	177,441	70,871	248,311	77,225	325,536
				57,874	57,874	56,799	114,673	132,767	247,441	195,871	443,311	627,225	1,070,536
Citrus Springs	906 S	Upgrade Lift Station 2/A			0	35,000	35,000		35,000		35,000		35,000
		WWTP Upgrade			0	0	0	60,000	60,000	60,000	120,000	60,000	180,000
		Allocated General & Miscellaneous Plants	0.437517%	22,534	22,534	22,116	44,650	24,439	69,089	27,595	96,684	30,069	126,753
				22,534	22,534	57,116	79,650	84,439	164,089	87,595	251,684	90,069	341,753
Crystal River HIGHLANDS	984 W	WTP Improvements		45,369	45,369		45,369		45,369		45,369		45,369
		Distribution System Improv. Investigation			0		0		0		0		0
		Allocated General & Miscellaneous Plants	0.044330%	2,293	2,283	2,241	4,524	2,476	7,000	2,796	9,796	3,047	12,843
				47,652	47,652	2,241	49,893	2,476	52,369	2,796	55,165	3,047	58,212
Golden Terrace	992 W	Abandon WTP #1 & WTP #2			0		0		0		0		0
		Interconnect with City of Inverness		32,694	32,694		32,694		32,694		32,694		32,694
		Allocated General & Miscellaneous Plants	0.066174%	3,408	3,408	3,345	6,753	3,696	10,450	4,174	14,623	4,548	19,171
				36,102	36,102	3,345	39,447	3,696	43,144	4,174	47,317	4,548	51,865
Gospel Island	986 W	Allocated General & Miscellaneous Plants	0.005782%	298	0	292	590	323	913	365	1,278	397	1,675
				298	298	292	590	323	913	365	1,278	397	1,675

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SSU ANSWER TO PSC INTERROGATORY  
 27R-A - CITRUS CO. SYSTEMS  
 DOCKET No 930880-LB

SCHEDULE OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER & SEWER  
 - Plant Additions and Ending Balances -

PLANT ADDITIONS AND ENDING BALANCES

PLANT NAME	PLT#	PROJECT DESCRIPTION	ALLOCATION FACTOR	1993 Additions	1993 End Bal.	1994 Additions	1994 End Bal.	1995 Additions	1995 End Bal.	1996 Additions	1996 End Bal.	1997 Additions	1997 End Bal.	
Oak Forest	993 W	Water Distribution System			0		0	5,000	5,000		5,000	5,000	10,000	
		WTP Upgrade & Aux Power			0	30,000	30,000	30,000	60,000		60,000		60,000	
		Allocated General & Miscellaneous Plants	0.089302%	4,599	4,599	4,514	9,114	4,988	14,102	5,632	19,734	6,137	25,872	
				4,599	4,599	34,514	39,114	39,988	79,102	5,632	84,734	11,137	95,872	
Pine Ridge Utilities	907 W	Redrill Well #3 & Interconnect with Well #			0		0		0	100,000	100,000	10,000	110,000	
		Hydraulic Analysis/Loop System			0	0	60,000	60,000	60,000	120,000		120,000		
		Hydrants		15,164	15,164		16,164		16,164		16,164		16,164	
		Well #2 / Auxiliary Generator			0		0	40,000	40,000		40,000		40,000	
		Additional Well			0	125,000	125,000	125,000	250,000		250,000		250,000	
		Allocated General & Miscellaneous Plants	0.307097%	15,817	15,817	15,523	31,340	17,154	48,494	19,369	67,863	21,106	88,969	
				31,981	31,981	140,523	172,504	242,154	414,658	179,369	594,027	31,106	625,133	
Point O' Woods	987 W	WTP Iron Filters		11,080	11,080		11,080		11,080		11,080		11,080	
		Allocated General & Miscellaneous Plants	0.221650%	11,416	11,416	11,204	22,620	12,381	35,001	13,980	48,981	15,233	64,214	
				22,496	22,496	11,204	33,700	12,381	46,081	13,980	60,061	15,233	75,294	
Point O'woods	987 S	Allocated General & Miscellaneous Plants	0.082878%	4,269	4,269	4,189	8,458	4,629	13,087	5,227	18,315	5,696	24,010	
				4,269	4,269	4,189	8,458	4,629	13,087	5,227	18,315	5,696	24,010	
Rolling Green	985 W	Water Main Upgrade			0		0		0	0	0	0	0	
		Allocated General & Miscellaneous Plants	0.051397%	2,647	2,647	2,598	5,245	2,871	8,116	3,242	11,358	3,532	14,890	
				2,647	2,647	2,598	5,245	2,871	8,116	3,242	11,358	3,532	14,890	
Rosemont	988 W	Water Main Upgrade			0		0		0	0	0	0	0	
		Allocated General & Miscellaneous Plants	0.029553%	1,522	1,522	1,494	3,015	1,651	4,667	1,864	6,531	2,031	8,562	
				1,522	1,522	1,494	3,015	1,651	4,667	1,864	6,531	2,031	8,562	
Sugar Mill Woods	989 W	0.5 MGD GST		136,635	136,635	500,000	636,635		636,635		636,635		636,635	
		1 MG Ground Storage Tank			0		0		0	550,000	550,000	550,000	1,100,000	
		Abandon WTP #1			0	15,000	15,000		15,000		15,000		15,000	
		Hydrants		2,590	2,590	3,000	5,590	3,000	8,590	3,000	11,590	3,000	14,590	
		Additional Wells			0	125,000	125,000	125,000	250,000		250,000		250,000	
		Allocated General & Miscellaneous Plants	1.261797%	64,588	64,988	63,781	128,770	70,483	199,253	79,583	278,836	86,718	365,554	
				204,213	204,213	706,781	910,995	198,483	1,109,478	632,583	1,742,061	639,718	2,381,779	

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590 ANSWER TO PSC INTERROGATORY

27R-A - CITRUS CO SYSTEMS.

DOCKET No. 930880-W9.

SCHEDULE OF FIVE-YEAR CONSTRUCTION PROJECTS BY SYSTEM - WATER & SEWER  
- Plant Additions and Ending Balances -

PLANT ADDITIONS AND ENDING BALANCES

PLANT NAME	PLT#	PROJECT DESCRIPTION	ALLOCATION FACTOR	1993 Additions	1993 End Bal.	1994 Additions	1994 End Bal.	1995 Additions	1995 End Bal.	1996 Additions	1996 End Bal.	1997 Additions	1997 End Bal.
Sugar Mill Woods	989	Collection System (Air Release)			0		0	5,000	5,000		5,000		5,000
		New Lift Stations (3)		15,543	15,543	50,000	65,543	16,000	81,543	32,000	113,543		113,543
	S	Pond Cleaning			0		0		0		0		0
		I & I Investigation			0		0	0	0	0	0	0	0
		Lift Station Upgrades			0	10,000	10,000	20,000	30,000	15,000	45,000	10,000	55,000
		0.5 MGD WWTP Expansion		102,815	102,815	150,000	252,815	500,000	752,815	1,200,000	1,952,815		1,952,815
		Allocated General & Miscellaneous Plants	1.212970%	62,473	62,473	61,313	123,787	67,756	191,542	76,503	268,046	83,362	351,408
				180,831	180,831	271,313	452,145	608,756	1,060,900	1,323,503	2,384,404	93,362	2,477,766

NOTE: ORIGINAL 27R-A HAD ALL WATER & SEWER SYSTEMS LISTED  
ALPHABETICALLY. THE CITRUS CO. SYSTEMS WERE CUT OUT  
& REASSEMBLED FOR THIS EXHIBIT.

BLH

7/17/94

**DOCKET NO. 930880-WS  
INVESTIGATION INTO APPROPRIATE RATE STRUCTURE FOR SSU**

**LATE FILED HEARING EXHIBIT NO.32**

**TITLE**

**Five Year Capital Budget Plans for Previous Two Years  
(1991 and 1992)**

**SOUTHERN STATES UTILITIES, INC.  
DOCKET NO. 930880-WS  
INVESTIGATION INTO APPROPRIATE RATE STRUCTURE FOR SSU  
LATE FILED HEARING EXHIBIT NO. 32**

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**Question:**

Five Year Capital Budget Plans for Previous Two Years (1991 and 1992)

**Response:**

Attached are the summary of capital budget plans for 1991 and 1992.

# SSU & LEHIGH

## PROJECTED CAPITAL IMPROVEMENTS

1992 - 1997

33,914,914 31,449,486 26,465,397 19,722,612 18,186,836 14,297,579 11,226,759

LIN	REGI	PLANT NAME	REQ			DESCRIPTION	PRIOR YRS	1992	1993	1994	1995	1996	1997
			TYP	DEP	BY:								
10	A	TOOLS & EQUIPMENT	G	E/O	O	ENGINEERING/OPERATIONS TOOLS & EQU		213,561	250,000	260,000	270,000	281,000	292,000
11	A	VEHICLES	G	E	O	VEHICLES		349,470	480,000	499,200	519,170	539,930	561,530
12	A	METERS	W	O	G	METER CHANGE OUT PROGRAM		90,595	192,500	210,210	229,550	250,670	273,730
13	A	NEW EXTENSIONS -	W	O	G	NEW EXTENSIONS - WATER (5000 new c		1,316,044	750,000	780,000	811,200	843,648	877,394
14	A	NEW EXTENSIONS -	S	O	G	NEW EXTENSIONS - SEWER (900 new co		18,700	135,000	140,400	146,016	151,857	157,931
15	A	UNANTICIPATED	W	U	U	UNANTICIPATED ADDITIONS (10% IN '9		0	2,405,945	3,287,102	3,637,367	3,299,441	2,910,641
16	A	SUSI	G	E	O	OF&E, COMPUTERS, BLANKETS, MISC.		1,467,602	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
18	A	ENGINEERING DEPT.	S	E	R	UNDERGROUND STORAGE REPLACEMENT		110,000	10,000				
20	C	APPLE VALLEY/SANL	W	E	R	DISTRIBUTION UPGRADE PER FPSC			200,000	200,000			
21	C	APPLE VALLEY/SANL	W	O	Q	NEW HIGH PUMP SERVICE			10,000				
22	C	APPLE VALLEY/SANL	W	O	Q	NEW HYDRO-PNEUMATIC TANKS							30,000
23	C	APPLE VALLEY/SANL	W	E	Q	UTILITY RELOCATIONS/UPGRADES			50,000	55,000	60,000	65,000	70,000
24	C	APPLE VALLEY/SANL	W	E	Q	WATER MAIN IMPROVEMENTS			25,000	30,000	35,000	40,000	45,000
25	C	APPLE VALLEY/SANL	W	E	Q	WTP IMPROVEMENTS			25,000	25,000			
26	C	BAY LAKE ESTATES	W	O	Q	AUTOMATIC SWITCHOVER FOR GENERATOR			5,000				
27	C	CARLTON VILLAGE	W	O	R	ABANDON 4" WELL & MAIN PLT.			5,000				
28	C	CARLTON VILLAGE	W	O	Q	DISTRIBUTION SYSTEM REPLACEMENT/UP				50,000			
29	C	CARLTON VILLAGE	W	E	R	EMERGENCY GENERATOR/WTP IMPROVEMEN			30,000				
30	C	CARLTON VILLAGE	W	O	Q	NEW HYDRO TANK				25,000			
31	C	CARLTON VILLAGE	W	O	Q	NEW WELL PUMP, SUBMERSIBLE				10,000			
32	C	CENTRAL REGION	G	O	R	NEGOTIABLE REGULATORY REQUIREMENTS		65,000					
33	C	CENTRAL REGION	W	O	Q	UNSCHEDULED MAIN LINE REPLACEMENTS		20,000					
34	C	CHULUOTA	S	O	Q	NEW LIFT STATION -LOCATED ON PRIVA			30,000				
35	C	CHULUOTA	W	O	Q	REPLACE 10,000 GAL HYDRO TANK						35,000	
36	C	CHULUOTA	S	E	Q	UPGRADE COLLECTION SYSTEM -INFILTR			25,000	30,000	35,000	40,000	45,000
37	C	CHULUOTA	W	E	Q	UPGRADE DISTRIBUTION SYSTEM			50,000	55,000	60,000	65,000	70,000
38	C	CHULUOTA	W	O	G	WTP #2 FOR NEW DEVELOPMENTS			50,000				
39	C	DAETWYLER SHORES	W	O	R	PLUG ABANDONED WELLS/ABANDON PLANT			6,500				
40	C	DOL RAY MANOR	W	O	R	ABANDON PLANT/INTERCONCT. W/ALTAMO			25,000				
41	C	EAST LAKE HARRIS	W	O	R	45KW EMERGENCY GENERATOR			30,000				
42	C	EAST LAKE HARRIS	W	O	R	FENCE AROUND PLANT PROPERTY			5,000				
43	C	EAST LAKE HARRIS	W	E	R	INTERCONNECT WITH FRIENDLY CENTER			50,000				
44	C	EAST LAKE HARRIS	W	E	Q	NEW HYDRO TANK - ASME CODE			25,000				
45	C	EAST LAKE HARRIS	W	O	R	NEW WELL PUMP			10,000				
46	C	FERN PARK	W	O	Q	NEW ROOF FOR GROUND STORAGE TANK			25,000				
47	C	FERN PARK	W	E	Q	NEW UPGRADE INTERCONNECT W/ALTA SP			50,000	30,000			

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# SSU & LEHIGH

PROJECTED CAPITAL IMPROVEMENTS  
1992 - 1997

33,914,914 31,449,486 26,465,397 19,722,612 18,186,836 14,297,579 11,226,759

LIN	REG	PLANT NAME	REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
			TYP	DSP	BY:								
48	C	FISHERMAN'S HAVEN	W	O	R	BLOWER COVER		1,000					
49	C	FISHERMAN'S HAVEN	W	O	R	DUAL CL2 WITH AUTO SWITCHOVER		5,000					
50	C	FISHERMAN'S HAVEN	S	E	R	FLOW METER/UPGRADE PLANT/DRAIN	162,215	7,808					
51	C	FISHERMAN'S HAVEN	W	E	R	INTERCONNECT WITH LEILANT #2 WE		75,000					
52	C	FISHERMAN'S HAVEN	W	E	Q	NEW HYDRO TANK - 10,000 GAL				30,000			
53	C	FISHERMAN'S HAVEN	S	E	Q	SLUDGE STABILIZATION/ADDITL. DI		25,000					
54	C	FL. CENTRAL COMM.	S	E	G	EFFLUENT DISPOSAL UPGRADE/STUDY		10,000					
55	C	FL. CENTRAL COMM.	S	O	O	STORAGE AND WORK AREA SHED		500					
56	C	FOUNTAINS	W	E	R	GENERATOR						50,000	
57	C	FOX RUN	S	E	R	EFFLUENT DISPOSAL SYSTEM IMPROV	29,380	116,091	33,909				
58	C	FRIENDLY CENTER	W	O	R	FENCE AROUND PROPERTY		2,500					
59	C	FRIENDLY CENTER	W	E	Q	NEW HYDRO TANK				30,000			
60	C	GRAND TERRACE	W	E	R	GENERATOR		45,000					
61	C	GRAND TERRACE	W	E	R	SECOND WELL		75,000					
62	C	HID EST/DRUID HLS	W	O	Q	AERATOR			15,000				
63	C	HID EST/DRUID HLS	W	E	R	DISTRIBUTION LOOPING PER PSC		30,000					
64	C	HID EST/DRUID HLS	W	O	R	DUAL CHLORINE SCALE		954					
65	C	HID EST/DRUID HLS	W	O	Q	INTERCONNECT WITH ALTAMONTE SPR			25,000				
66	C	HID EST/DRUID HLS	W	O	R	NEW 8000 GAL. HYDRO TANK		16,000					
67	C	HID EST/DRUID HLS	W	O	Q	REPLACE STORAGE TANK			40,000				
68	C	HOBBY HILLS	W	O	R	FENCE		5,000					
69	C	HOBBY HILLS	W	E	R	GENERATOR		30,000					
70	C	HOBBY HILLS	W	O	Q	NEW EQUIPMENT BUILDING			10,000				
71	C	HOLIDAY HEIGHTS	W	O	Q	ABANDON PLANT		15,000					
72	C	HOLIDAY HEIGHTS	W	E	R	INTERCONNECT W/ORANGE CO.		15,000					
73	C	IMPERIAL TERRACE	W	E	Q	ABANDON PLANT/STUDY		2,500					
74	C	IMPERIAL TERRACE	W	E	R	INTERCONNECT WITH TAVARES		70,000					
75	C	INTERCESSION CITY	W	E	R	NEW WELL			70,000				
76	C	INTERCESSION CITY	W	O	Q	REMOVE WATER TOWER		5,000					
77	C	INTERCESSION CITY	W	E	Q	TRANSMISSION & DISTRIBUTION SYS	25,049	4,164	25,000	25,000	25,000	25,000	
78	C	LAKE AJAY	W	O	Q	AERATOR REPLACEMENT		10,000					
79	C	LAKE AJAY	W	O	R	PLUG ABANDONED WELL		3,000					
80	C	LAKE BRANTLEY	W	E	Q	INTERCONNECT W/SANLANDO STUDY		5,000					
81	C	LAKE BRANTLEY	W	O	Q	NEW AERATOR / GROUND STORAGE TA		15,000					
82	C	LAKE BRANTLEY	W	O	Q	NEW HYDRO TANK		30,000					
83	C	LAKE CONWAY/VEN V	W	O	R	PLUG ABANDONED WELLS/ABANDON PL		6,500					
84	C	LAKE COUNTY OFFIC	W	O	R	4 CHLORINATORS-SPARES AND BOOST		6,120					
85	C	LAKE COUNTY OFFIC	S	O	R	PORTABLE GENERATOR		16,525					

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# SSU & LEHIGH

## PROJECTED CAPITAL IMPROVEMENTS

1992 - 1997

33,914,914 31,449,486 26,465,397 19,722,612 18,186,836 14,297,579 11,226,759

LIN	REG	PLANT NAME	REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
			TYP	DEP	BY:								
86	C	LAKE HARRIET	W	O	Q	NEW HYDRO TANK					35,000		
87	C	LEILANI HEIGHTS	W	O	R	CL2 ALARMS DUAL CL2		2,500					
88	C	LEILANI HEIGHTS	W	E	R	GENERATOR W/AUTOMATIC SWITCHOVE		45,000					
89	C	LEILANI HEIGHTS	S	E	R	INDIAN RIVER LAGOON COMPLIANCE		150,000					
90	C	LEILANI HEIGHTS	W	O	Q	REPLACEMENT HYDRO TANKS WTP #1		30,000					
91	C	LEILANI HEIGHTS	S	E	Q	SLUDGE STABILIZATION		65,000					
92	C	MARTIN COUNTY OFF	W	O	Q	BLANKET PURCHASES AREA S1	5,838						
93	C	MARTIN COUNTY OFF	W	O	R	CHLORINE SCALES (SINGLE)	1,005						
94	C	MEREDITH MANOR	W	E	R	DISTRIBUTION SYSTEM /UPGRADES P		50,000	50,000	50,000	50,000	50,000	
95	C	MEREDITH MANOR	W	E	R	IRON FILTERS OR INTERCONNECT AL		100,000					
96	C	MEREDITH MANOR	W	O	Q	REPLACE STORAGE TANK W/50,000 A					60,000		
97	C	MORNINGVIEW	S	E	R	ADDITIONAL DIGESTER			50,000				
98	C	MORNINGVIEW	W	O	R	HYDRO TANK RELOCATION	16,865						
99	C	MORNINGVIEW	S	E	R	NEW LIFT STATION		65,000					
100	C	OSCEOLA COUNTY OF	W	O	R	2 SPARE CHLORINATOR AND INJECTO		5,150					
101	C	PALMS MOBILE HOME	W	E	R	PALMS MOBILE HOME IRON FILTERS	36,416						
102	C	PICCIOLA ISLAND	W	O	G	CHLORINATION/SCALES		2,000					
103	C	PICCIOLA ISLAND	W	O	R	CL2 ALARM		500					
104	C	PICCIOLA ISLAND	W	O	R	FENCE		5,000					
105	C	PINE RIDGE ESTATE	W	E	Q	INTERCONNECT W/FOUNTAINS WTP			50,000				
106	C	PINE RIDGE ESTATE	W	E	G	WINDMILL POINT WATER MAIN IMPRO	46,736						
107	C	PINE RIDGE ESTATE	W	E	R	WTP FILTERING SYSTEM				50,000			
108	C	PINEY WDS/SPRING	W	O	R	FENCE		7,500					
109	C	PINEY WDS/SPRING	W	O	Q	REPLACE HYDRO TANK				30,000			
110	C	QUAIL RIDGE	W	O	Q	FENCE		5,000					
111	C	SEMINOLE COUNTY O	W	O	R	2 SPARE CHLORINATORS AND BOOSTE		4,590					
112	C	SILVER LAKES	W	E	G	DISTRIBUTION SYSTEM IMPROVEMENT			50,000	50,000			
113	C	SILVER LAKES	W	O	R	EMERGENCY GENERATOR		43,798					
114	C	SILVER LAKES	W	O	Q	NEW HYDRO TANK			30,000				
115	C	SILVER LAKES	W	E	R	WTP IMPROVEMENTS - GST & SAND		50,000					
116	C	SKYCREST	W	O	R	FENCE		5,000					
117	C	SKYCREST	W	E	R	FIRE WELL INTERCONNECT		25,000					
118	C	SKYCREST	W	E	R	GENERATOR		45,000					
119	C	SKYCREST	W	E	R	NEW HYDRO TANK		30,000					
120	C	SUNSHINE PARKWAY	W	O	R	2 WELL METERS PER C.U.P.		5,000					
121	C	SUNSHINE PARKWAY	S	E	R	ADDITIONAL DIGESTER					10,000		
122	C	SUNSHINE PARKWAY	S	E	R	EFFLUENT DISPOSAL SYSTEM & LAND	523,579	89,210					
123	C	SUNSHINE PARKWAY	W	O	R	NEW AERATOR					20,000		

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# SSU & LEHIGH

## PROJECTED CAPITAL IMPROVEMENTS

1992 - 1997

33,914,914 31,449,486 26,465,397 19,722,612 10,186,836 14,297,579 11,226,759

LIN	REG	PLANT NAME	REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
			TYP	DEP	BY:								
124	C	SUNSHINE PARKWAY	W	E	Q	NEW HYDRO TANK - 10,000 GAL						30,000	
125	C	SUNSHINE PARKWAY	W	O	Q	PADDLE WHEEL DRIVE/GEAR UNIT RE			10,000				
126	C	SUNSHINE PARKWAY	W	E	G	TIE-IN TO B'S RV PARK		100,000					
127	C	SUNSHINE PARKWAY	S	E	G	TIE-IN TO B'S RV PARK		100,000					
128	C	TROPICAL ISLE	W	O	R	BLOWER COVERS (2)		3,000					
129	C	TROPICAL ISLE	S	O	R	FENCE		17,064	5,000				
130	C	TROPICAL ISLE	S	O	R	HANDRAILS AND PLATFORMS		16,250	10,000				
131	C	TROPICAL ISLE	S	E	R	INDIAN RIVER LAGOON SWIM ACT MO			150,000				
132	C	TROPICAL ISLE	W	O	R	POTABLE WATER SUPPLY FOR CL2	126		5,000				
133	C	TROPICAL PARK	W	E	Q	ABANDON NO. 2 PLANT			10,000				
134	C	TROPICAL PARK	W	E	Q	DISTRIBUTION SYSTEM UPGRADES/RE		12,009	20,000	22,500	25,000	27,500	30,000
135	C	TROPICAL PARK	W	E	Q	INTERCNCT. W/K.U.A./INSTEAD OF			15,000				
136	C	TROPICAL PARK	W	E	R	MANGANESE FILTERS			50,000				
137	C	TROPICAL PARK	W	E	Q	NEW HYDRO TANK							40,000
138	C	UNIV. SHORES/SUNC	S	O	R	BLOWER/GENERATOR HOUSING		1,500					
139	C	UNIV. SHORES/SUNC	W	O	R	CHLORINE VACUUM LOSS ALARM SYST		700					
140	C	UNIV. SHORES/SUNC	S	O	Q	DEMOLISH ABANDONED HOUSE, REMOV			5,000				
141	C	UNIV. SHORES/SUNC	S	E	R	EFFLUENT DISPOSAL FOR AWT #1				250,000	250,000	250,000	250,000
142	C	UNIV. SHORES/SUNC	S	E	G	EFFLUENT DISPOSAL & LAND, DAVCO			500,000	500,000	500,000		
143	C	UNIV. SHORES/SUNC	S	O	O	EMERGENCY GENERATOR STP #2		36,100					
144	C	UNIV. SHORES/SUNC	S	E	Q	FORCE MAIN (EAST SIDE)	99,430	13,309					
145	C	UNIV. SHORES/SUNC	S	O	R	IRRIGATION UPGRADE CHAPEL HILL		17,000					
146	C	UNIV. SHORES/SUNC	W	O	Q	NEW HYDRO TANK REPLACEMENT						45,000	
147	C	UNIV. SHORES/SUNC	S	O	Q	NEW LABORATORY BUILDING, EQUIPM				100,000			
148	C	UNIV. SHORES/SUNC	W	E	G	NEW WELL AND LAND AT UNIVERSITY					150,000		
149	C	UNIV. SHORES/SUNC	S	O	R	REBUILD TREATMENT PLANT AIR BLO		12,000					
150	C	UNIV. SHORES/SUNC	S	O	G	REFURBISH DAVCO #2				100,000			
151	C	UNIV. SHORES/SUNC	S	O	R	REFURBISH STP #1		70,000					
152	C	UNIV. SHORES/SUNC	W	O	O	REFURBISH TOP OF GROUND STORAGE		29,400					
153	C	UNIV. SHORES/SUNC	S	E	Q	REPLACE MANHOLE COVERS, 40 IN H			150,000				
154	C	UNIV. SHORES/SUNC	S	E	G	WWTP #2 EXPANSION	32,792	113,345	2,000,000				
155	C	VENETIAN VILLAGE	S	O	R	ADDITIONAL DIGESTOR			25,000				
156	C	VENETIAN VILLAGE	S	O	R	SECOND BLOWER		3,550					
157	N	AMELIA ISLAND	S	O	G	COLLECTION IMPROVEMENTS				125,000	125,000		
158	N	AMELIA ISLAND	S	O	Q	LIFT STATION UPGRADE		36,000					
159	N	AMELIA ISLAND	S	O	G	LIFT STATION UPGRADE			20,000	20,000	20,000	20,000	20,000
160	N	AMELIA ISLAND	GP	O	O	ROOF REPLACEMENT		13,000					
161	N	AMELIA ISLAND	S	E	G	SEWER PLANT EXPANSION	1,963,828	4,393					

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LIN	REG	PLANT NAME	REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
			TYP	DEP	BY:								
162	N	AMELIA ISLAND	S	E	R	SLUDGE STABILIZATION		60,000					
163	N	AMELIA ISLAND	W	E	G	WATER DISTRIBUTION IMPROVEMENTS		150,000					
164	N	AMELIA ISLAND	E	E	G	WELL EXPANSION			160,000		160,000		
165	N	AMELIA ISLAND	W	E	Q	WTP IMPROVEMENTS		30,000					
166	N	AMELIA ISLAND	S	E	G	WWTP EXPANSION			450,000	450,000			
167	N	BEACON HILLS	W	O	Q	AUTOMATIC DIALER & PHONE LINES	1,500						
168	N	BEACON HILLS	S	E	R	BAR SCREEN		20,000					
169	N	BEACON HILLS	W	E	G	BEACON WATER DISTRIBUTION SYSTE		86,000					
170	N	BEACON HILLS	W	E	G	BEACON WTP TANK			400,000				
171	N	BEACON HILLS	W	E	Q	COBBLESTONE WTP CHEMICAL FEED U		75,000					
172	N	BEACON HILLS	W	E	G	COBBLESTONE WTP TANK & AERATOR		700,000					
173	N	BEACON HILLS	S	O	G	LIFT STATION IMPROVEMENTS		40,000	40,000	40,000	40,000	40,000	
174	N	BEACON HILLS	S	E	G	OLD WWTP CONVERSION TO EQ TANK			50,000	50,000			
175	N	BEACON HILLS	S	E	Q	WASTEWATER COLLECTION SYSTEM IM	150,750	169,000					
176	N	BEACON HILLS	S	E	Q	WASTEWATER COLLECTION SYSTEM IM		130,000					
177	N	BEACON HILLS	S	O	O	WASTEWATER ELECTRICAL EQUIPMENT		20,000					
178	N	BEACON HILLS	W	E	Q	WTP CHEMICAL FEED UPGRADE		75,000					
179	N	BEACON HILLS	W	E	G	WTP GENERATOR			100,000				
180	N	BEACON HILLS	S	E	R	WWTP DECHLORINATION	44,834	2,209					
181	N	BEACON HILLS	S	E	R	WWTP IMP.&FM FOR RECLAIMED WTR&			1,500,000	1,500,000			
182	N	BEACON HILLS	S	E	R	WWTP - OUTFALL (ENG & CONST)	3,203	81,726					
183	N	DELTONA LAKES	S	E	R	0.5 MGD WWTP EXPANSION		2,595,975					
184	N	DELTONA LAKES	W	E	G	0.5 MGD WWTP EXP.PH II				1,250,000	1,250,000		
185	N	DELTONA LAKES	W	E	G	2 MG STORAGE				900,000			
186	N	DELTONA LAKES	W	E	G	2 NEW WELLS			500,000				
187	N	DELTONA LAKES	W	E	G	3 NEW WELLS		750,000					
188	N	DELTONA LAKES	W	E	G	4 NEW WELLS IN 3 YEARS				333,333	333,333	333,333	
189	N	DELTONA LAKES	S	E	G	COLLECTION SYSTEM EXPANSION		100,000	100,000	100,000	100,000	100,000	
190	N	DELTONA LAKES	S	E	O	EFFL DISP STUDY CONSENT ORDER-M	26,203	21,326					
191	N	DELTONA LAKES	W	E	G	EFFLUENT DISPOSAL AT FLORIDA PO				325,000	325,000		
192	N	DELTONA LAKES	W	O	G	FIRE HYDRANTS		5,000					
193	N	DELTONA LAKES	S	E	R	FLOW EQUALIZATION & IMPROVEMENT	193,008	386,220					
194	N	DELTONA LAKES	W	E	G	FUTURE WWTP SITE			500,000				
195	N	DELTONA LAKES	S	E	R	GOLF COURSE IMPROVEMENTS	530,763						
196	N	DELTONA LAKES	W	O	R	VOLUSIA CTY ROAD WIDENING		43,200					
197	N	DELTONA LAKES	S	E	R	WASTEWATER SYSTEM CONNECTION-VO	167,508	326,211					
198	N	DELTONA LAKES	W	O	G	WATER DISTRIBUTION SYSTEM IMPRO			80,000	80,000	80,000	80,000	
199	N	DELTONA LAKES	W	E	G	2 MG STORAGE			450,000	450,000			

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		REQ															
LIN	REG	PLANT NAME	TYP	DEP BY:	DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997					
200	N	DELTONA LAKES	W	E	Q	WELL #23 INTERCONNECT		35,000	35,000								
201	N	DELTONA LAKES	W	E	G	WELL #30 & IRON FILTERS	208,690	104,736									
202	N	DELTONA LAKES	W	E	G	WELL #33	163,895	108,695									
203	N	DUVAL COUNTY OFFI	GP	O	O	EQUIPMENT REFPURBISHMENTS		7,000									
204	N	DUVAL COUNTY OFFI	S	O	R	FLOW PROPORTIONAL SAMPLERS		3,700									
205	N	ENTERPRISE	W	O	O	SIGHT TUBE FOR 1 MG STORAGE TAN		2,000									
206	N	GENEVA LAKE ESTAT	W	E	R	WTP GENERATOR											60,000
207	N	HERMITS COVE	W	E	R	LINE EXTENSION TO TIE INTO FLT	120,359	24,500									
208	N	INTERLACHEN LAKE	W	E	R	WTP GENERATORS	16,000	40,000									
209	N	KEYSTONE HEIGHTS	W	O	R	BRIDGE CROSSING		10,895									
210	N	KEYSTONE HEIGHTS	W	O	R	NEW PUMP & MOTOR WELL # 2		9,800									
211	N	KEYSTONE HEIGHTS	W	E	G	NEW WELL			50,000	50,000							
212	N	KEYSTONE HEIGHTS	W	E	O	WATER MAIN REPLACEMENT	9,898	6,050									
213	N	NORTH REGION	W	O	R	NEGOTIABLE REGULATORY REQUIREME		35,000									
214	N	OAKWOOD	W	O	R	WELL ABANDONMENT AND STRUCTURE			4,265								
215	N	PALM PORT	W	E	Q	REPLACE HYDROPNEUMATIC TANK		5,000	5,000								
216	N	PALM VALLEY	W	O	O	CONSTRUCT NEW PUMP BLDG		1,500									
217	N	PALM VALLEY	W	O	Q	REPLACE NORTH WTP HYDROPNEUMATI			10,000								
218	N	PALM VALLEY	W	E	Q	WATER DISTRIBUTION REPLACEMENTS			75,000	75,000	75,000	75,000	75,000				
219	N	PALM VALLEY	W	E	R	WATER DISTRIBUTION SYSTEM IMPRO	75,000	136,456									
220	N	PALM VALLEY	W	E	R	WTP IMPROVEMENTS	16,939	140,016									
221	N	PCMONA PARK	W	E	Q	NEW WELL		50,000		75,000							
222	N	PCMONA PARK	W	E	R	WTP GENERATORS		50,000									
223	N	POSTMASTER VILLAG	W	O	R	EMERGENCY POWER GENERATOR			60,000								
224	N	POSTMASTER VILLAG	W	E	R	REPLACE 1 1/4" LINE WITH 6" CLA	27,120	6,076									
225	N	PUTNAM COUNTY OFF	W	O	R	CHLORINE ALARMS			3,500								
226	N	REMINGTON FOREST	W	O	Q	EMERGENCY DIALER SYSTEM/PHONE F			500								
227	N	REMINGTON FOREST	W	O	R	INSTALL NEW 6" PLANT EFFLUENT M		750									
228	N	RIVER GROVE	W	O	R	EMERGENCY GENERATOR			50,000								
229	N	RIVER GROVE	W	E	G	NEW WELL				75,000							
230	N	RIVER PARK	W	E	R	INTERCONNECT PLANTS 1-2-3	46,905	34,837									
231	N	RIVER PARK	S	E	R	SEWER PLANT	208,338	3,866									
232	N	RIVER PARK	W	E	R	WTP GENERATORS	25,000	10,738									
233	N	ST JOHN'S HIGHLAN	W	E	R	WTP GENERATOR											70,000
234	N	SUGAR MILL C C	W	O	O	CATWALK AROUND WEIR		2,000									
235	N	SUGAR MILL C C	W	O	R	CHLORINE UNITS FOR PRE AND POST		0	4,340								
236	N	SUGAR MILL C C	S	O	O	LIFT STATION CONTROL PANEL		2,200									
237	N	SUGAR MILL C C	S	E	R	WWTP GENERATOR			50,000								

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REQ

P DEB BY:

DESCRIPTION

PRIOR YR

1992

1993

1994

1995

1996

1997

238			W	E	G	WTP GENERATOR				30,000										
239			S	O	R	BLOWER CONTROLS (EXISTING)		5,000												
240	N	WOODMERE	W	O	R	Cl2 SCALE & HOSES		2,500												
241	N	WOODMERE	W	O	O	LAB EQUIPMENT		5,000												
242	N	WOODMERE	W	E	G	NEW WELLS					100,000		100,000							
243	N	WOODMERE	W	O	O	WATER CONTROL PANEL		5,000	20,000											
244	N	WOODMERE	S	E	R	WWTP DECHLORINATION	43,810	4,435												
245	S	BURNT STORE	W	E	G	HORIZONTAL WELL & WTP				1,200,000										
246	S	BURNT STORE	S	O	R	INSTALL BLOWER AND MOTORS IN ED				6,290										
247	S	BURNT STORE	S	E	G	LIFT STATION #4-20 & FORCE MAIN		68,619												
248	S	BURNT STORE	S	E	G	LIFT STATION #6-22 & FORCE MAIN		119,718												
249	S	BURNT STORE	W	O	R	MONITORING OF R.O. PLANT		750												
250	S	BURNT STORE	W	O	R	REFURBISH WASTEWATER PLANT		2,692												
251	S	BURNT STORE	W	E	G	R.O. PLANT EXPANSION	502,118	250,000												
252	S	BURNT STORE	S	E	R	SLUDGE STABILIZATION				84,500										
253	S	BURNT STORE	S	O	R	VALVE INSTALLATION		1,856												
254	S	COVERED BRIDGE (L	W	O	R	REPLACE CHLORINE SCALES AT WATE		1,182												
255	S	COVERED BRIDGE (L	GP	O	O	UPGRADE WATER PLANT/REPLACE LAD		836												
256	S	DEEP CREEK	S	O	R	LIFT STATION MONITORING-DEEP CR				2,800	3,000	3,000	3,000	3,000	3,000					
257	S	DEEP CREEK	S	O	R	LIFT STATION UPGRADING		12,410	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000				
258	S	DEEP CREEK	S	O	R	REHAB OF COLLECTIONS LINES AND		12,200	12,200	12,200	12,200	12,200	12,200	12,200	12,200	12,200				
259	S	DEEP CREEK	S	O	Q	ROAD RESURFACING-RAISE MANHOLES		19,767												
260	S	DEEP CREEK	W	E	G	WATER DIST. SYS. IMPRV.				300,000	300,000	300,000	300,000	300,000	300,000	300,000				
261	S	LEHIGH UTILITIES	W	E	R	AMMONIATION SYSTEM		100,000												
262	S	LEHIGH UTILITIES	S	E	R	EFFLUENT DISPOSAL TO GOLF COURS		80,000	250,000	250,000										
263	S	LEHIGH UTILITIES	S	E	R	SEWER PLANT REHABILITATION	238,753	841,686												
264	S	LEHIGH UTILITIES	W	E	G	WATER LINE EXTENSION (DENSITY A	220,000	942,019	200,000	200,000	200,000	200,000	200,000	200,000	200,000					
265	S	LEHIGH UTILITIES	W	E	G	WATER MAIN EXTENSION		550,000												
266	S	MARCO ISLAND	S	E	R	1.0 MG ADDITIONAL TREATMENT	3,709,061	165,732												
267	S	MARCO ISLAND	W	E	R	24" RAW WATER TRANSMISSION LINE	1,099,338	939,714												
268	S	MARCO ISLAND	W	O	R	3 CHEMICAL PUMPS		5,400												
269	S	MARCO ISLAND	W	E	R	4.0 MGD R.O. PLANT	11,437,746	4,000,000												
270	S	MARCO ISLAND	S	E	G	ADD'L DEWATERING EQUIPMENT				225,000										
271	S	MARCO ISLAND	W	O	R	AIR CONDITIONER		2,528												
272	S	MARCO ISLAND	S	E	Q	DUDE PROPERTY DEVELOPMENT QAT	80,000	200,000	1,000,000											
273	S	MARCO ISLAND	S	E	R	EFFLUENT RIVER CROSSING	610,259	6,990												
274	S	MARCO ISLAND	G	O	O	FIRE RETARDENT CLOTHING		700												
275	S	MARCO ISLAND	G	O	O	GAS TANKS		13,200												

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		RSQ										
LIN	REG	PLANT NAME	TYP	DEP BY:	DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
276	S	MARCO ISLAND	S	O O	GENERAL IMPROVEMENTS NW OPER BL		16,722					
277	S	MARCO ISLAND	S	E R	INCREASE AERATION CAPACITY		154,999					
278	S	MARCO ISLAND	S	E R	LIME STABILIZATION OF SLUDGE			75,000				
279	S	MARCO ISLAND	W	O R	MECHANICAL INTEGRITY TEST							70,000
280	S	MARCO ISLAND	W	E G	NEW 2.0 MG STORAGE TANK @ R.O.				1,050,000			
281	S	MARCO ISLAND	W	E Q	NEW CONCENTRATE LINE FROM RO WT			800,000				
282	S	MARCO ISLAND	W	E G	NEW FILTERS FOR LIME STAB. WTP,				600,000	600,000		
283	S	MARCO ISLAND	W	O Q	NEW MEMBRANES FOR RO WTP (50%)					300,000	300,000	
284	S	MARCO ISLAND	S	E R	OFF-SITE PERCOLATION PONDS	500,000	4,700,000		1,000,000			
285	S	MARCO ISLAND	W	E G	REBUILD FILTERS			150,000				
286	S	MARCO ISLAND	W	O R	REFURBISH 2 MOYNO SLUDGE PUMPS		16,600					
287	S	MARCO ISLAND	W	O R	REFURBISH TWO LIME SLUDGE TRANS		5,400					
288	S	MARCO ISLAND	W	O R	REFURBISH TWO LIME SLUDGE VACU		8,600					
289	S	MARCO ISLAND	S	E R	REHAB LS'S #6A, 7, 4E & YARD ST			120,000				
290	S	MARCO ISLAND	S	E O	REPLACE CATWALKS			180,000				
291	S	MARCO ISLAND	W	E Q	REPLACE FITTINGS IN OLD BLEND L			150,000				
292	S	MARCO ISLAND	G	O O	REPLACEMENT OF ELECTRICAL PANEL		2,100					
293	S	MARCO ISLAND	S	E R	SCRUBBER FOR E.Q. TANK	1,115,609	59,861					
294	S	MARCO ISLAND	W	E R	STAND BY POWER FOR H.S. PUMPS				75,000			
295	S	MARCO ISLAND	W	O Q	TESTING & REFURBISHING OF WATER		10,000					
296	S	MARCO ISLAND	W	O R	TWO LIGHTNING MIXERS				3,700			
297	S	MARCO ISLAND	S	E Q	UPGRADE EFFLUENT LINE COLLIER &				40,000			
298	S	MARCO ISLAND	W	O Q	WATER METER REPLACEMENTS		39,113					
299	S	MARCO ISLAND	S	E R	WWTP PRETREATMENT STRUCTURE	200,000	350,542					
300	S	MARCO SHORES	S	E Q	ADD FILTERS				375,000			
301	S	MARCO SHORES	W	O R	CHLORINE SCALES		2,400					
302	S	MARCO SHORES	S	O G	CLEAN SLUDGE FROM PONDS			40,000				
303	S	MARCO SHORES	S	O R	NEW BLOWER			3,000				
304	S	MARCO SHORES	S	E G	NEW EQUILIZATION TANK			120,000				
305	S	MARCO SHORES	W	O Q	NEW HYDRO TANK			20,000				
306	S	MARCO SHORES	S	O R	NEW RETURN PUMP			4,000				
307	S	MARCO SHORES	S	O G	PUMPS FOR LS 27A & 27b			30,000				
308	S	MARCO SHORES	W	O Q	REBUILD FILTERS			50,000				
309	S	MARCO SHORES	S	E R	REPIPE SLUDGE LINES			20,000				
310	S	MARCO SHORES	W	O Q	SULFURIC ACID FOR L.I. IND.				7,000			
311	S	MARCO SHORES	W	O R	TWO CHEMICAL PUMPS		3,600					
312	S	VENICE GARDENS	W	E G	ADD WELL #8				150,000			
313	S	VENICE GARDENS	W	O O	INSTALL VALVES ON PRESSURE TANK		1,630					

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# SSU & LEHIGH

## PROJECTED CAPITAL IMPROVEMENTS

1992 - 1997

33,914,914 31,449,486 26,465,397 19,722,612 10,186,836 14,297,579 11,226,759

LIN	REG	PLANT NAME	REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
			TYP	DEP	BY:								
314	S	VENICE GARDENS	W	E	R	INTERCONNECT PLANTATION		300,000					
315	S	VENICE GARDENS	S	O	R	LIFT STATION MONITORING EQUIPME		14,000					
316	S	VENICE GARDENS	W	O	R	PLUGGING AND ABANDONMENT OF WEL		20,800					
317	S	VENICE GARDENS	S	O	R	REHAB OF COLLECTION LINES		91,950	50,000	50,000	50,000	50,000	
318	S	VENICE GARDENS	W	E	R	REPLACE H.S. PUMP BUILDING & PI		650,000					
319	S	VENICE GARDENS	W	O	Q	REPLACE MEMBRANES			100,000	100,000	100,000	100,000	
320	S	VENICE GARDENS	S	E	R	SLUDGE STABILIZATION		84,500					
321	S	VENICE GARDENS	S	O	R	UPGRADING OF LIFT STATIONS		8,848	12,000	14,000	14,000	14,000	
322	S	VENICE GARDENS	S	E	R	WWTP CLASS I RELIABILITY IMPROV	270,000	4,600,000					
323	S	VENICE GARDENS	S	E	R	WWTP #2 - 0.75 MGD & FILTERS	831,179	1,578,154					
324	S	VENICE GARDENS R.	W	O	O	DEEPEN R.O. WELLS #2 & #3		6,900					
325	S	VENICE GARDENS R.	W	O	R	MECHANICAL INTEGRITY TEST					70,000		
326	S	VENICE GARDENS (R	W	E	R	REPLACE WTP W/R.O. PLANT	4,013,296	80,000					
327	W	APACHE SHORES	W	E	R	UP GRADE BUILDING, ADD CHLORINE			30,000				
328	W	APACHE SHORES	W	E	G	UPGRADE WATER LINES - DISTRIBUT				10,000			
329	W	APACHE SHORES	S	E	G	WASTEWATER TREATMENT PLANT UPGR	75,727	11,643					
330	W	CITRUS COUNTY OFF	GP	O	O	AIR EXCHANGER/BLOWER-HARNES		1,100					
331	W	CITRUS COUNTY OFF	GP	O	R	CHLORINATORS-EJECTORS		0	4,740				
332	W	CITRUS COUNTY OFF	W	O	R	CHLORINE CYLINDER REPAIR KITS			1,260				
333	W	CITRUS SPRINGS	W	E	G	1.0 MGD STORAGE TANK/H. SERVICE					550,000	550,000	
334	W	CITRUS SPRINGS	S	O	Q	AERATOR REPAIR(CHANGE TO FLOATI				35,000			
335	W	CITRUS SPRINGS	W	O	R	CHLORINATORS - EJECTORS			4,740				
336	W	CITRUS SPRINGS	W	O	R	CHLORINE ALARM			700				
337	W	CITRUS SPRINGS	S	O	Q	CLARIFIER REPAIR			8,000				
338	W	CITRUS SPRINGS	W	E	G	GENERATOR/WELL #3		35,000					
339	W	CITRUS SPRINGS	W	E	G	INTERCONNECT CITRUS SPRINGS/PIN				125,000			
340	W	CITRUS SPRINGS	W	E	G	MAIN LINE EXTENSIONS		200,000	200,000	200,000	200,000	200,000	
341	W	CITRUS SPRINGS	S	E	G	MAINLINE EXTENSIONS		100,000	100,000	100,000	100,000	100,000	
342	W	CITRUS SPRINGS	W	E	G	NEW WELL				250,000			
343	W	CITRUS SPRINGS	S	O	Q	UPGRADE LIFT STATION 2/A				25,000			
344	W	CITRUS SPRINGS	W	E	G	WELL #2 ADDITION		20,000					
345	W	CITRUS SPRINGS	S	E	Q	WWTP UPGRADE INCLUDING PAINT		60,000	60,000	60,000			
346	W	CRYSTAL RIVER	W	E	R	BACKWASH BEDS (IRON FILTERS)		2,000					
347	W	CRYSTAL RIVER	W	E	Q	DISTRIBUTION SYSTEM IMPROVEMENT		20,000					
348	W	CRYSTAL RIVER	W	E	R	NEW WELL		30,000					
349	W	GIBSONIA ESTATES	W	E	R	INTERCON W/POLK CNTY.--SEE LK.GI							
350	W	GOLDEN TERRACE	W	E	R	INTERCONNECT W/CITY		20,000					
351	W	GOSPEL ISLAND	W	E	G	INTERCONNECT W/POINT 'O WOODS O		20,000					

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# SSU & LEHIGH

## PROJECTED CAPITAL IMPROVEMENTS

1992 - 1997

33,914,914 31,449,486 26,465,397 19,722,612 18,186,836 14,297,579 11,226,759

		REQ			DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
LIN	REG	PLANT NAME	TYP DEB BY:									
352	W	HOLIDAY HAVEN	S	O	O	BLOWER & MOTOR		3,000				
353	W	HOLIDAY HAVEN	S	E	R	SEWAGE TREATMENT PLANT MODIFICA	146,373	269,037				
354	W	HOLIDAY HAVEN	S	O	O	STORAGE SHED/FENCING		1,250				
355	W	JUNGLE DEN	S	O	R	PRIVACY FENCE		1,500				
356	W	JUNGLE DEN	S	E	G	WWTP EXPANSION/PENDING SALE			80,000			
357	W	LAKE GIBSON	W	E	R	COUNTY INTERCONNECT		242,590				
358	W	LAKE GIBSON	S	E	R	EFFLUENT DISPOSAL UPGRADE/CLEAR			30,000			
359	W	LAKE GIBSON	S	E	Q	MODIFY AND UPGARDE LIFT STATION				30,000		
360	W	LAKE GIBSON	S	E	R	WWTP EXPANSION IMPROVEMENTS	383,394	143,269				
361	W	MARION COUNTY OFF	GP	O	O	BLANKET PURCHASES		9,600				
362	W	MARION COUNTY OFF	S	O	O	BLOW IN VENTILATION UNIT		2,000				
363	W	MARION COUNTY OFF	W	O	R	CHLORINE ALARMS(4)			1,400			
364	W	MARION COUNTY OFF	GP	O	R	CL2 REPAIR KITS/SCALES			4,140			
365	W	MARION COUNTY OFF	S	O	R	LAB EQUIPMENT			5,000			
366	W	MARION COUNTY OFF	S	O	Q	SEWAGE TRASH PUMP		2,000				
367	W	MARION OAKS	W	O	G	FIRE HYDRANTS		15,625	16,000	16,000	16,000	16,000
368	W	MARION OAKS	S	E	G	NEW LIFT STATION			30,000			
369	W	MARION OAKS	W	E	G	NEW WELL					125,000	125,000
370	W	MARION OAKS	W	E	G	NEW WELL			125,000	125,000		
371	W	MARION OAKS	S	E	G	SEWER MAIN EXTENSIONS			100,000	100,000	100,000	100,000
372	W	MARION OAKS	W	E	G	WATER MAIN EXTENSIONS			350,000	350,000	350,000	350,000
373	W	MARION OAKS	S	O	O	WEMCO SLUDGE PUMP		4,000				
374	W	MARION OAKS	S	E	G	WWTP EXPANSION			250,000	250,000		
375	W	OAK FOREST	W	E	Q	WTP IMPROVEMENTS/UPGRADE DIST.S				25,000		
376	W	OAK FOREST	W	E	Q	WTP UPGRADE			80,000			
377	W	PALM TERRACE	W	E	R	EXPANDED DIGESTER (WWTP)			15,000			
378	W	PALM TERRACE	S	O	O	LIFT STATION IMPROVEMENT		9,964				
379	W	PALM TERRACE	W	O	Q	PHONE DIALER			2,000			
380	W	PALM TERRACE	W	O	Q	REPLACEMENT GATE VALVES 6" & 4"		5,809				
381	W	PINE RIDGE	W	O	G	FIRE HYDRANTS		16,250	16,000	16,000	16,000	16,000
382	W	PINE RIDGE	W	E	G	HYDRAULIC ANALYSIS/LOOP SYSTEM			120,000			
383	W	PINE RIDGE	W	E	G	NEW WELL				125,000	125,000	
384	W	PINE RIDGE	W	E	G	REDRILL WELL #3/INTERCONNECT W/			200,000			
385	W	PINE RIDGE	W	E	G	WATER MAIN EXTENSIONS			300,000	300,000	300,000	300,000
386	W	PINE RIDGE	W	E	G	WELL #2, AUX POWER				35,000		
387	W	PINE RIDGE	W	E	R	WELL #4/PRESSURE TANK/CL2 ELEC/	229,700	15,102				
388	W	POINT O'WOODS	W	E	R	WTP IRON FILTERS	34,293	187,575				
389	W	POINT O'WOODS	S	E	R	WWTP MODIFICATION/BACKWASH FACI				12,000		

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# SSU & LEHIGH

## PROJECTED CAPITAL IMPROVEMENTS

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REQ

LIN	REG	PLANT NAME	TYP	DEP BY:	DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
390	W	ROLLING GREEN	W	E	R	ABANDON TWO 4" WELLS		12,000				
391	W	ROLLING GREEN	W	E	Q	WATER MAIN UPGRADE			10,000			
392	W	ROSEMONT	W	E	Q	WATER MAIN UPGRADE			5,000			
393	W	ROSEMONT	W	E	R	WATER TREATMENT PLANT IMPROV. &	245,260	21,070				
394	W	SALT SPRINGS	S	E	R	REROUTE WW FORCE MAIN TO PLANT			4,000			
395	W	SALT SPRINGS	S	E	R	UPGRADE GRAVITY SEWER MAIN			20,000			
396	W	SALT SPRINGS	S	E	R	UPGRADE LIFT STATION			25,000			
397	W	SALT SPRINGS	S	E	R	WASTEWATER PLANT		115,000				
398	W	SEABOARD	S	E	Q	I & I INVESTIGATION				50,000		
399	W	SEABOARD	W	E	R	INTERCONNECT W/CITY OF TAMPA		280,000				
400	W	SEABOARD	S	O	Q	LIFT STATION 4 & 5 UPGRADE		44,000				
401	W	SEABOARD	S/W	E	Q	WATER MAIN, FORCE MAIN RELOCATI			80,000			
402	W	SEABOARD	S	E	R	WWTP IMPROVEMENTS	388,525	430,955	2,000,000			
403	W	SPRING HILL	W	E	O	1 UTILITY SITE			500,000			
404	W	SPRING HILL	W	E	G	2 - 1MG GST					900,000	900,000
405	W	SPRING HILL	W	O	R	CHLORINATOR TANK UNITS (REPLACE		3,600				
406	W	SPRING HILL	S	O	Q	LIFT STATION 25-F REHAB		8,500				
407	W	SPRING HILL	W	E	G	MARINER BLVD. UTILITY RELOCATIO	692,424	9,502				
408	W	SPRING HILL	W	E	G	NEW WELL #30 & #31			250,000			
409	W	SPRING HILL	W	E	G	NEW WELL #32 & #33					250,000	
410	W	SPRING HILL	G	O	O	PROPANE TANKS & CYLINDERS		4,000				
411	W	SPRING HILL	GP	O	O	SAFETY EQUIPMENT		1,500				
412	W	SPRING HILL	W	E	R	SPRING HILL DRIVE EXTENSION		186,952				
413	W	SPRING HILL	W	E	Q	WALLS & PIPING PROJECT AT WWTP	182,500	3,714				
414	W	SPRING HILL	W	E	G	WELL #27	309,559	13,048				
415	W	SPRING HILL	W	E	G	WELL #28	245,478	12,830				
416	W	SPRING HILL	W	E	G	WELL #29	272,991	18,925				
417	W	SPRING HILL	W	E	Q	WTP IMPROVEMENTS			30,000			
418	W	SPRING HILL	S	E	R	WWTP EFFLUENT DISPOSAL IMPROVEM		518,920				
419	W	SPRING HILL	S	E	R	WWTP EFFLUENT REUSE/SLUDGE STAB			1,500,000			
420	W	SUGAR MILL WOODS	W	E	R	1MG GST				550,000	550,000	
421	W	SUGAR MILL WOODS	W	O	R	CHLORINE ALARMS			1,050			
422	W	SUGAR MILL WOODS	GP	O	R	CL2 A REPAIR KIT			1,260			
423	W	SUGAR MILL WOODS	GP	O	O	LABORATORY EQUIPMENT		4,000				
424	W	SUGAR MILL WOODS	S	O	O	LIFT STATION UPGRADE		14,000				
425	W	SUGAR MILL WOODS	S	O	Q	LIFT STATION UPGRADE			25,000			
426	W	SUGAR MILL WOODS	S	O	R	MONITORING WELL PUMPS		3,670				
427	W	SUGAR MILL WOODS	W	E	G	NEW WATER PLANT/2 WELLS/PIPING	858,236	17,740				

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# SSU & LEHIGH

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REQ

LIN	REG	PLANT NAME	TYP	D&P BY:	REQ	DESCRIPTION	PRIOR YR	1992	1993	1994	1995	1996	1997
428	W	SUGAR MILL WOODS	W	E	G	NEW WELL(EACH YR)			250,000		250,000		250,000
429	W	SUGAR MILL WOODS	S	E	G	WWTP EXPANSION (.5 MGD)/DISPOSA				400,000	400,000		
430	W	SUGAR MILL WOODS	S	E	Q	WWTP FENCE					40,000		
431	W	SUNNY HILLS	GP	O	R	BLANKET PURCHASES			2,800				
432	W	SUNNY HILLS	W	O	R	CHLORINATOR			1,350				
433	W	SUNNY HILLS	W	O	R	CHLORINE LOSS ALARMS			1,050				
434	W	SUNNY HILLS	W	E	R	HYDRO TANK WELL #4		15,950					
435	W	SUNNY HILLS	W	O	Q	TRASH PUMP		950					
436	W	SUNNY HILLS	S	E	G	WWTP MODIFICATIONS						100,000	
437	W	VALRICO HILLS	W	E	G	WTP IMPROVEMENTS			100,000				
438	W	VALRICO HILLS	S	E	G	WWTP IMPROVEMENTS/MODIFICATIONS					80,000		
439	W	WEST REGION		O	R	NEGOTIABLE REGULATORY REQUIREME		12,000					
440	W	ZEPHYR SHORES	W	E	R	ABANDON WELL #2			10,000				
441	W	ZEPHYR SHORES	S	E	G	WWTP IMPROVEMENTS	108,473	88,499					

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1992-1995 Capital Budget  
RECORDED  
JAN 07 1991  
TELETYPE

MEMORANDUM

DATE: January 7, 1991

TO:	Bert Phillips	Dick Ausman
	Donnie Crandell	Forrest Lubes
	Chuck Wood	Charles Sweet
	Karla Teasley	Randi Kaplan
	Roula Tsoukatas	Rafael Tenfaro
	Woody Hendricks	Joe Mack
	John Losch	Robert Regalado
	Priscilla Wampler	Aaron Perlowich

FROM: Chris Carr

SUBJECT: 1992 to 1995 Capital Budget

Please find attached a copy of the proposed 1992 to 1995 Capital Budget. Amounts marked with an asterisk (\*) represent dollars which have been compounded at a 5% annual increase. Amounts marked with a pound sign (£) are unanticipated projects and do not include a 5% increase. This proposed budget does not include any carryover from the current 1991 budget.

Much credit for the compilation of this report goes to Joe Mack and John Losch for the tremendous amount of effort made in order to get this report done in the short time allotted.

Please let me know if there are any questions or comments regarding this proposed budget.

Chris Carr  
Capital Projects Analyst

MS





FILENAME: D:\23731ES\00092095.V01--C.C000  
04-Jan-92

PRT/CC	MAINT/COST	CMT/NAME	U/S/G	DESCRIPTION	1992	1993	1994	1995	WATER			SEWER			COMMENTS	
									PROJ	OBJ	PROJ	PROJ	OBJ	PROJ		
									1990	GROWTH	COST	1990	GROWTH	COST		
									DATE	1992	1990	DATE	1992			
551		BOYCEST	U	WTP IMPROVEMENTS	10,000				128	10,000	153					
552		FERN TERRACE	U	WTP IMPROVEMENTS	10,000				132	4,430	145				NEW GENERATOR, NEW TANK ON FIRE WELL, WISC	
553		PIPER BROOKS/SPRING LAKE	U	WTP IMPROVEMENTS			20,000		130	4,791	204				NEW WELL, NEW GENERATOR & WISC	
555		CAMDEN VILLAGE	U	WTP IMPROVEMENTS			10,000		87	12,160	210				REPAIR GFI, CHLORINE SYSTEM, NOISE & WISC	
556		FRIENDLY CENTER	U	WTP IMPROVEMENTS	1,000				21	0,000	21				REPAIR HYDRO TANK & WISC	
557		EAST LAKE MARAIS	U	WTP IMPROVEMENTS		100,000			171	0,000	171				FENCING, SIGN & WISC	
558		MOODY HILLS	U	WTP IMPROVEMENTS	1,000	2,000			100	0,000	100				FENCING, NEW GENERATOR, WELL & WISC	
559		PAUL MOTTIE JUNE PARK	U	WTP IMPROVEMENTS					65	0,000	65				REPAIR HYDRO TANK, FENCING & WISC	
560		SUNSHINE PARKING							7		30				NEW GENERATOR & WISC	
567		HOISINGVIELE	S	WTP IMPROVEMENTS		2,500			79	0,000	99		39	0,000	39	WISC UPGRADES
568		HOISINGVIELE	U	WTP IMPROVEMENTS		15,000									CHLORINE SYSTEM, NEW HYDRO TANK, WISC	
564		PROCTOR ISLAND	U	WTP IMPROVEMENTS			5,000		142	6,000	160				ELIC UPGRADE	
565		STONE MOUNTAIN	U	WTP IMPROVEMENTS					10	13,390	82					
566		DESTER SHORES	U	WTP IMPROVEMENTS			5,000		271	10,070	170				WISC UPGRADES	
567		REXINGTON VILLAGE	S	WTP IMPROVEMENTS	2,000	11,000			126	2,450	146		84	1,200	96	NEW BLOWER, PIPING, STRUCTURAL REPLACEMENT, FENCING & WISC
567		REXINGTON VILLAGE	U	WTP IMPROVEMENTS			5,000								WISC UPGRADES	
570		TEMPERAL TERRACE	U	WTP IMPROVEMENTS	10,000				230	0,000	230				FENCE, WELL & WISC	
572		HOLIDAY HAVEN	S	WTP MODIFICATION		5,000			804	0,000	120		99	1,000	101	
574		SILVER LAKES	U	WTP IMPROVEMENTS	10,000		50,000		859	24,440	1,373					PLANT EXPANSION, NEW GENERATOR, WISC
575		GRAND TERRACE							30	20,000	63					
576		EDGEWOOD	U	WTP IMPROVEMENTS		101,000			51	25,000	86					NEW WELL, WISC
577		SILVER LAKES							15		30					
601		HASTON COUNTY OFFICE														
673		FISHERMAN'S HAVEN	S	WTP UPGRADE DRAGFIELD CONST	0	5,000	5,000		195	4,403	203		104	0,000	104	
673		FISHERMAN'S HAVEN	U	WTP IMPROVEMENTS		5,000		5,000								WISC UPGRADES
675		LELAND HEIGHTS	S	WTP IMPROVEMENTS		5,000	10,000		369	0,000	369		300	0,000	120	WISC UPGRADES
675		LELAND HEIGHTS	U	WTP IMPROVEMENTS			10,000									REPAIR HYDRO TANKS & WISC
677		ST LOUIS TALLE							245	14,150	320		236	15,640	305	
679		FOX RUN							80	10,000	107		65	4,000	91	
701		OSCEOLA COUNTY OFFICE														
712		FOUNTAINS														
773		LAKE ADIP	U	WTP IMPROVEMENTS	3,000				22	30,270	30					FENCE, ABANDON WELL, WISC
780		EMERISSON CITY	U	WTP IMPROVEMENTS			5,000		256	3,390	270					AIR COMPRESSOR, PIPING & WISC
781		JACOBICAL PARK	U	WTP IMPROVEMENTS				20,000	554	0,300	560					REPAIR GWS & WISC
782		PINE HURST ESTATES	U	WTP IMPROVEMENTS		3,000	5,000		172	10,000	200					REPAIR HYDRO TANK & WISC
783		WINDSONG	U	WTP IMPROVEMENTS		3,000	5,000		104	0,000	112					WISC UPGRADES
786		DAY LAKE ESTATES	U	WTP IMPROVEMENTS			10,000	10,000	65	6,200	75					WISC UPGRADES
800		OSCEOLA COUNTY OFFICE														
806		BEACON HILLS/COMMISSION	U	WTP IMPROVEMENTS	150,000				2,614	14,590	3,432		2,547	14,000	3,301	REPAIR (2) GWS, (1) HYDRO TANK, WISC
808		WINDSONG	S	WTP IMPROVEMENTS	500,000	1,100,000			1,051	0,120	1,079		1,000	0,200	1,040	PLANT EXPANSION, S AND
808		WINDSONG	U	WTP IMPROVEMENTS	25,000	20,000										RT SOC PUMPS, INSTRUMENTATION, ELECTRICAL
903		CITRUS COUNTY OFFICE														
920		CRYSTAL RIVER	U	REPAIR TANK FILTERS		5,000			104	5,000	110					
960		CRYSTAL RIVER	U	WTP IMPROVEMENTS			5,000									WISC UPGRADES
985		ROLLING GREEN	U	WATER TANK UPGRADE			5,000		79	5,000	87					
990		WINDSONG ISLAND	U	CHLORINATION & SCALES		5,000			7	0,500	9					
996		WINDSONG ISLAND	U	REPAIRS & UPGRADE TANK FILTERS		0,000										
996		WINDSONG ISLAND	U	WTP IMPROVEMENTS				5,000								
996		WINDSONG ISLAND	U	WTP--FENCE, ENLARGE BUILDING		1,000		5,000								
997		POINT O'WINDS	U	WTP IMPROVEMENTS		3,000		10,000								
998		WINDSONG	U	CHLORINATION & SCALES		3,000			312	20,590	202		96	20,100	140	REPAIR HYDRO TANKS, CHLORINE & WISC
999		SUGAR HILL WOODS	S	WTP ADDITION/0.5 ACR EXPANSION	1,500,000				50	0,000	52					
999		SUGAR HILL WOODS	U	WTP IMPROVEMENTS		000,000			1,025	0,950	0,810		1,000	5,000	2,000	NEW WELLS & WISC

50

FILENAME: D:\STFILES\00002895.WE1--C.CARD  
01-JAN-90

PLT/CC	PLANT/COST	CENO NAME	U/I/S	DESCRIPTION	1992	1993	1994	1995	WATER	WATER	WATER	SEWER	SEWER	SEWER	COMMENTS	
									PROJ	ADD	PROJ	PROJ	PROJ	PROJ		PROJ
									COST	GROWTH	COST	COST	GROWTH	COST		
									1990	RATE	1992	1990	RATE	1992		
889	SUGAR HILL WOODS		U	WTP IMPROVEMENTS--L.O. ROD STORAGE TANK	3,500,000											
990	APACHE SHORES		S	LIFE STATION UPGRADE		10,000			359	8.240	305	126	0.000	126		
990	APACHE SHORES		S	UPGRADE BUILDING, ADD CHLORINE DECH			30,000									
990	APACHE SHORES		S	WTP IMPROVEMENTS	45,000											NEW 20,000 GPD PLANT
990	APACHE SHORES		U	UPGRADE BUILDING, AND ENCLOSED ROOM			30,000									
990	APACHE SHORES		U	UPGRADE WATER LINES			4,000									
990	APACHE SHORES		U	WTP AUXILIARY GENERATOR			22,500									
990	APACHE SHORES		U	WTP IMPROVEMENTS		0,000										
991	APACHE SHORES		U	WTP IMPROVEMENTS	30,000											REPAIR SLUDGE BED, ADD ADDON 4" WELL, REPAIR OYARD TANK
992	GOLDEN TERRACE		U	WTP IMPROVEMENTS			10,000									REPAIR HYDRO TANK & HISC
997	GOLDEN TERRACE		U	WTP UPGRADE AND BUILDING		4,000										
993	OAK FOREST		U	WTP UPGRADE			31,000									HISC UPGRADES
9901	CITRUS SPRINGS		S	CLARIFIER REPAIR	5,000				1,579	7.900	1,841	690	2.270	722		
9901	CITRUS SPRINGS		S	REPAIR GENERATOR		35,000										
9903	CITRUS SPRINGS		S	WTP IMPROVEMENTS	30,000		30,000	50,000								CHLORINE BAFFLES, SLUDGE PETERS, HISC
9901	CITRUS SPRINGS		U	L.O. ROD STORAGE TANK			250,000									
9909	CITRUS SPRINGS		U	HI SERVICE PUMP BUILDING			250,000									
9903	CITRUS SPRINGS		U	INTERCONNECT CITRUS SPRINGS/PINE RIDGE			100,000									
9901	CITRUS SPRINGS		U	NEW WELL		200,000										
9904	CITRUS SPRINGS		U	WTP IMPROVEMENTS	50,000	75,000										ADD GENERATOR, PAINT HYDRO TANKS & HISC
9907	PIKE RIDGE		U	500,000 GPD STORAGE TANK			175,000		203	10.200	439					
9907	PIKE RIDGE		U	HI SERVICE PUMP BUILDING			250,000									
9907	PIKE RIDGE		U	UPGRADE PSLR II			25,000									
9907	PIKE RIDGE		U	WTP IMPROVEMENTS	50,000	75,000										ADD GENERATOR, REPAIR HYDRO TANKS & HISC
1002	CLAY COUNTY OFFICE															
1054	LAREYDEN VILLAS								80	6.400	20					
1094	KEYSTONE BEACHES		U	ADDITIONAL WTP	100,000	50,000			991	2.930	1,050					NEEDED CAPACITY
1095	POSTMASTER VILLAGE		U	WTP IMPROVEMENTS	20,000		10,000		145	5.540	361					ADD GENERATOR, CHLORINE & HISC
1348	BANDON COUNTY OFFICE															
1193	SCOTT FORT											25	0.000	25		
1115	SALT SPRINGS		S	WTP IMPROVEMENTS			20,000		122	3.570	130	122	3.000	130		SLUDGE TANK CORRECT, PUMP & HISC
1113	SALT SPRINGS		U	WTP IMPROVEMENTS		2,000										ADDITIONAL WELL TIE-IN & HISC
1117	CITRUS PARK		U	WTP IMPROVEMENTS	12,000			3,000	340	0.000	340	202	0.000	212		REPAIR HYDRO TANK, REPAIR WTP GENERATOR, HISC
1110	SARINA FOLLAGE		U	WTP IMPROVEMENTS				1,000	7	0.000	2					REPAIR HYDRO TANK & HISC
1119	DAVA GARDENS		U						320	1.940	505					
11003	NATION CREEK		U	WTP IMPROVEMENTS		500,000			2,073	12.940	2,660	1,591	6.100	1,360		PLANT EXPANSION & HISC
11004	NATION CREEK		U	WTP IMPROVEMENTS		0,000										REPAIR HYDRO TANK & HISC
1203	BRADFORD COUNTY OFFICE															
1179	ALYSONE CLUB ESTATES		U	WTP IMPROVEMENTS		3,000	2,000		145	7.020	160					REPAIR HYDRO TANK & HISC
1190	GENERAL LANE ESTATES		U	WTP IMPROVEMENTS		5,000	2,000		79	5.000	89					REPAIR HYDRO TANK
1401	PASCO COUNTY OFFICE															
1427	TEJANA SHORES		S	WTP IMPROVEMENTS	250,000				600	12.900	744	590	12.000	750		REPAIR SURGE TANK, CLEAN POND, BUILD POND, SAND FILTERS, HISC
1427	TEJANA SHORES		U	WTP IMPROVEMENTS		3,000	10,000									REPAIR PRESSURE TANKS, NEW WELL, CHLORINATION & HISC
1427	PAIN TERRACE		U	WTP IMPROVEMENTS	20,000				1,126	0.000	1,374	950	-0.000	950		METERING, BESSNER COMPRESSOR, HISC
1429	PAIN TERRACE		U	WTP IMPROVEMENTS	10,000											REPLACE ROOF, AIR COMPRESSOR, HISC
1500	MOSSBROOK COUNTY OFFICE															
1500	MELBA ISLAND		U	WTP IMPROVEMENTS		20,000	3,000		1,245	10.750	1,601	940	6.000	0,070		REPAIR HYDRO TANK, GUST, REPAIR, CHLORINE SYSTEM, HISC
1640	SARASOTA COUNTY OFFICE															
1601	VENICE GARDENS		U	WTP IMPROVEMENTS	25,000	75,000			6,700	5.000	8,215	4,762	3.500	1,250		HISC IMPROVEMENTS
1602	VENICE GARDENS N.O.		U	WTP IMPROVEMENTS--ADD HI SVC PUMPS	100,000											HI SVC PUMPS
1700	ORFORD COUNTY OFFICE															
1701	KINGSBORO HAZEN								65	0.000	65					
1702	WINDYBROOK								200	0.000	200					



PLT/CC	PLANT/COST	CENT NAME	D/S/G	DESCRIPTION	1992	1993	1994	1995	WATER PROP COST	WATER ADD GROWTH	WATER PROP COST	SEWER PROP COST	SEWER ADD GROWTH	SEWER PROP COST	COMMENTS	
1705				DOWNSIDE												
1800				YONKIA COMPT OFFICE					81	50,000	103	35	55,000	700		
1801			S	SUGAR HILL WTP IMPROVEMENTS	20,000				511	0.000	599	550	0.220	670	REPAIR SURGE TANK & MISC	
1802			N	SUGAR HILL WTP IMPROVEMENTS	100,000	100,000									REPAIR RISING TAN, FILTERS, REPAIR SLUDGE DEW, BELLS & MISC	
1803			S	JINGLE DEW WTP IMPROVEMENTS	50,000				114	0.900	116	115	2.700	171		
18003			N	DELTON LAKES WTP	450,000	450,000	450,000	450,000	21,369	10,020	24,701	4,615	2,510	4,050	TWO NEW BELLS PER YEAR	
18007				ENTERPRISE					175	17,100	220	118	13,715	145		
1900				WATKINSON COUNTY OFFICE												
1901				VALRICH BELLS					314	0.000	304	306	0.000	314		
1902				MERSHEL HEIGHTS					350	0.000	350					
1903			N	SEADOWN WTP IMPROVEMENTS		50,000	50,000	50,000	2,410	0.000	2,622	2,570	0.015	2,570		
2100				ST LUCIE COUNTY OFFICE												
2101				TROPICAL ISLE								136	50,000	261		
2200				CHARLOTTE COUNTY OFFICE					0	0.000	0	21	0.000	21		
2201				BEIP CREEK												
2202				QUARTY STORE/PURDIE HARBOR					2,303	10,960	2,035	2,102	15,100	3,217		
2300				ST JAMES COUNTY OFFICE					104	7,000	107	121	7,000	112		
2301			N	PALM VALLEY WTP IMPROVEMENTS	40,000	40,000			210	3,000	272				NEW GUS	
2302			N	WENTWORTH FOREST WTP IMPROVEMENTS			17,000		22	3,000	24					
2303				ST AUGUSTINE SHORES 300,000 GALLON RAW WATER STORAGE TANK		100,000			2,720	2,340	2,376	2,107	2,690	2,306		
2304				ST AUGUSTINE SHORES LINE 3310 SLUICER	80,000											
2305			N	ST AUGUSTINE SHORES WTP IMPROVEMENTS	100,000	100,000	100,000	100,000							NEW BELLS & MISC	
2400				WILMINGTON COUNTY OFFICE												
2401			S	LEISENE LAKES WTP IMPROVEMENTS	20,000		5,000		306	0.000	306	231	7,000	260	EFFECTUENT METER, REPAIR BLOWER, MONITORING BELLS, NEW BLOWER, MISC	
2402			N	LEISENE LAKES WTP IMPROVEMENTS			15,000								REPAIR HYDRO TANK, WELLS PUMPS, GUS & MISC	
2500				WANTON COUNTY OFFICE												
2501				SHADPOURCK					330	0.000	330	330	0.000	330		
2600			S	16" EFF FORCE MAIN-BARCO RIVER CROSSING	3,425,000				5,300	7,100	6,000	1,942	2,070	2,055		
2601			N	24" RAW WATER LINE (PORT) SR 951	3,072,000											
2602			N	1.0 MSP R.D. PLANT	1,000,000											
2603			N	BARCO ISLAND WELLS TRANSMIT 15/DRIVE DISC LINE			400,000									
2604			N	BARCO ISLAND WTP IMPROVEMENTS	25,000	75,000	75,000	25,000							MISC UPGRADES	
2605			N	BARCO ISLAND WTP IMPROVEMENTS	50,000	50,000	50,000	50,000							MISC UPGRADES, EXPANSION	
2700			S	WTP EXPANSION, NEW PLANT, EFF DISPOSAL	500,000	1,500,000			333	10,350	103	270	9,720	316	MISC UPGRADES, EXPANSION	
2701			N	NEW BELLS	300,000	300,000	300,000	300,000	22,300	11,000	27,550	4,000	6,400	5,565	TWO NEW BELLS PER YEAR	
2702			N	TWO 1.0 MGD STORAGE TANKS	1,000,000	1,000,000										
2800			N	WTP IMPROVEMENTS	30,000				407	2,300	412	116	2,300	132	MISC UPGRADES	
PLANT TOTALS					20,919,907	17,406,770	17,732,425	12,473,901	95,901	313,754	43,495		40,855			
9000				AROWKA												
				SSPIC (ESTIMATED)	1,500,000	1,000,000	1,000,000	1,000,000								
				AFDC (ESTIMATED)	1,000,000	1,000,000	1,000,000	1,000,000								
SUBTOTAL					22,419,907	19,406,770	18,732,425	14,473,901								
OVERHEADS (ESTIMATED 10%)					2,241,991	1,940,677	1,873,242	1,447,390								
GRAND TOTALS					24,661,898	21,347,447	20,605,667	15,921,291								

TOTAL BUDGET 1992-1995 \$1,431,204

NOTES:

28

FILENAME: D:\223FILES\00092895.WL--C.CARR  
04-Nov-91

CONTRBS

PER/EC	PIANI/COST	CITY NAME	U/S/G	DESCRIPTION	1992	1993	1994	1995	WATER	WATER	WATER	SEWER	SEWER	SEWER
									PROJ	NOJ	PROJ	PROJ	NOJ	NOJ
									1990	DATE	1992	1990	RATE	1992

1. 0--ANNURES COMPANDED AT 30 ANNUALLY.
2. 0--MUNICIPATED ADRETS ON NCH INCLUDE COMPANDED.
3. THIS 190GET DOES NOT ANTICIPATED ANY CARRYOVER FROM 1991 TO 1992.



# Department of Environmental Protection

Lawton Chiles  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Virginia B. Wetherell  
Secretary

March 21, 1995

Mr. Rafael A. Terrero, P.E.,  
Manager of Environmental  
Services  
Southern States Utilities, Inc.  
1000 Color Place  
Apopka, Florida 32703

Citrus County  
Sugarmill Woods WWTP  
GMS ID No. 4009P05400

Modification of Conditions  
Permit No. DC09-242735

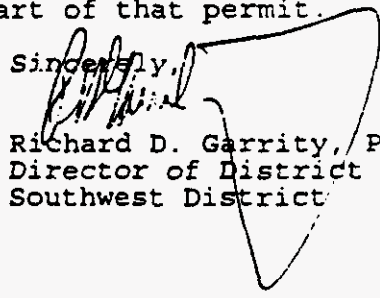
Dear Mr. Terrero:

The Department received your request, application 265903, for a modification of the permit conditions of the above construction permit originally issued on June 23, 1994. The conditions are hereby changed as follows:

<u>Condition</u>	<u>From</u>	<u>To</u>
Expiration Date	April 1, 1995	December 31, 1995

This permit modification, DC09-242735A, authorizing the above changes must be attached to your original permit and, together with any other preceding modification(s), becomes a part of that permit.

Sincerely,

  
Richard D. Garrity, Ph.D.  
Director of District Management  
Southwest District

RDG/rhl

c: Citrus County Public Health Unit  
Phyllis James, DEP  
Robert Lear, DEP

Received

MAR 23 1995

Environmental Services

Protect, Conserve and Manage Florida's Environment and Natural Resources

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Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619  
813-744-6100

Virginia B. Wetherell  
Secretary

**PERMITTEE:**  
Southern States Utilities, Inc.  
1000 Color Place  
Apopka, FL 32703

**PERMIT/CERTIFICATION**  
GMS ID No: 4009P05400  
Permit No: DC09-242735  
Date of Issue: 06/23/94  
Expiration Date: 04/01/95  
County: Citrus  
Lat/Long: 28°43'05"  
82°30'50"  
Sec/Town/Range: 28/20S/18E  
Project: Sugarmill Woods  
WWTP Expansion  
Processor: A.D. McLaurin

**Attention:**  
Mr. Rafael A. Terrero, P.E.  
Environmental Service Manager

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-3, 17-4, 17-300, 17-500 and 17-600 Series. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached thereto or on file with the Department and made a part thereof and specifically described as follows:

Expansion of a 0.500 MGD Type I oxidation ditch by re-rating the existing oxidation ditch to a permitted capacity of 0.700 MGD and the addition of a new clarifier, dual chlorine contact chambers and sludge processing and handling system with chlorinated effluent to a 1.5 mg holding pond and then to a 53.35 acre restricted access spray irrigation site.

Location: South of C.R. 480 and North of U.S. 98 in Citrus County, Florida

Replaces Permit No: N/A

Expired: N/A

**SPECIFIC CONDITIONS:**

- 16 1. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Southwest District Office, are made a part hereof.
- 15 2. The zone of discharge boundary shall extend horizontally 100 feet from the site boundary or to the installation's property boundary, whichever is less, and vertically to the base of the shallow water table aquifer. (Rule 17-522.410, F.A.C.)

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PERMITTEE: Southern States Utilities, Inc.  
 PERMIT NO: DC09-242735

SPECIFIC CONDITIONS: (cont'd)

OPS 3. The water quality standards for Class G-II ground water shall not be exceeded at the boundary of the zone of discharge.  
 (Rule 17-520.400, Rule 17-520.420, F.A.C.)

OPS 4. In accordance with Chapter 17-699, F.A.C., the required certified operator on site time is: A Class C or higher operator for 6 hours/day for 5 days/ week and one visit on each weekend day.

OPS 5. The discharge from the chlorine contact chamber shall be sampled in accordance with Chapter 17-601, F.A.C. and shall meet the following limitations:

Parameter	Unit	Min-imum	Maximum	Type Sample	Frequency
Permitted Capacity (flow)	mgd	.000	0.700 3MADF	RFM&T	Daily, 5/wk
pH	STD UN	6.00	8.50	grab	Daily, 5/wk
CBOD <sub>5</sub> * & Total Suspended Solids*	mg/L	0	20 annual avg. 30 monthly avg. 45 weekly avg. 60 any one sample	8HR-fpc	Weekly
Nitrate (as N)	mg/L	0	12	grab	Weekly
Cl <sub>2</sub>	mg/L	0.5	-	grab	Daily, 5/wk
Fecal coliform	#/100	0	200 annual avg. 200 monthly avg.	grab	Weekly

3MADF - Three month average daily flow

RFM&T - Recording Flowmeter & Totalizer

8HR-fpc - 8 Hour Flow proportioned composite sample

\*Influent shall be monitored and reported weekly [Rule 17-601.300(1), F.A.C.]

The results shall be reported weekly on DEP Form 17-601.900(1).

OPS 6. The sludge shall be sampled after final treatment in accordance with Rule 17-640.700(1)(b) F.A.C. but prior to land application for the parameters listed below every three (3) months. A copy of the analyses shall be submitted with the monthly operation report for the following parameters:

Total Nitrogen - ‰ dry weight  
 Total Phosphorus - ‰ dry weight  
 Total Potassium - ‰ dry weight  
 Cadmium - mg/kg dry weight  
 Copper - mg/kg dry weight  
 Lead - mg/kg dry weight  
 Nickel - mg/kg dry weight  
 Zinc - mg/kg dry weight  
 pH - standard units  
 Total Solids - ‰

PERMITTEE: Southern States Utilities, Inc.  
PERMIT NO: DC09-242735

SPECIFIC CONDITIONS: (cont'd)

- X) 7. Direct discharge from the holding pond or restricted access spray irrigation site to area surface waters is not allowed. Surface discharge shall be considered a violation of this permit and the permittee shall immediately report any such discharge to the SW District Office of the Department of Environmental Protection.
- PS 8. If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the project site, the permittee shall notify the DEP Southwest District office and the Bureau of Historic Preservation, Division of Archives, History and Records Management, R.A. Gray Building, Tallahassee, Florida 32301, telephone number (904) 487-2073.
- PS 9. The domestic wastewater residuals for this facility are classified as stabilization Class B.
- PS a. The domestic wastewater residuals shall be land applied only at Cason Property, lat - 28°44'50"N, long - 82°27'50"W, S/R/T - 23 & 24/20S/18E on 160 of 720 Acres (as identified in the Agricultural Use Plan or Dedicated Site Plan submitted with the application).
- PS b. Annual update reports, summaries, and revised Agricultural Use Plans are due not later than one year from the issuance of the permit. The reports shall be submitted annually thereafter, and not later than this anniversary date to the Department.
- PS c. The permittee shall comply with all provisions of Chapter 17-640, F.A.C. and shall report any non-compliance or changes from the approved site plan to the Department.
- PS 10. In accordance with Rule 17-601.400(3), F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by DHRS in accordance with Rule 10D41.100-113, F.A.C., to perform the test. On-site tests for dissolved oxygen, pH, and total chlorine residual shall be performed by a laboratory certified to test for dissolved oxygen, pH and total chlorine residual or under the direction of an operator certified in accordance with Chapter 61E12-41, F.A.C.
- 5 11. In accordance with Rule 17-160.300(6), F.A.C., sample collection shall be performed by following the protocols outlined in "DEP Standard Operating Procedures for Laboratory Operations and Sample Collection Activities" (DEP-QA-001/92). Alternatively, sample collection may be performed by an organization which has an approved Comprehensive Quality Assurance Plan (CompQAP) on file with DEP. This CompQAP shall be approved for collection of samples from the required matrices and for the required tests.

PERMITTEE: Southern States Utilities, Inc.  
PERMIT NO: DC09-242735

SPECIFIC CONDITIONS: (cont'd)

- ENV 12. Upon completion of construction and prior to placing the treatment plant or effluent reuse/disposal system into operation for any purpose other than testing for leaks and equipment operation, the permittee shall submit a Notification That a Domestic Wastewater Facility Will Be Placed Into Operation [DEP Form 17-600.910(3)] and either a Completion of Construction Notification for a Reuse/Land Application System [DEP Form 17-610.910(6)] (non-public access reuse/disposal), or an Application to Place a Public Access Reuse System in Operation [DEP Form 17-610.910(3)] (public access projects). These forms must be signed and sealed by a Professional Engineer registered in the State of Florida.
- OPS 13. The permittee shall operate and maintain this holding pond system in strict accordance with Chapter 17-610, F.A.C. Hydraulic loading shall be uniformly distributed throughout the design bottom area such that the actual loading shall not exceed the design loading rate in any section of the pond bottom.
- OPS 14. The permittee shall provide an approved flow measurement device on the domestic wastewater treatment plant to monitor the influent (ahead of any return flows) and/or effluent flow, as appropriate. For plants with design flow equal to or greater than 0.100 MGD, flow measurement shall be with a flow meter equipped with a recorder and an integrator or totalizer. The flow measurement device shall be calibrated at least annually, with evidence of calibration kept at the site of flow measurement, and submitted to the Department upon request.
- OPS 15. The spray irrigation site shall be properly restricted giving access control to the area. Vegetation on the spray site shall be cropped regularly and the soil surface maintained in order to prevent ponding. Spray nozzles are to be regularly inspected for proper operation and the spray zone shall be entirely within the restricted area.
- OPS 16. The permittee shall ensure that neither ponding nor run-off from the spray site occurs as a result of the spray irrigation of the reclaimed water. The Department considers ponding to be any residual which remains on the surface sufficient time to contaminate stormwater runoff or otherwise be environmentally objectionable due to odor or public health criteria.
- OPS 17. The permittee shall provide a weatherproof location at the plant site for the operator log, and ensure that the certified operator keeps the on-site log current to the last operation and maintenance performed on the site. These entries shall include at least the following: (a) plant name, (b) date and time in/out, (c) specific operation and maintenance performed, (d) test(s) performed and

PERMITTEE: Southern States Utilities, Inc.  
PERMIT NO: DC09-242735

SPECIFIC CONDITIONS: (cont'd)

17. (cont'd) samples taken, (e) major repairs performed, and (f) signature and certification number of the operator. Any condition that causes a violation of this permit shall be reported to the Department within twenty-four (24) hours of discovery by the permittee or designated representative. These conditions shall include (g) equipment breakdown, (h) power outage, (i) destruction by fire, wind or other cause, and (j) conditions which cause, or are likely to cause serious plant breakdowns, inefficient or unsafe treatment plant operation, or a discharge of water or wastewater in a manner not authorized by the permit. The permittee is responsible for maintaining adequate communication with the operator in order to become informed of such abnormal events.

PS 18. The permittee shall maintain all audible and visual alarm systems on the lift station(s) in operating condition at all times.

PS 19. A reduced pressure zone (RPZ) backflow preventer shall be installed on any potable water supply to the treatment facility. No potable water outlet intended for human contact shall be located down-line of the backflow preventer. Annual checks of the RPZ assembly by a properly certified technician is required. Certification documents should be kept at the plant and are subject to request for submittal by the Department.

11 20. The disinfection system shall be operated to maintain a minimum chlorine residual of 0.5 mg/L at the outfall from the chlorine contact chamber. A metering device for dosing chlorine to the effluent shall be utilized and the chlorine supply tank shall be inspected regularly to ensure proper operation.

PS 21. Prior to sixty (60) days before the expiration of this permit, the permittee shall apply for a renewal of the permit on forms and in a manner prescribed by the Department of Environmental Protection.

PS 22. The permittee shall implement the DEP approved ground water monitoring plan prior to placing the restricted access spray irrigation site into active service.

PS 23. Daily checks of the plant shall be performed by the permittee, or supplier, or designated representative five (5) days per week for all Class C and D plants pursuant to Rule 17-699.311(1), F.A.C.

NG 24. The permittee shall ensure that the construction of this facility shall be as described in the application and supporting documents. Any request for change to this permit, shall be submitted in writing to the Domestic Wastewater Program Manager for review and clearance prior to implementation. Request for changes of negligible impact to the environment and staff time will be reviewed by the Program

PERMITTEE: Southern States Utilities, Inc.  
PERMIT NO: DC09-242735

SPECIFIC CONDITIONS: (cont'd)

24. (cont'd) Manager, cleared when appropriate and incorporated into this permit. Changes or modifications other than those described above will require submission of a completed application and appropriate processing fee as per Section 17-4.050, F.A.C.

ENV 25. This permit may be extended for a period of up to four (4) additional years provided the permittee complies with all the conditions and requirements of this permit, including the need to provide adequate disinfection of the effluent on a consistent and reliable basis. The permittee may request, by letter and appropriate fee, further extension of the permit and submit evidence of satisfactory compliance with all permit conditions.

ENV 26. Ground Water Monitoring Plan (GWMP)  
a. In accordance with Rule 17-522.600(3), Florida Administrative Code (F.A.C.), the permittee has installed and placed into operation a Ground Water Monitoring System. The Ground Water Monitoring System is designed and constructed in accordance with the plans on file in the Southwest District office.

OPS b. The ground water monitor well system consists of 3 monitor wells as listed below. All wells are to be clearly labeled and easily visible at all times.

<u>Well Number</u>	<u>Aquifer</u>	<u>Location</u>
*MW-2	Floridan	Approx. 1000' East of NE corner of sprayfield
MW-6	Floridan	400' So. & 125' W. of NW corner of sprayfield
MW-7	Floridan	500' NW of NW corner of sprayfield

\*Background well

OPS c. If any monitoring well becomes damaged or inoperable, the permittee shall notify the Department immediately and a detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation of the replacement well.

OPS d. Sixty (60) days prior to the submittal of the renewal application of this permit, the permittee shall sample all ground water monitor wells for the Florida Primary and Secondary Drinking Water parameters included in Rule 17-550, F.A.C., Public Drinking Water Systems (excluding asbestos, acrylamide and epichlorohydrin), fecal coliform and EPA Methods 601 and 602. The analyses shall be submitted to the Department with the renewal application.

PERMITTEE: Southern States Utilities, Inc.  
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SPECIFIC CONDITIONS: (cont'd)

26. GWMP (cont'd)

e. Sixty (60) days prior to the submittal of the renewal application of this permit, the permittee shall provide a 24 hour composite effluent sample prior to discharge to the plant percolation ponds. The composite sample shall be analyzed for the Florida Primary and Secondary Drinking Water Standards (excluding asbestos, acrylamide and epichlorohydrin) in accordance with Rule 17-550, F.A.C., the EPA Priority Pollutants and fecal coliform. The effluent analysis shall be submitted to the Department with the renewal application.

f. All ground water monitor wells shall be sampled and analyzed QUARTERLY for the parameters listed below. There shall be a minimum of forty-five (45) days between any two (2) consecutive quarterly sampling events. Additional sample(s), well(s), and parameter(s) may be required based upon subsequent analyses.

<u>PRIMARY STANDARDS</u>	<u>UNITS</u>
Nitrate (as N)	mg/L
Sodium	mg/L
Turbidity	NTU
<u>SECONDARY STANDARDS</u>	
Chloride	mg/L
Total Dissolved Solids (TDS)	mg/L
pH	std. units
<u>OTHERS</u>	
NH <sub>3</sub> (as N)	mg/L
Temperature	°C
Total Organic Carbon (TOC)	mg/L
Specific Conductance	µmhos/cm
Fecal Coliform	cts/100 ml
Water Level (M.S.L.)	feet

g. The ground water monitor wells shall be sampled, analyzed and results reported to the Department in accordance with the following schedule:

<u>Sample Period</u>	<u>Report Due Date</u>
1st Quarter (January-March)	April 15
2nd Quarter (April-June)	July 15
3rd Quarter (July-September)	October 15
4th Quarter (October-December)	January 15

PERMITTEE: Southern States Utilities, Inc.  
PERMIT NO: DC09-242735

SPECIFIC CONDITIONS: (cont'd)

26. GWMP (cont'd)

g. (cont'd) The permittee shall submit to the Department the results of the water quality analyses no later than the 15th day of the month immediately following the end of the sampling period. The results shall be sent to the Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.

ops g.(1) The permittee shall submit to the Department an annual cumulative summary of the quarterly ground water quality data. The data shall be presented in both graphical and tabular form for each ground water monitor well. The specific parameters are to include the following:

Nitrate (as N)	mg/L
Sodium	mg/L
Chloride	mg/L
Total Dissolved Solids (TDS)	mg/L
NH <sub>3</sub> (as N)	mg/L
Specific Conductance	µmhos/cm
Fecal Coliform	cts/100ml
Water Level (M.S.L.)	feet

75 h. If, at any time, background ground water standards are exceeded at the edge of the zone of discharge, the permittee has fifteen (15) days from receipt of the laboratory analyses in which to resample the monitor well(s) to verify the original analysis. The monitoring test results must be submitted to the Department within fifteen (15) days of receipt of the reanalyses from the laboratory. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility.

ops i. All field testing, sample collection, preservation and laboratory testing, including quality control procedures, shall be in accordance with a current Department Approved Comprehensive Quality Assurance Plan in accordance with Rule 17-160.300 and 17-520.300, F.A.C. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.

ops j. Ground water sampling shall be reported on the attached Parameter Monitoring Report Forms [DEP Form 17-1.216(2)]. In order to facilitate entry of this data into the State computer system, these forms or an exact replica must be used and must not be altered as to content. The original copies should be retained so that the necessary information is available to properly complete future reports. The report forms received from the laboratory must be submitted along with the DEP Parameter Monitoring Report Forms described above.

PERMITTEE: Southern States Utilities, Inc.  
PERMIT NO: DC09-242735

SPECIFIC CONDITIONS: (cont'd)

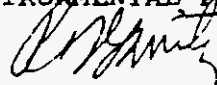
26. GWMP (cont'd)

OPS k. The permittee shall ensure that the water quality standards for Class G-II ground waters will not be exceeded at the boundary of the zone of discharge according to Rule 17-520.400 and 17-520.420, F.A.C.

OPS l. The permittee shall ensure that the minimum criteria for ground water specified in Rule 17-520.420, F.A.C. shall not be violated within the zone of discharge.

OPS 27. The permittee shall be aware of and operate under the attached "General Permit Conditions #1 thru #15". General Permit Conditions are binding upon the permittee and enforceable pursuant to Chapter 403 of the Florida Statutes.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Richard D. Garrity, Ph.D.  
Director of District Management



VOL. XI  
EX 15817

BILL WILLIAM  
JOE MACK  
SAWDY JORDE  
JOHN LEVESQUE  
MEL FISHE



Lawton Chiles  
Governor

# Florida Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619  
813-744-6100

Virginia B. Wetherell  
Secretary

**PERMITTEE:**  
Southern States Utilities, Inc.  
1000 Color Place  
Apopka, FL 32703

**Attention:**  
Mr. Rafael A. Terrerro, P.E.  
Environmental Service Manager

**PERMIT/CERTIFICATION:**  
GMS ID No: 4009P05400  
Permit No: D009-218511  
Date of Issue: 04/18/94  
Expiration Date: 09/01/95  
County: Citrus  
Lat/Long: 28°43'05"  
82°30'50"  
Sec/Town/Range: 28/20S/18E  
Project: Sugarmill Woods WWTP  
Processor: A.D. McLaurin

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-3, 17-4, 17-300, 17-500 and 17-600 Series. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached thereto or on file with the Department and made a part thereof and specifically described as follows:

Operation of a 0.500 MGD Type I oxidation ditch domestic wastewater treatment plant with chlorinated effluent to a 1.5 MG holding pond and then to a 33 acre restricted access spray irrigation site.

Location: South of C.R. 480 and North of U.S. 98 in Citrus County, Florida.

Replaces Permit No.  
D009-158879

Expired:  
09/01/92

51

Permittee: Southern States Utilities, Inc.  
 Permit No: D009-218511

**SPECIFIC CONDITIONS:**

1. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Southwest District Office, are made a part hereof.

2. The zone of discharge boundary shall extend horizontally 100 feet from the site boundary or to the installation's property boundary, whichever is less, and vertically to the base of the shallow water table aquifer. (Rule 17-522.410, F.A.C.)

3. The water quality standards for Class G-II ground water shall not be exceeded at the boundary of the zone of discharge. (Rule 17-522.400, Rule 17-522.420, F.A.C.)

4. In accordance with Chapter 17-601, F.A.C., the required certified operator on site time for A Class C or higher sewer for 5 days/week and one visit on each weekend day.

5. The discharge from the chlorine contact chamber shall be sampled in accordance with Chapter 17-601, F.A.C. and shall meet the following limitations:

Parameter	Unit	Min-Max		Type	Frequency
		Min	Max		
Permitted Capacity (flow)	mgd	0.000	0.500 3MADF	Effluent	Daily, 5/wk
pH	STD UN	6.00	8.50	grab	Daily, 5/wk
CBOD <sub>5</sub> * & Total Suspended Solids*	mg/L	0	30 annual avg. 30 monthly avg. 45 weekly avg. 60 any one sample	8HR-fpc	Weekly
Nitrate (as N)	mg/L	0	10	grab	Weekly
CL <sub>2</sub>	mg/L	0.5	-	grab	Daily, 5/wk
Fecal coliform	#/100	0	200 annual avg. 200 monthly avg.	grab	Weekly

3MADF - Three month average daily flow  
 Rfm&t - Recording flow meter & totalizer  
 8HR-fpc - 8 hour flow proportioned composite sample

\*Influent shall be monitored and reported weekly.  
 [Rule 17-601.300(1), F.A.C.]  
 The results shall be reported monthly.

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CP3/W

6. The sludge shall be sampled after final treatment in accordance with Rule 17-640.700(1)(b) F.A.C. but prior to land application for the parameters listed below every three (3) months. A copy of the analyses shall be submitted with the monthly operation report for the following parameters:

Total Nitrogen - % dry weight  
Total Phosphorus - % dry weight  
Total Potassium - % dry weight  
Cadmium - mg/kg dry weight  
Copper - mg/kg dry weight  
Lead - mg/kg dry weight  
Nickel - mg/kg dry weight  
Zinc - mg/kg dry weight  
pH - standard units  
Total Solids - %

CP3/W

7. Direct discharge from the holding pond or restricted access spray irrigation site to area surface waters is not allowed. Surface discharge shall be considered a violation of this permit and the permittee shall immediately report any such discharge to the S.W. District Office of the Department of Environmental Protection.

CP3/W

8. If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the project site, the permittee shall notify the DEP Southwest District office and the Bureau of Historic Preservation, Division of Archives, History and Records Management, R.A. Gray Building, Tallahassee, Florida 32301, telephone number (904) 487-2073.

CP3/W

9. The domestic wastewater residuals for this facility are classified as stabilization Class B.

CP3/W

a. The domestic wastewater residuals shall be land applied only at Cason property, Latitude - 28°44'50" N, Longitude - 82°27'50" W, S/R/T - 23 & 24/20S/18E on 160 of 720 acres (as identified in the Agricultural Use Plan or Dedicated Site Plan submitted with the application).

PERMIT/W

b. Annual update reports, summaries, and revised Agricultural Use Plans are due not later than one year from the issuance of the permit. The reports shall be submitted annually thereafter, and not later than this anniversary date to the Department.

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7/2/10  
c. The permittee shall comply with all provisions of Chapter 17-640, F.A.C. and shall report any non-compliance or changes from the approved site plan to the Department.

10/1/10  
10. In accordance with Rule 17-601.400(3), F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by DHS in accordance with Rule 10D41.100-113, F.A.C., to perform the test. On-site tests for dissolved oxygen, pH, and total chlorine residual shall be performed by a laboratory certified to test for dissolved oxygen, pH and total chlorine residual or under the direction of an operator certified in accordance with Chapter 61E12-41, F.A.C.

11. In accordance with Rule 17-160.300(6), F.A.C., sample collection shall be performed by following the protocols outlined in "DEP Standard Operating Procedures for Laboratory Operations and Sample Collection Activities" (DEP-OL-001/91). Alternatively, sample collection may be performed by an organization which has an approved Comprehensive Quality Assurance Plan (CompQAP) on file with DEP. This CompQAP shall be approved for collection of samples from the required matrices and for the required tests.

7/2/10  
12. The permittee shall operate and maintain this holding pond system in strict accordance with Chapter 17-610, F.A.C. Hydraulic loading shall be uniformly distributed throughout the design bottom area such that the actual loading shall not exceed the design loading rate in any section of the pond bottom.

7/2/10  
13. The permittee shall provide an approved flow measurement device on the domestic wastewater treatment plant to monitor the influent (ahead of any return flow), and/or effluent flow, as appropriate. For plants with design flow equal to or greater than 0.100 MGD, flow measurement shall be with a flow meter equipped with a recorder and an integrator or totalizer. The flow measurement device shall be calibrated at least annually, with evidence of calibration kept at the site of flow measurement, and submitted to the Department upon request.

7/2/10  
14. The spray irrigation site shall be properly restricted giving access control to the area. Vegetation on the spray site shall be cropped regularly and the soil surface maintained in order to prevent ponding. Spray nozzles shall be regularly inspected for proper operation and the spray zone shall be entirely within the restricted area.

Permittee: Citrus County Board of County Commissioners  
Permit No: DC09-240161

CPB/W

15. The permittee shall ensure that neither ponding nor run-off from the spray site occurs as a result of the spray irrigation of the wastewater. The Department considers ponding to be any residual which remains on the surface sufficient time to contaminate stormwater runoff or otherwise be environmentally objectionable due to odor or public health criteria.

CPB/W

16. The permittee shall provide a weatherproof location at the plant site for the operator log, and ensure that the certified operator keeps the on/site log current to the last operation and maintenance performed on the site. These entries shall include at least the following: (a) plant name, (b) date and time in/out, (c) specific operation and maintenance performed, (d) test(s) performed and samples taken, (e) major repairs performed, and (f) signature and certification number of the operator. Any condition that causes a violation of this permit shall be reported to the Department within twenty-four (24) hours of discovery by the permittee or designated representative. These conditions shall include (g) equipment breakdown, (h) power outage, (i) destruction by fire, wind or other cause, and (j) conditions which cause, or are likely to cause serious plant breakdowns, inefficient or unsafe treatment plant operation, or a discharge of water or wastewater in a manner not authorized by the permit. The permittee is responsible for maintaining adequate communication with the operator in order to become informed of such abnormal events.

CPB/W

17. The permittee shall maintain all audible and visual alarm systems on the lift station(s) in operating condition at all times.

CPB/W

18. A reduced pressure zone (RPZ) backflow preventer shall be installed on any potable water supply to the treatment facility. No potable water outlet intended for human contact shall be located down-line of the backflow preventer. Annual checks of the RPZ assembly by a properly certified technician is required. Certification documents should be kept at the plant and are subject to request for submittal by the Department.

CPB/W

19. The disinfection system shall be operated to maintain a minimum chlorine residual of 0.5 mg/L at the outfall from the chlorine contact chamber. A metering device for dosing chlorine to the effluent shall be utilized and the chlorine supply tank shall be inspected regularly to ensure proper operation.

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Permit No: DC09-218511

12/20/11  
20. Prior to sixty days before the expiration of this permit, the permittee shall apply for a renewal of the permit on forms and in a manner prescribed by the Department of Environmental Protection.

21. Daily checks of the plant shall be performed by the permittee, or supplier, or the designated representative five (5) days per week for all Class C and D plants pursuant to Rule 17-699.311(1), F.A.C.

22. The permittee shall ensure that the operation of this facility shall be as described in the application and supporting documents. Any request for change to this permit, shall be submitted in writing to the Domestic Wastewater Program Manager for review and clearance prior to implementation. Requests for changes of negligible impact to the environment and staff time will be reviewed by the Program Manager, cleared when appropriate and incorporated into this permit. Changes or modifications other than those described above will require submission of a completed application and appropriate processing fee as per Section 17-4.050, F.A.C.

23. This permit may be extended for a period of up to Two (2) additional years provided the permittee complies with all the conditions and requirements of this permit, including the need to provide adequate disinfection of the effluent on a consistent and reliable basis. The permittee may request, by letter and appropriate fee, further extension of the permit and submit evidence of satisfactory compliance with all permit conditions.

24. The permittee shall replace and rehabilitate the missing or damaged existing high-voltage spray pads within the existing 33 acres restricted access way location site within thirty (30) days from the start date of this permit.

25. The permittee shall implement the construction details outlined in FDEP Permit No. DC09-247 according to the following construction schedule:

- ING/CC  
CONST
- A. Prepare final design drawings by 01/01/12
  - B. Obtain State and county permits by 05/01/12
  - C. Bid/Award project by 08/01/12
  - D. Begin construction (Notice to Proceed) by 09/01/12
  - E. Substantial completion (Inspection) by 12/31/12
  - F. Final completion by 04/01/13
  - G. Modification of this operation by 04/01/13

Permittee: Southern States Utilities, Inc.  
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ENE/W  
CONST

26. Failure to implement or adhere to the above construction schedule may subject the permittee to enforcement action by the Department.

OPS/W

27. GROUND WATER MONITORING PLAN B (OPERATION)

OPS/W

A. In accordance with Rule 17-522.600(3), Florida Administrative Code (F.A.C.), the permittee has installed and placed into operation a ground water Monitoring System. The Ground Water Monitoring System is designed and constructed in accordance with the plans on file in the Southwest District office.

OPS/W

B. The ground water monitor well system consists of 3 monitor wells as listed below. All wells are to be clearly labeled and easily visible at all times.

<u>Well Number</u>	<u>Aquifer</u>	<u>Location</u>
*MW - 2	Floridan	Aprox. 1000' East of NE corner of sprayfield
MW - 6	Floridan	400' South and 125' West of NW cornr of sprayfield
MW - 7	Floridan	500' NW of NW corner of sprayfield.

\*Background well

The wells are to be clearly labeled and easily visible at all times.

OPS/W

C. If any monitoring well becomes damaged or inoperable, the permittee shall notify the Department immediately and a detailed written report shall follow within 7 days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation of the replacement well.

OPS/W

D. Sixty days prior to the submittal of the renewal application of this permit, the permittee shall sample all ground water monitor wells for the Florida Primary and Secondary Drinking Water parameters included in Rule 17-550, F.A.C., Public Drinking Water Systems, fecal coliform and EPA Methods 601 and 602. The analyses shall be submitted to the Department with the renewal application.

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Permit No: D000-218511

*of/w*  
E. Sixty days prior to the submittal of the renewal application of this permit, the permittee shall provide a 24 hour composite effluent sample prior to discharge to the plant percolation ponds. The composite sample shall be analyzed for the Florida Primary and Secondary Drinking Water Standards in accordance with Rule 17-300, F.A.C., the EPA Priority Pollutants and fecal coliform. The effluent analysis shall be submitted to the Department with the renewal application.

*of/w*  
F. All ground water monitor wells shall be sampled and analyzed **QUARTERLY** for the parameters listed below. Additional sample(s), well(s), and parameter(s) may be required based upon subsequent analyses.

PRIMARY STANDARDS

Nitrate (as N)	mg/l
Sodium	mg/l
Turbidity	NTU

SECONDARY STANDARDS

Chloride	mg/l
Total Dissolved Solids (TDS)	mg/l
pH	std. units

OTHERS

NH <sub>3</sub> (as N)	mg/l
Temperature	"
Total Organic Carbon (TOC)	mg/l
Specific Conductance	umhos/cm
Fecal Coliform	ct/100 ml
Water Level (M.S.L.)	feet

*of/w*  
G. The ground water monitor wells shall be sampled, analyzed and results reported to the Department in accordance with the following schedule:

<u>Sample Period</u>	<u>Report Due Date</u>
1st Quarter (January-March)	April 15
2nd Quarter (April-June)	July 15
3rd Quarter (July-September)	October 15
4th Quarter (October-December)	January 15



Permittee: Southern States Utilities, Inc.  
Permit No: D009-218511

The permittee shall submit to the Department the results of the water quality analyses no later than the 15th day of the month immediately following the end of the sampling period. The results shall be sent to the Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.

OP3/W H. If, at any time, background ground water standards are exceeded at the edge of the zone of discharge, the permittee has 15 days from receipt of the laboratory analyses in which to resample the monitor well(s) to verify the original analysis. The monitoring test results must be submitted to the Department within 15 days of receipt of the reanalyses from the laboratory. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility.

OP3/W I. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department in accordance with Rule 17-4.246 and 17-520.300, F.A.C. Approved methods as published by the Department or as published in Standard Methods, A.S.T.M. or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.

OP3/W J. Ground water sampling shall be reported on the attached Parameter Monitoring Report Forms [DEP Form 17-1.216(2)]. In order to facilitate entry of this data into the State computer system, these forms or an exact replica must be used and must not be altered as to content. The original copies should be retained so that the necessary information is available to properly complete future reports. The report forms received from the laboratory must be submitted along with the DEP Parameter Monitoring Report Forms described above.

OP3/W K. The permittee shall ensure that the water quality standards for Class G-II ground waters will not be exceeded at the boundary of the zone of discharge according to Rule 17-520.400 and 17-520.420, F.A.C.

OP3/W L. The permittee shall ensure that the minimum criteria for ground water specified in Rule 17-520.420, F.A.C. shall not be violated within the zone of discharge.

Permittee: Southern States Utilities, Inc.  
Permit No: D009-218511

25. The permittee shall be aware of and operate under the attached "General Permit Conditions #1 through #15". General Permit Conditions are binding upon the permittee and enforceable pursuant to Chapter 402 of the Florida Statutes.

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

*Richard D. Carrity, Ph.D.*  
Richard D. Carrity, Ph.D.  
Director of District Management

(70)

DOCKET 950495-WS  
NO. 94  
CASE 96-04227

**Gerald Hartman**

**Late Filed Exhibit No. 94**

**Docket No. 950495-WS**

**Set-Back Requirements in FDEP Rules**

FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET  
NO. 950495-WS <sup>LF</sup> EXHIBIT NO. 94  
COMPANY/  
WITNESS: \_\_\_\_\_  
DATE: 4-29-97

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**62-521.100 Scope and Intent of Wellhead Protection.**

- (1) Florida's ground water resource is the primary source of drinking water in the state, supplying over 90 percent of all public water supply.
- (2) The intent of wellhead protection is to protect potable water wells, as defined in Rule 62-521.200, F.A.C., from contamination, and to prevent the need for their replacement or restoration due to contamination.
- (3) The scope of this chapter is to provide more protection to potable water wells by establishing a statewide wellhead protection program which includes:
  - (a) Criteria for delineating wellhead protection areas, and
  - (b) Department imposed permitting and monitoring requirements within these areas.
- (4) This chapter is not intended to discourage local governments from establishing more comprehensive or more stringent protection measures.

Specific Authority: 403.061, F.S.  
Law Implemented: 403.021, 403.062, F.S.  
History: New 7-13-95.

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**62-521.200 Definitions for Wellhead Protection.** For the purpose of this chapter the following definitions shall apply. For other terms used in this chapter, the definitions contained in Chapters 62-520 and 62-522, F.A.C., shall prevail over definitions established elsewhere by Department rule.

- (1) "Community Water System" means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.
- (2) "Existing Installation" means any installation including its zone of discharge established under Chapter 62-522, F.A.C., or other Department rule, regulated under this chapter which, on or before 90 days after the effective date of this chapter, or before the commencement of construction of a potable water well whose wellhead protection area would include that installation: either has a Department construction or operation permit or authorization; has submitted a complete construction permit application; has filed a notice of intent to file an application under Rule 62-17.041, F.A.C., or an application under Rule 62-17.051, F.A.C., or has filed an application or request for a meeting with the Department under Rule 62-17.540, F.A.C.; or is exempt from Department permitting or ground water monitoring requirements. Except as provided in Rule 62-521.400, F.A.C., this chapter does not apply to existing installations.

## WELLHEAD PROTECTION

DEP 62-521.200(3)

7/95

- (3) "Installation" means any structure, equipment, facility, or appurtenances thereto, operation, or activity which may be a source of pollution.
- (4) "New Installation" means any installation other than an existing installation as defined in (2) above.
- (5) "Non-Transient Non-Community Water System" means a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year.
- (6) "Potable Water Well" means any water well which supplies water for human consumption to a community water system or to a non-transient non-community water system. For the purpose of this rule, any potable water well installed by an installation used to serve that installation's operation is excluded from this definition.
- (7) "Wellhead Protection Area" means an area designated by the Department consisting of a 500 foot radial setback distance around a potable water well where ground water is provided the most stringent protection measures to protect the ground water source for a potable water well and includes the surface and subsurface area surrounding the well.

Specific Authority: 403.061, F.S.  
Law Implemented: 403.021, 403.061, F.S.  
History: New 7-13-95.

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### 62-521.400 Ground Water Protection Measures in Wellhead Protection Areas.

- (1) The Department shall require new installations to meet the following restrictions within a wellhead protection area.
- (a) New domestic wastewater treatment facilities shall be provided with Class I reliability as described in Chapter 62-600, F.A.C., and flow equalization. New wastewater ponds, basins, and similar facilities shall be lined or sealed to prevent measurable seepage. Unlined reclaimed water storage systems are allowed for reuse projects permitted under Part III of Chapter 62-610, F.A.C.
- (b) New reuse and land application projects shall be prohibited except for new projects permitted under Part III of Chapter 62-610, F.A.C.
- (c) New domestic wastewater residuals land application sites, as defined in Chapter 62-640, F.A.C., shall be prohibited.
- (d) New discharges to ground water of industrial wastewater, as regulated under Chapters 62-660, 62-670, 62-671, and 62-673, F.A.C., shall be prohibited except as provided below:
1. All non-contact cooling water discharges (without additives); and

## WELLHEAD PROTECTION

2. Discharges specifically allowed within a wellhead protection area in Chapters 62-660, 62-670, 62-671, and 62-673, F.A.C.
- (e) New phosphogypsum stack systems, as regulated under Chapter 62-673, F.A.C., are prohibited.
- (f) New Class I and Class III underground injection control wells, as regulated in Chapter 62-528, F.A.C., are prohibited.
- (g) New Class V underground injection control wells, as regulated in Chapter 62-528, F.A.C., are prohibited except as provided below:
1. Thermal exchange process wells (closed-loop without additives) for use at single family residences; and
  2. Aquifer storage and recovery systems wells, where the injected fluid meets the applicable drinking water quality standards in Chapter 62-550, F.A.C.
- (h) New solid waste disposal facilities regulated under Chapter 62-701, F.A.C., are prohibited.
- (i) New generators of hazardous waste, as regulated under Chapter 62-730, F.A.C., which excludes household hazardous waste as defined in 40 C.F.R. Part 261.4(b)(1) (1994), hereby incorporated and adopted by reference, shall comply with the secondary containment requirements of 40 C.F.R. Part 264 Subpart I (1994), hereby incorporated and adopted by reference.
- (j) New hazardous waste treatment, storage, disposal, and transfer facilities requiring permits under Chapter 62-730, F.A.C., are prohibited.
- (k) New aboveground and underground tankage of hazardous wastes regulated under Chapter 62-730, F.A.C., is prohibited.
- (l) Underground storage tanks regulated under Chapter 62-761, F.A.C., shall not be installed 90 days after the effective date of this rule. Replacement of an existing underground storage tank system regulated under Chapter 62-761, F.A.C., within the same excavation, or addition of new underground storage tanks regulated under Chapter 62-761, F.A.C., at a facility with other such underground storage tanks is exempt from this provision, provided that the replacement or new underground storage tank system is installed with secondary containment as required in Chapter 62-761, F.A.C.
- (m) Aboveground storage tanks regulated under Chapter 62-762, F.A.C., shall not be installed 90 days after the effective date of this rule. Replacement or upgrading of an existing aboveground storage tank or addition of new aboveground storage tanks which are regulated under Chapter 62-762, F.A.C., at a facility with other such aboveground storage tanks is exempt from this provision, provided that the replacement or new aboveground storage tank system meets the applicable provisions of Chapter 62-762, F.A.C.
- (n) Storage tanks which meet the auxiliary power provisions of Rule 62-555.320(6), F.A.C., for operation of a potable water well and storage tanks for substances used

## WELLHEAD PROTECTION

DEP 62-521.400(1)(n)

7/95

for the treatment of potable water are exempt from the provisions of this rule. Storage tanks regulated under Chapters 62-761 and 62-762, F.A.C., shall continue to meet the requirements of those chapters.

(o) Applicants should take note that to prevent the vertical migration of fluids, a water management district may require a construction permit for new water wells, which shall meet the applicable construction standards contained in Chapter 62-532, F.A.C.

(2) Emergency equipment, including storage tanks, that is necessary to provide power to ensure a continuous supply on an emergency basis of public water supply, electrical power, sewer service, telephone service, or other essential services that are of a public benefit are exempt from the provisions of this chapter. This does not exempt these services from meeting other applicable Department rules.

(3) Discharge to ground water from Department approved remedial corrective actions for contaminated sites located within wellhead protection areas shall not be subject to the discharge restrictions in this chapter.

(4) Nothing herein supersedes more stringent setback or permitting requirements contained in other Department rules.

Specific Authority: 403.061, F.S.

Law Implemented: 403.021, 403.061, 403.087, 403.088, F.S.

History: New 7-13-95.

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WELLHEAD PROTECTION

DEP 62-521

7/95

LISTING OF AMENDMENTS

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Chapter/Section	Change	Effective Date Description of Change
<b>UPDATE: 7/95</b>		
62-521.100	Addition	July 13, 1995 Stating that the intent of wellhead protection is to protect potable water wells from contamination and to prevent the need for their replacement or restoration due to contamination.
62-521.200	Addition	July 13, 1995 Creating a definitions section for this rule.
62-521.400	Addition	July 13, 1995 Establishing ground water permitting and monitoring requirements in wellhead protection areas.

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**REUSE OF RECLAIMED WATER AND LAND APPLICATION**

DEP 62-610.419(2)

4/96

**PART II: SLOW-RATE LAND APPLICATION SYSTEMS;  
RESTRICTED PUBLIC ACCESS**

(2) Subsurface application systems may be used if the reclaimed water is made available to the plant root zone and the hydraulic loading rates and cycles comply with Rule 62-610.423, F.A.C.

(3) No cross-connections to potable water systems shall be allowed.

(4) For all systems, there shall be readily identifiable "non-potable" notices, marking, or coding on application/distribution facilities and appurtenances.

Specific Authority: 403.061, 403.087, F.S.

Law Implemented: 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088, F.S.

History: New 4-4-89, Formerly 17-610.419, Amended 1-9-96.

**62-610.421 Setback Distances.**

(1) The permittee shall maintain setback distances between the wetted site area subject to land application and surface waters and potable water supply wells to ensure compliance with water quality and drinking water standards, and to protect the public health, safety and welfare. All systems shall be designed to minimize adverse effects resulting from noise, odor, lighting and aerosol drift. Adequate site area shall be provided for operation and maintenance, and for controlling emergency discharges.

(2) Slow-rate land application systems shall maintain a distance of 100 feet from the edge of the wetted area to buildings that are not part of the treatment facility, utilities system, or municipal operation; or to the site property line.

(a) This distance shall be reduced to 50 feet if the setback is vegetated with trees or shrubs to create a continuous visual barrier at least five feet high to minimize aerosol drift. This distance shall be reduced to 25 feet if high-level disinfection is provided in addition to the setback vegetation.

(b) This distance shall be reduced to 50 feet if only low trajectory, low pressure nozzles or surface application techniques are used within the outermost 50 feet of the application area. This distance shall be further reduced to 25 feet if high-level disinfection is also provided.

(c) If subsurface application systems are used, no setback distances to buildings are required. If subsurface application systems are used, the setback distance to the site property line shall be reduced to 30 feet. If subsurface application systems are used and if high-level disinfection is provided, the setback distance to the site property line shall be reduced to 10 feet.

(d) This on-site setback distance shall be reduced to 50 feet if high-level disinfection is provided.

(3) A 500-foot setback distance shall be provided from the edge of the wetted area to potable water supply wells that are existing or have been approved by the Department

**PART II: SLOW-RATE LAND APPLICATION SYSTEMS;  
RESTRICTED PUBLIC ACCESS**

or by the Department of Health and Rehabilitative Services (but not yet constructed); Class I surface waters; or Class II surface waters. This distance shall be reduced to 200 feet if facility Class I reliability is provided in accordance with Rule 62-610.462(1), F.A.C. This distance shall be reduced to 100 feet if facility Class I reliability is provided in accordance with Rule 62-610.462(1), F.A.C., and if high-level disinfection is provided. Reductions in the 500-foot setback distance to potable water wells, as described in Rule 62-521.200, F.A.C., shall not be allowed. Setback distance requirements apply to all Class II waters regardless of Department classification (such as open, closed, approved, conditionally approved, restricted, conditionally restricted, prohibited, or unclassified).

(4) No setback distance is required to any nonpotable water supply well.

(5) A 100-foot setback distance shall be provided from a reclaimed water transmission facility to a public water supply well. No setback distance is required to other potable water supply wells or to nonpotable water supply wells.

(6) Setback distances for potable water supply wells shall be applied only for new or expanded reuse facilities. Setback distances shall not be applied when considering renewal of a permit.

(7) Minimum setback distances to other classes of surface waters shall be established case-by-case based on compliance with applicable water quality standards.

(8) The minimum setback distances described above shall only be used if, based on review of the soils and hydrogeology of the area, the proposed hydraulic loading rate, quality of the reclaimed water, expected travel time of the ground water to the potable water supply wells and surface waters, and similar considerations, there is reasonable assurance that applicable water quality standards will not be violated.

(9) The edge of the wetted area of the land application system shall be at least 100 feet from outdoor public eating, drinking, and bathing facilities.

(10) A 500-foot setback distance shall be provided from new unlined storage ponds to potable water wells, as described in Rule 62-521.200, F.A.C.

Specific Authority: 403.061, 403.087, F.S.

Law Implemented: 403.021, 403.061, 403.062, 403.085, 403.086, 403.087, 403.088, F.S.

History: New 4-4-89, Amended 4-2-90, Formerly 17-610.421, Amended 1-9-96.

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**62-610.423 Hydraulic Loading Rates.**

(1) Hydraulic loading rates shall be established after considering the ability of the soil-plant system to remove pollutants from the reclaimed water.

(2) Loading of nitrogen shall promote use by vegetation and nitrification-denitrification reactions in the soil. If supplemental fertilizers are used, the effect of such fertilizer

**DOCKET** 950495-WS  
**EXHIBIT** 95  
**CASE NO.** 96-04227

**EXHIBIT NO.** 95

**WITNESS:**

**DOCKET NO. 950495-WS**

**APPLICATION FOR RATE INCREASE BY  
SOUTHERN STATES UTILITIES, INC.**

**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DESCRIPTION:**

**FPSC NOTICE OF STAFF WORKSHOP  
ISSUED JUNE 12, 1995  
RE: STAFF'S DRAFT RULES ON USED AND USEFUL  
WITH 5-12-95 RULE DRAFT ATTACHED**

FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET  
NO. 950495-WS EXHIBIT NO 95  
COMPANY/  
WITNESS:  
DATE: 5/23/96

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

NOTICE OF STAFF WORKSHOP

TO

WATER AND WASTEWATER UTILITIES

AND

ALL INTERESTED PERSONS

RE: UNDOCKETED

USED AND USEFUL RULEMAKING WORKSHOP

ISSUED: June 12, 1995

NOTICE is hereby given that the Staff of the Florida Public Service Commission will conduct a workshop, in the above-referenced matter, to which all persons are invited, at the following time and place:

9:30 a.m., Wednesday and Thursday, July 12 - 13, 1995  
Room 152, Betty Easley Conference Center  
4075 Esplanade Way  
Tallahassee, Florida 32399

PURPOSE

The purpose of this workshop is to discuss and evaluate staff's proposed rules regarding the determination of plant used and useful in rate proceedings. A copy of staff's proposed rules is attached to this Notice. Workshop participants should review the rules and be prepared to comment on them.

Parties who wish to comment but cannot attend the workshop are encouraged to file comments with the Division of Records and Reporting, 2540 Shumard Oak Blvd., Tallahassee, Florida 32399-0850, on or before July 5, 1995, specifically referencing "Undocketed Water and Wastewater Used and Useful Workshop."

Those rules pertaining to both water and wastewater systems, such as margin reserve, will be discussed first on July 12th. The workshop will then focus on issues applicable to wastewater systems. The final topic will be the rules pertaining to water systems only.

Any person requiring accommodation at this workshop due to a physical impairment should call the Division of Records and Reporting at (904) 413-6770 at least five calendar days prior to the workshop. Persons who are hearing or speech impaired should contact the Florida Public Service Commission using the Florida Relay Service, which can be reached at (800) 955-8771 (TDD).

DOCUMENT NUMBER DATE

05391 JUN 12 8

FPSC-RECORDS/REPORTING

NOTICE OF WORKSHOP  
UNDOCKETED  
PAGE 2

General Information

Pursuant to Section 367.081(2)(a), Florida Statutes, the Commission is required to consider plant "used and useful" in the public service. The Commission practice is to consider used and useful in each rate proceeding. In an effort to codify prior practice, and to introduce new procedures, the proposed rules are offered. A utility's investment in transmission and distribution and collection lines is not addressed by the default used and useful formulas; however, it is addressed with respect to margin reserve. Due to the potential complexity of codifying formulas for lines, this subject is not being addressed at the workshop.

Parties who wish to submit materials for the Commission's and participants' review and discussion should submit them to Mr. John Williams, Division of Water and Wastewater, 2540 Shumard Oak Blvd., Tallahassee, Florida 32399-0850, by July 3, 1995, so that copies may be made.

Issues

Both Water and Wastewater Systems

1. Are the proposed definitions adequate?
2. Are the proposed margin reserve calculations proper and sufficient?
3. Have cost/benefit analyses been addressed adequately?

Wastewater Systems Only

4. Are infiltration and inflow addressed sufficiently?
5. Are the used and useful default formulas for wastewater systems adequate?


Water Systems Only

6. Is the proposed rulemaking regarding fire flow appropriate and adequate?
7. Has unaccounted for water been addressed sufficiently?
8. Are the used and useful default formulas for water systems adequate?
9. What is the appropriate methodology for determining instantaneous demand?

JURISDICTION

Jurisdiction is vested in this Commission pursuant to Chapter 367, Florida Statutes. The workshop will be governed by the provisions of that Chapter and Chapters 25-22 and 25-30, Florida Administrative Code.

By DIRECTION of the Florida Public Service Commission, this  
12th day of June, 1995.

  
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BLANCA S. BAYÓ, Director  
Division of Records and Reporting

( S E A L )

SKE/KA

1 25-30.432 Used and Useful in Rate Case Proceedings.  
2 (1) Definitions - the following definitions apply to Rule 25-  
3 30.432, F.A.C., for determining used and useful water and wastewater  
4 facilities.  
5 (a) Economies of scale - The decrease in unit cost of water or  
6 wastewater plant that typically occurs with an increase in system  
7 capacity. Economies of scale can be defined either in the context of  
8 total system capacity or changes in a single component of the system.  
9 (b) Effluent Disposal Facilities - this includes, but is not  
10 limited to, the transmission lines, percolation and evaporation ponds,  
11 sprayfields, irrigation systems, effluent pumping equipment, and deep  
12 wells utilized in the disposal of effluent or reclaimed water, as required  
13 to meet applicable federal, state and local requirements.  
14 (c) Emergency Storage - that storage required by a water system to  
15 meet the emergency-like demands of the customers. Typically, Emergency  
16 Storage is made available when it is more cost effective to provide the  
17 storage and pumping facilities than to add redundancy to the system for  
18 emergency conditions. The quantity of Emergency Storage need is a  
19 function of the duration of the emergency condition and is assumed to be  
20 approximately one half of the maximum day demand.  
21 (d) Equalization Volume - the quantity of storage in a water  
22 system necessary to meet the customers' greatest demands which are beyond  
23 the throughput capacity of the source of supply or water treatment

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1 equipment. The Equalization Volume is assumed to be approximately one-  
2 quarter of the maximum daily demand.

3 (e) Equivalent Residential Connection (ERC) - 150 gpd per ERC for  
4 water and 280 gpd per ERC for wastewater.

5 (f) Fire Flow Requirement - as defined in 25-30.432(5)(b), F.A.C.

6 (g) Firm Reliable Capacity - the capacity of a particular  
7 component of a water facility in which at least the largest unit is  
8 assumed to be out of service. If the used and useful category contains  
9 several components, the Firm Reliable Capacity is assumed to be the  
10 limiting component in that category with the largest unit out of service.  
11 If there is only one component, then that component's capacity becomes the  
12 Firm Reliable Capacity. For finished water storage, the Firm Reliable  
13 Capacity excludes any unusable or dead storage (10% of ground storage  
14 capacity).

15 (h) Infiltration - refers to those extraneous flows (usually from  
16 groundwater sources) that enter the wastewater system through openings in  
17 pipes that may be caused by normal deterioration, corrosion, or damage  
18 from ground movement or structural overload.

19 (i) Inflow - refers to extraneous flows from sources other than  
20 infiltration, such as surface water run-off into manholes or from  
21 unauthorized connections to surface water sources.

22 (j) Instantaneous Demand - the greatest demand that a water system  
23 attains. It is typically used only as a design criteria for small water

1 systems with no storage and a small distribution system that does not have  
2 the ability to absorb these instantaneous demands through depressurization  
3 of the distribution system. The charts in Rule 25-30.432(7), F.A.C.,  
4 shall be used to determine the instantaneous demand unless specific  
5 quantitative information indicates greater demands.

6 (k) Large Water System - a system that has a firm reliable  
7 capacity of 1 million gallons per day or greater. Staffing shall be as  
8 mandated in Rule 62-699, F.A.C.

9 (l) Margin Reserve - as defined in 25-30.432(5)(a), F.A.C.

10 (m) Maximum Day Demand - the maximum daily demand that a water  
11 system attained during the past 5 years of time, exclusive of emergency or  
12 fire flow events.

13 (n) Other Wastewater Facilities - this includes, but is not  
14 limited to, disinfection units, emergency generators, auxiliary engines,  
15 customer service laterals, laboratory equipment, utility office and other  
16 general plant and equipment used in the operation of a wastewater system.  
17 Specifically excluded from this definition are a wastewater system's  
18 pumping stations and collection mains (both gravity and force).

19 (o) Other Water Facilities - this includes, but is not limited to,  
20 hydropneumatic tanks, disinfection facilities, emergency generators,  
21 auxiliary engines, customer service lines and meters, laboratory  
22 equipment, utility office and other general plant used in the operation of  
23 a water system. Specifically excluded from this definition are a water

1 system's transmission and distribution lines.

2 (p) Peak Hour Demand - the greatest demand attained by a water  
3 system over a sustained period of 60 minutes. Typical design criteria for  
4 a Peak Hour Demand of 2 times the maximum day demand or 1.1 gpm per ERG  
5 can be used if historical flow data is not available.

6 (q) Small Water System - a system that has a firm reliable  
7 capacity of less than 1 million gallons per day. Staffing shall be as  
8 mandated in Rule 62-699, F.A.C.

9 (r) Unaccounted for water - all water produced or purchased by a  
10 water utility that is neither sold, metered nor accounted for in the  
11 records of the utility. Water other than that sold that shall be  
12 accounted for includes, but is not limited to, water for plant operations,  
13 line flushing, hydrant testing, hydrant use, sewer cleaning, and street  
14 cleaning.

15 (s) Wastewater Customer Demand - the wastewater flows which match  
16 the utility's specified time frame in its Department of Environmental  
17 Protection (DEP) permit -- annual average daily flow, the three month  
18 average daily flow, or the maximum month average daily flow.

19 (t) Wastewater Permitted Capacity - the established design  
20 capacity of a wastewater facility in its DEP permit and the specified time  
21 frame (annual average daily flow, maximum monthly average daily flow,  
22 three-month average daily flow).

23 (u) Wastewater Treatment Equipment - this includes, but is not

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1 limited to, the influent structure, pretreatment facilities, pumps,  
2  aerators, clarification tanks, filters, digestors, and chlorine contact  
3 equipment.

4 (2) The utility's investment, prudently incurred, in meeting its  
5 statutory obligations to provide safe, efficient and sufficient service,  
6 shall be considered used and useful.

7 (3) Utilities are encouraged to undertake planning that recognizes  
8 conservation, environmental protection, economies of scale, and which is  
9 economically beneficial to its customers over the long term.

10 (4) In determining those portions of water and wastewater systems  
11 that are used and useful in serving the public, the Commission shall  
12 consider:

13 (a) the design and construction requirements set forth in Chapters  
14 62-532, 62-555, 62-600, 62-601, 62-604, 62-620 and 62-640, F.A.C.

15 (b) the investment in land acquired or facilities constructed or  
16 to be constructed in the public interest within a reasonable time in the  
17 future;

18 (c) the prudence of the investment, taking into consideration such  
19 factors as the treatment process, water storage capacity, economies of  
20 scale, the historical and projected rate of growth in customers and  
21 demand, regulatory requirements, including those requiring plant  
22 redundancies, seasonal demand characteristics, residential and commercial  
23 mix, and the configuration of the service area.

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1           (5) For the purpose of calculating used and useful, the following  
2 specific factors shall apply. When applying these factors, references to  
3 demand shall mean the demand per connection (in ERCs) used for design or  
4 permitting, or the actual historical demand per connection if such data  
5 has been shown by the utility to be accurate and reliable.

6           (a) Margin Reserve

7           1. The Commission recognizes that for a utility to meet its  
8 statutory responsibility, it must have sufficient capacity and investment  
9 to meet the existing and changing demands of present customers and the  
10 demands of potential customers within a reasonable time. The investment  
11 needed to meet the demands of potential customers and the changing demands  
12 of existing customers is defined as margin reserve. Margin reserve is  
13 recognized as a component of used and useful rate base. The Commission  
14 shall include an allowance for margin reserve if requested by the utility.

15           2. In determining the allowable investment in margin reserve, the  
16 Commission shall consider, but not be limited to, the functions of each  
17 component of plant, regulatory lag, the rate of growth in customers and  
18 demand, and the time needed to construct plant (the "construction  
19 factor").

20           3. As a part of its rate filing, the utility shall submit  
21 historical, reliable data for a minimum of four years, if available,  
22 preceding the test year and including the test year for the year-end  
23 number of customers by class and meter size; the annual sales by class;

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1           the annual treated or pumped flows for the system; and system peak day  
2 flows for each year. The utility's most recent wastewater capacity  
3 analysis report, if any, filed with DEP shall also be submitted as part of  
4 the rate filing.

5           4. Unless otherwise justified, margin reserve shall be calculated  
6 by applying linear regression to the utility's five years historical  
7 growth data (in ERCs) so that a projected growth can be determined and  
8 then multiplying that growth by the appropriate construction factor.

9           a. Water source and treatment facilities and wastewater treatment  
10 and disposal facilities; the calculated growth (in ERCs) multiplied by the  
11 following construction factors:

12           (i) water source, treatment facilities, and each water system  
13 component have a construction factor of 3 years;

14           (ii) wastewater treatment and disposal facilities have a  
15 construction factor of 3 years;

16           b. Margin reserve for transmission and distribution lines and  
17 pumping stations and collection mains shall be the calculated growth  
18 multiplied by a construction factor of 1 year.

19           (b) Fire Flow

20           1. Fire flow shall be considered in used and useful default  
21 formulas for storage and high service pumping for any utility that  
22 requests that fire flow be a consideration in its system requirements. If  
23 the Commission determines that a utility can provide fire flow in a more

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1 economical manner than through storage and high service pumping, it may  
2 allow fire flow to be considered in used and useful calculations for  
3 components other than storage and high service pumping. However, any  
4 utility that receives an allowance for fire flow in used and useful  
5 calculations shall maintain the ability to provide adequate, reliable fire  
6 flow at all times in the future, unless it meets the requirements in 25-  
7 30.432(5)(b)2 for adding fire flow capacity. For a utility meeting the  
8 requirements in 25-30.432(5)(b)2 for adding fire flow capacity, once the  
9 ability to provide adequate, reliable fire flow has been achieved, such  
10 ability shall be maintained from that point on. If a utility has  
11 previously received fire flow consideration in used and useful  
12 calculations but fails to maintain adequate, reliable capacity for fire  
13 fighting (e.g. sells fire flow capacity), then the Commission may reduce  
14 the utility's rate of return by up to 50 basis points until adequate fire  
15 protection is once again maintained.

16 2. An allowance for fire flow shall be included in used and  
17 useful calculations up to the capacity of the appropriate component. If  
18 a utility cannot provide adequate, reliable fire flow and is requesting an  
19 allowance for fire flow in used and useful calculations, the Commission  
20 shall require the utility to take the steps necessary to provide such fire  
21 flow capacity. In doing so, the Commission shall set a reasonable  
22 timetable for compliance and may later reduce rates for that portion  
23 associated with allowed fire flow capacity if such requirements are not

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1 met within the specified timetable.

2 3. When fire flow requirements are set by a governmental  
3 authority, those requirements shall be the basis for determining the fire  
4 flow component of used and useful. In such cases, as part of its rate  
5 filing, the utility shall identify and file with the Commission a copy of  
6 the applicable governmental fire flow requirements. In all other cases,  
7 unless specific support is provided, the Commission shall consider a  
8 minimum fire flow demand to be 500 gallons per minute (gpm) for single  
9 family and 1,500 gpm for multiple family and commercial areas for a  
10 duration of 2 hours for needed fire flows up to 2500 gpm and 3 hours for  
11 needed fire flows of 3000 and 3500 gpm. Such requirements shall be  
12 satisfied without causing deterioration of water pressure below 20 pounds  
13 per square inch (psi).

14 4. Inasmuch as Rule 25-30.432(5)(b) deviates from prior  
15 Commission practice whereby an allowance for fire flow capacity in  
16 composite used and useful plant calculations was considered, the impact on  
17 those utilities affected by a future reduction to used and useful  
18 percentages for source of supply and/or treatment plant due to such  
19 deviation from prior practice regarding fire flow allowance shall be  
20 considered on a case by case basis.

21 (c) Unaccounted for Water

22 1. To recognize conservation of water as a fundamental and proper  
23 concern of water system operation, water utilities are encouraged to

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1 exercise good operational and economic management toward preventing  
2 depletion and wasteful use of this important natural resource. Good  
3 modern water utility practice dictates that, wherever possible, all  
4 customer services and plant output and plant uses be metered and  
5 reasonable records be kept.

6 2. The Commission recognizes that some uses of water are readily  
7 measurable and others are not. Each utility is encouraged to establish  
8 procedures to measure or estimate the quantity of water used but not sold,  
9 by cause, and to maintain documentation for those measurements and  
10 estimates.

11 2. The Commission shall consider the amount of unaccounted for  
12 water in determining used and useful plant percentages and shall allow the  
13 American Water Works Association's (AWWA Manual M-8) design level of  
14 leakage (2-3 percent plus the standard 10 percent for a maximum of 12.5  
15 percent) without further explanation. The Commission may impute revenues  
16 or reduce purchased power and chemical expenses where inadequate  
17 explanation is given for unaccounted for water in excess of this amount.

18 (d) Infiltration and Inflow

19 1. The impact of infiltration and inflow on wastewater treatment  
20 and collection systems shall be considered in determining both the  
21 appropriate level of operation and maintenance expenses and used and  
22 useful plant percentages.

23 2. The Commission recognizes as reasonable the Infiltration

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1 Specification Allowances set forth in Water Pollution Control Federation  
2 (WPCF) Manual of Practice No. 9. Absent sufficient justification to the  
3 contrary, excess infiltration is defined as flows in excess of 500 gallons  
4 per day (and) per inch diameter of pipe per mile (gpd/in. diam./mile) for  
5 all gravity lines, including service laterals. Excessive inflow will be  
6 determined on a case-by-case basis if warranted.

7 (e) Cost/Benefit Analysis - The Commission may order a utility to  
8 perform a cost/benefit analysis to determine the amount of water losses or  
9 wastewater infiltration and inflow that may be economically eliminated.  
10 If the cost/benefit analysis is ordered by the Commission in the course of  
11 evaluating a rate application, the actual or estimated prudent cost of the  
12 analysis shall be recovered through the revenues authorized in that rate  
13 proceeding, and the cost shall be amortized over five years. If the  
14 analysis is ordered outside of a formal rate proceeding, the utility may  
15 request the cost be recovered through a limited proceeding pursuant to  
16 section 367.0822, F.S.

17 (f) Used and Useful Analysis

18 1. As a part of its rate filing, each utility shall provide a  
19 determination of the used and useful percentage for each primary plant  
20 account along with the supporting formulas and documentation.

21 2. In lieu of presenting evidence in support of used and useful  
22 percentages, the utility may elect to use the default formulas in Rule 25-  
23 30.432(6), F.A.C., for calculating used and useful percentages for water

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supply, treatment, pumping and storage equipment, and wastewater treatment and effluent disposal equipment. Documentation in support of requested used and useful percentages for a water utility's transmission and distribution lines and a wastewater utility's pumping stations and collection mains (both gravity and force) shall be presented by the utility.

(6) Used and useful default formulas. The appropriate units to be used are included with each default formula. Because of the unique nature of a water system's transmission and distribution lines and a wastewater system's pumping stations and collection mains (both gravity and force), the default formulas presented here do not address these items; however, as stated in Rule 25-30.432(5)(f)2, the utility shall present documentation in support of requested used and useful percentages for these items.

(a) Small water systems (less than 1 million gallons per day (MGD) firm reliable capacity).

1. Small water systems with adequate reliable finished water storage capacity to meet the local fire flow ordinances and to meet the peak hour demand of its customers shall use the following formulas:

a. Water source of supply:

(Maximum Day Demand + Margin Reserve - Excessive Unaccounted For Water)/Firm Reliable Capacity (gpd)

b. Water treatment equipment:

CODING: Words underlined are additions; words in struck-through type are deletions from existing law.

1 (Maximum Day Demand + Margin Reserve - Excessive Unaccounted  
2 For Water)/Firm Reliable Capacity (gpd)

3 c. Finished water storage:

4 (Equalization Volume + Fire Flow Requirement + Emergency  
5 Storage + Margin Reserve)/Firm Reliable Capacity (gallons)

6 d. Water high service pumping:

7 (Instantaneous Demand + Margin Reserve - Excessive Unaccounted  
8 For Water)/Firm Reliable Capacity (gpm)

9 or, if the utility chooses:

10 (Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
11 Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)

12 e. Other water facilities: 100 percent used and useful

13 2. Small water systems with no storage facilities other than  
14 hydropneumatic tanks or with insufficient storage capacity to meet the  
15 local fire flow ordinances and to meet the instantaneous demand of its  
16 customers shall use the following formulas:

17 a. Water source of supply:

18 (Instantaneous Demand + Margin Reserve - Excessive Unaccounted  
19 For Water)/Firm Reliable Capacity (gpm)

20 or, if the utility can show it is the most economical way to  
21 provide fire flow:

22 (Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
23 Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)

CODING: Words underlined are additions; words in  
struck-through type are deletions from existing law.

- 1            b. Water treatment equipment:  
2            (Instantaneous Demand + Margin Reserve - Excessive Unaccounted  
3            For Water)/Firm Reliable Capacity (gpm)  
4            or, if the utility can show it is the most economical way to  
5            provide fire flow:  
6            (Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
7            Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)  
8            c. Finished water storage: 100 percent used and useful (gallons)  
9            d. Water high service pumping:  
10           (Instantaneous Demand + Margin Reserve - Excessive Unaccounted  
11           For Water)/Firm Reliable Capacity (gpm)  
12           or, if the utility chooses:  
13           (Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
14           Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)  
15           e. Other water facilities: 100 percent used and useful  
16           (b) Large water systems (1 MGD or greater firm reliable capacity):  
17           1. Large water systems with adequate reliable finished water  
18           storage capacity to meet the local fire flow ordinances and to meet the  
19           peak hour demand of its customers shall use the following formulas:  
20           a. Water source of supply:  
21           (Maximum Day Demand + Margin Reserve - Excessive Unaccounted  
22           For Water)/Firm Reliable Capacity (gpd)  
23           b. Water Treatment Equipment:

CODING: Words underlined are additions; words in  
struck-through type are deletions from existing law.

- 1            (Maximum Day Demand + Margin Reserve - Excessive Unaccounted  
2            For Water)/Firm Reliable Capacity (gpd)  
3            c. Finished water storage:  
4            (Equalization Volume + Fire Flow Requirement + Emergency  
5            Storage + Margin Reserve)/Firm Reliable Capacity (gallons)  
6            d. Water high service pumping:  
7            (Peak Hour Demand + Margin Reserve - Excessive Unaccounted For  
8            Water)/Firm Reliable Capacity (gpm)  
9            or, if the utility chooses:  
10           Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
11           Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)  
12           e. Other water facilities: 100 percent used and useful  
13           2. Large water systems with no storage facilities other than  
14           hydropneumatic tanks or with insufficient storage capacity to meet  
15           the local fire flow ordinances and to meet the peak hour demand of  
16           its customers shall use the following formulas:  
17           a. Water source of supply:  
18           (Peak Hour Demand + Margin Reserve - Excessive Unaccounted For  
19           Water)/Firm Reliable Capacity (gpm)  
20           or, if the utility can show it is the most economical way to  
21           provide fire flow:  
22           (Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
23           Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)

CODING: Words underlined are additions; words in  
struck-through type are deletions from existing law.

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5-12-95

b. Water treatment equipment:  
(Peak Hour Demand + Margin Reserve - Excessive Unaccounted For  
Water)/Firm Reliable Capacity (gpm)  
or, if the utility can show it is the most economical way to  
provide fire flow:

(Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)

c. Finished water storage: 100 percent used and useful (gallons)

d. Water high service pumping:

(Peak Hour Demand + Margin Reserve - Excessive Unaccounted For  
Water)/Firm Reliable Capacity (gpm)

or, if the utility chooses:

(Maximum Day Demand + Fire Flow Requirement + Margin Reserve -  
Excessive Unaccounted For Water)/Firm Reliable Capacity (gpm)

e. Other water facilities: 100 percent used and useful

(g) Wastewater systems:

1. Wastewater treatment equipment:

(Wastewater Customer Demand + Margin Reserve - Excessive  
Infiltration and Inflow)/Permitted Capacity (gpd)

2. Effluent disposal facilities:

(Wastewater Customer Demand + Margin Reserve - Excessive  
Infiltration and Inflow)/Permitted Capacity (gpd)

3. Other wastewater facilities: 100 percent used and useful

CODING: Words underlined are additions; words in  
~~struck-through~~ type are deletions from existing law.

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5-12-95

1 (7) Unless specific quantitative information indicates greater  
2 demands, a water system's Instantaneous Demand, for purposes of  
3 determining used and useful, will be calculated from the following charts  
4 which are from the U.S. Environmental Protection Agency Manual "Small  
5 Water Systems Serving The Public".

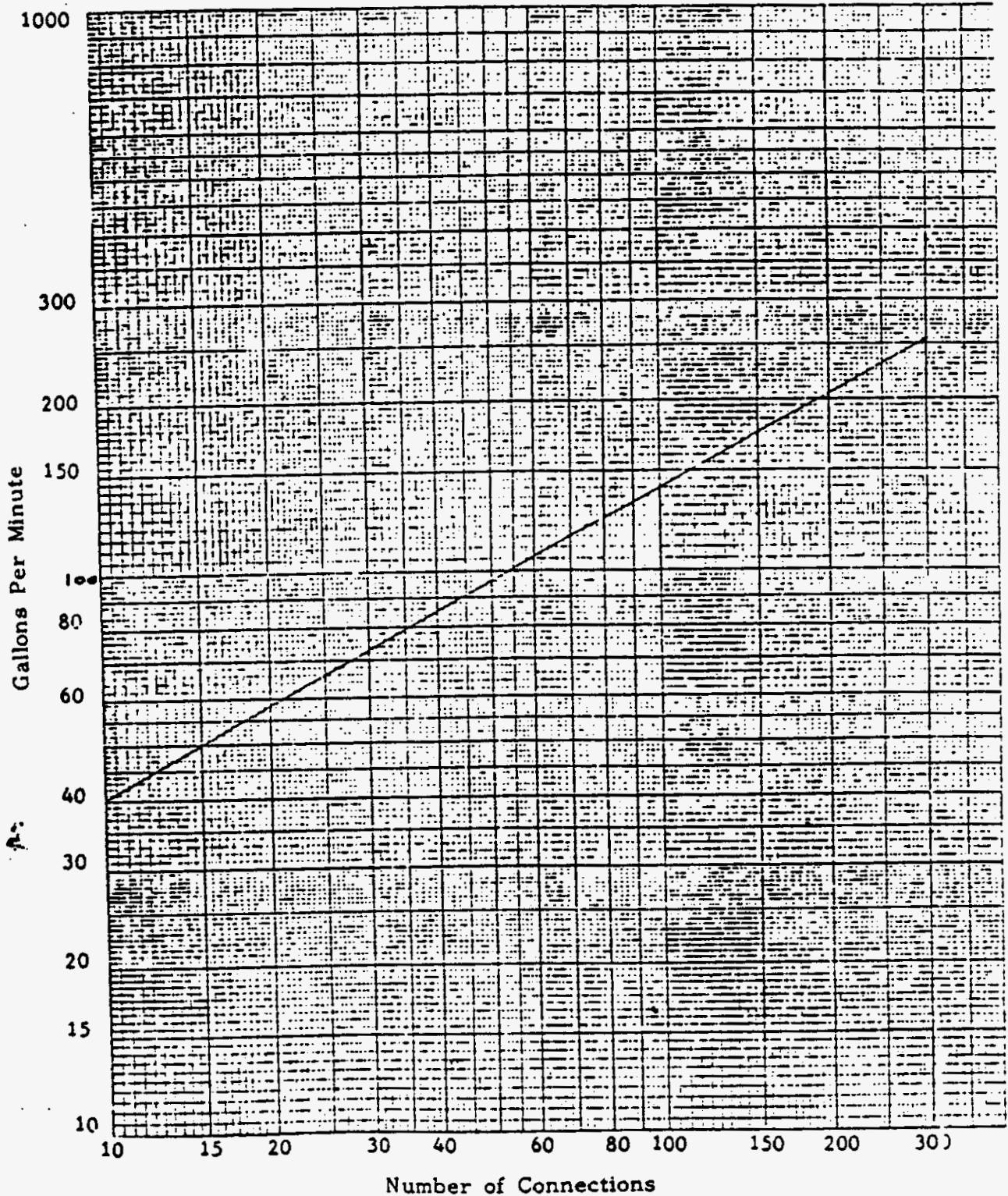
6 (chart)

CODING: Words underlined are additions; words in  
~~struck-through~~ type are deletions from existing law.

**FIGURE 3-3**

**INSTANTANEOUS DEMAND FOR RESIDENTIAL COMMUNITY WATER SYSTEMS**

(Number of Connections vs Gallons Per Minute)



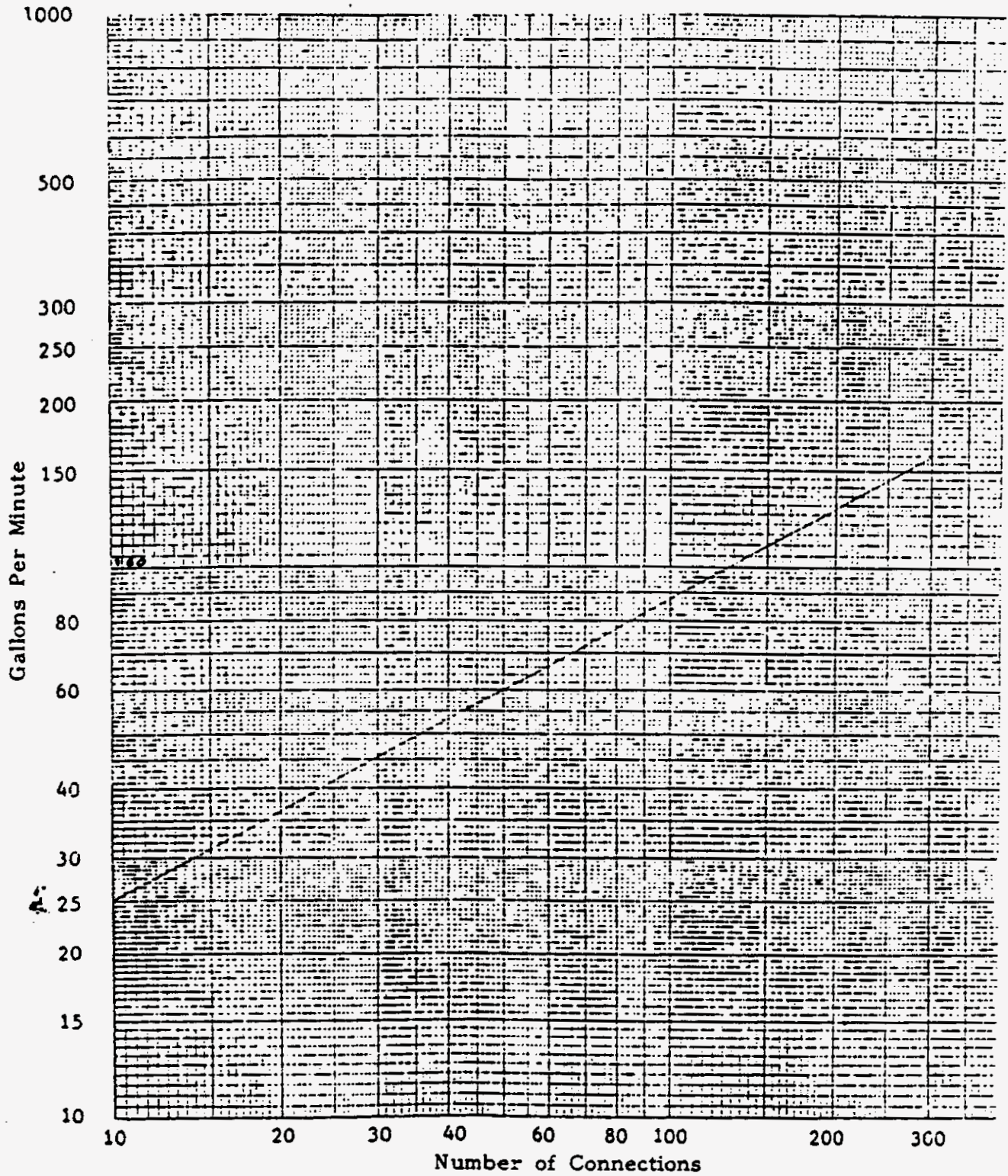
Source: Standards and Criteria for Design and Construction of Public Water Supply Systems to Service Residential Communities; Division of Health Services - Sanitary Engineering Section, State of North Carolina, 1974.



FIGURE 3-4

PEAK DEMAND FOR MOBILE HOME PARK WATER SYSTEMS

(Number of Connections vs Gallons Per Minute)



Source: Standards and Criteria for Design and Construction of Public Water Supply Systems to Service Residential Communities; Division of Health Services - Sanitary Engineering Section, State of North Carolina, 1974.



**DOCKET** 950495-WS  
**EXHIBIT NO.** 96  
**CASE NO.** 96-04227



**EXHIBIT NO.** 96

**WITNESS: TERRERO**

**DOCKET NO. 950495-WS**

**APPLICATION FOR RATE INCREASE BY  
SOUTHERN STATES UTILITIES, INC.**

**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DESCRIPTION:**

**SSU RESPONSE TO OPC INTERROGATORY No. 121  
PERTAINING TO ECONOMIES OF SCALE  
REPORTS, STUDIES, OR OTHER DOCUMENTS**

FLORIDA PUBLIC SERVICE COMMISSION  
DOCKET  
NO. 950495-WS EXHIBIT NO 96  
COMPANY/  
WITNESS: \_\_\_\_\_  
DATE: 9/29/96

SOUTHERN STATES UTILITIES, INC.  
RESPONSE TO REQUEST FOR PRODUCTION OF DOCUMENTS  
DOCKET NO.: 950495-WS

REQUESTED BY: OPC  
SET NO: 1  
DOCUMENT REQUEST NO: 121  
ISSUE DATE: 07/18/95  
WITNESS: RAFAEL A. TERRERO  
RESPONDENT: Charles E. Wood

DOCUMENT REQUEST: 121

Please provide any reports, studies, or other documents in the Company's custody or control which address the subject of economies of scale of the Company's storage, treatment, collection, and distribution systems, or the storage, treatment, collection and distribution systems water and sewer companies in general.

RESPONSE: 121

None available.

Ex. NO. 97

APPENDIX DR 305-B

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Invoice Tracking Log

10/27/95

Vendor Name: Hartman & Associates, Inc.  
 Vendor Reference #: 95-145.00  
 Project Description: Economy of Scale Evaluation  
 Initiated By: R. Terrero

SSU Project #: 95RA100  
 SSU Purchase Order #: 39237  
 SSU G/L Account #: 001.00001.595.99.1861.0000.150

INVOICE APPROVALS:

CHANGE ORDER APPROVALS:

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT	DATE APPROVED	APPROVED BY		C.O. NUMBER	DATE APPROVED	APPROVED BY	C.O. AMOUNT
1	5/26/95	\$ 3,443.50	6/9/95	R. Terrero		CONTRACT AMT	5/9/96	B. Armstrong	\$ 44,710.00
2	6/23/95	\$ 9,668.50	7/5/95	R. Terrero					
3	7/21/95	\$ 6,563.52	8/14/95	R. Terrero					
4	8/18/95	\$ 8,748.50	9/15/95	R. Terrero					
5	9/15/95	\$ 4,885.50	9/26/95	R. Terrero					
6	10/13/95	\$ 6,698.10	10/27/95	R. Terrero					
TOTAL INVOICED TO DATE:		\$ 40,007.62				CHANGE ORDER TOTALS:		\$	-
REMAINING AMOUNT:		\$ 4,702.38				CURRENT CONTRACT AMT:		\$	44,710.00

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 950495 EXHIBIT NO. 97

COMPANY/ WITNESS: DATE: 4/29/96

DOCKET 950495-WS  
 EXHIBIT 97  
 CASE NO. 96-04227