96-04227

1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION 2 In the Matter of DOCKET NO. : 3 950495-WS : Application for a rate increase and : Increase in service availability charges : 4 By SOUTHERN STATES UTILITIES, INC., for 5 Orange-Osceola Utilities, Inc., in Osceola County, and in Bradford, Brevard,: 6 Charlotte, Citrus, Clay, Collier, Duval, : Highlands, Lake, Lee, Marion, Martin, 7 Nassau, Orange, Osceola, Pasco, Putnam, Seminole, St. Johns, St. Lucie, Volusia, : 8 and Washington Counties. 9 TENTH DAY - LATE EVENING SESSION 10 VOLUME 43 11 Pages 5203 through 5384 12 13 **PROCEEDINGS:** HEARING 14 15 **BEFORE**: CHAIRMAN SUSAN F. CLARK COMMISSIONER J. TERRY DEASON 16 COMMISSIONER JULIA L. JOHNSON COMMISSIONER DIANE K. KIESLING 17 COMMISSIONER JOE GARCIA 18 DATE: May 10, 1996 19 TIME: Commenced at 5:10 p.m. 20 PLACE: Betty Easley Conference Center Room 148 21 4075 Esplanade Way DOCUMENT NUMBER-DATE 38 Tallahassee, Florida 22 **REPORTED BY:** PEGGY L. OWENS, RMR, RPR 23 13 13 13 **APPEARANCES:** 24 25 (As heretofore noted.)

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PROCEEDINGS 1 (Transcript continues from Volume 42.) 2 CHAIRMAN CLARK: We will reconvene the 3 hearing. 4 MR. HOFFMAN: I have a preliminary matter, 5 Madam Chairman. I would ask that the Commission take 6 7 official recognition of two orders. CHAIRMAN CLARK: All right. 8 MR. HOFFMAN: I have copies of the orders 9 here today available for the parties. 10 CHAIRMAN CLARK: Would you give us the 11 numbers? 12 MR. HOFFMAN: Yes, ma'am. The first is 13 order number 14380 issued in docket number 840206-WS 14 involving Twin County Utility Company. The second 15 order is order number 15440 in the same docket 16 17 involving the same utility. CHAIRMAN CLARK: All right. We will take 18 official recognition of those two orders, and please 19 20 give copies of those orders to the parties. 21 MR. HOFFMAN: Yes, ma'am. 22 CHAIRMAN CLARK: All right. We are back with Mr. Ludsen. Is it our intention to put his 23 24 rebuttal testimony in, and then go through the 25 questioning as we have done before with the

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1 understanding that when we get to staff they will be 2 doing both direct and rebuttal? 3 MR. ARMSTRONG: Yes, Madam Chair. 4 MR. TWOMEY: Is it at all possible, Madam 5 Chair, to let the staff finish their cross on direct? 6 7 CHAIRMAN CLARK: We can do that. MR. TWOMEY: I'd prefer that because I can 8 probably shorten my questions. 9 CHAIRMAN CLARK: You know the 10 11 representation to make to get that kind of 12 agreement. Yes. We can do that, Mr. Twomey. So 13 lets go through the procedures of getting 14 Mr. Ludsen's rebuttal testimony in the record and we will begin with Staff. 15 16 Staff, if you want to do the direct and the 17 rebuttal at the same time, that is up to you; or you can simply do direct and then we will go to rebuttal 18 and go through the parties. 19 20 MS. CAPELESS: I think what we would prefer to do is do direct and then do rebuttal when we would 21 normally do rebuttal, if that is okay. 22 CHAIRMAN CLARK: That's fine. Go ahead, 23 Mr. Armstrong. 24 25

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1	FORREST LUDSEN
2	was called as a rebuttal witness on behalf of
3	Southern States Utilities and, having been duly
4	sworn, testified as follows:
5	DIRECT EXAMINATION
6	BY MR. ARMSTRONG:
7	Q Mr. Ludsen, do you have before you 43 pages
8	of prefiled rebuttal testimony?
9	A Yes, I do.
10	Q Do you have any changes to make to that
11	testimony?
12	A Yes, I do.
13	Q Can you give the changes now, please?
14	A Yes. Page 7, line 16, 17.1 percent should
15	be 18.9 percent.
16	COMMISSIONER KIESLING: 18.9?
17	WITNESS LUDSEN: 18.9. Line 20, \$73 should
18	be \$74. Line 21, the 21,725 should be 22,070. Page
19	14, line 16, the word "is" at the end of the
20	sentence, should be "in". And Page 17, line 4, the
21	word "along" should be "alone". That's it.
22	BY MR. ARMSTRONG:
23	Q With those changes, if I asked you those
24	questions contained in the 43 pages, would your
25	answers be the same?

1	A Yes.
2	MR. ARMSTRONG: Madam Chair, we request
3	that the 43 pages of prefiled rebuttal testimony be
4	incorporated into the record as though read.
5	CHAIRMAN CLARK: The prefiled rebuttal
6	testimony of Mr. Forrest Ludsen will be inserted in
7	the record as though read.
8	MR. ARMSTRONG: Thank you.
9	(Prefiled Rebuttal testimony inserted as
10	follows:)
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	FLORIDA PUBLIC SERVICE COMMISSION

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is Forrest L. Ludsen and my business
address is 1000 Color Place, Apopka, Florida 32703.

4 Q. ARE YOU THE SAME FORREST L. LUDSEN WHO SUBMITTED 5 PRE-FILED DIRECT TESTIMONY IN THIS PROCEEDING?

6 A. Yes, I am.

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Q. DO YOU HAVE ANY COMMENTS IN REBUTTAL TO INTERVENOR 8 WITNESSES OPPOSING A UNIFORM RATE STRUCTURE?

The intervenor's witnesses opposing uniform 9 Α. Yes. 10 rates raise no new facts or arguments from those already considered by the Commission in Docket Nos. 11 920199-WS and 930880-WS. Therefore, there is no 12 13 evidentiary basis for the Commission to alter its prior findings in favor of uniform 14 a rate 15 structure.

16 Q. COULD YOU PLEASE DESCRIBE EXHIBIT 247 (FLL-6).

Exhibit \mathcal{A}^{47} (FLL-6) provides the rate schedules 17 Α. and supporting data reflecting the five alternative 18 19 rate design proposals identified by Staff witness 20 Gregory Shafer, as applied to the 1996 test year. 21 As indicated in the exhibit, based upon the revenue requirements being requested by SSU, there would be 22 23 no service area which would be effected by the 24 minimum \$1.00 gallonage charge or \$4.00 base 25 facility charge suggested in Staff witness Shafer's

proposal. Also, due to time constraints and unfamiliarity with the proposed mechanics of the "treatment type/CIAC factor" design, SSU was unable to show the Commission and parties what the rates based on such a factored design would look like.

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6 The exhibit provides the service area specific 7 data necessary to establish rates on Mr. Shafer's 8 stand alone or modified stand alone rate designs 9 for 1996. Information supporting these designs is 10 identical to the information previously provided on 11 three occasions to the Commission, and the Public 12 Counsel (1) during on site audits to Staff in July 13 and Public Counsel in September, (2) through 14 document requests responded to by SSU in September 15 and (3) a third time in supplemental MFR Volumes filed with the Commission and served on all parties 16 17 in November, 1995. This exhibit is being presented 18 to reflect the actual rates which would arise under 19 the rate structure alternatives identified by Staff 20 witness Shafer as well as to rebut accusations 21 during customer service hearings that SSU has not 22 provided service area specific data such that rates 23 could be calculated on a stand alone or modified 24 stand alone basis. At an agenda conference on 25 February 6, Commissioner Deason indicated that he

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1 would oppose the introduction of the supplemental 2 MFR information if he later determined that the 3 information somehow bolstered SSU's case. To this 4 day, SSU does not understand the Commissioner's 5 concerns, however, we felt compelled to file this 6 exhibit for two reasons: (1) to make sure that the 7 record contains sufficient rate information and 8 supporting data relative to Staff's rate design 9 alternatives to satisfy anyone's purported due 10 process rights; and (2) to ensure that the 11 Commission knew that the service area specific cost 12 information had been available to the Commission 13 staff and the parties since as early as July and 14 September 1995, respectively -- despite repeated 15 protestations of Public Counsel to the contrary.

16Q.IF EITHER THE "MODIFIED" RATE DESIGN OR MODIFIED17WITH MINIMUM GALLONAGE/BASE FACILITY CHARGE RATE18DESIGN PROPOSAL IS ADOPTED BY THE COMMISSION, HOW19WOULD SSU PROPOSE THAT FUTURE INDEXINGS AND PASS-20THROUGHS BE TREATED?

A. If either the "modified" or "minimum" rate design
proposals are adopted, future indexings and passthroughs should be implemented so as to increase
the caps and minimums by the amount of increases.
Commission consideration of new caps and minimums

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would not be set until another full-blown rate 1 2 proceeding is conducted. The indexings and pass-3 through adjustments would be applied to the Commission's approved rates which would increase 4 the caps and minimum levels. To do otherwise would 5 create extraordinary complexity and confusion to 6 7 customers.

MS. DISMUKES SUGGESTS THAT SSU'S CUSTOMERS HAVE NOT 8 Q. BENEFITED FROM SSU'S ACQUISITION PROGRAM AND HAS 9 THAT COMMISSION REDUCE SSU'S 10 RECOMMENDED THE ADJUSTED TEST YEAR A&G EXPENSES BY \$243,773 TO 11 ACCOUNT FOR WHAT SHE REFERS TO AS DISECONOMIES OF 12 13 SCALE. DO YOU AGREE WITH THIS ADJUSTMENT?

Dismukes 14 No Ι do not. Ms. examined the Α. Buenaventura Lakes acquisition which occurred at 15 the end of 1995 and the Lehigh acquisition which 16 occurred in late 1991 and determined that because 17 costs to the customers of those systems increased 18 19 after SSU acquired the utilities, specifically the administrative and general costs, that 20 SSU's benefited 21 customers have not from these 22 acquisitions. I must note that Public Counsel 23 already raised this argument as it relates to the 24 Lehigh service area in the last rate proceeding. 25 The Commission rejected Public Counsel's argument

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in that case.

2 Q. DID THE COSTS TO CUSTOMERS IN THOSE SERVICE AREAS 3 INCREASE AFTER SSU ACQUIRED THEM?

4 Α. Yes, the cost to the customers of those facilities 5 did increase; however, it must be understood that 6 both Buenaventura Lakes and Lehigh were developer 7 owned utilities and it is not uncommon for 8 developer owned utilities to be subsidized by the 9 developer to keep utility rates artificially low to 10 help the sale of homes. As an example, 11 Buenaventura Lakes shows in its 1994 annual report 12 a management fee of \$30,000 from its parent 13 corporation Landstar Development Corporation. This 14 management fee is for accounting and data 15 processing services. The fee was developed for a 16 1987 rate case and is the same amount included in 17 the 1994 annual report. Obviously, Landstar is not 18 billing the utility for the true cost of these 19 services.

20Q.DID THE COMMISSION APPROVE THE TRANSFER OF THE21BUENAVENTURA AND LEHIGH UTILITIES TO SSU?

A. Yes, the Commission approved both transfers and
found the transfers to be in the best interest of
customers. As I indicated earlier, in the case of
Lehigh, the Commission also reviewed and approved

the increased administrative and general costs associated with the transfer to SSU in rate case Docket No. 911188-WS. Ms. Dismukes fails to bring this fact to the Commission's attention.

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5Q.DOYOUAGREEWITHMS.DISMUKESTHATACQUIRING6UTILITIESLIKEBUENAVENTURALAKESANDLEHIGHISNOT7NECESSARILYBENEFICIALTOCUSTOMERS?

No I do not. The attached Exhibit 247 (FLL-7) 8 Α. 9 shows a comparison of A & G and customer service 10 without with costs per customer and the 11 Buenaventura Lakes acquisition. SSU's total cost 12 per customer of A & G and customer service expenses 13 without the Buenaventura acquisition is \$85 per 14 customer. The total cost with the acquisition is 15 \$80 per customer. Therefore, although Buenaventura 16 customers experience an increase in costs, the 17 overall body of SSU customers benefited by the 18 acquisition because it provided a larger customer 19 base over which to spread common costs. Whenever a 20 utility is acquired, the cost/benefit to the 21 acquired utility can be positive or negative 22 depending on the acquired utility's cost structure 23 as compared to SSU's cost structure. Generally, 24 the result of adding additional customers is the 25 lowering of the cost per customer of the common

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1 costs allocated to SSU's other customers. 2 Ultimately it is the stimulation of growth that 3 provides the economies of scale to help hold down 4 costs. This does not mean that an acquisition will 5 result in a rate reduction.

6Q.HOW DO THE CUSTOMER SERVICE AND A & G COMMON COSTS7FOR SSU COMPARE TO OTHER UTILITIES?

I have attached as Exhibit 247 (FLL-8) a schedule 8 Α. 9 which compares Southern States to the National 10 Association of Water Companies (NAWC) survey 11 information. This exhibit shows that SSU's 12 customer accounts and A & G expenses compare 13 favorably to the NAWC companies when compared to 14 revenues, customers and employees. In 1994 SSU's 15 combined customer accounts and A & G expenses were 21.5% of actual revenues and $\frac{89}{17.18}$ of required 16 17 revenues. The comparable NAWC companies were at 18 21.3% of revenues. Comparing these same expenses 19 on a cost per customer and cost per employee basis, 20 we find that SSU's 1994 cost per customer was 21 and SSU's 1994 cost per employee was \$21,725. 22 Similar sized NAWC companies in 1994 had a cost per 23 customer of \$94 and a cost per employee of \$33,991. 24 Although Ms. Dismukes may consider our costs high 25 developer compared to the owned costs of

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Buenaventura and Lehigh, our common costs compare
 vary favorably with the NAWC "utility" companies
 surveyed.

Q. DO YOU FEEL THAT COST IS THE ONLY CONSIDERATION IN WHETHER CUSTOMERS BENEFIT BY AN ACQUISITION?

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Low cost does not necessarily equate to good 6 Α. No. 7 quality and reliable service. As verification of 8 this fact, we invite the Commission to review the 9 transcript of the customer service hearing held in 10 Kissimmee on September 19, 1995 in this docket. 11 The acquisition of the Buenaventura Lakes service 12 area by SSU had not yet been approved by the 13 Commission at that time so the utility owning and 14 operating the related facilities was Orange Osceola 15 Utilities, not SSU. The customers of OOU expressed 16 extreme dissatisfaction with the service they were 17 receiving from OOU in terms of quality of water and What we believe will be seen 18 customer service. 19 from a review of the transcript is that over the 20 long term, customers are better served by someone 21 like SSU that can provide all the services of a 22 full-time utility rather than a developer that has 23 its primary focus on home sales and often sends the 24 wrong price signal to customers by subsidizing the 25 utility rates. Our belief is supported by the fact

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1 that one of the witnesses from the Kissimmee 2 hearing testified that he owned property in three 3 service areas -- two properties received service 4 from SSU and the other OOU. The witness emphasized 5 that he was happy with the service from SSU but OOU 6 was a problem. SSU believes we can rectify the 7 problem.

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 Q. MS. DISMUKES HAS PROPOSED AN ADJUSTMENT TO INCREASE

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 RATE CASE EXPENSE BY \$30,481 TO REFLECT THE

 10
 OVERTIME INCLUDED IN THE 1995 BUDGET. DO YOU AGREE

 11
 WITH THIS ADJUSTMENT?

12 Α. Yes I do. I believe it is reasonable to include 13 in-house overtime as rate case expense rather than 14 a normal expense item. Overtime related to rate 15 case may not be an ongoing annual expense; 16 therefore, including this expense as part of rate 17 case expense with amortization over four years 18 avoids this possibility.

19 **Q**. MS. DISMUKES HAS REMOVED THE RATE CASE EXPENSE 20 BUDGETED FOR MR. GARTZKE AND MR. CRESSE BECAUSE THEY DID NOT PROVIDE DIRECT TESTIMONY IN THIS 21 PROCEEDING. 22 SHE HAS ALSO REMOVED THE ESTIMATED 23 FEES OF THE COST OF CAPITAL CONSULTANT, DR. MORIN 24 WHO DID PROVIDE DIRECT TESTIMONY IN THIS 25 PROCEEDING. DO YOU AGREE WITH THESE ADJUSTMENTS?

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Mr. Gartzke and Mr. Cresse did not provide direct 1 Α. 2 testimony in this proceeding and are not going to 3 provide rebuttal testimony; therefore, I agree that these costs should be removed. Similarly, we have 4 added additional witnesses for rebuttal testimony 5 to address issues raised by customers and their 6 counsel and those costs should be added to and 7 8 recoverable as a part of rate case expense.

Ms. Dismukes has removed Dr. Morin's rate case 9 10 expenses because the Commission developed the 11 leverage formula to estimate water and wastewater I do not agree that 12 utilities' cost of equity. 13 this adjustment should be made. Dr. Morin has 14 shown that the past leverage graph formula did not properly reflect the cost of capital required for 15 water and wastewater utilities through the cost of 16 17 capital workshop and specifically demonstrated in 18 this proceeding that it is not appropriate for SSU. 19 If the leverage graph is flawed and SSU cannot put 20 a witness before the Commission to correct the flaw 21 because it cannot cover its rate case expense, then 22 it becomes a catch 22 for the Company. I have been 23 advised as stated in Dr. Morin's testimony that 24 certain changes he recommended were incorporated 25 into the current leverage graph by a Commission

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order issued on August 10, 1995 -- six weeks after 1 his direct testimony was filed in this proceeding. 2 Therefore, his testimony has been beneficial and 3 his rate case expenses should be allowed to be 4 5 SSU. In addition. Section recovered bv 367.081(4)(f) of the Florida Statutes states that . 6 7 the use of the leverage graph is optional to the utility as follows: 8

9 (f) "The commission may regularly, not less often than once each year, 10 11 establish by order а leverage 12 formula that reasonably reflect the range of returns on common equity 13 14 for an average water or wastewater utility and which, for purposes of 15 16 this section, shall be used to calculate the last authorized rate 17 18 of return on equity for any utility 19 which otherwise would have no 20 established of rate return on 21 equity. In any other proceeding in 22 which an authorized rate of return 23 on equity is to be established, a 24 utility, in lieu of presenting 25 evidence on its rate of return on

1	common equity, may move the
2	commission to adopt the range of
3	rates of return on common equity
4	
	that has been established under this
5	paragraph." (emphasis added)
6	Rule 25-30.415(1), (2) also allow the Commission to
7	consider a generally accepted financial model as
8	follows:
9	(1) "The Commission will establish,
10	at least once each year, a leverage
11	scale or scales that reflect the
12	range of returns on common equity as
13	required by Section 367.081(4)(f),
14	F.S.
15	(2) In determining the range of
16	returns on common equity, the
17	Commission may consider generally
18	accepted financial models."
19	Again, SSU should not be foreclosed from testing
20	the leverage graph as clearly permitted under the
21	law. Finally, we note that Public Counsel
22	submitted testimony contesting Dr. Morin's
23	testimony. SSU cannot legitimately be denied
24	recovery of expenses incurred to rebut Public
25	Counsel's witness particularly since nobody,

including SSU, could have known whether Public Counsel intended to present a cost of capital witness regardless of whether SSU did.

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4 Q. DO YOU AGREE WITH MS. DISMUKES' ADJUSTMENT TO 5 DISALLOW \$345,671 OUT OF THE \$432,069 ASSOCIATED 6 WITH THE DOCKET NO. 930880-WS UNIFORM RATE 7 **INVESTIGATION?**

No I do not. Ms. Dismukes has disallowed 80% of 8 Α. 9 the costs related to the uniform rate investigation 10 and has not specified how she has arrived at this 11 percentage. The costs relating to the uniform rate 12 investigation as outlined in Ms. Dismukes testimony 13 include: \$34,358 on telemarketing consultants, 14\$95,285 on consultants testimony, \$4,587 on image 15 marketing associates, \$102,629 on legal services, 16 \$104,804 on FPSC notices, transportation and 17 security, \$54,963 for customer education mailings, 18 \$1,574 for open houses, and the remainder of 19 \$33,888 on miscellaneous travel and federal express and other miscellaneous 20 items. Ms. Dismuke' 21 proposed allowance of \$86,398 does not even cover 22 our cost for FPSC notices required to meet the 23 requirements of the Commission. Ms. Dismukes 24 agrees that SSU had an obligation to bring to the 25 Commission а reasonable and not unduly

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discriminatory rate design and that SSU had an 1 obligation to fully cooperate with the Commission's 2 investigation. However, she felt the advocacy of 3 uniform rates in that docket was unnecessary. 4 SSU 5 believes it had a right to take a position on the issues in that case. SSU supported uniform rates 6 7 consistent with the Commission's decision in Docket No. 920199-WS because SSU believes that it is in 8 9 the long term best interest of SSU, our customers 10 the environment have uniform and to rates. 11 Ultimately, the Commission heard evidence from 12 those supporting and opposed to uniform rates and 13 decided in favor of uniform rates for SSU. To not 14 allow the Company to recover such costs is 15 equivalent to informing the Company to not 16 participate in any such generic proceedings is the 17 Of course, such a signal would not serve future. 18 the customer or the Commission well in future 19 generic proceedings of this type. Obviously, the 20 customers opposed to uniform rates were very well 21 represented throughout this proceeding and would 22 have preferred that SSU did not advocate uniform 23 rates so the Commission would not have the record 24 evidence to issue their decision supporting uniform 25 rates. Because of SSU's advocacy role in support

1 of uniform rates and the intervenors advocacy role against uniform rates, the Commission had a 2 complete record upon which to base their decision. 3 Public Counsel chose not to participate. 4 SSU 5 believes that all costs incurred to date, currently 6 \$451,385, should be recoverable through rate case This includes the costs incurred to 7 expense. 8 educate customers on the potential impact to them 9 of uniform and non-uniform rates and our efforts 10 made to encourage customers to attend and 11 participate in the hearings whether for or against uniform rates. A final point -- Ms. Dismukes' 12 13 proposed disallowance, in SSU's view, is yet 14 another none too subtle demonstration of the Public Counsel's activities evidencing Public Counsel's 15 16 opposition to the uniform rate structure.

17Q.HAVE YOU DETERMINED THE ACTUAL RATE CASE EXPENSE TO18DATE?

Attached as Exhibit 247 (FLL-9) are the 19 Α. Yes. 20 actual rate case expenses paid through January 31, 21 1996 for both the current Docket No. 950495-WS case 22 Docket 930880-WS and No. uniform rate 23 investigation. We projected a total rate case 24 expense in the current case of \$995,152 and the actual to date is \$975,364. Our actual costs are 25

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running higher than originally projected primarily 1 2 because of the impact of extending the case, scheduling additional customer service hearings, 3 and renoticing customers. A significant portion of 4 5 the increased cost has occurred in outside printing 6 required to meet the noticing schedules. The actuals through January 31, 1996 for the uniform 7 8 rate investigation are \$451,385 as compared to the \$432,089 filed in the MFRs. The Company requests 9 that additional costs incurred for rate case 10 expense over the filed amounts be used as an offset 11 to any Commission reductions in expenses. 12

13Q.DO YOU HAVE ANY COMMENTS REGARDING PUBLIC COUNSEL14WITNESS KIM DISMUKES' ATTEMPT TO USE THE15COMMISSION'S "ONE SYSTEM" FINDING IN DOCKET NO.16930945-WS TO JUSTIFY A CUSTOMER SHARING OF THE GAIN

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FROM THE SALE OF THE VENICE GARDENS FACILITIES?

18 Α. Yes. Ms. Dismukes' attempt to use the Commission's 19 "one system" finding is outrageous since it is 20 Public Counsel's contrary to the opposition 21 throughout the remand proceedings in Docket No. 22 920199-WS to SSU's position that the "one system" 23 finding reflected in the Commission's July 1995 24 order in 930945-WS acted to cut off SSU's alleged 25 refund liability and, indeed, obviated the

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Commission's perceived need to revert to a modified 1 stand alone rate structure as a result of 2 the appellate decision in Citrus County v. FPSC. 3 For alone this inherent inconsistency along, Public Counsel's 4 contention should be rejected outright. 5 Further reasons to reject Public Counsel's proposal include 6 7 the fact that the "one system" finding was made including Venice 8 after sale, Gardens, everv identified by Public Counsel. Public Counsel seeks 9 retroactive application of the finding without 10 11 presenting anv evidence in support of its 12 proposition. Also, a "one system" finding does 13 little to counteract the multitude of reasons 14 provided by SSU's witnesses Sandbulte and Gower 15 confirming that requiring SSU to share any portion of the gain with customers would be unlawful and 16 17 improper.

18Q.MR. WOELFFER INDICATES THAT HE SEES NO BENEFIT FROM19THE WEATHER NORMALIZATION CLAUSE FOR SSU'S MARCO20ISLAND CUSTOMERS. DO YOU HAVE ANY COMMENTS?

Woelffer 21 Α. Mr. suggests that the weather 22 normalization clause is a risk shifting mechanism 23 and that seasonal variations in water sales due to 24 weather is a risk of SSU. I do not agree with Mr. 25 Woelffer because variations in weather are a risk

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to both the customer and SSU. The adoption of the 1 2 weather normalization clause is merely a mechanism to minimize risk to the customer and SSU from 3 events which would cause the consumption per 4 5 customer to vary from the levels reflected in the design of their rates. The consumption per 6 customer could vary from such factors as weather, 7 the impacts of conservation education, or the 8 9 impact of the rate design that the Commission ultimately recommends. The goal of the Company is 10 11 to include a level of consumption in the design of the rates which we think is realistic and reflects 12 the elasticity of the rate design we have proposed, 13 14 however, if the pattern of usage should change for whatever reason, then the weather normalization 15 16 clause would protect both the customer and the The suggestion by anyone that the WNC 17 Company. 18 penalizes customers by raising their rates if they use less water ignores the fact that rates will 19 rise in such event regardless of the existence of a 20 21 WNC. However, customers will save the cost of rate 22 cases if the WNC is approved because the WNC will provide gradual monthly adjustments to reflect 23 24 consumption decreases over time.

Q. DO YOU HAVE ANY COMMENTS TO MR. WOELFFER'S

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1 STATEMENT ON PAGE 16 THAT THE UNIFORM RATES 2 PROPOSED BY SSU WOULD REQUIRE MARCO ISLAND RESIDENTS TO SUBSIDIZE THROUGH HIGHER RATES SSU'S 3 **REVENUE REQUIREMENT?** 4

5 Α. Yes I do. Mr. Woelffer indicates that the Marco 6 Island subsidy would be \$1,568,026. The actual so-"subsidy" indicated in the MFRs is 7 called \$1,229,194 consisting of \$346,331 for water and 8 \$882,863 for wastewater. However, I would like to 9 point out to Mr. Woelffer that the uniform rates of 10 Marco Island are based on a combined rate for Burnt 11 Store and Marco Island. SSU's basic position on 12 uniform rates is that they are in the long term 13 best interest of the total body of customers. 14 At any point in time, some customers benefit and other 15 customers don't benefit. This can be dependent on 16 17 many factors such as the density of the service 18 areas, the age of the facilities, the amount of 19 CIAC for the service area, the operating efficiency 20 of the plant, the consumption of the customers in 21 the service areas, and the environmental 22 requirements for capital in any particular area. 23 As Staff witness Greg Shafer indicated, all rates 24 contain subsidies including stand-alone rates. 25 Marco Island customers should be aware that

although they are currently subsidizing Burnt 1 2 Store, eventually it could be Burnt Store providing the subsidy to the Marco Island customers. Part of 3 the reason Marco Island is subsidizing Burnt Store 4 5 is because Burnt Store has low density and low consumption and because it is a start-up facility. 6 7 At the end of 1994 Burnt Store had approximately 8 400 customers while Marco Island had about 6,000 9 Burnt Store's average consumption for customers. residential customers was 3,924 gallons while Marco 10 Island's average consumption per customer was 11 12 17,508. Marco's average consumption per customer 13 is decreasing. At the end of 1995, the average 14 consumption (residential and non-residential) 15 dropped to 15,000 gallons. Burnt Store currently 16 is growing at a very fast rate, approximately 35% 17 per year, which is somewhat deceiving because they are working from a low base but they are adding 18 19 approximately 150 customers per year to their 20 service area with an eventual build-out in our 21 current service area of approximately 4,350. As 22 Burnt Store continues to build-out, their cost per 23 customer should become less than Marco Island 24 because their incremental cost will be less and 25 they don't have the costly critical water supply

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problems of Marco's island environment. If the 1 2 current growth continues, within the next five years you could see the average cost for Burnt 3 4 Store customers be less than Marco Island 5 customers.

DO YOU HAVE ANY COMMENTS WITH RESPECT TO MR. JOHN 6 Q. 7 WILLIAMS TESTIMONY ON SERVICE AVAILABILITY CHARGES? 8 Α. Yes. I do. Mr. Williams has made several 9 significant statements which demonstrate that the 10 Staff recognizes the problems inherent in the 11 application of current FPSC CIAC policy. These 12 include the following:

13 1. Obviously, changes in charges will only affect
14 a growing utility (p. 4, 14).

15 2. A utility's CIAC level, which is the basis for
16 complying with the rule, is a moving target (p. 4,
17 22).

18 3. Over time, it is inevitable that some 19 utilities will be under-contributed with no 20 apparent means available to inject additional CIAC 21 into the system under the traditional scheme (p. 5, 22 9).

4. When SSU acquired systems, SSU inherited the
individual CIAC levels which were based upon
various levels of charges, donated property as well

as imputed CIAC (p. 5, 19).

SSU's present mix of individual 2 5. service availability charges and CIAC levels are to a great 3 extent dependent upon the service availability 4 5 policies implemented by the prior owners of the systems (p. 6, 14). 6 7 It has long been established that there is an 6. inverse relationship between rates and CIAC level 8 9 (p. 7, 5). 10 7. Service availability charges may need to be modified to compliment the chosen rate structure -11 (p. 8, 3). 12

13 8. Service availability charges designed to bring
14 the Company to a 75% CIAC (maximum) level would be
15 unreasonably high in many cases, and would
16 unnecessarily stifle growth (p. 11, 8).

9. The appropriate service availability goal for SSU would be to design charges that will help to move the utility closer to the minimum levels outlined in the rules (p. 11, 11).

21 10. If the Commission finds that it is appropriate 22 to calculate separate service availability charges 23 for each service area, it will be very difficult to 24 design reasonable charges and still comply with the 25 minimum/maximum guidelines contained in the rule

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1 (p. 11, 14).

25

11. The Commission should be prepared to grant an
exemption from the guidelines if charges are set on
a service area by service area basis (p. 11, 25).

5 Q. DO YOU AGREE WITH ALL OF THESE STATEMENTS?

6 Α. Yes, with the exception of item no. 6 above. I do 7 not believe there is always an inverse relationship between rates and CIAC levels although there is a 8 9 predominant perception that this is true. In fact, 10 customer density and consumption are the 11 predominant determinations of rates.

12Q. DO YOU HAVE EVIDENCE TO DEMONSTRATE THAT THERE IS13NOT ALWAYS AN INVERSE RELATIONSHIP BETWEEN RATES14AND CIAC LEVELS?

Yes, I have prepared Exhibit 247 (FLL-10) which 15 Α. 16 sorts the service areas (plants) included in this 17 filing by the percentage of CIAC to plant in 18 ascending order and subtotaled in increments of 19 10%. Also shown is the stand alone bill for each 20 of these service areas at a theoretical 10,000 21 gallon consumption level for ease of presentation. 22 I have also weighted the information by the number 23 of customers in each service area to emulate a 24 uniform rate comparison.

Q. DOES THIS ANALYSIS DEMONSTRATE A CONSISTENT INVERSE

RELATIONSHIP BETWEEN RATES AND CIAC LEVELS?

2 This exhibit shows that sometimes there is a Α. No. relationship between rates and CIAC levels and 3 sometimes there is not. This inconsistent result 4 5 clearly demonstrates that CIAC is only one factor that determines the level of rates and therefore it 6 7 would be unreasonable to assume that high CIAC equates to low rates or that raising the level of 8 9 CIAC will mean low rates. It also means that it 10 does not make sense to attempt to base rate 11 structure on only the levels of CIAC. Other factors, which in some service areas can be more 12 critical than CIAC in influencing the level of 13 14 stand alone rates, may include density, the level 15 of consumption, the type of treatment, the age of 16 the facility, location, growth and environmental 17 requirements.

Q. WHAT WAS THE BASIS FOR SSU'S DETERMINATION OF THE
 LEVEL OF CIAC RATES PROPOSED IN THIS FILING?

A. SSU based the level of CIAC rates proposed in this
filing on a market comparison of other utilities.

22Q. DID MR. WILLIAMS ADDRESS THE IMPORTANCE OF THE23MARKET WITH RESPECT TO ESTABLISHING THE LEVEL OF24CIAC RATES AND WHAT AN APPROPRIATE LEVEL OF CIAC25SHOULD BE UNDER EACH OF HIS ALTERNATIVES?

Mr. Williams did indicate that 1 Not directly. Α. 2 service availability rates designed to bring the 3 Company to a 75% CIAC (maximum) level would be unreasonably high in many cases, and would 4 5 unnecessarily stifle growth and that the FPSC 6 guidelines may not be appropriate.

 7
 Q.
 WHAT DO YOU BELIEVE IS THE MAIN CONSIDERATION IN

 8
 DEVELOPING CIAC RATES AND WHAT DO YOU BELIEVE IS AN

 9
 APPROPRIATE LEVEL OF RATES?

10 Α. I believe that CIAC guidelines are, in theory, 11 significant in providing a new utility with a target for developing CIAC charges, however, I 12 13 believe that reality is that the market is the 14 critical factor in determining CIAC charges and 15 that the guidelines should only be used to move 16 charges plus or minus within the market range. Ι 17 believe that there has been a misguided reliance on 18 CIAC being the answer to high rates. I agree it is 19 part of the answer, but only if the level of CIAC 20 rates does not hamper growth. Ultimately growth is 21 more important in keeping rates low than CIAC. If 22 you have significant growth in a service area you 23 still can have low general rates without CIAC 24 because of the benefits of economies of scale. 25 However, without growth you have nothing because if

no new customers are connecting you are 1 not collecting any CIAC and in addition you do not have 2 the benefits of economies of scale. Obviously, the 3 ideal situation is to have CIAC charges which 4 reflect the market so that growth is encouraged. 5 In this way you get the benefit of economies of 6 7 scale from the growth plus you get the CIAC fees as 8 new customers connect which offsets investment 9 costs.

Q. HOW DOES THE LEVEL OF CIAC CHARGES AFFECT GROWTH?

10

11 Most of SSU's growth results from building by Α. 12 developers. Developers build in areas where they 13 are able to build homes at market prices. CIAC 14 charges which do not reflect market prices act as a disincentive to the developer building in our 15 service area and thus builders may move to another 16 17 area where costs are competitive. It does not really matter to the developer if the CIAC charges 18 19 meet or do not meet the FPSC's guidelines. All he 20 cares about is if he can build his homes at a 21 competitive price so that they can be sold.

Q. DO YOU HAVE AN EXAMPLE OF HOW AN UNREASONABLE LEVEL
 OF CIAC CHARGES HAS STOPPED GROWTH?

A. Yes, I do. On September 18, 1990, the FPSC issued Order No. 23511 attached as Exhibit 247 (FLL-11)

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relating to an SSU rate increase request 1 in 2 Seminole County. Included as part of this filing 3 Chuluota wastewater service area. was our Stipulation 35 stated that service availability 4 5 (plant capacity) charges should be implemented for 6 the Chuluota wastewater system. SSU's position was 7 service availability charges that should be 8 designed to generate the minimum levels of CIAC 9 rather than the maximum. The FPSC ordered the 10 service availability charges be designed to achieve 11 the maximum CIAC level set forth in Rule 25-30.580, 12 F.A.C. of 75%. The Order further states that if 13 the FPSC were to accept SSU's position of using the 14 minimum CIAC level permitted by the rule, the 15 related facilities only would be 7.7% contributed. 16 The FPSC suggested that such a contribution level 17 would be contrary to the intent of the rule.

18

Q. HAS THIS DECISION STOPPED GROWTH?

19 Α. Yes, it has. In 1984 we had 117 wastewater 20 customers in Chuluota and in 1990 when the FPSC 21 implemented the maximum levels of CIAC we had 132 22 customers. This represents about a 2.5% growth 23 rate. Year-to-date in 1996 we have 134 customers. 24 We have had virtually no growth in wastewater since 25 the implementation of the maximum CIAC charges. In

fact the 7.7% level of CIAC which the Commission 1 2 then deemed unreasonable under SSU's minimum level 3 proposal has now gone down to 2.65% of plant and 4 Chuluota has the highest stand alone wastewater 5 bill of all of our wastewater service areas. Their 6 stand alone wastewater bill at the capped level of 7 6,000 gallons of consumption is \$271.11. Chuluota 8 customers receive the worst of all worlds, no 9 economies of scale related to growth and, with no growth, no collection of CIAC to reduce investment 10 11 In this case, perhaps implementing the costs. 12 minimum charge would not have made a significant 13 difference in their current rates, but implementing 14 the maximum charge stopped any chance for growth.

Q. WHAT IS THE CURRENT SERVICE AVAILABILITY CHARGE FOR CHULUOTA?

17 Α. The capacity charge is \$2,730, the minimum service 18 installation charge is \$350, the main extension 19 charge is actual cost less 20% and the AFPI charge 20 is \$3,197. Therefore the minimum service 21 availability charge to the developer for just 22 wastewater would be \$6,277 not including the main 23 extension charge.

Q. MR. WILLIAMS HAS RECOMMENDED ALTERNATIVES TO STAND
 ALONE CIAC CHARGES, BUT HAS NOT MADE ANY

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RECOMMENDATIONS ON WHAT THE LEVEL OF CIAC CHARGES SHOULD BE EXCEPT THAT IT MAY BE APPROPRIATE TO DESIGN THE CHARGES TO MOVE SSU TOWARDS THE MINIMUM LEVELS. DO YOU AGREE WITH THIS POSITION?

If we have growth we will move toward minimum 5 Α. levels, however, to the developer, the FPSC's 6 7 theoretical minimum may not reflect reality. Reality is the level of CIAC which reflects the 8 market and which will enable SSU to attract 9 developers to our service areas which will create 10 the growth to lower general rates through economies 11 of scale and collect CIAC as customers connect. 12

Q. What are the CIAC charges you have proposed in this
filing?

for have proposed а \$750 CIAC charge 15 Α. We conventional water, a \$1,500 CIAC charge for 16 reverse osmosis water and a \$1,500 wastewater 17 charge for all wastewater customers. 18

19 Q. WHAT ARE THESE RATES BASED ON?

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20 A. These rates are based on a market study SSU did of 21 Florida utilities located in the proximity of our 22 service areas and was based on judgment of what 23 appeared to be the average rate based on the 24 utilities analyzed.

25 Q. DO YOU AGREE WITH MR. WILLIAMS THAT IF THE

COMMISSION ORDERS A STAND ALONE RATE THAT THE CIAC 1 CHARGES SHOULD BE STAND ALONE AND THAT IF THE ORDERED RATE IS UNIFORM THAT THE CIAC CHARGES SHOULD BE UNIFORM?

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In theory I agree, however, the reality is that 5 Α. the CIAC charge should be based on the market to 6 stimulate growth rather than costs based on the 7 FPSC formula. The goal should be to develop a rate 8 which will encourage growth which will ultimately 9 benefit the customer the most through economies of 10 scale and increased CIAC collections. We cannot 11 change the past and no matter where you set the 12 CIAC charges you are not going to significantly 13 change history or the effect of history on the 14 I have no problem with a uniform CIAC rate 15 future. for all customers if the Commission orders stand 16 alone rates since the stand alone general rate 17 itself would theoretically reflect the so called 18 stand alone cost of the service area. Mr. Williams 19 did not specifically address what the CIAC rate 20 levels should be, however, if you review the stand 21 alone CIAC charges based on the Commission's 22 23 minimum and maximum rules, a significant number of the charges are unreasonable and do not reflect the 24 I agree with Mr. Williams that it will be 25 market.

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very difficult to design charges that comply with the minimum and maximum guidelines.

Q. WHAT DO YOU RECOMMEND IF STAND ALONE RATES ARE ORDERED AND THE COMMISSION ORDERS STAND ALONE SERVICE AVAILABILITY CHARGES?

I would recommend that the market rates provided in 6 Α. my exhibit be used and that a deviation from this 7 rate to reflect stand alone characteristics be no 8 more than plus or minus 20% from the rate filed by 9 the Company. All rates will, therefore, still be 10 within a reasonable market range. I believe that 11 all new customers, in all service areas, should pay 12 a fair and reasonable CIAC charge as they connect 13 to our system. Ultimately growth, whether you have 14 stand alone rates or uniform rates, helps all 15 customers since common costs are allocated between 16 all service areas and the Company's revenues are 17 determined on a total company basis. Charges to 18 past customers, and the history which cannot be 19 20 changed, should not be determinative of the charges that future customers should pay. 21

Q. MS. DISMUKES LISTS SEVEN PROBLEMS WITH SSU'S
 PROPOSED WEATHER NORMALIZATION CLAUSE (WNC). DO
 YOU HAVE ANY COMMENTS WITH RESPECT TO HER CONCERNS?
 A. Yes, I do. Ms. Dismukes, like Mr. Woelffer, first

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concern is that the WNC shifts the risk of revenue 1 recoverability shareholders to from SSU's 2 customers. This is not true. The WNC is designed 3 to both the customer eliminate risk and 4 to shareholder from events which influence consumption 5 levels such as dry years, wet years, conservation 6 efforts or unpredicted rate design effects. The 7 clause goes both plus and minus which means nobody 8 is benefiting but rather the customer is paying 9 exactly what they should be paying and the Company 10 is recovering only the revenue at which it is 11 entitled based on the rate assumptions determined 12 in its last rate case. What is the problem with 13 14 that?

15Q.MS. DISMUKES SECOND CONCERN IS THAT THE WNC WILL16NOT REDUCE THE AMOUNT OF LITIGATION ASSOCIATED WITH17ESTABLISHING THE APPROPRIATE TEST YEAR CONSUMPTION18LEVELS AS I HAD INDICATED IN MY DIRECT TESTIMONY.19DO YOU HAVE ANY COMMENTS?

20 A. There certainly is no guarantee that the OPC will 21 not keep raising the consumption issues over and 22 over again in future rate cases even if a WNC is 23 allowed; however, I would hope that the WNC would 24 eventually result in less litigation relating to 25 consumption issues. Apparently Ms. Dismukes

believes that because SSU proposed a repression 1 adjustment and a conservation adjustment that we 2 must not believe our own statement. I am not sure 3 what Ms. Dismukes' reasoning is because even if a 4 WNC is approved, the consumption levels used to 5 design rates should reflect the best estimate of 6 7 what actual consumption will be under the proposed The WNC is designed to be a true-up 8 rates. 9 mechanism which should go positive and negative; therefore, it is important that base consumption 10 reflects the best estimate possible for consumption 11 12 which requires that we reflect the repression 13 adjustment and conservation adjustment in our estimate of consumption. 14

15Q.MS. DISMUKES THIRD CONCERN CLAIMS THAT SSU HAS NOT16STARTED WITH WEATHER NORMALIZED TEST YEAR17CONSUMPTION. IS THIS CONCERN VALID?

18 Α. No, Mr. Bencini addresses this issue in his 19 testimony and shows that SSU's 1995 and 1996 20 projections when compared to actual 1995 21 consumption are far more realistic than Ms. 22 Dismukes' projections and in fact show that 23 consumption as filed by SSU should be reduced 24 rather than increased as Ms. Dismukes proposes. 25 SSU based its projections on historical consumption

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which takes into account all factors affecting consumption, not only weather.

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Q. MS. DISMUKES FOURTH CONCERN IS THAT SSU HAS NOT PROPERLY ACCOUNTED FOR CHANGES IN COSTS THAT WOULD BE AFFECTED BY CHANGES IN CONSUMPTION. DOES THE WINC ACCOUNT FOR CHANGES IN COSTS?

7 Ms. Dismukes is correct that the WNC does not Α. specifically provide for adjustments relating to 8 9 costs relating to changes in changes in consumption. I see this as a risk to the customer 10 and Company that is no different than if you do not 11 have the WNC, except that the risk is less with the 12 WNC because at least the customer is not overpaying 13 14 underpaying revenues. If the test year or 15 consumption used to develop the base rate is realistic the WNC adjustment over time should go 16 positive and negative. What is not needed is a 17 18 clause that is burdened with micro regulatory 19 requirements which in the final analysis do not make any difference in the overall impact 20 on 21 customers. This includes Ms. Dismukes' proposal to 22 include an interest adjustment in the clause. 23 Without the clause there is no means of even 24 truing-up over or under collections let alone interest without incurring the expense of rate 25

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1 cases and associated costs to customers. Why does 2 it suddenly becomes necessary to reflect interest 3 when a clause that will true-up the over and under 4 collections is implemented.

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 Q. MS. DISMUKES FIFTH CONCERN IS HOW SSU PROPOSES TO

 6
 RECOVER OVER OR UNDER COLLECTIONS ON THE CUSTOMERS

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 BILL. HOW DO YOU PROPOSE TO SHOW THE ADJUSTMENT ON

 8
 THE BILL?

9 A. The WNC adjustment would appear as a separate line 10 item on the customer's bill similar to the fuel 11 adjustment on an electric bill.

12Q.MS. DISMUKES SIXTH CONCERN IS THAT THE CLAUSE MAY13CREATE CUSTOMER CONFUSION BECAUSE IF CUSTOMERS14CONSUME LESS, (IN TOTAL) THE ACTUAL UNIT COST WILL15INCREASE AND VISE VERSA. DO YOU BELIEVE CUSTOMERS16WILL BE CONFUSED?

My experience is that there always will be some 17 Α. 18 customers confused when something new is 19 introduced, if the clause is explained but 20 properly, customers will understand over time.

21Q.MS. DISMUKES SEVENTH CONCERN IS THAT THE WNC COULD22LEAD TO PERVERSE INCENTIVES RELATED TO QUALITY OF23SERVICE ISSUES. IN OTHER WORDS MS. DISMUKES24SUGGESTS THAT SSU PROBABLY WOULD NOT HAVE THE25INCENTIVE TO FIX LINE BREAKS IF WE KNEW WE WOULD

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STILL COLLECT OUR REVENUES. DO YOU AGREE?

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No, I think Ms. Dismukes is really reaching. If 2 Α. SSU where to provide customer service in the 3 fashion outlined by Ms. Dismukes we would not be in 4 I have a difficult time business very long. 5 visualizing a SSU customer service representative 6 or operations person just ignoring the customer and 7 his or her complaint about a line break because SSU 8 9 will recover the revenue anyway.

10 Q. DO YOU HAVE ANY OTHER COMMENTS WITH REGARD TO THE 11 WNC?

the staff has proposed several alternative 12 Α. Yes, rate structures. Application of the WNC is only 13 14 practical if you have uniform rates because without 15 uniform rates it would be necessary to have a separate clause for each service area where the 16 17 gallonage rate is different. If the Commission 18 orders stand alone or modified stand alone rates we 19 would have approximately 100 different gallonage 20 charges which would mean 100 different clauses 21 which would be administratively impractical to 22 administer.

Q. IF THE COMMISSION DECIDES TO IMPLEMENT THE CLAUSE
 ON A TRIAL BASIS, WHAT SERVICE AREAS WOULD YOU
 RECOMMEND BE INCLUDED IN THE TRIAL?

524**5**

1 A. I would recommend the Marco Island or reverse 2 osmosis class be used in the trial because of the 3 significant changes in consumption patterns and the 4 limited number of service areas included in the 5 reverse osmosis class.

STAFF WITNESS SHAFER SUMMARIZES FIVE RATE DESIGN 6 0. OPTIONS IN HIS TESTIMONY. WHAT ARE THESE OPTIONS? 7 Option I is a modified stand alone rate, Option II 8 Α. is a stand alone rate, Option III is a new rate 9 design option reflecting modified stand alone rate 10 with minimums, Option IV is a uniform rate, Option 11 design option called is rate а 12 V а new CIAC/treatment type factored rate. 13

14Q.HOW DO THESE OPTIONS COMPARE TO THE COMPANY'S FILED15RATE DESIGN IN THIS RATE CASE?

The Company has proposed final rates similar to the 16 Α. 17 Option IV uniform rates which consists of a uniform 18 water rate for conventional treatment, a uniform 19 water rate for reverse osmosis treatment, and a 20 uniform wastewater rate. The Commission has 21 ordered the Company to implement modified stand 22 alone and stand alone rates similar to Option I and 23 Option II for interim rates. The modified stand 24 alone rates reflect a \$52.00 cap at 10,000 gallons 25 for water and a \$65.00 cap at 10,000 gallons for

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wastewater and apply to those service areas which 1 previously had uniform rates. Option III is a new 2 rate proposal and is a variation of Option I, with 3 a \$1.00 minimum for gallonage and a \$4.00 minimum 4 The Option I modified stand for the base charge. 5 alone rates provided in Exhibit 247(FLL-6) 6 7 exceed these minimums. As previously stated, the Option V CIAC/treatment type factored rate is a new 8 9 rate proposal.

10 Q. DO YOU SUPPORT THE NEW CIAC/TREATMENT TYPE FACTORED 11 RATE PROPOSAL?

12 A. No, I do not.

25

13 Q. COULD YOU EXPLAIN WHY?

14 The CIAC/treatment proposal is not only complex and Α. it takes 15 difficult to understand, but into consideration only the cost factors relating to 16 CIAC and treatment type. It does not take into 17 consideration the many other costs factors which 18 determine the level of a customer's bill, such as 19 20 density, consumption, age of facilities, economies 21 of scale, location, and environmental requirements. 22 Q. DO YOU HAVE ANY OTHER COMMENTS RELATING TO THIS 23 RATE PROPOSAL? Yes, I do. I have prepared Exhibit $\frac{247}{247}$ (FLL-12) 24 Α.

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which is a comparison of SSU's CIAC to plant,

sorted by treatment type and the stand alone 1 residential bill; Exhibit 247 (FLL-13) is a 2 3 comparison of stand alone residential bills, sorted by treatment type and the percent of CIAC to plant; 4 and Exhibit 247 (FLL-14) is a comparison of 5 treatment types and stand alone residential bills, 6 sorted by the percent of CIAC to plant. 7

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WHAT DO THESE THREE EXHIBITS SHOW? Q.

9 Α. These three exhibits contain the same information 10 sorted three different ways and all show that there is no consistent pattern of costs relative to CIAC 11 12 or treatment type. In other words, low CIAC does not consistently mean high bills and vice versa. 13 An example is shown on Exhibit $\frac{247}{2}$ (FLL-14) page 14 2 of 3, lines 121 and 122 for Gospel Island which 15 16 has a CIAC to plant ratio of 74.23% and a typical 17 residential bill of \$105.50 at 10,000 gallons. 18 Amelia Island which has a 75.02% CIAC to plant 19 ratio, however, only has a typical residential 20 stand alone bill of \$15.58 at the same consumption 21 level.

22 Q. HAS STAFF WITNESS SHAFER RECOMMENDED A PREFERRED 23 RATE DESIGN IN HIS TESTIMONY?

24 Α. No.

25 IF THE COMMISSION SHOULD NOT GRANT THE COMPANY'S Q.

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PROPOSED UNIFORM RATES, WHAT OPTION DOES THE COMPANY SUPPORT?

If the Company's proposed uniform rates are not 3 Α. granted, the Company supports the modified stand 4 alone rate Option III with minimums and with a 5 lower cap than the one used by the Commission to 6 The modified stand alone rate 7 set interim rates. has the advantage over the stand alone rate Option 8 9 II of recognizing affordability, and has the 10 advantage over the CIAC/treatment Option V of being less complex while reflecting all factors 11 12 influencing costs such as density, consumption, CIAC, treatment type, location, age of facilities, 13 It also provides a means for the Commission 14 etc. 15 to move toward a uniform rate by lowering the cap 16 or maximum bill at 10,000 gallons of consumption.

17Q. HOW DOES SSU'S UNIFORM RATE PROPOSAL DIFFER FROM18THE OPTIONS PROPOSED BY STAFF?

19 Α. SSU has established two classes of uniform rates 20 for water based on whether the treatment is for 21 fresh water (conventional treatment) or brackish 22 water (reverse osmosis treatment). The 23 distinguishing factors between these two classes is 24 (1) there is a significant difference in the 25 treatment process, (2) there is a significant

difference in the product being treated, and (3) 1 there is a significant difference in the average 2 cost of the particular water treatment. The lime 3 softening, filtration aeration and disinfection 4 are all variations only treatment types of 5 freshwater treatment at SSU and have been included 6 7 in the determination of conventional uniform rates. Reverse osmosis treatment is used for the treatment 8 of brackish water and is the last resort for 9 treatment because of its high cost and therefore 10 has been included in a separate uniform rate class. 11 Typically, R.O. facilities are located along 12 13 coastal areas where you have high populations which 14 have depleted the freshwater supply resulting in 15 the intrusion of brackish or salt water.

average cost of R.O treatment 16 The is 17 significantly higher than the average cost of conventional or freshwater treatment and this is 18 19 confirmed when you compare the uniform conventional 20 freshwater rate with the uniform R.O. rate. SSU's 21 uniform conventional rate averages the cost of 95 22 plants and therefore provides a representative 23 average cost of conventional treatment. This 24 average rate also reflects the variances that 25 result between plants due to a number of factors

customer freshwater treatment types, in consumption, CIAC, differences depreciated value and O&M due to the age of the facilities, as well as manpower requirements which or

to regulatory requirements 5 can varv due operating characteristics of individual facilities. 6 The R.O. uniform rate reflects the cost of SSU's 7 two R.O. facilities at Marco Island and Burnt 8 Exhibit 247 (FLL-15) shows a comparison Store. 9 of the Company's proposed final conventional and 10 reverse osmosis uniform rates. As shown on this 11 uniform schedule, the base charge for the 12 conventional rates is \$9.17 while the base charge 13 for the uniform R.O facilities is \$23.62. The 14 gallonage charge for uniform conventional plants is 15 \$2.16 while the gallonage charge for uniform R.O. 16 plants is \$3.27. The bill at 10,000 gallons for 17 18 the uniform conventional plants is \$30.77 while the typical bill for the uniform R.O. plants is \$56.32. 19

such

density,

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3

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as

The uniform base charge for R.O. treatment is 20 21 2.5 times the uniform base charge for conventional 22 treatment which reflects the highly capital 23 intensive nature of R.O. treatment compared to conventional. Within the R.O. group, Marco Island 24 and Burnt Store have almost identical stand alone 25

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base charges which indicates the similarity in capital costs for R. O. treatment.

The uniform gallonage charge for R.O treatment 3 is 1.5 times greater than the conventional uniform 4 gallonage charge. Within the R.O. group, Marco's 5 gallonage charge is low compared to Burnt Store 6 because of higher per customer monthly consumption 7 at Marco in 1995 of approximately 26,000 gallons as 8 compared to approximately 10,000 gallons at Burnt 9 Residential consumption at Marco is 10 Store. 11 projected to be approximately 15,000 gallons compared to 4,000 gallons at Burnt Store in 1996. 12

In summary, the overall annual average cost of 13 R.O. treatment is approximately 1.8 times or almost 14 twice the average cost of SSU's 95 conventional 15 water treatment plants. The average of the cost of 16 95 water plants reflects the true levelized cost of 17 18 service of conventional treatment and represents a significant and permanent cost difference between 19 conventional and R.O. treatment. 20

21 Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?

- 22 A. Yes, it does.
- 23

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BY MR. ARMSTRONG: 1 2 Mr. Ludsen, are you sponsoring Exhibit 0 FLL-6 through FLL-15? 3 Α Yes, I am. 4 Do you have any changes to those? 5 Q Α No. 6 MR. ARMSTRONG: Madam Chair, we request the 7 next available exhibit number. 8 CHAIRMAN CLARK: The next number I have is 9 247. 10 (Exhibit No. 247 identified.) 11 BY MR. ARMSTRONG: 12 13 Mr. Ludsen, you have no summary, correct? 0 14 Α That's correct. MR. ARMSTRONG: He is available for cross. 15 16 CHAIRMAN CLARK: Ms. Capeless, we are ready 17 to have the Staff's cross of Mr. Ludsen's direct testimony. 18 MS. CAPELESS: 19 20 CROSS EXAMINATION BY MS. CAPELESS: 21 Good evening, Mr. Ludsen. 22 0 23 Α Good evening. 24 I have some questions for you on behalf of 0 25 the Staff concerning various topics which you cover

in your direct testimony. What I will try to do is 1 to take those topics in roughly the same order as you 2 discuss them in your testimony. 3 So I would like to begin by asking you some 4 questions pertaining to your proposed service 5 6 availability charges. 7 Α Yes. 8 Q You selected your proposed service availability charges based upon the average of your 9 market survey with the caveat these charges would 10 11 place SSU within the Commission's minimum and maximum guidelines; is that correct? 12 13 Α Overall, yes, that's correct. With the minimum being the percentage that 14 0 transmission distribution or collection facilities 15 16 are to total plant, and the maximum being 75 percent 17 of total plant; correct? That's correct. 18 Α 19 If you would, please, turn your attention 0 to what was marked last week as Exhibit 127, which is 20 21 attached to your direct testimony, as FLL-3. 22 Α Okay. This is a summary of total water and 23 Q 24 wastewater service availability charges for 1996; 25 right?

			5255
1	A That'	s correct.	
2		n 6 shows the proposed uniform o	abargo .
		n a shows the proposed difform o	.narge;
3	correct?		
4	A Yes.		
5		xcept for column 6, doesn't the	
6	remainder of Ex	hibit 127 represent figures pull	.ed
7	from Mr. Bliss'	analysis found in volume eight	of the
8	MFRs, 2 through	4; correct?	
9	A Yes.		
10	Q We dia	d not copy those because they an	re
11	voluminous, but	we've got the three books here	for
12	your reference	if you are interested in browsin	ıg
13	through them.	Is it correct that columns 2 and	1 3 of
14	Exhibit 127 rep	resent minimum and maximum charg	jes
15	based upon Comm	ission guidelines which were dev	veloped
16	by Mr. Bliss ba	sed upon Staff's model?	
17	A That'	s correct.	
18	Q And c	olumn 5 of the exhibit represent	is a
19	stand alone rat	e based upon the assumptions der	rived
20	in the same mod	el; is that right?	
21	A Colum	n 5, yes.	
22	Q Okay.	And again, referring to the sa	ame
23	Exhibit 127, fo	or numerous systems in columns 2	and
24	three both the	minimum and maximum charges are	zero.
25	Do you see that	?	
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Yes. 1 Α What is the significance of both columns 2 Q being zero with a charge appearing in column 5? 3 The significance is that columns 2 and 3 Α 4 represent future connections. And the reason that 5 you have zeroes there is because you do not have any 6 future ERCs in this system. 7 Column 5 represents the stand alone 8 charges. In other words, it is the average cost of 9 the facilities currently installed at Amelia Island. 10 Okay. If you will direct your attention to 0 11 Page 2 of the exhibit, FFL-3, which is Exhibit 127. 12 Please take a look at line number 95 on that page. 13 Α Okay. 14 Those are the service availability 15 0 calculations for the Zephyr Shores plant, right? 16 Ά 17 Yes. In column 2 of line 95, you show a minimum 18 Q charge of \$857; correct? 19 Α 20 Yes. 21 And in column 3 you show a maximum charge 0 22 of \$2,362; right? Α 23 Yes. In column 5 you show a stand alone charge 24 Q of \$383, correct? 25

1	A Yes.
2	Q Doesn't that show that the stand alone
3	charge in column 5 is not within the minimum/maximum
4	range?
5	A Yes.
6	Q Why does that stand alone charge fall
7	outside of the range?
8	A It could be for various reasons. I would
9	have to look at the schedules, I guess, or have
10	Mr. Bliss look at the schedules that he prepared to
11	explain that, but it could be a variety of reasons
12	because the calculations are different for stand
13	alone versus the projected, or the minimum/maximum
14	calculation, which actually looks into the future.
15	Q Okay. Let me direct your attention,
16	please, to page 14 of your direct testimony,
17	beginning at line 15. Here you show three
18	percentages for contribution levels, correct?
19	A Yes.
20	Q One percentage is for your conventional
21	water plant and service, one for your reverse osmosis
22	water plant and service, and one for your wastewater
23	plant and service; right?
24	A That's correct.
25	Q Is it correct that these are projected year
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1	end 1996 percentages which include projected plant
2	additions?
3	A Yes. Those are existing.
4	Q And based upon these percentages you've
5	determined that at year end '96 SSU will on a company
6	wide basis be below Commission minimum guidelines?
7	A That's correct.
8	Q If you will turn your attention back again
9	to Exhibit 127, FFL-3 attached to your testimony
10	there. Haven't you provided this exhibit to support
11	the contention that your proposed service
12	availability charges are within Commission
13	guidelines?
14	A Could you repeat the question?
15	Q Have you provided this exhibit in order to
16	support the contention that your proposed service
17	availability charges are within Commission
18	guidelines?
19	A Partly, yes. That is a total composite.
20	If you look at the detail schedules under the service
21	availability filing, for instance the 750, results in
22	a minimum of 53.95 percent. Well, the minimum is
23	53.95 percent that we need for the conventional
24	treatment. And the 750 produces a percentage of
25	56.38 percent, which is above that minimum.
	FIORIDA DUDITO SERVICE COMMISSION

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1	So what that schedule shows is that we
2	moved from the 32.77 existing to 56.38 percent, which
3	is above the minimum for that grouping.
4	Q And these numbers were derived from
5	Mr. Bliss' service availability analysis; right?
6	A Yes.
7	Q Isn't it true that you are unable to assure
8	the Commission that your proposed service
9	availability charges will place SSU in compliance
10	with Commission service availability guidelines
11	beyond the year 1996?
12	A Yes, but I think that would be the case no
13	matter what you did, since they are just using
14	projected information.
15	Q Okay. Thank you. Lets move on to some
16	questions pertaining to SSU's conservation efforts.
17	If you will refer, please, to page 20 of your direct
18	testimony, starting at line 17. There you indicate
19	that SSU has reduced 1996 consumption based on
20	anticipated savings resulting from its expanded
21	conservation programs; correct?
22	A Yes.
23	Q Are you aware that SSU estimates that
24	consumption will be reduced by a total of 142,788,000
25	gallons per year resulting from conservation
	FLORIDA PUBLIC SERVICE COMMISSION

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1	programs?
2	A Yes, I am.
3	Q Are you aware that in the MFRs SSU did not
4	adjust its operating expenses further reduction in
5	consumption associated with the conservation
6	programs?
7	A Yes, I am.
8	Q Theoretically shouldn't there be some
9	corresponding reduction in operating expenses as a
10	result of anticipated reduced demand?
11	A Yes, there should. I think we provided an
12	interrogatory response in regard to that issue.
13	MS. CAPELESS: We would like to go ahead
14	and pass this out. It is an exhibit, which is the
15	late filed Exhibit No. 4 from the 11/14 deposition.
16	We would like to have that marked, please.
17	CHAIRMAN CLARK: That will be Exhibit 248.
18	You have two more exhibits.
19	MS. CAPELESS: Thank you.
20	CHAIRMAN CLARK: That is a Late Filed
21	Exhibit No. 4 From the Ludsen Deposition on November
22	14th.
23	MS. CAPELESS: Correct, thank you.
24	BY MS. CAPELESS:
25	Q Does this document appear to be a true and
	FLORIDA PUBLIC SERVICE COMMISSION

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1	correct copy of that late filed deposition Exhibit
2	No. 4, Mr. Ludsen?
3	A Yes, it is.
4	Q This exhibit contains anticipated
5	reductions in operating expenses from the
6	conservation programs, right?
7	A That's correct.
, 8	Q And attached to this Exhibit 248 is a
9	schedule which details the operating expense
10	adjustments by plant for the anticipated reductions
11	in consumption associated with the conservation
12	program; right?
13	A Correct.
14	Q Thank you. Let's move onto the proposed
15	weather normalization clause or WNC. Isn't it true
16	that this weather normalization clause affects only
17	those customers whose rates are being reviewed in
18	this rate case?
19	A That's correct.
20	Q Now, if SSU were to buy a new facility the
21	transfer of ownership would have to be approved by
22	the Commission; right?
23	A Yes.
24	Q So lets just assume for the moment that the
25	Commission approves a weather normalization clause in
	ELODIDA DUDIIC CEDUICE COMMISSION

1	this docket as proposed by SSU, okay?
2	A Yes.
3	Q If that were true, would it be necessary
4	for the Commission to make a determination as to
5	whether the WNC should apply to a newly acquired
6	facility during a subsequent transfer or amendment
7	proceeding?
8	A No, it wouldn't. The intent would be that,
9	first of all, that the WNC would only be applicable
10	or usable if you had uniform rates, because otherwise
11	you would have to have a WNC adjustment clause for
12	every facility throughout the state.
13	If you acquired a new system, those systems
14	as has happened in the past, would come in under
15	their current rate, which would not be the uniform
16	rate. So therefore, they would not be included in
17	the WNC until a subsequent rate case.
18	Q Thank you. Isn't it your opinion that
19	SSU's tariff would not need to be updated each time
20	the rate changed as a result of the WNC?
21	A Yes.
22	Q And the tariff, in your opinion, wouldn't
23	need to be updated because the Commission would
24	approve the mechanism, right, and the mechanism would
25	be applied each month to the billing?
	FLORIDA PUBLIC SERVICE COMMISSION

A That's correct.

2	Q Again, assuming that the Commission were to
3	approve your proposed WNC, lets say that the
4	Commission later receives a phone call from a
5	customer questioning his or her bill. And let's
6	assume that the Commission or Staff intends to
7	research that billing question. We here at the
8	Commission wouldn't be able to ascertain the
9	appropriate amount of the customer's bill from
10	looking at the tariff, would we?
11	A Well, yes, you would because the WNC would
12	be a separate line on the bill at the bottom of the
13	bill, or after you actually calculated the rates
14	through and determined that total dollar amount you
15	would have a separate amount for the WNC adjustment.
16	Then that would be rolled into the total.
17	You would have the amount up to the WNC.
18	And then the WNC would be a separate calculation
19	which you would audit periodically or whenever, or
20	monthly, if you chose to have us send copies to you
21	monthly.
22	Q We would have to take a look at the tariff
23	in conjunction with the customer's bill?
24	A Normally what you would do is we would send
25	you a copy of the adjustment each month so you would
	FLORIDA DIDITO CEDVICE COMMISSION

1	know what the adjustment factor was for each month
2	that the bills went out. And so you would have a
3	copy of the adjustment factor.
4	Q So we would Staff would first have to
5	calculate the weather normalization, the adjustment,
6	for that specific customer's bill in order to
7	determine
8	A Repeat the question, please.
9	Q Staff would need to calculate the weather
10	normalization adjustment for that particular
11	customer; is that correct?
12	A No. Well, you would receive the actual
13	rate from us. If you had a copy of their bill
14	obviously you would see it on the bill; or if you
15	were talking to them over the phone, you would know
16	what that rate was, and you would have to multiply it
17	times the consumption for the month. Just like you
18	would to bill it out, also; you would have to look at
19	the rate schedule to see what the rates are, and bill
20	those out based on consumption. You would do the
21	same thing with the adjustment factor.
22	Q Okay. Thank you. Mr. Ludsen, are you
23	aware that fuel adjustment clauses are reviewed once
24	every six months for fuel and environmental costs and
25	yearly for conservation costs?
	FLORIDA DIBLIC SERVICE COMMISSION

1	A No.
2	Q Do you have an opinion as to how frequently
3	the WNC should be reviewed?
4	A At least once a year.
5	Q Okay. Isn't it true that you don't
6	anticipate any change to the pass through index
7	procedures if the WNC is approved?
8	A That's correct.
9	Q Would you agree that one of the reasons why
10	SSU has requested this mechanism is to insure that it
11	receives its gallonage revenue requirement in rainy
12	seasons?
13	A That is part of it. It is a balancing
14	account which works both ways. It assures that we
15	meet the level of consumption per bill that was
16	included in our last rate case, and it varies plus or
17	minus and refunds to the customer or collects for the
18	company. So it is really a balancing account.
19	Q In requesting this mechanism, isn't SSU
20	acknowledging that Florida has many rainy seasons?
21	A Yes, it is also involved in a very intense
22	conservation effort throughout the state. It is
23	also, we are also involved in significant changes in
24	rate design.
25	Q Isn't it true that there is no other
	FLORIDA DIBLIC SERVICE COMMISSION

1	privately-owned water or wastewater utility in the
2	United States which utilizes such a mechanism?
3	A I'm not aware of any.
4	Q So this idea of implementing a weather
5	normalization clause is a new idea to the water
6	industry, correct?
7	A I haven't seen another clause for the water
8	industry; that's correct.
9	Q Are you aware that Dr. Morin has testified
10	that the WNC will reduce SSU's cost of equity by 25
11	basis points?
12	A I believe he indicated that, from the 12
13	point or I think we filed with the 12.25, and he
14	felt that the cost equity would be 12.50 if we didn't
15	have the WNC.
16	Q Wouldn't the fact that this is a new
17	mechanism cause it to be considered more risky?
18	A Risky to who?
19	Q Risky to lenders.
20	A Well, I consider it to be a stabilization
21	mechanism in terms of revenues to the company and to
22	the customers. So I would say it is less risky.
23	Q Okay, thank you. On Page 21 now of your
24	direct testimony. Here you provide a step-by-step
25	description of the mechanics of the WNC; correct?
	FLORIDA PUBLIC SERVICE COMMISSION

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1	A Yes.
2	Q And you describe that there are various
3	steps involved in computing the monthly WNC
4	adjustment, right?
5	A Yes.
6	Q Attached to your direct testimony as
7	Exhibit FLL-4, which is also part of 127, Exhibit No.
8	127, if you would please turn to page one of that
9	portion of the Exhibit FLL-4?
10	A Yes.
11	Q The actual number of bills and consumption
12	that are approved in this rate case is the starting
13	point in the process of calculating the WNC; is that
14	right?
15	A That's correct.
16	Q And this is because the approved number of
17	bills and consumption is used to calculate an average
18	monthly consumption per bill, right?
19	A Yes.
20	Q Okay. The monthly WNC revenue rebate or
21	surcharge amount is the calculation of the monthly
22	revenues that are over or under the target revenues;
23	correct?
24	A That's correct.
25	Q There are four month and two month lags
	FLORIDA PUBLIC SERVICE COMMISSION

	5268
1	that are built into the WNC calculation; aren't
2	there?
3	A Yes, in the clause that we've developed,
4	that's correct.
5	Q And it is your opinion that the WNC should
6	be implemented only if a uniform rate structure is
7	put in place?
8	A That's correct, and if it is based on a
9	gallonage charge. If you have an inverted rate it
10	would be virtually or almost impossible to use a WNC
11	because you would have to keep track of consumption
12	by intervals.
13	MS. CAPELESS: Okay, thank you. We would
14	like to move on to some questions concerning the
15	topic of reuse. And we want to go ahead and hand you
16	a few more documents at this point. One of them
17	consists of SSU's responses to certain discovery
18	requests. And if we could have that identified,
19	please, Madam Chairman, as composite exhibit.
20	CHAIRMAN CLARK: That number will be 249.
21	(Exhibit No. 249 identified.)
22	MS. CAPELESS: Thank you. And the other
23	one is a late filed deposition Exhibit No. 2, if we
24	could have that one marked, please.
25	CHAIRMAN CLARK: That will be 250.
	FLORIDA PUBLIC SERVICE COMMISSION

1	5269
-	MS. CAPELESS: Thank you.
1	
2	(Exhibit No. 250 identified.)
3	BY MS. CAPELESS:
4	Q Mr. Ludsen, if you would direct your
5	attention first to the exhibit that was marked 249,
6	SSU's responses to certain discovery requests.
7	MR. ARMSTRONG: Could we have a reference
8	to the page in his testimony you are referring to?
9	MS. CAPELESS: If you give me a minute I
10	think I can probably come up with that. Can we go
11	off the record for about a minute?
12	CHAIRMAN CLARK: Yes.
13	(Brief pause.)
14	MS. CAPELESS: Okay. Staff has refreshed
15	my memory on this. These questions on reuse were in
16	Ms. Kowalsky's testimony. And some of the questions
17	that we asked Ms. Kowalsky at deposition concerning
18	reuse and rate structure were deferred to
19	Mr. Ludsen.
20	MR. ARMSTRONG: Oh. I'm sure he is
21	delighted.
22	BY MS. CAPELESS:
23	Q Again, referring to what was marked 249,
24	Exhibit 249, does this appear to be a true and
25	correct copy of SSU's responses of certain OPC's
	FLORIDA PUBLIC SERVICE COMMISSION

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1	discovery request, Mr. Ludsen?
2	A It appears to be, but I haven't seen it
3	before.
4	Q Okay. And with respect to the exhibit
5	marked 250, the copy of your late filed deposition
6	Exhibit No. 2, does this also appear to be a true and
7	correct copy of that document?
8	A Yes.
9	Q Thank you. Now, I think Staff also
10	distributed a copy of Page 464 of volume 5 of the
11	MFRs, that is for reference purposes. Did you
12	receive a copy of that?
13	A Yes.
14	Q Thank you. Focusing for the moment on the
15	composite Exhibit No. 249, is it correct that SSU
16	presently provides reuse for spray irrigation from
17	eight of its plants?
18	A Yes, including Buenaventura Lakes, yes.
19	Q Thank you. And is it also correct that the
20	charges proposed by SSU for reuse range from no
21	charge at all to \$0.87 per thousand gallons?
22	A Yes.
23	Q Doesn't SSU intend to increase the reuse
24	charge for the Lehigh and Florida Central Commerce
25	Park facilities by the average percentage revenue
	FLORIDA DUBLIC SERVICE COMMISSION

l	increase approved in this docket?
2	A Yes.
3	Q Are you familiar with the testimony of
4	Mr. Guastella filed in this case?
5	A I've read it before, yes, but it has been
6	awhile now.
7	Q Okay. Are you aware that he performed a
8	cost study to develop a cost based rate of \$0.87 per
9	thousand gallons for reuse for Marco Island?
10	A Yes.
11	Q And SSU's proposed \$0.87 charge for Marco
12	Island is based upon Mr. Guastella's study; is that
13	right?
14	A That's correct.
15	Q You've not conducted similar studies for
16	any of your other service areas, though, have you?
17	A No.
18	Q SSU proposes to charge a cost base reuse
19	rate for Marco Island and to continue to provide
20	reuse at no charge for several other locations; is
21	that right?
22	A Yes. Well, there are different
23	circumstances involved for each one of those. The
24	ones that were charging zero is because we are really
25	under contract in those situations. And in the case
	FLORIDA PUBLIC SERVICE COMMISSION

of Marco Island, that is a situation where we are 1 replacing potable water. The \$0.87 rate is a potable 2 water replacement rate. It has a different value of 3 service, then for the golf courses. And it is not 4 under contract. 5 6 Ο So your rationale for this cost differential then is based upon differing 7 circumstances at the various locations? 8 9 Α That's correct. For example, alternate water sources may or 10 0 may not be available to the end user, and you 11 12 consider that in determining whether or how much to charge for reuse; is that right? 13 MR. ARMSTRONG: Objection, Madam Chair. I 14 just -- this is my witness. I prepared him for this 15 testimony. I looked through the issue statement. Ι 16 don't see any issues regarding appropriate reuse 17 rates. So I know this is an off-the-cuff discussion, 18 because he hasn't been prepared, because there is no 19 Again, I think we are going into an area --20 issue. 21 if it was an issue, we should have had notice there 22 was an issue, and I could have had him prepared. MS. CAPELESS: I would refer Counsel to 23 24 issue 122 of the prehearing order. 25 MR. ARMSTRONG: If I'm wrong, I will take

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1	it back, but I looked through. Okay. This is why I
2	wasn't prepared with Mr. Ludsen because it says
3	Kowalsky is the witness. Is it because of what you
4	said in the deposition that she couldn't answer the
5	questions that you didn't ask her?
6	COMMISSIONER KIESLING: That happened right
7	here when they had with Kowalsky on direct.
8	MR. ARMSTRONG: I wasn't here either.
9	COMMISSIONER KIESLING: She deferred
10	answers on some of the reuse questions.
11	MR. ARMSTRONG: I take it back. I wasn't
12	here when she was on the stand. I will take it back
13	and you can go ahead.
14	MS. CAPELESS: Thank you.
15	BY MS. CAPELESS:
16	Q I will repeat the question, Mr. Ludsen. As
17	an example, when you've got alternate water sources
18	which may or may not be available to the end user,
19	and our question is do you consider that in
20	determining whether or how much to charge for reuse?
21	A I think that has to be one of the
22	considerations. I think ultimately we will have to
23	end up with probably two reuse rates for our service
24	areas. We will have to have a potable water
25	replacement rate for reuse, and a non-potable water
	FLORIDA PUBLIC SERVICE COMMISSION

1 replacement rate.

2	If you have a customer that is currently
3	taking potable water, they are going to have to be
4	charged a rate which reflects a value of the service
5	that is being provided and the replacement of potable
6	water. In some case like Deltona where they have
7	zero charge currently, we are going to need another
8	rate for those customers that are replacing potable
9	water with reuse.
10	The golf courses aren't replacing potable
11	water with reuse. They are replacing groundwater.
12	It has a different cost and it is usually under
13	separate contracts with different situations.
14	Q Are you planning you are not planning to
15	do this in this rate case, are you? This is in
16	future considerations?
17	A Well, I would prefer it was done in this
18	rate case, quite honestly, if there was a separate
19	rate established for potable replacement.
20	Q Would supply and reuse to a golf course
21	if supply and reuse to a golf course is the lowest
22	cost disposal option for SSU at a given location
23	wouldn't that be also taken into consideration, as
24	well?
25	A Yes.
	FLORIDA DIBLIC SERVICE COMMISSION

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1	Q Okay. If you would please refer again to
2	the Composite Exhibit 249, and go to pages 13 through
3	15 of that exhibit. If you would just take a minute
4	or two to look through those pages, please, sir.
5	A Which exhibit?
6	Q This is the Composite Exhibit 249 at pages
7	13 through 15.
8	A Okay.
9	Q Which is where Mr. Sweat provides a
10	detailed justification for not charging for reuse for
11	several plants.
12	What we would like to know, Mr. Ludsen, is
13	if you are in agreement with Mr. Sweat's response to
14	this discovery request?
15	A I haven't gotten through it yet.
16	Q When you are ready.
17	A It is a lot to digest in a very short time
18	here.
19	Q I don't mean to rush you. (Brief pause.)
20	A I guess I've read it.
21	Q Pardon me, sir?
22	A I've read it.
23	Q Are you in agreement with that response?
24	A I have no way of verifying it.
25	Q Okay. Does anything jump out at you as
	FLORIDA PUBLIC SERVICE COMMISSION

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1	being blatantly wrong?
2	A No.
3	Q Thank you. Moving on to the other exhibit,
4	which was passed out to you and marked as Exhibit
5	250, the late numbered file number 2 to your April
6	8th deposition.
7	A Okay.
8	Q You have outlined which customers have
9	their own water wells, right?
10	A Yes.
11	Q And you provided additional information on
12	why these customers are not charged?
13	A Yes.
14	Q If you would refer to the fourth paragraph
15	from the bottom of the page of that exhibit. You
16	indicate that customers with their own supply wells
17	have agreed not to use them; right?
18	A Yes.
19	Q Do you know whether these wells are
20	abandoned or whether they are still available for
21	backup for the golf courses?
22	A No, I don't.
23	Q This exhibit seems to indicate that in
24	determining whether or how much to charge for reuse
25	that you consider whether SSU has acquired a contract

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1	with a particular plant; is that right? This is on
2	the second paragraph from the bottom of the page.
3	A Yes; in those situations, yes.
4	Q And the exhibit, which is the exhibit
5	marked No. 250 indicates that you also consider
6	whether there are disposal problems at a particular
7	plant; right?
8	A Yes.
9	Q Are you aware of the Commission's authority
10	to allow a utility to recover the costs of a reuse
11	project from the utility's water, wastewater, or
12	reuse customers?
13	A Yes.
14	Q Didn't SSU support the initial draft of the
15	legislation which provides the Commission with that
16	authority?
17	A Yes.
18	Q From the utility support of the legislation
19	can we assume that SSU believes that the ability to
20	allocate some cost to water customers is a good
21	idea?
22	A Well, I think there is a benefit to the
23	water customers.
24	Q But SSU doesn't propose recovery of any
25	reuse cost from any of your water customers at this
	FLORIDA PUBLIC SERVICE COMMISSION

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1	time; is that correct?
2	A I haven't really given it a lot of
3	thought. I'm not sure exactly how to quantify the
4	amount, but I realize there is benefit to the water
5	customers from reuse.
6	Q So you didn't propose such an allocation in
7	this docket because you haven't given it enough
8	thought?
9	A That's correct.
10	Q Okay. Are you saying, though, that you
11	agree that reuse benefits water customers because it
12	ultimately results in preserving groundwater
13	supplies; is that right?
14	A Yes, that's the ultimate benefit of it,
15	yes.
16	Q Is it correct that to date SSU has not
17	attempted to quantify any benefits of reuse to water
18	customers?
19	A That's correct.
20	Q And to date SSU has not developed a
21	methodology for allocating such benefits to water
22	customers; is that also correct?
23	A Yes.
24	Q Referring again to what was marked as
25	Exhibit 250, the late filed Exhibit No. 2 to your

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FLORIDA PUBLIC SERVICE COMMISSION

		5279
1	April Oth	deposition. In column 2 you show that
	-	
2	eight reu	se customers received reclaimed water at no
3	cost; cor:	rect?
4	A	Yes.
5	Q	Is SSU presently providing service to these
6	reuse cus	tomers pursuant to contract; do you know?
7	A	Did you say eight reuse customers?
8	Q	Yes, sir.
9	A	At zero cost?
10	Q	Yes, sir.
11	A	I've got five on the exhibit here. Are you
12	looking a	t the
13	Q	I'm looking under customer name.
14	A	Okay.
15	Q	Which is column two.
16	А	I see it, yes.
17	Q	Okay. Is it your testimony then that there
18	are eight	reuse customers who receive reclaimed water
19	at no cos	t?
20	А	Yes.
21	Q	Do you know whether SSU is presently
22	providing	service to these reuse customers pursuant
23	to contra	ct?
24	А	That's my understanding, yes.
25	Q	On what was marked Exhibit 250 you indicate
		FLORIDA DUBLIC SERVICE COMMISSION

	5280
1	that the Deltona plant is among those plants that
2	provide reuse service at no charge, right?
3	A That's correct.
4	Q If you would please, sir, refer to the MFR
5	page we handed you a few minutes ago, Page 464 of
6	volume five. If you would go to line 50. Let me
7	know when you are there.
8	A I'm there.
9	Q Thank you. Mr. Bencini shows a present and
10	proposed effluent rate of \$0.06 per a thousand
11	gallons for the Deltona plant; right?
12	A Yes.
13	Q Also on this schedule, if you will look at
14	footnote three at the bottom of the page, Mr. Bencini
15	indicates that this rate is by contract and that it
16	cannot be changed; do you see that?
17	A Yes.
18	Q In light of this information, can you
19	explain why on Exhibit 250, your late filed depo
20	Exhibit No. 2, that the Deltona plant provides reuse
21	service at no charge?
22	A I think the situation there is that we have
23	to have a site for our reuse. We have no
24	alternatives, but to deliver it there. And even
25	though I believe the contract does say \$0.06, but
	FLORIDA PUBLIC SERVICE COMMISSION

	5281
1	we are unable to forge them to have begauge we have no
	we are unable to force them to pay because we have no
2	alternative disposal for our reuse at Deltona.
3	Q So you are currently not charging it?
4	A That's my understanding.
5	Q Do you know whether a charge is included
6	within your tariff for reuse service for the Deltona
7	plant?
8	A According to the schedule here there is a
9	charge, but I would have to look at the tariff,
10	specifically.
11	Q Okay. Also by exhibit marked No. 250, at
12	the bottom of the page you indicate that the
13	Commission chose not to change revenues for these
14	reuse customers in docket number 920199-WS, which was
15	SSU's last rate case; correct?
16	A Yes.
17	Q But in that docket reuse rates were not
18	enumerated as a separate issue in which the
19	Commission voted not to change those rates, were
20	they?
21	A Yes, they were a separate issue.
22	Q Okay. Thank you.
23	A In fact, there was a significant cross
24	examination on that issue by particularly the OPC.
25	Q Thank you. That's all I have on reuse, if
	FLORIDA PUBLIC SERVICE COMMISSION

we could move on. I have a few questions on price 1 elasticity and billing determinants. That's not to 2 say that's all I have, but that's all I have on that 3 topic. 4 5 If you would please refer to page 20 of 6 your direct testimony, beginning at line 18. Here 7 you state that SSU reduced 1996 water consumption to reflect the conversion of certain water customers to 8 9 reuse; right? Α 10 Yes. 11 Regarding the conversion of certain water 0 12 customers to effluent reuse, none of these customers 13 have been converted as of now, have they? 14 Α Which customers are you referring to 15 specifically? 16 Pardon me, sir? Q Which customers are you referring to 17 Ά specifically? 18 19 0 The conversion of water customers to 20 effluent reuse, any of them. 21 Α Are you referring to the Marco customers? 22 To any of the customers. What we would Q 23 like to know is if any of them have been converted to effluent reuse as of now? 24 25 Α I don't believe so.

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1	Q Thank you. Do you know when those
2	customers' conversion to reuse will be complete?
3	A NO, I don't.
4	MS. CAPELESS: Okay. Thank you. I would
5	like to move on to the topic of wastewater only flat
6	rates. And we will hand you a few more documents
7	here. One is a copy of late filed Exhibit 3 from
8	your April 9th deposition which we would like to have
9	marked please, Madam Chairman.
10	CHAIRMAN CLARK: The next exhibit number is
11	251.
12	MS. CAPELESS: Thank you.
13	(Exhibit No. 251 identified.)
14	BY MS. CAPELESS:
15	Q The other is an MFR which we will refer
16	to. If you would take moment to look over the late
17	filed deposition exhibit marked 251, does this appear
18	to be a true and correct copy of that document?
19	A Yes, it does.
20	Q Thank you. Did you prepare this exhibit at
21	the request of Staff?
22	A Yes, it was prepared under my supervision.
23	Q Does it show that SSU service area does
24	it show the SSU service areas that have wastewater
25	only residential service?
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1	A Yes.
2	
	Q And according to this exhibit marked 251,
3	you have nine such service areas; correct?
4	A Yes.
5	Q If you would please take a look at the MFR
6	page that Staff just distributed, which is MFR
7	Schedule E-21 page 59 of 72; according to this MFR
8	schedule Buenaventura Lakes also has residential
9	wastewater only customers; is that correct?
10	A It has zero bills.
11	Q It has zero bills?
12	A Well, the schedule shows zero bills.
13	Q Is that why you didn't include Buenaventura
14	Lakes in your exhibit which is marked 251?
15	A I would have to check and verify that.
16	Q Okay. Isn't the flat rate based on an
17	estimate of water consumption for these customers
18	which is applied to the wastewater rate?
19	A Yes.
20	Q Under the present rates isn't it true that
21	this estimate of water consumption is different for
22	each of the wastewater only service areas?
23	A Yes.
24	Q Isn't it also true that under the present
25	rates this estimate of water consumption is based on
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the average consumption of the metered residential 1 2 customers within the particular service area? Yes, with the exception of Tropical Isle. 3 Α Okay. According to Exhibit 251, Tropical Q 4 Isle has no metered residential customers in the 5 6 service area; right? 7 Α That's correct. 8 0 Under present rates where do you get the 9 average consumption upon which to base the flat rate 10 for Tropical Isle? Basically, it is just taking the total 11 Α 12 revenue requirements for Tropical Isle and dividing 13 it by the number of bills for the customer so you end 14 up with a flat rate. 15 Q Thank you. Under the utility's proposed 16 rates, isn't it true that you have used the same estimate of water consumption for all of the 17 18 wastewater only service areas? Α Yes. 19 20 0 This estimate of water consumption under the proposed rates is based on the average for the 21 22 entire SSU residential water customer base; right? 23 А Yes. 24 Q Mr. Ludsen, are you aware that at one of the service hearings held in this docket a customer 25

of Tropical Isle stated that he is a water customer
 of another utility and is metered for water service?
 A I recall that, yes.

0 And he questioned why he should have to pay 4 a flat rate for wastewater, rather than paying a 5 metered rate like the other wastewater customers. 6 Are you aware that other wastewater only customers at 7 that service hearing wanted to know why there isn't a 8 9 vacation rate so that when customers are away for a 10 period of time they won't be billed the full wastewater only flat rate? 11

12 A I recall that discussion from my 13 deposition. And I think my response was that it 14 would be very difficult to have a vacation rate; 15 because first of all, you don't know when people go 16 on vacation.

But second of all, no matter what you do 17 18 they are going to end up paying that total revenue 19 requirement. If you had a vacation rate you would 20 have a lower rate for a certain period of time. Then 21 you would have to have a higher rate for the 22 remaining period of time. So ultimately they end up 23 paying the same amount anyway. A vacation rate just 24 wouldn't, to me, wouldn't make sense for 228 customers when the end result is going to be the 25

1	same.
2	Q Isn't it true, though, that because the
3	wastewater only rate includes some estimate of
4	consumption, that when these customers are away they
5	are paying for consumption even though they are not
6	there and not using water that goes to the wastewater
7	system?
8	A It could be. I mean, but that's very
9	difficult to predict. I mean if you had a vacation
10	rate and they didn't go on vacation they would get a
11	lower rate during the vacation period and a higher
12	rate when they are not in the vacation period. So it
13	is very difficult to predict. Ultimately, they are
14	going to pay basically the same amount no matter how
15	you do it.
16	Q Is that true only under a stand alone
17	rate?
18	A Well, it would be the same amount under a
19	uniform rate, too.
20	Q Okay. If the company were to offer a
21	vacation rate, couldn't you establish certain
22	criteria requiring customers to notify the utility
23	when they are going away and when they plan to
24	return?
25	A Boy, that would really be an administrative
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1	nightmare. Then you would have people telling us
2	they are going on vacation when they are not going on
3	vacation so they can get the lower rate. I don't
4	know how you would ever police something like that.
5	Q Residential wastewater customers that are
6	metered by SSU for water service, they pay the
7	wastewater base facility charge during months that
8	they are not there; is that right?
9	A Yes, they do.
10	Q Wouldn't it be fairer to bill these flat
11	rate wastewater only customers the same base facility
12	charge for the months that they are away?
13	A I don't understand the question. Could you
14	repeat it?
15	Q Sure. Wouldn't it be fair to bill these
16	flat rate wastewater only customers the same base
17	facility charge for the months that they are away?
18	A They are billed the same. I mean, that's
19	what a flat rate basically is. It is a base facility
20	charge.
21	Q But that is base facility charge and
22	including gallonage, isn't it?
23	CHAIRMAN CLARK: Mr. Ludsen, I think what
24	she is suggesting is why the people you don't
25	measure the water for why don't you just charge
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1	them the same base facility charge that you charge
2	for the customers who have, who are also water
3	customers for you?
4	BY MS. CAPELESS:
5	Q Assuming you could somehow get rid of the
6	administrative nightmare that you just testified
7	about.
8	A Well, that's a big concern. I mean, that
9	is a very big concern.
10	Q Now, according to Exhibit No. 251 that was
11	just
12	COMMISSIONER KIESLING: Wait a minute, I
13	never heard the answer to why he couldn't.
14	BY MS. CAPELESS:
15	Q Okay. Could you explain further, please,
16	sir?
17	A I just want to make sure I understand it
18	again. Would you go through it once again?
19	Q If you could somehow eliminate the
20	administrative nightmares involved
21	A Is this for Tropical Isle you are speaking
22	of now?
23	Q For any of the wastewater, the flat
24	wastewater only rate customers, wouldn't it be fairer
25	to bill these customers the same base facility charge
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for the month that they are away? 1 They are billed the same base facility 2 Α charge for the month they are away. 3 COMMISSIONER KIESLING: I don't think you 4 are understanding the question. The same base 5 facility charge as your other charges who are both 6 7 water and wastewater. WITNESS LUDSEN: But then you are not 8 charging them for the other side of the equation, 9 which is the gallonage part of the equation. And how 10 do you know when they are away? We don't have meters 11 on these customers. 12 BY MS. CAPELESS: 13 Assuming you can determine they are away, 14 0 is the question. Wouldn't it then be fairer to 15 charge them the same as what you are charging the 16 other customers, which is the base facility charge 17 minus the gallonage? 18 Well, I suppose theoretically if they are 19 Α away then they wouldn't have the gallonage part of 20 it, but then you would have to monitor when people 21 are going away again. 22 Q Okay. Thank you. 23 CHAIRMAN CLARK: Mr. Ludsen, as I 24 25 understand your concern, the reason you wouldn't want

1	to do that is because you have no way of verifying by
2	the water bill whether they are there or not.
3	WITNESS LUDSEN: Right.
4	CHAIRMAN CLARK: When you do both water and
5	wastewater you can verify they are not there based on
6	how much water they don't use.
7	WITNESS LUDSEN: That's correct.
8	CHAIRMAN CLARK: Would that be your
9	concern, if you are not metering the water, to be
10	able to tell that they are actually on vacation
11	through their usage, you just can't do it.
12	WITNESS LUDSEN: That's correct.
13	BY MS. CAPELESS:
14	Q Thank you. According to what was marked
15	Exhibit No. 251, again, that was just passed out,
16	Tropical Isle is the only service area that has
17	wastewater only residential customers who receive
18	metered water service; is that right?
19	A Non-metered.
20	Q Tropical Isle, are they not metered?
21	A No.
22	Q For water service?
23	A We don't meter Tropical Isle's customers.
24	Q They are metered by some other utility?
25	A Fort Pierce.
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1	Q Thank you. You also state in this exhibit
2	that the company has had problems in the past trying
3	to get metered consumption information from
4	municipalities in order to bill wastewater only
5	customers; is that right?
6	A Yes. I talked to the billing people. They
7	have had experience with this. They said it is very
8	difficult, especially if you have any customer
9	complaints. You know, how do you solve a customer
10	complaint when you don't have the billing information
11	for that customer. You have to rely on somebody
12	else's information.
13	Q Have you ever experienced a problem in
14	getting this information from the City of Fort
15	Pierce?
16	A We've never tried to get the information
17	from the City of Fort Pierce, to my knowledge.
18	Q Okay. Also, in the same exhibit, 251, you
19	state since Tropical Isle has no customers other than
20	residential wastewater only customers, that any
21	change in billing structure from a flat rate just
22	redistributes the revenue requirement among those 228
23	customers; right?
24	A That's correct.
25	Q Isn't that true only if a stand alone rate
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structure is approved in this docket? 1 2 Α It depends on what kind of rate structure 3 you ended up with. Q Thank you. Now, Mr. Ludsen, you are 4 vice-president in charge of finance and 5 6 administration; correct? 7 Α Yes. And I see according to your testimony that 0 8 you are responsible for all matters relating to 9 rates, accounting, human resources and 10 administration; right? 11 12 Α Yes. I note from the company's filing that you 13 Q 14 have requested increases in monthly service rates, 15 base facility and gallonage charges for both water and wastewater, and increases in your service 16 availability charges, main extensions, meter 17 18 installation and so forth, but you've not requested 19 increases for any of the miscellaneous service 20 charges. 21 Can you tell me, Mr. Ludsen, was that your 22 decision? 23 Α We haven't done a study on miscellaneous 24 service charges. We relied on Staff Advisory Bulletin number 13, as we did in our last rate case, 25

which outlines what the miscellaneous service charges
 should be. And since we have not done a study to
 update or to determine what the actual charges are
 for SSU, we relied on Staff's charges outlined in
 Advisory Bulletin 13.

Okay. So what kind of cost study do you 6 0 7 envision would need to be undertaken in order to determine a change in those charges? Would it be 8 something along the lines of determining the 9 functions involved, determining the approximate times 10 11 to perform the functions, the hourly costs? And then finally, estimating the cost of each of the services? 12 13 Α Yes, including computer time, et cetera. I'm sorry, sir? 14 0 15 Α Including computer time, et cetera. 16 Wouldn't you agree that if the company had 0 17 wanted to request an increase in these charges that 1.8 there are other ways to demonstrate the current charges are inappropriate other than doing a cost 19 study? 20 21 Α I don't know on what basis. I quess I haven't -- if you haven't looked at the information, 22 if you haven't looked at the cause of the costs, and 23 since the Staff has the charges outlined, I wouldn't 24

-- without a study I wouldn't know what the cost

25

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1	should be.
2	For instance, I notice on one of the
3	proposals by Staff was increase of the bad check
4	charge to \$30, return check charge for \$30. And in
5	that case, there is a statute, I believe, Statute
6	832.07(1)(a), which says that the return check charge
7	can't exceed \$20 or five percent of the bill.
8	Q Okay. Thank you, sir.
9	A So that is what I'm talking about, as far
10	as doing an analysis and research on these costs to
11	make sure that the costs are appropriate.
12	Q Well, as an example, Mr. Ludsen, I'm
13	recalling from looking at your filing and your direct
14	testimony that you based your requested service
15	availability charges on a market survey, a
16	comparative analysis, if you will; isn't that right?
17	A Yes, that's correct.
18	Q Couldn't you have done the same thing for
19	miscellaneous service charges if you had wanted to do
20	it that way?
21	A That's one of the things we would do if we
22	were to analyze the charges. We would do a survey of
23	other utilities in the State of Florida to determine
24	what type of charges they charge for and what the
25	charges are to make sure that we are competitive with
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1 them; as well as look at the costs behind the 2 charges. But in that case you would probably end up, 3 you would want to have a rate that's competitive with 4 other utilities around you, also.

5 Q Wouldn't you agree it would have been a 6 relatively simple task for the company to demonstrate 7 that the current charges are old and haven't changed 8 in several years?

Well, I don't know how simple it would be 9 Α because we were pretty busy putting the rest of the 10 11 filing together and doing studies on service 12 availability and the like. So, the answer is no, it wouldn't have been an easy task for us. 13 If you weren't in the middle of a rate case it probably 14 15 wouldn't have been that difficult. I think it is something that should be done in the future. 16 17 Wouldn't you agree that the underlying 0

18 costs of the services are captured in the NARUC O & M
19 accounts which have been indexed annually?

20 A In the NARUC accounts. I don't understand 21 that.

Q Operation and maintenance accounts.

22

A I can't say that. I would assume there has been some increase in the costs since 1988, which is when the Staff Advisory Bulletin was put out; but

then again, I guess, you know, maybe the Staff
 Advisory Bulletin should be updated for inflation or
 whatever.

Q Mr. Ludsen, do you believe that as a regulatory philosophy the Commission should look to all possible revenue sources when setting rates, or should they just assume any revenue increase should come from monthly service rates?

9 A Well, I think that before we change rates 10 we should have some basis for the change and some 11 support for the change. And my problem with this is 12 there isn't any support for these changes, other than 13 just doubling the rate, which I don't think is 14 appropriate. Or it may be appropriate, but I don't 15 know if it is appropriate.

16 Okay. Do you believe that the Commission 0 should consider indexing miscellaneous service 17 18 charges; that is when the Commission allows utilities to index their monthly service rates, do you believe 19 20 it would be appropriate to also index these charges? 21 I think it probably could. Α I think you would want to make sure that your starting point is 22 23 correct, though. I would certainly want to look at other utilities, though, and get a comparison of what 24 25 other utilities in the state are charging. Because I

don't know, you would have to figure out what index
 really applied to these types of charges. So I would
 like to see surveys done periodically by the Staff to
 determine what these charges should be.

Q Okay, thank you, sir. My last series of
questions for you concerning your direct testimony go
to rate case expense.

8 Do you agree that the costs incurred for 9 the jurisdiction docket, docket number 930945-WS are 10 non-recurring costs?

I'm not sure if they are or not because I 11 Α 12 think there are some workshops coming up for like used and useful. I think we consider those to be in 13 14 the same category as those type of proceedings. So I 15 think that, I think to some extent they are recurring over time. Maybe not -- it won't be the same topic, 16 but you are going to have other proceedings. 17

18 Q But the topic that was involved in the 19 jurisdiction docket, that is not something that will 20 recur; is that correct?

A Not that particular topic, but I think when you are looking at costs you are looking at -- it may not be exactly the same topic, but you could have another proceeding of a different topic, which, you know, ends up costing the company money.

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1 0 Is it your testimony that you could have a 2 similar topic of the same magnitude every year as the magnitude of the jurisdictional docket? 3 Α Probably not. The jurisdictional docket 4 5 costs us about \$95,000, I believe it was. I wouldn't suspect that a workshop would cost that much. 6 Ιt 7 could, I suppose if you had to bring in experts to 8 testify in those proceedings, but probably not. 9 0 The company doesn't object to amortizing this amount over five years as long as the 10 11 unamortized portion is included in working capital; is that right? 12 13 Ά That's correct. 14 Do you agree that these costs should be 0 amortized over five years? 15 As I responded to, I think it was an 16 Α Yes. 17 interrogatory response, we would not object to having 18 those amortized over five years because we don't know 19 in this case if there would be other proceedings of 20 the magnitude of that proceeding. So that would seem 21 fair to us, as long as we can include the amortized 22 portion and working capital. 23 Is it correct that you budgeted \$47,765 for Q 24 both 1995 and 1996 for these costs? 25 Α Yes.

Isn't it correct that the amount included 1 0 2 in the 1996 test year expenses for jurisdiction costs is 48,696? 3 4 Α Yes. It was about that. In SSU's position in the prehearing order 5 0 on issue 95, it states that the total costs incurred 6 for the jurisdiction docket were approximately 7 \$100,000; right? 8 Α Yes. 9 10 Is this supported by any testimony or Q exhibits, do you know? 11 12 I don't know if it is specifically referred Α 13 to in testimony, but the costs are included in the filing. 14 Is it correct that these costs should be 15 0 spread to all SSU's customers and not just the 16 17 customers of facilities included in that docket? 18 Α That's correct. That case applied to -- it 19 was a jurisdictional case. If it is charged to regulatory commission expense, other would be 20 allocated to all customers. 21 22 Q Okay. According to your response to the 23 interrogatory that you mentioned, it was interrogatory number 426, the most recent estimate 24 for these costs you said was \$95,530, and that it 25

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1	should be amortized over five years, for an annual
2	expense amount of 19,106; does that sound right?
3	A Yes.
4	Q Isn't it correct that in determining the
5	amount of rate case expense amortization requested in
6	this case, that you've taken the prior unamortized
7	balances of rate case expense for the following rate
8	cases, those being Charlotte County, the Marco
9	Island, which is 920655-WS, and the 920199 docket,
10	and the Lehigh rate case, which was 911188-WS?
11	A Would you repeat those?
12	Q Yes, sir. You want me to repeat the rate
13	cases?
14	A Yes.
15	Q Charlotte County, the Marco Island, which
16	was 920655-WS, the 920199 docket, and the Lehigh rate
17	case, which was 911188-WS.
18	A Yes.
19	Q Thank you. And then you added the
20	additional costs, not considered by the Commission,
21	incurred for the appeal of docket number 920199-WS to
22	the prior unamortized amounts; is that right?
23	A That's correct.
24	Q You then added the current estimate of rate
25	case expense to this amount and amortized the total

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over four years; is that right? 1 2 Α Yes. For the estimate of the current rate 3 case, yes. For those prior rate cases mentioned above, Q 4 5 or mentioned earlier, except for Charlotte County SSU's rates will be reduced at the end of four years; 6 7 is that right? Α That's correct. 8 The amounts of the four year rate 9 Q reductions were a fixed amount included in those 10 11 final orders based on the approved rate case expense; 12 right? Yes, at that time. 13 Α 14 Based on the dates the rates in those prior Q dockets went into effect, do you agree that the four 15 year rate reductions will occur in 1997? 16 17 Α No. 18 0 When will it occur? 19 Well, if you reamortize them they will Α 20 occur four years from the effective date that the rate is going in effect in this docket. 21 22 But the rates will still be reduced after 0 23 four years according to the law, correct? 24 Α Well, what you've done is reset the rates we filed before the four year expiration date. 25 We

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are resetting new rates, so you reset a new reduction 1 2 amount in four years. If we hadn't filed -- if we had filed later than the four years we would have, or 3 if we hadn't filed this case after four years then 4 5 you would reduce the rates. But we are in another 6 proceeding now and you are resetting the rates. In 7 essence, you are reducing them automatically by 8 resetting the rates.

9 Q If the Commission adds those prior 10 unamortized amounts to the current expense to be 11 amortized over four years, the dollar amount of 12 amortization will be less than the amount approved in 13 those dockets, won't it?

14 A Well, you are just redistributing the 15 dollars that were already approved in the prior 16 docket.

17 0 But you are taking the remaining balance 18 previously amortized over four years and then 19 dividing that amount by four more years, aren't you? 20 Α You are taking the unamortized balance, the 21 amount that we didn't recover from the prior rate 22 case, you are taking that balance and you are 23 redistributing it over the next four years, because 24 you are resetting the rates in this case. And then at the end of four years, assume we didn't have 25

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1	another rate case, we would reduce our rates for the
2	amounts that we included in this case.
3	Q Okay. Pardon?
4	A Okay. Do you need more on that?
5	Q If you want to give more, that will be
6	fine. I didn't mean to cut you off.
7	A I just wanted to make sure you understand
8	what I'm saying.
9	Q That's fine. Thank you, sir. Mr. Ludsen,
10	moving on, the Spring Hill facilities were included
11	in docket numbers 920199-WS and 930880-WS; correct?
12	A Yes.
13	Q Has the utility requested to spread the
14	additional costs incurred for that docket to any of
15	the Spring Hill customers?
16	A Which docket are you referring to?
17	Q Either one of those two dockets, the last
18	rate case or the jurisdictional docket.
19	A No. They are not FPSC customers anymore,
20	or they are not under the FPSC jurisdiction anymore.
21	Q Isn't it correct that Spring Hill's
22	residential rates changed as a result of docket
23	number 930880-WS?
24	A Spring Hill's wastewater rates, yes.
25	Q There are also several facilities in this
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1	current docket that were not included in docket
2	number 920199 or 930880, right?
2	A Yes.
4	Q Such as Marco Island, Lehigh and new
5	facilities?
6	A Yes, they were different dockets.
7	Buenaventura is also in this case, which wasn't in
8	any previous docket.
9	Q Why should the customers of Marco Island or
10	Lehigh pay the increased costs for a docket that did
11	not relate to them?
12	A Because they are under the FPSC
13	jurisdiction now. When new customers come on they
14	assume the costs of that jurisdiction or that one
15	system. And when facilities leave the FPSC
16	jurisdiction they are removed of those costs.
17	So basically it is like any allocation.
18	You don't go back and try to determine, you know,
19	when that cost originated or why. Everybody within
20	the jurisdiction gets allocated the costs equally.
21	That's one of the basic tenets of allocation.
22	Q Thank you. Mr. Ludsen, do you agree that
23	the Commission should calculate revenue requirements
24	on a plant specific basis?
25	A I would like to see them determined on a,
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if you have uniform rates, on a total jurisdictional 1 2 basis; but in this case we did calculate the revenue requirements on a plant specific basis. You almost 3 have to because of the way the used and useful 4 numbers are calculated plant by plant. 5 So my answer to that under the current 6 7 situation, yes, you almost have to do that plant by 8 plant. 9 MS. CAPELESS: Okay. Thank you, sir. 10 That's all I have concerning the direct testimony. CHAIRMAN CLARK: Mr. Beck, you indicated 11 12 you had no questions. 13 MR. BECK: That's correct. 14 CHAIRMAN CLARK: Mr. Twomey, how much do you have? 15 16 I will probably just take --MR. TWOMEY: 17 well, Mr. Ludsen is such a good witness I'm always 18 leery to guess, but I would say probably in the neighborhood of a half hour, something like that. 19 20 CHAIRMAN CLARK: Why don't we take a ten 21 minute break, and we will come back and start with 22 your cross examination. (Brief recess.) 23 24 CHAIRMAN CLARK: Call the hearing back to 25 order. Mr. Twomey.

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1	CROSS EXAMINATION
2	BY MR. TWOMEY:
3	Q Good evening, Mr. Ludsen.
4	A Good evening.
5	Q I'm going to try and be as succinct as I
6	can in my questions, which is difficult for me, then
7	ask you to just do yes or no and whatever explanation
8	you think this hour will tolerate.
9	Let's see. At page 19 of your rebuttal
10	testimony, you begin a discussion about how you
11	defend the adoption of a uniform rate classification
12	for the reverse osmosis treatment category; is that
13	correct, sir?
14	A Yes.
15	Q You base that notion on the fact primarily
16	because they are the same treatment, right?
17	A Different treatment.
18	Q I'm sorry. They are different treatment,
19	but the same as each other. Both of them are R.O.?
20	A Yes.
21	Q Now, at some point, Mr. Ludsen, I
22	apologize, you mentioned that the costs, the average
23	cost of the I found it. On Page 42 you indicate
24	that the average base charge for the uniform
25	conventional rates is \$9.17 while the base charge for
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1	the uniform reverse osmosis facilities is 23.62;
2	right?
3	A That's correct.
4	Q Now, it is not your testimony that all
5	conventional treatment plants on a stand alone basis
6	are less than 23.62, is it?
7	A No.
8	Q Because, in fact, isn't it true,
9	Mr. Ludsen, that on a stand alone basis there are
10	some 14 conventional water treatment plants that have
11	base facility charges you have calculated as
12	exceeding \$23.62?
13	A That's possible, yes. I haven't counted
14	them.
15	Q Well, let me just read them and see. I
16	show Fountains if you know of one you could object
17	to or want to double check. I show Fountains,
18	Foxrun, Gospel Island, Lake A J Estates, Lake
19	Brantley, Lake View Villas, Marco Shores, Palms
20	Mobile Home Park, Quail Ridge, Silver Lake Oaks,
21	Skycrest, Stone Mountain, Lakeside, and Palm Valley.
22	So in fact there is a do you have any basis for
23	objecting to those, any of them being less than 23.62
24	on a stand alone?
25	A No, I don't.
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1	Q And you recognize that there is a cost
2	differential, in fact, between Marco Island's reverse
3	osmosis plant and that of Burnt Store; right?
4	A Yes, on the
5	Q What page is that?
6	A On the base charge you are talking about?
7	Q Yes, sir.
8	A Yes, they are very close.
9	Q You just turned to page. I've lost it. Do
10	you have the page?
11	A Yes, I'm looking at FLL-15, page one of
12	one.
13	Q Okay. Your exhibit shows that there is
14	only about, what, a 1.43, something like that
15	A Yes.
16	Q difference in the base. Big jump in the
17	gallonage charge, though, right?
18	A Yes.
19	Q The difference in the gallonage charge is
20	\$3.11 per thousand for my clients at Marco Island;
21	right?
22	A Yes.
23	Q And for the others at Burnt Store on a
24	stand alone basis it would be \$7.19; is that
25	correct?
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1	A Yes.
2	Q Okay. Now, isn't it also true that there
3	is a big difference in there is a big variance in
4	gallonage charges for conventional water treatment
5	facilities, as well, on a stand alone basis?
6	A Between various facilities?
7	Q Yes, sir.
8	A Yes, there can be.
9	Q And, in fact, isn't it true that several of
10	them exceed even the stand alone gallonage charge for
11	Burnt Store of \$7.19?
12	A That's possible, yes.
13	Q Okay. I mean, let me just read you a
14	couple. If you have any if you want to double
15	check them and disagree with me, please do.
16	I see from a chart that Mr. Hansen has
17	prepared for me from your MFRs, that the gallonage
18	charge on a stand alone basis at Fountains would be
19	1981; at Gospel Island, 7.23; Lake View Villas, 9.93;
20	Marco Shores, 7.59; Palms Mobile, 16.19; Silver Lake
21	Oaks, 16.05; Skycrest, 8.64. And the last one that
22	exceeds the 7.19 is Palm Valley at 8.77.
23	Now, my question to you is if all that is
24	true, isn't it true that the only thing that the two
25	reverse osmosis plants have in common is the fact
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1	that they are reverse osmosis plants?
2	A Yes, they are both reverse osmosis plants.
3	I'm not sure if that is the only thing they have in
4	common. I think they have in common the fact that
5	their base costs or their base charges are very close
6	to each other. Certainly their consumption is
7	radically different, which accounts for the
8	difference in the gallonage charge. Burnt Store has
9	about 4,000 gallons average consumption. And Marco
10	Island has about 15,000 gallons average consumption.
11	Q Yes, sir, but look back at your page one of
12	one of FLL-15.
13	A Yes.
14	Q Now, what you've calculated as a bill at
15	10,000 gallons of consumption is my clients at Marco
16	Island paying their own freight, it would be \$54.61
17	per month, right?
18	A Yes.
19	Q The Burnt Store folks let me ask you
20	this. These rates that we have on stand alone here
21	are based upon your current filing, right?
22	A Yes.
23	Q So that of necessity it includes the
24	Commission giving you well, the hydraulic modeling
25	doesn't affect this but the reserve margin request
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1	you've asked for, elasticity isn't that correct?
2	A Yes.
3	Q The elasticity adjustments you requested?
4	A Yes.
5	Q The weather normalization clause you
6	requested?
7	A Well, the weather, we did propose a
8	separate weather normalization clause, but it doesn't
9	necessarily affect these rates like the other items I
10	think you spoke of.
11	Q Yes, sir, but some of it, it is the, these
12	rates here assume that you get everything you've
13	asked for in your filing; right?
14	A That's correct.
15	Q Okay. So, the Burnt Store folks can assume
16	that if you get everything in your filing that you've
17	asked for, that they would have a bill of 98.84 on a
18	stand alone basis for 10,000 gallons; right?
19	A Yes.
20	Q Now, what you are proposing to do, if I
21	understand it at its core, is just basically say,
22	hey, Burnt Store at 10,000 gallons, assuming you get
23	everything you ask for, is a little less than twice
24	as much as what my clients would pay. And you would
25	average them and charge an average rate, right?
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1	A Yes.
2	Q Okay. Now, on page I want to go to page
3	23 for a moment. I think it is a discussion of
4	Mr. John William's testimony about service
5	availability charges. You say at Page 23, line 6,
6	that I do not believe there is always an inverse
7	relationship between rates and CIAC levels, although
8	there is a predominant perception that this is true.
9	In fact, customer density and consumption are the
10	predominant determinations of rates.
11	And I wanted to ask you with respect to
12	that, isn't it true under the current regulatory
13	policies of the Florida Public Service Commission
14	that CIAC always reduces rate base?
15	A CIAC is a reduction to rate base. I'd hate
16	to use the word "always".
17	Q Well, let me ask you this, if you are
18	uncomfortable with the word "always", let me ask you
19	if you can give me a single exception.
20	A I can't think of any, but traditionally
21	CIAC is a reduction to rate base.
22	Q Right. Now, isn't it true, as well,
23	Mr. Ludsen, that reduced rate base all other
24	things held equal necessitates a lower revenue
25	requirement?
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1	A In theory, all other things held equal, it
2	would.
3	Q Let me try and get a "yes" or "no" out of
4	you again. Instead of pushing you to say yes, let me
5	ask you if you can think of a single exception to the
6	notion that, to the statement that reduced rate base,
7	all other things held equal, necessitates a lower
8	revenue requirement?
9	A I don't believe that is true.
10	Q I'm sorry, I thought let me try again.
11	I asked you isn't it true that a reduced rate base,
12	all other things held equal, necessitates a lower
13	revenue requirement?
14	A Not necessarily.
15	Q Why not?
16	A Because you are missing the expense side of
17	it, which could result in a higher revenue
18	requirement.
19	Q No, I said all other factors held equal.
20	That may not occur, you may want to say that doesn't
21	occur in the real world. I'm saying to you the
22	supposition of my question to you is if everything
23	else is the same, doesn't one case that has a lower
24	rate base than another necessarily result in a lower
25	revenue requirement?
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1	A Yes, that would be true.
2	Q Okay. Now, the perception that
3	therefore, isn't it true that the perception that
4	lower CIAC equals lower rates is generally true
5	unless the CIAC is shared in some manner?
6	A Are you still back to everything else being
7	equal?
8	Q Yes, sir.
9	A Then I think you meant higher CIAC, also.
10	Q I beg your pardon?
11	A You probably meant higher CIAC rather than
12	lower CIAC?
13	Q Yes, higher CIAC results in lower rates?
14	A Everything else being equal, that would
15	probably be a true statement. While not necessarily
16	either, because you are talking about rates now, not
17	revenue requirements.
18	Q I'm sorry, I meant revenue requirements.
19	A Revenue requirements, that probably would
20	be a true statement.
21	Q And it is not true that necessarily results
22	in lower rates because one reason is that uniform
23	rates can foul that relationship up, can't it?
24	A Well, that's not the only thing that can
25	foul it up. It can also be fouled up by density and
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consumption which are other factors that go into 1 developing rates. 2 Yes, sir, but it is one of the things that Q 3 can foul it up; right? 4 Yes, there is always various elements which 5 Α can change the situation. 6 MR. TWOMEY: Okay, sir. Now, on Page 37 7 you talk about some of the options testified to by 8 witness Shafer by the Staff. 9 I have two exhibits, Madam Chairman, I 10 would like to have identified, please. The first 11 small one, Madam Chairman, I would ask for a number 12for. 13 CHAIRMAN CLARK: Okay. The letter to Ms. 14 Lynn Adams, that will be Exhibit 252. 15 (Exhibit No. 252 identified.) 16 MR. TWOMEY: The second is a copy in its 17 entirety of a report prepared by the Staff of the 18 19 Florida Public Service Commission, or I should say it is a report of the Public Service Commission. 20 CHAIRMAN CLARK: Entitled Analysis of 21 Uniform Rates for Water and Wastewater Utilities, 22 that will be marked as Exhibit 253. 23 24 MR. TWOMEY: Thank you. (Exhibit No. 253 identified.) 25

1	BY MR. TWOMEY:
2	Q Now, you say at Page 40 of your rebuttal
3	testimony well, you describe some of the
4	advantages of the option you support if the
5	Commission doesn't adopt uniform rates; is that
6	correct, Page 40?
7	A I discuss the difference in the options,
8	yes.
9	Q Okay. Now, they include that they they
10	are less complex, right? They reflect all factors
11	influencing costs such as density, consumption, CIAC,
12	treatment type, location, age of facilities, et
13	cetera, right? I don't mean to be unfair, that's in
14	your text between lines 3 and 14 of Page 40.
15	A Okay.
16	Q Now, I want to ask you some questions with
17	regard to some of those same factors that compare it
18	to some of the texts that appears in Exhibit 252,
19	Mr. Ludsen. You recognize that document as being on
20	Southern States Utilities, Inc.'s letterhead, right?
21	A Yes, I do.
22	Q Okay. It has got the same address as your
23	current address, right?
24	A Yes.
25	MR. TWOMEY: Let me say, Madam Chairman, I
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think we can for starters tear off the last two pages 1 on this exhibit, which were inadvertently --2 MR. ARMSTRONG: Do you want to just leave 3 them, that way I won have to identify them later? 4 MR. TWOMEY: Pardon me? 5 MR. ARMSTRONG: Why don't you just leave 6 them and I wouldn't have to identify them later. I 7 am glad they are there. I will bring it up myself. 8 MR. TWOMEY: Yeah, I'm sorry, I didn't mean 9 to take them out because they say something --10 MR. ARMSTRONG: That's okay. It makes it 11 easier, one exhibit. 12 MR. TWOMEY: Okay. Let me put them back, 13 then. 14 BY MR. TWOMEY: 15 What I was trying to get to was the 16 Q Okay. end of the letter, Mr. Ludsen, and ask you if you 17 recognize the name Chuck Lewis, Director of Rates. 18 19 Α Yes, I do. Okay. Is he still with SSU? 20 0 21 Α No. 22 Q Okay. 23 Α This letter was written before I was with SSU, also. 24 25 I just wanted to ask you a couple of Q

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questions here. These questions are apparently in answer to a survey sent out by the Public Service Commission Staff. At the top of Page 2, I want to ask you some questions about the answers contained there and see if they are consistent with the reasons you give for proposing uniform rates for the reverse osmosis, the two reverse osmosis plants.

8 Now, that answer says at the top, it says 9 in the counties which Southern States has systems 10 with uniform rates, those systems are grouped in such 11 a way to reflect similar types of water and sewer 12 plant operations, including O & M expense 13 similarities.

14 First, I want to ask you do you think that your Exhibit 15 attached to your rebuttal suggests 15 16 that the 0 & M expenses demonstrated by a difference in the gallonage charge of \$3.11 per thousand and 17 7.19 per thousand suggest that they are similar? 18 19 Α Well, the difference in those charges is more due to density than anything else. Basically, 20 21 you are dealing with the same type of treatment. So 22 you would have very similar costs, as far as expenses are concerned. 23

However, because of the gallonageconsumption used by the different customers, you are

going to end up with a significantly different rate. 1 It is supposed to use in this -- I didn't use this as 2 a basis for the decision to --3 Well, are you finished? Isn't it true that 0 4 a properly designed base facility/gallonage charge 5 rate structure attempts to put the majority of the 6 fixed costs in the base facility charge so it will be 7 recovered with or without consumption in most of the 8 variable costs in the gallonage charge; isn't that 9 true? 10 Well, basically what we've done is --11 Α Mr. Ludsen, if you can answer my question 12 0 first "yes" or "no" and then explain --13 Α No. 14 15 Q -- it will help the process? No? Α No. 16 It is not true that a properly designed 17 0 base facility charge attempts to, rate structure, 18 attempts to put the fixed costs and the base facility 19 20 charge in the variable costs in the gallonage 21 charge? The way it used to be done, before there 22 Α was emphasis on conservation, that is what was done. 23 You went through an analysis of your expenses to 24 determine which were fixed and which were variable. 25

And in the years past, usually about 55 to 60 percent
 of your costs were in the fixed category. And the
 remaining costs were in the variable category.

Now with the move towards conservation, 4 that analysis for the most part has been pretty much 5 ignored. And now it is more on what would be 6 considered a conservation type rate, which is what we 7 8 file in this case, which is 40 percent of our costs in the base charge and 60 percent in our gallonage 9 charge, knowing full well that your fixed costs were 10 11 probably in the area of 55 to 60 base would be in the base charge. So we pretty much ignored traditional 12 approach to separating our costs. 13

Q Is it, going back to your FLL-15, is it your testimony that the difference between the stand alone gallonage charge of 3.11 for Marco Island and the stand alone gallonage charge for Burnt Store of \$7.19 is not primarily due to a difference in the operation and maintenance expenses of those two systems?

21 A Well, yes.

22 || Q Okay.

A I look at it and I see the average consumption for Marco Island to be 15,000 gallons in this example; and for Burnt Store, 4,000. So when

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1	you use that as a denominator against your cost that
2	you are going to include in the gallonage charge you
3	will end up with a significantly higher rate for
4	Burnt Store than you are for Marco Island.
5	Q Because you are spreading 0 & M costs over
6	a smaller body of billable units, right?
7	A That's correct. And Burnt Store, of
8	course, is pretty much of a start-up service area, so
9	you do get some aberrations in your costing.
10	Q Quickly on that point, Mr. Ludsen, if it is
11	a start-up operation now, it was certainly a start-up
12	operation when you bought it; right?
13	A Yes.
14	Q Okay. Now, you say that the I'm still
15	on the top of Page 2 the geographical locations of
16	the systems are also critical to combining systems
17	without causing undue cross subsidization within the
18	rate structure of the various classes of customers.
19	The next paragraph apparently attempts to
20	describe what geographical closeness requires. It
21	says close enough to exchange operators and/or
22	supervisors. Is that the case for what you do at
23	Burnt Store and Marco Island now? Do you exchange
24	operators and/or supervisors?
25	MR. ARMSTRONG: Just for clarification, you
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mentioned that "you" state in the letter. Mr. Ludsen 1 has indicated this letter was written before he was 2 even with the company. 3 MR. TWOMEY: I'm sorry. When I said "you", I 4 5 meant SSU. MR. ARMSTRONG: Okay. 6 WITNESS LUDSEN: No, I don't use this. 7 I'm not using this letter as a basis for what we've 8 done. 9 BY MR. TWOMEY: 10 That's not the question I asked you. 11 Q The question I asked you is do you exchange plant 12 13 operators between Marco Island and Burnt Store? Α No. 14 15 0 Okay. 16 Α Not to my knowledge. Okay. This answer which was provided in 17 0 18 1988, apparently, says in the middle of Page 2, "Southern States has requested uniform rates in 19 20 geographic areas, i.e., counties where plant operations are similar, fixed and variable O & M 21 22 associated with these plants is comparable and cross-23 subsidization was at a minimum." 24 I take it, Mr. Ludsen, that this is no longer the position of your company; is that 25

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correct? 1 Well, I can tell you one thing, that Α 2 statement isn't true back then either because I know 3 at that time they had county uniform rates. There 4 were extreme differences in the cost between the 5 individual facilities within those counties. 6 If you weren't there when this letter was 7 0 written, Mr. Ludsen, how do you know that? 8 Because when I came here in 1989, they were Α 9 involved in some cases in Duval and Seminole County. 10 I know for a fact that there was significant 11 difference in the costs for a facility within those 12 counties and the Commission ordered uniform rates 13 within those counties. 14 Question four, the bottom of the Page, 15 Q asks, "Would you like to see uniform rates 16 implemented in all of the systems operated by your 17 company statewide? Why or why not?" 18 19 Let me read the answer and see if you still agree with it -- by "you", I mean the company. 20 "Uniform rates should be implemented in geographic 21 areas which have similar operating characteristics, 22 comparable O & M levels, and comparable social 23 24 economic levels and life styles." 25 Then there is a statement, "Do we want to

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base our rate design on cross-subsidization merely to 1 placate a difference in social economic levels within 2 geopolitical areas?" 3 Now, I would ask you first, is it your 4 testimony that all of the systems in this case for 5 which you have requested uniform rates have similar 6 operating characteristics? 7 I'm sure they all don't have similar 8 Α operating characteristics. 9 Did you say you are sure they do not all 10 0 11 have? I'm sure there are differences between 12 Δ individual facilities in all different areas, but we 13 14 do operate as one system. I think that is the predominant. 15 Isn't it true that you want to operate as 16 Q 17 one system, Mr. Ludsen? We do operate as one system. 18 Α 19 Q Okay. The Commission has found us to rate as one 20 Α system. 21 22 Q Is it your testimony that all of the systems or service areas contained in this case for 23 24 which you are asking uniform statewide rates have 25 comparable O & M levels?

1	A As I will repeat, there is differences in
2	costs. There is differences in CIAC. There is
3	difference in age of facilities. But the basic, for
4	the water, the conventional water treatment that we
5	propose, the basic thread is that they all treat
6	fresh water treatment and the reverse osmosis
7	facilities treat brackish water.
8	Q Let me ask you this: Do you know whether
9	all of the systems included in this rate case for
10	which you have requested uniform statewide rates
11	serve customers that have comparable social economic
12	levels and life styles?
13	A I'm sure they don't.
14	Q Okay. On Page 3, Mr. Ludsen, isn't it true
15	that in this case you have requested that your
16	administrative and general expenses be allocated on a
17	customer basis?
18	A Yes.
19	Q Okay. Let me read this question to you or
20	this answer and see if it is let me read the
21	question, first. Question five. "Do you have any
22	recommendations for ways to implement uniform rates
23	such that the benefits of reduced administrative
24	costs could be realized while minimizing the negative
25	aspects of cross-subsidization? Please describe your
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recommendations in detail." 1 The answer that SSU gave then is, "Because 2 Southern States Utilities allocated A & G expense 3 based on customers back to all its systems, it would 4 take a tremendous savings to offset a situation where 5 you were faced with cross subsidization." 6 7 And my question to you is aren't there cross-subsidizations involved in this case, 8 Mr. Ludsen? 9 Α There are cross-subsidizations involved in 10 every case, even your so called stand alone case. 11 Let me ask you again? 0 12 In fact, when you are looking at allocation 13 Α 14 factors, if the Commission were to change the allocation factors in this case that would change the 15 results on a stand alone basis. For instance, if you 16 17 were to allocate based on ERCs, Marco Island would probably get another million dollars worth of costs. 18 So there is a lot of things that can change. 19 20 0 Isn't it true, Mr. Ludsen, that there are cross-subsidizations involved between service areas 21 in this case? 22 Well, if you --23 Α 24 I'm sorry, was your answer "yes"? 0 25 А Yes, but we are still one system. And I

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think there are cross-subsidizations no matter what you do. You allocate common costs across all systems whether you have stand alone rates, so called stand alone rates, or so called uniform rates or modified

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stand alone rates.

6 Q You've already indicated to me that you 7 allocate -- you are your questioning the allocation 8 of A & G expense based on customers. And isn't it 9 true, as well, Mr. Ludsen, that the rates you now 10 charge allocate A & G expense based on customers? 11 A That's correct.

Q Okay. Can you demonstrate to this
Commission any tremendous savings resulting from
uniform rates that would offset cross subsidization
in this case?

Well, I think you have to look at the long-16 Α term benefits to all customers. You have to look at 17 various, you have to -- you just can't look at one 18 element of costs. You have to look at all factors. 19 You have to look at potability. You have to look at 20 rate shock. You have to look at the rate case 21 expense. You have to look at ultimately what is 22 going to be best for customers in the long run. 23 24 0 Okay, sir. I want to read you a statement and ask you to see if this still remains true. If 25

you combine for rate design purposes three or four 1 systems with completely different modes of operation, 2 dissimilar expenses, and very uneven social economic 3 levels, you are going to have a real problem with 4 cross-subsidization within that combined systems 5 service territory. Isn't that a true statement now? 6 Well, if you are one system, then I guess 7 Α theoretically it really doesn't matter. 8 Theoretically it doesn't really matter? 9 0 If you are one system it doesn't matter. 10 Α 11 That's what we are. Okay. The next thing I want to ask you 12 0 about, the next sentence, cross subsidization is a 13 very legitimate concern, not only to rate design 14 experts and regulators, but also to the customer 15 trying to make ends meet. 16 17 Now, I don't know how long you have sat in on these hearings the last two weeks, Mr. Ludsen, but 18 have you been here and heard Mr. Bud Hansen testify 19 about his neighbor whose husband went in the 20 hospital? 21 Α No, I missed that. 22 Did you by chance here the gentleman who 23 0 came over and spoke about the inability to even flush 24 his toilets on a regular basis because of the expense 25

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1	of their water bill?
2	A I wasn't here.
3	Q Okay.
4	A Was this a customer that was on modified
5	stand alone rates?
6	Q I don't recall, Mr. Ludsen. Mr. Armstrong
7	can probably ask you that.
8	MR. ARMSTRONG: I won't bother.
9	BY MR. TWOMEY:
10	Q The last question on this document,
11	Mr. Ludsen, the 9th question put to your company by
12	the Staff said, "One of the claimed benefits of
13	uniform rates is that they facilitate centralized
14	recordkeeping and billing functions. However,
15	centralized recordkeeping and billing activities are
16	benefits which appear to be due to centralized
17	management and ownership rather than the use of
18	uniform rates. How have uniform rates enabled your
19	company to reduce costs over and above cost
20	reductions attributable to centralized management?"
21	And the answer given by your company in
22	1988 was this: "After discussing the subject with
23	other managers at Southern States, I don't believe
24	that we can show a cost savings associated with
25	implementation of uniform rates over and above that
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obtained from going to a centralized management." 1 My question to you, Mr. Ludsen, is can you 2 name me one cost savings, aside from whatever expense 3 savings you associate with the filing of a 4 consolidate annual report that you would not 5 otherwise obtain simply from centralized management? 6 Well, I think that -- I can't identify any 7 Α specific cost savings. I know there are inherent 8 cost savings in your billing and your customer 9 service with uniform rates. Wherever you reduce the 10 matrix of rates it does create efficiency, but I 11 think what you have to look at is over the long term 12 how uniform rates will enable the company to grow, 13 which allows you to have economies of scale. And I 14 think ultimately you do realize significant cost 15 savings from uniform rates. 16 Mr. Ludsen, this is at least the third 17 0 uniform rate case you've participated in. It is at 18 least the fourth proceeding, is it not, that 19 questioned the advantages of uniform rates in the 20 last five to six years; isn't that correct? 21 Yes. 22 Ά Your company is asking for something in the 23 0 neighborhood of 18.1 million dollars in increase 24 rates in this proceeding, right? 25

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1	A Yes.
2	Q You are asking this Commission to change
3	the rate structure currently imposed in your interim
4	rates to uniform rates, right?
5	A Yes.
6	Q We are in what is hopefully the last hour
7	of the last day of a two-week hearing. My question
8	to you is, isn't it now time to give to this
9	Commission and to your customers some tangible
10	evidence, some concrete evidence of savings that will
11	accrue by having uniform rates over merely having
12	centralized management?
13	A Well, I think again you have to look at the
14	whole picture. You just can't look at one element
15	relating to uniform rates. One of the big factors is
16	the potability. If you get the customer complaints
17	that we've gotten from the rates that are currently
18	in place, you would understand that it is very
19	critical to our customers to have uniform rates.
20	Q Let me try one more time. You have spoken
21	before of achieved savings from a consolidated filing
22	of an annual report, right? Have you quantified
23	those savings in this case in dollars and cents?
24	A Well, we have talked about the savings
25	related to our costs of capital. We've quantified
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1 that savings. That has been confirmed that there
2 would be a savings of cost capital. We talked about
3 the annual report.

Q Let me start again. Can you quantify for me the savings in dollars and cents that you will tell these five commissioners your customers will accrue as a result of you being granted uniform rates versus merely operating as a centralized management? Can you give us the dollars and cents?

10 A I told you before we haven't calculated it, 11 but we do know there is administrative efficiency, we 12 do know that it does ultimately result in a lower 13 cost of capital. It does result in customers that 14 can afford to pay their bills. It insulates from 15 rate shock. So there are many benefits associated 16 with uniform rates.

And cost is not, cost savings is just not one of the benefits. There is also the savings associated with the annual reports, which is not significant, but it is an example of how you can become more efficient when you don't have to deal with the magnitude of numbers that you have to deal with on a stand alone basis.

Q I take your answer to be that not only can you not give me dollar and cents cost savings

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benefitting from uniform rate structure over any 1 other type of rate structure involving centralized 2 management, but isn't it true that you cannot give me 3 a single quantification in dollars and cents of 4 savings of uniform rates over just centralized 5 6 management? We admitted before we haven't quantified 7 Α the dollars. 8 Thank you. Now, I want to ask you to turn Q 9 to page, look at Exhibit 253, please, which is a 10 publication of the Public Service Commission of 11 Florida, November of 1990. You were with the company 12 at the time that it filed its rate case in 900329; is 13 that right? 14 15 Α Yes. 16 Okay. That case was initially filed in Q July of 1990, right? 17 18 Α It sounds right. Okay. Let me ask you, Mr. Ludsen, if you 19 0 20 would turn to -- these pages are numbered in the document, themselves, in the top of the page. 21 22 Α Which page? 1-3. I just want to ask you, Mr. Ludsen, 23 0 if you know, and you may not, I would like you to 24 25 read to yourself the -- let me read it, starting at

1 the first line. They are not numbered. It says at 2 Page 1-3 -- I would like you to tell me when I finish 3 reading this if this didn't describe your company at 4 that time.

It says, "Southern States Utilities, Inc., 5 SSUI, provides an example of the water and wastewater 6 utility which formally requested consolidated 7 ratemaking treatment for its 13 water systems and 8 four wastewater systems in Lake County in 1985. The 9 company claimed that it made 'good economic sense' to 10 treat these systems as a single ratemaking unit 11 because plant operations and operating and 12 maintenance expenses were similar. 13

"In addition, SSUI claimed that geographic 14 proximity insured similar water treatment and 15 customer demand characteristics, and comparable 16 capital investments per customer across systems 17 encouraged a single tariff price method." 18 Did that describe, if you know, your 19 company back then? 20 I can't say. I mean, I didn't write this. Α 21 Okay. Would you agree with me, Mr. Ludsen, 22 Q that with respect to the comparable capital 23 investment part there per customer, would you agree 24 with me that there is a wide range of variance in the 25

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1 capital investment per customer amongst your various
2 systems filed in this case?

A I think that I would have to look at each system; but I think if you look over time I think it is going to pretty much even out. I think you can go from year to year and you will have significant investment in a particular facility, and maybe no investment in another facility; but over time I think these costs even out.

For the purposes of my question, and I 0 10 don't mean to be rude, Mr. Ludsen, but for the 11 purposes of my question I'm not interested over 12 time. My question to you is wouldn't, if you know, 13 wouldn't an analysis or review of your MFRs filed in 14 this case reveal that there is a wide variance in the 15 capital investment per customer from system to system 16 filed in this case? 17

18 A Because -- the answer is, yes, because you
19 are looking at a very short time period and not a
20 long time period.

Q Yes, that is fine. That's all I wanted you to say. Isn't it true that there is little geographic proximity amongst the 140 plus systems filed in this case?

A I wouldn't say that.

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1	Q Okay. Would you you have on occasion
2	made note of the fact that my clients in Sugarmill
з	Woods use a lot of water, right?
4	A That's correct.
5	Q And that other locations use substantially
6	less, isn't that right?
7	A Yes. In fact, the so called subsidizers in
8	this case use twice as much, have twice as high
9	consumption as the non-subsidizers in this case.
10	Q Sure. On that basis wouldn't you agree
11	with me that customer demand characteristics among
12	the systems you've filed in this case vary
13	substantially from system to system for service area
14	to service area?
15	A They can. In fact, what the basis for our
16	grouping of the plants is the fact we are one system,
17	and the fact we group them by differentiation between
18	the fresh water treatment and the brackish water
19	treatment.
20	And part of the reason that you have
21	significant differences in characteristics and costs
22	is because of consumption and density. And I think
23	if you look at the subsidizer list with their average
24	consumption of 11,600 gallons and non-subsidizer list
25	with average consumption of 5300 gallons, I think
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that tells a big part of the story. 1 I have one last question for you. Let me 0 2 double check that. Would you turn to Page 1-11. 3 Footnote 3, I want to ask you if you can agree with 4 this definition whether or not, Mr. Ludsen, you agree 5 that subsidies occur in this case. That is this: 6 "Subsidization occurs when a person, government, or 7 agency voluntarily or involuntarily provides 8 financial assistance to another person, government, 9 or agency to achieve a reduction in cost or price of 1.0 goods and services for the latter group." 11 Can you agree with that definition? 12 I could agree with that. And I also, it is 13 А inherent in all rates there is subsidization. 14 15 MR. TWOMEY: Thank you, Mr. Ludsen. WITNESS LUDSEN: Whether they are stand 16 17 alone or uniform. Thank you, Mr. Twomey. CHAIRMAN CLARK: 18 Mr. Jacobs, you had questions. 19 MR. JACOBS: Yes, ma'am. 20 CHAIRMAN CLARK: Okay. 21 CROSS EXAMINATION 22 BY MR. JACOBS: 23 Mr. Ludsen, you've been seated for quite Q 24 awhile. Would you like to stand up for a minute? 25

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1	A No, I'm fine.
2	Q You want to get it over quickly?
3	A I'm used to it.
4	Q All right, sir. I just have a few
5	questions for you. And first is, in your position as
6	in charge of administration and human resources, you
7	kind of operate the company then so to speak; is that
8	right?
9	A I do what?
10	Q You sort of operate the company.
11	A No.
12	Q You don't? Are you in charge of the
13	billing as the bills go out, that sort of thing?
14	A Yes.
15	Q You've been there since 1989 I guess you
16	wouldn't say you operate the company if the president
17	is still here but since 1989 you have watched SSU
18	grow to be the company that it is today. And they've
19	grown because they've bought utility companies.
20	When they buy utility companies they
21	capture a customer base who are there because of the
22	monopoly, and they have to use that utility company
23	or either sell their house and move on. So I think
24	you've made the statement in your rebuttal testimony
25	that when you sell one of these I mean when you
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buy one of these companies, you acquire a company, 1 that all the customers benefit, even though as I 2 think you note in your testimony that Buenaventura 3 Lakes, whenever you bought that company, the rates 4 might have gone up some, but everybody gets the 5 benefit of that purchase because you have a larger 6 customer base and you can distribute the overhead 7 amongst more people. 8 That is your testimony, is that not 9 correct? 10 Generally that's a true statement. You Α 11 know, as a general statement the economies of scale 12 is improved when you have a larger customer base that 13 you can spread your costs over. 14 MR. JACOBS: Madam Chairman, I'm in a hurry 15 to leave, too. I think if he just said "yes" or "no" 16 and then explain, that would be okay with me. 17 BY MR. JACOBS: 18 But I think it is your testimony, as well 19 Q when, you sell, conversely, a company, customers do 20 not really benefit, do they? 21 If you are shrinking your customer base it 22 Α will have an impact on customers. 23 So the answer would be "yes" or "no", the 24 0 25 answer to that question would be they do not benefit?

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1	A You would have to look at all the factors
2	involved. I can't say yes or no, because it would
3	depend on the individual situation.
4	Q Well, all things equal, if you have a
5	company that you acquire a larger customer base, all
6	customers benefit. You've made that statement. All
7	things being equal, when you sell one, conversely
8	then there is an impact on the customers, which is
9	not favorable; is that not correct?
10	MR. ARMSTRONG: Objection, Madam Chair. I
11	think this question obviously goes to the gain on
12	sale issue. Mr. Ludsen is not the company's witness
13	on that issue, so he is not prepared to answer the
14	question.
15	MR. JACOBS: Madam Chair, I beg to differ
16	with that. I think the statement is made in his
17	rebuttal testimony regarding that particular issue.
18	MR. ARMSTRONG: Only with regard to the one
19	system claim made by the Public Counsel's office.
20	MR. JACOBS: It says also a one system
21	finding as little to counteract the multitude of
22	reasons provided by SSU witness Sandbulte and Gower
23	requiring SSU to share any portion of the gain with
24	customers would be unlawful and improper.
25	He has kind of opened it up there I think
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for proper inquiry. And I just have a very few 1 questions to ask him about it. It won't be lengthy. 2 CHAIRMAN CLARK: Just the fact it is not 3 going to be lengthy doesn't make it admissible. 4 MR. JACOBS: Again, he talks about 5 acquisitions. 6 CHAIRMAN CLARK: Mr. Jacobs I will allow 7 8 the question. Go ahead. BY MR. JACOBS: 9 All I want is a "yes" or "no" about the 10 0 impacts not being favorable when you sell a company. 11 Based on the logic that you have that when you 12 acquire one it is favorable, so if you sell one and 13 shrink the customer base, logically it has an 14 unfavorable impact on the customers, is that not 15 correct? 16 17 Α Well, you do shrink your customer base, 18 yes. 19 Thank you. So as I understand it, as well, 0 if you were to sell let's say the headquarters in 20 Apopka, of the company, from your rate base -- you've 21 lost part of your rate base because that headquarters 22 23 is now part of the rate base that you are trying to get rates based on. So when you sell that, isn't 24 25 there some methodology here where the customers

ultimately benefit from that because you've reduced 1 your rate base? 2 Not if you sell your headquarters. 3 Α If you sell any building that is part of 0 4 the rate base, there is no benefit given to 5 customers? 6 Well, I mean if you sell your headquarters 7 Α you won't have much of a company. 8 Well, say you have an tent, and you move to 9 Q the tent and you sell the headquarters. And I 10 appreciate the levity at this time of night because I 11 need some of that. I thank you for that. 12 I just wondered if you do sell a building 13 that is part of the rate base, isn't some benefit 14 passed on to the rate payers? 15 Well, I think you are taking all these in a 16 Α You really have to look at the whole 17 vacuum. picture. I can't answer that. 18 All things being equal, you can't say that 190 if you sell part of the rate base that some benefit 20 comes to the customers through the rate process, your 21 rate base is less? 22 It may not be less. If it is fully 23 Α depreciated it may not change. 24 25 0 Given the point that it does diminish your

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1 rate base, isn't there a benefit passed onto the 2 customer?

A If your rate base is less, all other things being equal, there will be a reduction in revenue requirements.

All right, sir. Thank you. So I think 0 6 your point is that, and Mr. Sandbulte and that 7 testimony, also your comments about the Buenaventura 8 thing would be that you don't think the customers 9 ought to receive the benefit from the sale of, say, 10 some utility that occurred in a year when you didn't 11 have uniform rates, because that particular asset at 12 the time was not being contributed to by other parts 13 of -- although you are one company -- to the other 14 parts; is that not correct? 15

A I can't answer that question.

16

Well, let me ask you another one then. Sav 17 0 that if that were your theory, now we are into the 18 situation where you do get the uniform rates that you 19 are asking, and if it is uniform rates, then all the 20 CIAC of all the companies gets lumped into that, and 21 everybody is kind of treated equally, and you have, 22 as I understand it from Mr. Sweat's testimony, 20 23 24 companies that he thinks ought to be sold, that is about 13 percent of the companies you own, and now 25

you sell off one of those companies and you have 1 uniform rates, shouldn't the customers then get the 2 benefit of that because your rate base has been 3 diminished? 4 MR. ARMSTRONG: Objection, Madam Chair. We 5 can get into this kind of speculation until midnight 6 if we wanted to, but it has no relevance to this 7 I think we've already determined that those 8 case. sales are all speculative, not even knowledge of a 9 buyer, not even knowledge that it is a company 10 policy. We can go until midnight with this kind of 11 stuff. 12 MR. JACOBS: I'm not going to midnight. 13 Madam Chairman, I think the issue is --14 CHAIRMAN CLARK: Let me hear your question 15 16 aqain. MR. JACOBS: All right. If he gets uniform 17 rates, which he is advocating, and they now, all the 18 CIAC which I represent some folks got some pretty 19 high CIAC in their utility, and that CIAC is now 20 diminished, it is all part of the amorphous company 21 now, and our uniform rates are now going -- we are 22 all being charged the same, so he sells part of the 23 rate base because now our CIAC is part of his rate 24 25 base. He sells that --

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1 CHAIRMAN CLARK: Mr. Jacobs, let me tell 2 you something. Part of the reason is you 3 editorialize on your question. It is hard for me to 4 follow. If you want to give us -- don't talk about 5 your people having it. Just state what you want to 6 state.

MR. JACOBS: All right. Forget about my 7 8 people having it. If we have a situation where going forward he has uniform -- he gets what he wants, and 9 he sells part of the rate base, which would be one of 10 11 the utility companies, shouldn't that money then be in some fashion to the ratemaking process, since the 12 rate base has been diminished, do the customers now 13 14 benefit, all things being equal.

15 CHAIRMAN CLARK: Can you answer that 16 question, Mr. Ludsen?

WITNESS LUDSEN: My answer is that if the company sells an asset that is an investor-owned asset. It is not a customer-owned asset.

CHAIRMAN CLARK: Let me ask, maybe I can help out. If you sell part of what is -- if you get uniform rates, and you sell one of the utilities that has customers who take service under a uniform rate, and you sell that utility, your rate base will be reduced. Would that be correct?

1	WITNESS LUDSEN: That's correct.
2	CHAIRMAN CLARK: So your revenue
3	requirement would be reduced; is that correct?
4	WITNESS LUDSEN: Right.
5	CHAIRMAN CLARK: Let me ask you this. The
6	gain on sale, assumed you gained, you made money on
7	that sale, how is that going to be recorded? Is it
8	above the line or below the line?
9	WITNESS LUDSEN: I believe it should be
10	below the line because it is an investor-owned
1 1	capital, it is investor-owned assets. You are also
12	losing the customers. It is not just the loss of
13	rate base. You've lost the customers. You've lost
14	the earning power on those assets. So it is really
15	investor-owned assets, not customer.
16	It is like the example in Mr. Sandbulte's
17	testimony. If you own an apartment building
18	CHAIRMAN CLARK: Let me ask you this, do
19	you know what the Commission policy is on gain on
20	sale when it has been in the rate base?
21	WITNESS LUDSEN: No, I don't; but in our
22	last case we had the sale of St. Augustine. There
23	was a gain that went onto the shareholders.
24	CHAIRMAN CLARK: Had that been in the rate
25	base, a Commission jurisdiction company?
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WITNESS LUDSEN: It was in the, it was a 1 county jurisdiction. 2 CHAIRMAN CLARK: Is that "no"? 3 WITNESS LUDSEN: It had not been in the 4 5 FPSC. MR. JACOBS: Thank you, Madam Chair. I will 6 move into another area of inquiry. It is my last 7 area, I promise. 8 BY MR. JACOBS: 9 You state, and you've told me you are in 10 0 charge of billing. Whenever you state on Page 15 11 that the reason -- you think you ought to get all 12 these costs that were involved in fighting this 13 inquiry as to uniform rates, you say on Page 15 line 14 7, this includes the cost incurred to educate 15 customers on the potential impact of them of uniform 16 and non- uniform rates, and are efforts made to 17 encourage customers to attend and participate in the 18 hearings whether for or against uniform rates. 19 20 All right, sir. That is your position. Now, that would include letters you've sent out; is 21 that correct? 22 23 Α Yes. 24 That would include whoever's effort it took Q 25 to put notices on bills about meetings and that sort

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1	of thing; is that correct?
2	A It includes customer notices.
3	Q That would just be a "yes" or "no", if you
4	would, please. In other words, any effort you made
5	towards
6	A Yes.
7	Q Educating people like notices on bills.
8	All right, sir. Now when you sent out the notices,
9	did you send the same notice to all customers?
10	A I don't recall. I didn't send the
11	notices.
12	Q But your billing was under your authority.
13	If the company sent out notices, were those all sent
14	with the same message?
15	A They weren't sent out through billing.
16	Q No messages went out through billing?
17	A No. My recollection is they were sent out
18	in separate mailings. We had FPSC notices that had
19	to be sent out. Those are mailed out separately. We
20	had other notices that were sent out, that were sent
21	out separately. And I don't recall if there is a
22	notice or information on the bills or not.
23	MR. JACOBS: Madam Chair, I just have a
24	brief handout here. Not very lengthy.
25	CHAIRMAN CLARK: Customer bill with
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suggestion by company that customer contact their 1 legislature, we'll mark that as Exhibit 254. 2 (Exhibit No. 254 identified.) 3 BY MR. JACOBS: 4 Now, just to explain the condition it is 5 0 in, we didacted the comments by the customer who 6 7 presented us with the bill. Didn't want to be unfair about it. 8 Now, Mr. Ludsen, this is a notice on a bill 9 that was sent out. And I think as it states, SSU, 10 middle of it says, "SSU is seeking reconsideration of 11 this change. If you want to keep your uniform rates, 12 please write or call the Public Service Commission." 13 Then it skips down, our phone, and your 14 State legislators, Florida legislature, Tallahassee, 15 Florida, at their local offices. Now, this was a 16 message that was sent out. Do you know whether or 17 not this was sent to all customers, whether they 18 benefitted from uniform rates or not? 19 20 No, I don't. When I answered the question Α 21 before, I thought you were referring to the uniform 22 rate proceeding. 23 But it says in your, on Page 15, your Q testimony, line 9, that you -- potential impact to 24 25 uniform and non-uniform rates, and efforts made to

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1	encourage customers to attend and participate in the
2	hearings, whether for or against uniform rates.
3	CHAIRMAN CLARK: Mr. Ludsen, I think, if I
4	might clarify that. As I understood your answer, you
5	were talking about the other rate case on
6	reconsideration.
7	WITNESS LUDSEN: Yes.
8	CHAIRMAN CLARK: And I think that is the
9	distinction he is trying to make, Mr. Jacobs. That
10	notice had to do with the prior case where we were
11	reversed by the DCA.
12	BY MR. JACOBS:
13	Q All right. You are saying even though this
14	was done in December, this particular effort is not
15	part of this \$451,000?
16	A This letter relates to this rate case, not
17	to the prior uniform rate cases.
18	Q So this relates to this rate case then?
19	A Or I'm not sure.
20	Q If it does then, should we be required
21	A My discussion in the testimony relates to
22	the uniform rate proceedings which occurred in 1993.
23	Q 19 what?
24	A I believe it was the '93-'94 period.
25	Q All right. I don't want to be unfair about
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1	it. This bill, though, relates to the current rate
2	case, doesn't it?
3	A I think this bill might relate to that
4	case, also; but I didn't send the bill out, so I'm
5	not sure.
6	Q My point is, isn't contact your legislator,
7	isn't that lobbying, advocacy?
8	MR. ARMSTRONG: Objection. Are we talking
9	about this context in his testimony, or are you going
10	to another rate case? Because this portion of his
11	testimony doesn't relate in any way to this bill,
12	which is what the evidence is now.
13	BY MR. JACOBS:
14	Q Mr. Ludsen, do you know whether or not this
15	Commission had made a decision about stand alone,
16	modified stand alone rates at the time this bill was
17	sent out in December of 1995?
18	A I think they had.
19	Q They had made that decision, right? So
20	that is done. Now, did you think that you would
21	influence the Public Service Commission in that case
22	after they already made the decision?
23	A I didn't send the bill out. I had nothing
24	to do with it.
25	Q But your company did.
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Α Yes. 1 So really this is not about that rate case, 2 Q this is about this rate case; isn't it? 3 MR. ARMSTRONG: Objection. This relates to 4 920119. The testimony would state -- it does not 5 refer to this bill or relate to it in any way. So 6 the whole line of questioning is irrelevant at this 7 8 point. CHAIRMAN CLARK: You know, I am having 9 10 trouble understanding the point that is trying to be 11 made and the answers, quite frankly. Where are you 12 in his testimony? MR. JACOBS: I'm on Page 15. 13 14 CHAIRMAN CLARK: 15? 15 MR. JACOBS: Yes, ma'am. CHAIRMAN CLARK: Because as I read of the 16 17 notice that is on the customer bill, it seems to me what it says is we have reversed our '93 decision, 18 and unless we reconsider -- it gives the average bill 19 20 and urges them to contact their legislator. 21 Now, Mr. Ludsen, what are you talking about 22 on Page 15? 23 I'm talking about the rate WITNESS LUDSEN: 24 case expense related to the uniform rate case docket 25 number 930880.

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1	CHAIRMAN CLARK: Okay. Then it is the same
2	that is listed on this bill.
3	MR. ARMSTRONG: No.
4	WITNESS LUDSEN: This bill, I believe,
5	relates to the cost this is a generic procedure on
6	the uniform rates is what I'm talking about in the
7	testimony. What this bill relates to is docket
8	920199-WS.
9	BY MR. JACOBS:
10	Q All right. I will move onto another
11	question then. Mr. Ludsen, the effort that you had
12	in other words, did you send, and you say you
13	don't know, I guess, I will ask you again. Did y'all
14	have, your meetings, are you familiar there is an
15	expense in here about the meetings you had around the
16	state, you notified people. Did you have meetings in
17	all counties affected or in all counties where your
18	utility companies are located that were affected?
19	A I wasn't involved in that.
20	Q So don't know whether or not this rate that
21	you want, this 451,000 was in all counties?
22	A This \$451,000 relates to the generic
23	uniform rate proceeding.
24	CHAIRMAN CLARK: It is your testimony that
25	this notice is not part of that?
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WITNESS LUDSEN: Yes. 1 CHAIRMAN CLARK: Okay. 2 MR. JACOBS: Just a minute, please. 3 (Brief pause.) 4 BY MR. JACOBS: 5 Mr. Ludsen, this rate case was going on at 6 0 the same time, wasn't it? 7 CHAIRMAN CLARK: As what? 8 MR. JACOBS: As the generic uniform rate 9 case he is talking about. 10 WITNESS LUDSEN: No. 11 BY MR. JACOBS: 12 Wasn't it filed prior to this billing? 13 Q Α The generic --14 15 This case that we are in right now, wasn't 0 this case filed? 16 17 Α This case was filed on June 28th. It was accepted on August 2nd. The generic uniform rate 18 proceeding was over. 19 20 COMMISSIONER DEASON: Let me ask a question. Why then is it relevant that you have 21 22 actual, through January 31, 1996 -- if the case was already over why did you have to update that through 23 January 31st? 24 25 WITNESS LUDSEN: I believe there is an FLORIDA PUBLIC SERVICE COMMISSION

appeal outstanding, but the order was issued by the 1 Commission. The proceeding, the actual FPSC 2 proceeding was over except for the appeal, which I 3 think there is still an appeal outstanding in that 4 5 case. BY MR. JACOBS: 6 7 Didn't you hope by sending this that Q legislators would contact the Public Service 8 9 Commission? MR. ARMSTRONG: Objection, Madam Chair. 10 The witness has already indicated that he didn't send 11 12 the bill. I think we are getting far extraneous. If they had this kind of testimony, they 13 could have given it through their own witness and we 14 15 would have an opportunity to cross examine and get the real facts into evidence through cross 16 They chose not to do so. 17 examination. CHAIRMAN CLARK: Mr. Jacobs. 18 MR. JACOBS: Madam Chairman, they get the 19 benefit, I guess, of the fact we have two uniform 20 21 rate cases moving along at the same time. 22 CHAIRMAN CLARK: He is just asking you 23 about the lobbying. He is asking you about your 24 question. 25 MR. JACOBS: I would ask him to repeat it

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1	again. What was his question about the lobbying?
2	MR. ARMSTRONG: I don't have a question.
3	CHAIRMAN CLARK: He objects to your asking
4	the question about whether or not this is lobbying as
5	being, as outside the scope of the testimony of this
6	witness. And he said he didn't know about the
7	notice.
8	MR. JACOBS: But he did say he was in
9	charge of all billing.
10	CHAIRMAN CLARK: I agree with that.
11	MR. JACOBS: All the bills were sent. I
12	think he is imputed to some knowledge all things
13	under his administration and jurisdiction.
14	MR. ARMSTRONG: That's ridiculous.
15	CHAIRMAN CLARK: I will sustain the
16	objection.
17	MR. JACOBS: All right, thank you. No
18	further questions.
19	CHAIRMAN CLARK: Staff.
20	MS. CAPELESS: Thank you.
21	CROSS EXAMINATION
22	BY MS. CAPELESS:
23	Q We don't have terribly many questions for
24	you, Mr. Ludsen.
25	A Thank you.
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1	Q On Page 3 of your rebuttal testimony, at
2	lines 21 through 24. You state that if either the
3	modified or minimum rate design proposals are
4	adopted, future indexings and pass throughs should be
5	implemented so as to increase the caps and minimums
6	by the amount of increases; correct?
7	A Yes.
8	Q By this you mean that under either of those
9	two rate designs a specific pass through should be
10	implemented only for that specific plant rather than
11	on a system wide basis; is that right?
12	A Yes.
13	Q Do you believe that under either of those
14	two rate designs that indexings should also be
15	implemented on a plant specific basis or on a system
16	wide basis?
17	A Well, what I would like to do, I would like
18	to see it on a system wide basis because of the fact
19	you are going to kind of maintain a steady cap level
20	between the individual plants. And in that way you
21	are not going to have a huge jump in the rate for any
22	particular facility. And then the cap would be reset
23	in the next rate case. So my preference would be to
24	do it on an overall basis, both for the pass through
25	and for the indexing.
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1	Q Mr. Ludsen, would you agree that indexes
2	are allowed in order to recover increase in expenses,
3	increases in expenses due to inflation?
4	A Yes.
5	Q Would you agree that the index factor is
6	the same for each service area throughout Florida no
7	matter where it is located?
8	A Yes.
9	Q Then under a modified stand alone scenario
10	wouldn't it be reasonable to assume that an index
11	should be applied to SSU on a system wide basis and
12	not on a service area by service area basis?
13	A Under a modified I would believe that would
14	be a better alternative, yes.
15	Q Thank you. I have a few questions
16	regarding SSU's wastewater main extension charge of
17	\$280. According to SSU's position on issue 134, you
18	agree that a wastewater main extension charge of \$280
19	for Sugarmill Woods was never approved by the
20	Commission; is that correct?
21	A Yes.
22	Q Also stated in position, in SSU's position
23	on that issue, 134, is that the tariff submitted by
24	SSU effective June 5th of 1992, reflected the
25	incorrect main extension charge of \$280; right?
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1	A Yes.
2	Q But SSU has not charged this amount to this
3	Sugarmill Woods customers; is that right?
4	A That's correct.
5	Q If at some later date it is substantiated
6	that a wastewater main extension charge of \$280 was,
7	indeed, charged to any customer of Sugarmill Woods,
8	do you agree that given SSU's position on this issue
9	it would be appropriate for SSU to refund that charge
10	with interest?
11	A Yes.
12	Q Thank you. Just a few questions on rate
13	case expense. Isn't it true that a portion of
14	Minnesota Power and Light's expenses have been
15	allocated to SSU as test year expenses?
16	A Would you repeat that?
17	Q Sure. Is it true that a portion of
18	Minnesota Power and Light's expenses have been
19	allocated to SSU as test year expenses?
20	A That's my understanding.
21	Q How can the Commission be assured that the
22	rate case expenses for Minnesota Power and Light have
23	not already been included in test year expense?
24	A We will have invoices for the rate case
25	expense charges.
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0 Isn't it true that rate case expense should 1 be reduced for any witness that was stipulated into 2 the records since they didn't have to appear to 3 testify? 4 Yes, if their original estimate included Α 5 costs for the hearing, the rate case expense should 6 7 be reduced for that. MS. CAPELESS: Thank you. That's all we 8 9 have. 10 CHAIRMAN CLARK: Thank you very much. 11 Redirect. 12 MR. ARMSTRONG: Madam Chair, the first item, the company would like to request an 13 14 opportunity to file the updated rate case expense 15 exhibit which generally is filed as a late filed. Ιt has been provided to all the parties. 16 Obviously, we didn't have the updated exhibit at the time we filed 17 18 that testimony. 19 MS. CAPELESS: Madam Chairman, if that's 20 the case we will have some more questions on that 21 exhibit. 22 CHAIRMAN CLARK: Hold on a minute. How do 23 we get updated rate case expense? We've handled this before. 24 25 MS. JABER: Madam Chairman, may I? What

typically happens is the utility's witness has to
 sponsor the updated rate case expense.

MR. ARMSTRONG: Madam Chair, he will sponsor that expense. This is what we were concerned about given discussions. We typically provide all the information, and then it is asked for as a late filed exhibit. It is all provided through a late filed exhibit.

Now we are concerned we did not do -- have 9 a request of a late filed exhibit. All of a sudden 10 11 our expenses would be subject to question because we didn't have it in evidence. We are simply requesting 12 13 that the updated exhibit, Madam Chair, be placed into evidence. Obviously, as I indicated, we could not 14 15 have placed that information into evidence through 16 rebuttal testimony.

MS. JABER: Madam Chairman, if I may respond, we don't allow the utility witness to do that at the end of the case. We don't have an objection to them providing the update, but Staff does have additional questions in light of what just happened.

23 CHAIRMAN CLARK: What additional questions
24 do you have?

25

MS. JABER: If they are going to provide an

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update to rate case expense, obviously we've got to 1 do cross examination on the exhibit. 2 3 MR. ARMSTRONG: Madam Chair, what I'm talking about is what we provided to Staff and to the 4 other parties, as well. As you know, Public Counsel 5 already cross examined on it. If there are questions 6 7 -- this is exactly what we were concerned about. If there are questions Staff has, they have the 8 opportunity to ask those questions as did Public 9 10 Counsel. CHAIRMAN CLARK: Let me back up a minute. 11 12 Just a minute. Do you have an exhibit now that shows 13 updated rate case expense to a certain time? MR. ARMSTRONG: 2,000 pages, I believe, or 14 15 1,500 pages have been provided to all the parties as has been the course of conduct in the past, Madam 16 Chair. 17 CHAIRMAN CLARK: The pages have been 18 19 provided already to Staff. 20 MR. ARMSTRONG: Yes. That is how Public 21 Counsel got it. 22 CHAIRMAN CLARK: As of what date? MS. JABER: Day before yesterday. They did 23 24 provide the copies to Staff, and they did provide them to the parties. That doesn't automatically get 25

CHAIRMAN CLARK: Let me ask Staff this, do we traditionally take updated rate case expense? MS. JABER: We have -- the utility has been allowed to update rate case expense. Traditionally what happens is the utility witness when he takes the stand makes the modification to his testimony that he has updated the rate case expense. CHAIRMAN CLARK: Do you have that updated expense now? MR. ARMSTRONG: 1,500 pages have been provided to all the parties. CHAIRMAN CLARK: Let's take that 1,500 pages and put it in as a exhibit, and then you can cross examine on it. MR. BECK: Madam Chairman, you haven't heard from all the parties on that issue. They've not offered this exhibit into evidence at all. they are doing it now that the witness is getting ready to leave the stand. We object to their attempts to try to offer an exhibit at this point in the hearing. The burden is on them to offer an exhibit at an appropriate time and have the witness to sponsor that exhibit. Merely providing it to the parties two days before the end FLORIDA PUBLIC SERVICE COMMISSION

it in the record.

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of the hearing is inadequate. They have to have a 1 witness come up and have that witness sponsor an 2 3 exhibit. CHAIRMAN CLARK: Mr. Beck, what I'm 4 concerned about is that my recollection of water and 5 6 wastewater cases is that we do take updated rate case 7 expense through the hearing. MR. BECK: But it would be the burden of 8 9 the company to do it an appropriate way. CHAIRMAN CLARK: They have brought it up 10 now. I will allow the witness to sponsor the 11 12 exhibit. I will allow the cross examination, too. 13 MR. ARMSTRONG: Thank you, Madam Chair. 14 CHAIRMAN CLARK: Do you have copies of the 15 exhibit? 16 MR. ARMSTRONG: Do we have the whole thing 17 here? They've already been provided to all the parties, Madam Chair, 1,500 pages or so. I don't 18 believe we have enough to give to all the 19 20 commissioners at this point. 21 CHAIRMAN CLARK: Staff do you have your 22 copy? 23 MS. CAPELESS: We have a summary, I 24 believe.

MR. ARMSTRONG: It consists of the two

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binders Mr. Ludsen has there or three binders. 1 WITNESS LUDSEN: Four binders. 2 MR. TWOMEY: I don't recall getting this. 3 I could be mistaken. How did we get this? 4 MR. HOFFMAN: It was mailed to you. 5 It was mailed to you. 6 7 MR. TWOMEY: A couple days ago? 8 MR. HOFFMAN: Yes. MR. ARMSTRONG: Madam Chair, the cross 9 10 examination occurred on these pages already by the Office of Public Counsel. To say they didn't have 11 the information is pretty incredible. 12 13 MR. BECK: That's not true. My cross examination was on documents I had before we walked 14 into this case, not the same documents he is 15 16 referring to. Mine was based on their response to 17 document request 305. WITNESS LUDSEN: That's what this is. 18 MR. ARMSTRONG: It is the updates to 305. 19 Madam Chair, as you recall very correctly, it is 20 21 always done in this manner through a late filed 22 exhibit. It has always been every case I've been 23 involved in. I find it rather incredible this is the 24 tact that's being taken at this point in time. 25 MR. TWOMEY: May I comment?

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CHAIRMAN CLARK: Go ahead, Mr. Twomey. 1 2 MR. TWOMEY: I'm not one to unnecessarily trod on tradition, but we've heard the company 3 repeatedly in these two weeks object to somebody 4 5 raising a question outside the scope, crying due process, and that kind of thing. 6 7 Now, I haven't even checked my mail, post office box, in ten days. They have four, three or 8 four volumes or maybe it is five Mr. Ludsen has just 9 10 pulled out. My understanding, although I haven't seen it, is that there is, that the request has gone 11 12 from some \$900,000 to 1.6. That's \$700,000. I would suggest, in a general sense, that 13 due process of -- I mean, he whipped those out of a 14 15 hat some place and put them up on the table. And they wanted to ask you that it be a late filed 16 exhibit even though he was sitting on them. Now, 17 18 there is something inappropriate about that. 19 CHAIRMAN CLARK: Well, Mr. Twomey, I understand that. I am concerned about how voluminous 20 21 the document is at this point. 22 MR. ARMSTRONG: Madam Chair, it is no 23 different than it has been in the past. No different than ever in the past. 24 25 CHAIRMAN CLARK: Let me put it this way.

Rate case expense is a legitimate expense. It is 1 though subject to examination by the parties, and 2 cross examination by the parties, as well. My 3 recollection is that it is either provided as a late 4 filed exhibit or provided at the end. And there is 5 not that much opportunity to look at it. 6 7 Now, I need for some proposal for a solution out of this dilemma because I do believe it 8 9 is appropriate to allow the rate case expense to be updated. 10 MS. JABER: That is traditionally what has 11 12 happened. It happens when the witness first takes the stand. Not that this isn't workable, Staff is 13 ready with its questions. We can go forward. As for 14 15 the parties in getting their copies, you know, obviously I can't speak for them. We got our copy 16 two days ago. 17 18 We have taken the view this is the utility's burden, it is the utility's case. 19 Now, I've had conversations with utility counsel. 20 I told 21 them we weren't going to prepare this as an exhibit. 22 It is not our job. 23 MR. ARMSTRONG: Which is sort of what 24 tipped the hand as to what might be going on. 25 CHAIRMAN CLARK: Why did you bring it up

Why wasn't it brought up when you were having 1 now? 2 these discussions? MR. ARMSTRONG: We understood it was going 3 to be standard operating procedure, Madam Chair. 4 CHAIRMAN CLARK: If you had doubts about it 5 -- when did you have doubts about it? 6 7 MR. ARMSTRONG: When Mr. Feil came up to me and told me five minutes ago. I debated it with him 8 9 saying they wouldn't possibly do that, would they, 10 Mr. Feil? He said, I'm concerned by the conversation he'd just had that might occur. I find it incredible 11 it has occurred. 12 13 CHAIRMAN CLARK: What we are going to do is we are going to have it as a late filed exhibit, but 14 it is subject to objection. And if we need to hold a 15 16 brief other period of time to review that and allow cross examination, we will do it. 17 18 MR. ARMSTRONG: Thank you, Madam Chair. 19 That's acceptable to the company, certainly. MS. JABER: Madam Chairman, we are ready 20 21 with our questions. Would you prefer we go ahead and 22 ask our questions because it may take care of some of the concerns the other parties have? That might 23 expedite matters. 24 25 It might, but given the hour MR. TWOMEY:

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and given we will probably have some questions, I would suggest that you consider setting a time in which the rest of us could indicate the need for a short hearing. CHAIRMAN CLARK: That's what I'm going to do. It is getting late. I realize you may have just a few questions. So I will mark it as a late filed exhibit, updated rate case expense. MR. JACOBS: Madam Chairman. CHAIRMAN CLARK: Yes, Mr. Jacobs. MR. JACOBS: Before you put a number in there, I was going to move my exhibit forward, as well, as No. 254. CHAIRMAN CLARK: We haven't done that yet. Updated rate case expense. I'm sorry, you are That's 255. It will be a late filed exhibit, right. which means it is subject to objection. And the parties should review it. And we will discuss the time frames for reviewing it and letting me know a possible time to hold a brief continuation of the hearing for that exhibit only.

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(Exhibit No. 255 identified.)
CHAIRMAN CLARK: Other exhibits.
MR. ARMSTRONG: Excuse me, we are at
redirect.

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1	CHAIRMAN CLARK: You are right.
2	MR. ARMSTRONG: Thank you.
3	REDIRECT EXAMINATION
4	BY MR. ARMSTRONG:
5	Q They are very brief. Mr. Ludsen, earlier
6	on in your discussion with regard to the direct, the
7	cross by Staff of your direct testimony, there was
8	some questions that you referenced a potable reuse
9	rate and a non-potable reuse rate; do you recall
10	that?
11	A Yes.
12	Q Do you support any adjustment to the reuse
13	rates being requested by the company in the MFRs?
14	A No.
15	MR. ARMSTRONG: Madam Chair, I have Exhibit
16	253, I believe, which is the analysis of uniform
17	rates. I wasn't sure if the letter was part of 253,
18	the letter dated July 12, 1988.
19	CHAIRMAN CLARK: That's 252. The letter to
20	Lynn Adams?
21	MR. ARMSTRONG: Yes.
22	CHAIRMAN CLARK: I have that as Exhibit
23	252.
24	MR. ARMSTRONG: Thank you.
25	BY MR. ARMSTRONG:
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Mr. Ludsen, drawing your attention to Q 1 Exhibit 252, and specifically the last two pages of 2 that exhibit. 3 Α Yes. 4 5 0 This is a response from Deltona Utilities Inc., and United Florida Utilities Corporation; is 6 7 that correct? Α Yes. 8 Those two companies recently have been 9 Q 10 merged into Southern States Utilities; is that 11 correct? Α 12 Yes. 13 MR. ARMSTRONG: Madam Chairman, that's it. CHAIRMAN CLARK: Exhibits. 14 15 MR. ARMSTRONG: The company moves Exhibit 16 247. 17 MS. CAPELESS: Staff moves Exhibits 248, 249, 250, and 251. 18 19 MR. TWOMEY: 252 and 253, please. 20 MR. ARMSTRONG: Objection to 254. 21 CHAIRMAN CLARK: All right. Wait a minute. From 247 through 253 will be admitted without 22 objection. 23 24 (Exhibits 247 - 253 admitted.) 25 CHAIRMAN CLARK: All right.

MR. ARMSTRONG: Madam Chair, 254 was the 1 bill not authenticated by Mr. Ludsen. No questions 2 relating to the exhibit could have been answered by 3 Mr. Ludsen. So we object to it being introduced into 4 evidence. 5 MR. JACOBS: Madam Chairman, he's testified 6 he is in charge of billing. That's a bill from his 7 It speaks for itself. 8 company. 9 CHAIRMAN CLARK: Mr. Armstrong, you don't believe this is a bill from Southern States 10 Utilities? 11 MR. ARMSTRONG: Just for the purpose that 12 13 it was offered. 14 CHAIRMAN CLARK: I think he was using it to cross examine the questions on Page 15. And 15 Mr. Ludsen clarified that. 16 17 MR. ARMSTRONG: And Madam Chair, if we have a representation that was the purpose it was offered 18 for, and the only use that this bill would be used 19 20 for, that would be okay. Otherwise, my objection 21 would stand. 22 MR. JACOBS: Madam Chairman, Page 15, he 23 says we sent the same message to everybody. I asked 24 him, you know, regarding --25 CHAIRMAN CLARK: I will allow the exhibit.

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1	MR. ARMSTRONG: Note my objection.
2	MR. TWOMEY: Since you allowed that.
3	CHAIRMAN CLARK: The objection is noted.
4	MR. ARMSTRONG: Thank you.
5	(Exhibit No. 254 admitted.)
6	MR. TWOMEY: I was trying to find
7	CHAIRMAN CLARK: Have you lost Exhibit 93
8	again?
9	MR. TWOMEY: Mr. Hansen was reviewing it.
10	I've got, I never got, I apologize, I never got to
11	Mr. Armstrong because he started the cross.
12	CHAIRMAN CLARK: That's the big problem.
13	MR. TWOMEY: What had happened was 93 has
14	been not admitted a couple days ago or a week ago or
15	whatever, my exhibit, because there was a page in
16	there Mr. Hansen had cut and pasted different
17	schedules from the last rate case. That's why it
18	wasn't admitted, as I recall. And we proposed to
19	substitute two pages that were taken from the case,
20	itself.
21	MR. FEIL: Commissioner, I don't even
22	remember who the witness was on that, although I
23	remember seeing the exhibit. It was a hodgepodge, if
24	you will, of various pages taken from various
25	sources.
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-	CHAIRMAN CLARK: I think it must have been
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2	Mr. Gower, right? Was it Mr. Gower?
3	COMMISSIONER KIESLING: My records show it
4	was Mr. Hartman.
5	CHAIRMAN CLARK: Okay, Mr. Hartman.
6	COMMISSIONER KIESLING: Is when this was at
7	least offered and not accepted.
8	I also think that there was more than just
9	the hodgepodge or the cut and paste ones.
10	There were, also, if I recall, a number of
11	documents in here that you never even asked him
12	anything about.
13	MR. TWOMEY: That is possible, Commissioner
14	Kiesling. I'm not questioning your recollection. I
15	just don't recall.
16	CHAIRMAN CLARK: Well, Mr. Twomey, have you
17	reviewed it? Do you need this exhibit?
18	MR. TWOMEY: I think at this hour that I
19	don't need it.
20	CHAIRMAN CLARK: All right. Then we will
21	not admit Exhibit 93.
22	MR. BECK: Madam Chairman, I believe we did
23	not finish the full cross of Mr. Ludsen when he was
24	on direct. I never moved in our exhibits on direct.
25	CHAIRMAN CLARK: I believe that is
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correct. We were still waiting for Mr. -- Yes. And 1 I have that from Exhibit 127 which would be the 2 3 company's exhibit for Mr. Ludsen's direct. MR. ARMSTRONG: We'll move that in. 4 CHAIRMAN CLARK: That will be without 5 6 objection. (Exhibit No. 127 admitted.) 7 CHAIRMAN CLARK: I have two OPC's of 128 8 and 129. They will be admitted without objection. 9 One is the uniform rate investigation expenses and 10 one is rate case expense. 11 (Exhibit Nos. 128 and 129 admitted.) 12 CHAIRMAN CLARK: 130 is a late filed 13 14 exhibit. And I have 131 as pages from the MFRs. And 15 that will be admitted without objection. (Exhibits 130 and 131 admitted.) 16 CHAIRMAN CLARK: Let me just review the 17 exhibits and make sure I have no other unadmitted --18 I have Exhibit 71 is again the late filed, 78 is the 19 late filed, 92 is a late filed exhibit. 120 is a 20 late filed exhibit. 130 is a late filed exhibit. 21 22 COMMISSIONER KIESLING: Could I slow you down? Did you say 94? I have 94 as being a late 23 filed. 24 25 CHAIRMAN CLARK: 94 is also a late filed

I don't have 156, which is production of exhibit. 1 documents request 221 as admitted yet. 2 MS. CAPELESS: We didn't move that one into 3 the record. 4 5 CHAIRMAN CLARK: You don't want it in the record? 6 7 MS. CAPELESS: Correct. CHAIRMAN CLARK: 180 has been admitted in 8 the record? 9 MS. CAPELESS: Yes. 10 11 COMMISSIONER KIESLING: 180 was identified, but it was part of the rebuttal exhibits of Mr. 12 13 Terrero. CHAIRMAN CLARK: We decided not to move it 14 15 in. That's what I 16 COMMISSIONER KIESLING: 17 have. 18 CHAIRMAN CLARK: Okay. MR. FEIL: Excuse me, Madam Chairman, could 19 20 you read the description for Exhibit 180? 21 CHAIRMAN CLARK: They were also, it was part of an exhibit to Mr. Terrero's rebuttal. It was 22 23 identified as an exhibit for a questioning of another 24 witness. 25 COMMISSIONER KIESLING: It was Pages 1 and

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2 from RAT-11 from his rebuttal. 1 MR. FEIL: Another witness was questioned 2 about it. Okay. Thank you. 3 COMMISSIONER KIESLING: Right. 197? 4 5 CHAIRMAN CLARK: 197, I don't have 197 as admitted. 6 7 MS. O'SULLIVAN: I indicate it was not moved by the parties. 8 9 MR. FEIL: What was the description? CHAIRMAN CLARK: Work papers from Staff 10 11 management studies of SSU. That was not admitted in the record. 12 13 MS. JABER: That's correct, Madam 14 Chairman. CHAIRMAN CLARK: I have Exhibit 205 as a 15 late filed exhibit. I have 215 as a late filed 16 17 exhibit. I have 237 as a late filed exhibit. I have 246 as a late filed exhibit; and finally, 255. 18 Staff, are there any final items we need to 19 20 take up? 21 MR. TWOMEY: Madam Chair, pardon me. Ι 22 think, let me see, Mr. Pellegrini is not here, but at some point earlier -- I think it was this day -- you 23 24 asked the Staff and myself and Mr. Feil to get 25 together and discuss what company agreements would be

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1 made on the lead education thing. And we came to an 2 agreement, I believe. I think we just need a 3 number.

4 CHAIRMAN CLARK: All right. Mr. Feil, can 5 you give me what the agreement is?

6 MR. FEIL: As I understand it, what they 7 would like as the late filed exhibit would contain 8 the Beacon Hills education requirements for lead and 9 copper -- well, actually for lead testing because 10 there is no education requirement for copper, from 11 October, 1994, on. Staff would like the test 12 results.

Mr. Twomey made a request regarding Deltona because he thought there was an action level exceeded there, but the action level was for copper. And again, there are no education requirements for exceeding action levels for copper.

18 CHAIRMAN CLARK: So it is the Beacon Hills
19 education requirements for lead testing and the
20 testing results for the period you identified.
21 MR. FEIL: Yes, ma'am. Also, so for Marco
22 Island from January 1, 1996, on the same materials,
23 testing, and compliance materials.
24 CHAIRMAN CLARK: That will be late filed

25 || Exhibit 256.

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1	(Late Filed Exhibit No. 256 identified.)
2	MR. FEIL: Also for the record, Madam
3	Chairman, we will make every effort in this late
4	filed exhibit to give the parties what they want; but
5	because of the nature of the late filed exhibit, I
6	have no idea whether or not they are going to be
7	happy with what they get, but we will do our best.
8	CHAIRMAN CLARK: Okay. Ms. O'Sullivan.
9	MS. O'SULLIVAN: Just a few brief matters.
10	We have not set a deadline for late filed exhibits.
11	We should probably set one for all exhibits of
12	perhaps two weeks of today's date.
13	CHAIRMAN CLARK: Mr. Armstrong, the
14	deadline for late filed exhibits, and I believe it is
15	only your witnesses that have them
16	MR. ARMSTRONG: We will get them in.
17	CHAIRMAN CLARK: is two weeks from
18	today. So that makes it
19	MS. O'SULLIVAN: The 24th.
20	CHAIRMAN CLARK: The 24th. Okay.
21	MR. ARMSTRONG: They will be there.
22	CHAIRMAN CLARK: All late filed exhibits
23	are subject to objection.
24	MS. O'SULLIVAN: That's correct. One more
25	final point. The briefs are due June 3rd, according
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1	to the case.
2	CHAIRMAN CLARK: We have set a different
3	amount of pages for the briefs, is that right?
4	MS. O'SULLIVAN: That's correct. I believe
5	it is 150 pages.
6	CHAIRMAN CLARK: Now, with respect to the
7	rate case expense, I would like let me ask you
8	that. We have identified it as a late filed
9	exhibit. Can it be provided to all the parties by
10	this Monday?
11	MR. ARMSTRONG: Yes, it sure can.
12	CHAIRMAN CLARK: By Friday I would expect
13	Staff to inform me whether or not we need to hold a
14	brief hearing to review the rate case expense.
15	MS. O'SULLIVAN: The parties will advise
16	Staff and we will get back to you by Friday.
17	CHAIRMAN CLARK: Anything further?
18	MR. FEIL: One other thing. I mentioned an
19	order that I would like administrative notice to be
20	taken of. I have copies of it here.
21	CHAIRMAN CLARK: Give us the order number.
22	MR. FEIL: The order number is 24134 issued
23	February 18, 1991. And we would also like to have
24	I did not advise you of this previously but have
25	administrative notice taken of another order which is
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the 1996 price index order. That number is 1 PSC-96-0177-FOF-WS issued February 9, 1996. 2 CHAIRMAN CLARK: All right. We will take 3 official notice of those orders. And you have 4 copies? 5 MR. FEIL: We have copies of the first, but 6 7 not of the second. We will have it to the parties by Monday. 8 CHAIRMAN CLARK: Is there anything else we 9 10 need to take up? Let me say to each one of you, the attorneys and parties that participated in this case, 11 12 I really appreciate your hanging in there. I know it has been a grueling two weeks. This case has 13 14 certainly been one of the more difficult ones I've 15 ever been involved in, but I think the proceedings have gone smoothly for the most part. I appreciate 16 17 that. 18 I want to thank all of you and the Staff 19 for your hard work. I think we have a complete 20 record. I think we have thoroughly explored the issues, and I think we've done it in a professional 21 22 I certainly appreciate that. manner. 23 MR. TWOMEY: Thank you, Madam Chairman. 24 MR. FEIL: Thank you. 25 CHAIRMAN CLARK: This hearing is

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FLORIDA PUBLIC SERVICE COMMISSION

STATE OF FLORIDA) 1 CERTIFICATE OF REPORTERS COUNTY OF LEON 2) We, JOY KELLY, CSR, RPR, Chief, Bureau of 3 Reporting SYDNEY C. SILVA, CSR, RPR, and ROWENA NASH HACKNEY, Official Commission Reporters, and LISA GIROD 4 JONES, RPR, RMR, JANE FAUROT, RPR, and PEGGY OWENS, 5 RMR, RPR, DO HEREBY CERTIFY that the Hearing in Docket 6 No. 950495-WS was heard by the Florida Public Service Commission at the time and place herein stated; it is 7 further 8 CERTIFIED that we stenographically reported the said proceedings; that the same has been 9 transcribed under our direct supervision; and that this transcript, consisting of 5,383 pages, Volumes 1 10 through 43, constitutes a true transcription of our notes of said proceedings. 11 12 DATED this 13th day of May, 1996. nu 13 SYDNEY C. SALVA, CSR, RPR KELLY, CSR,/RPR JOY Phief, Bureau of Reporting Official Commission Reporter 14 (904) 413-6732 (904) 413-6732 15 10 and ROWENA NASH HACKNEY 16 Official Commission Reporter (904) 413-6736 17 18 19 LISA GIROD JONES, RPR, JANE FAUROT, RPR CMR (904) 224-7642 (904) 379-8669 20 21 PEGCY. -<u>F</u>. OWENS, RMR, RPR 22 (904) 222 893-0799 23 24 25 FLORIDA PUBLIC SERVICE COMMISSION

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FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. <u>95044545</u> EXHIBIT NO QUT COMPANYISSU/LUDSEN WITNESS: <u>550/LUDSEN</u> MATE: <u>4/29/95</u>

DOCKET 950495-W5 10 247 10 96-04227

Exhibit ____ (FLL-6) Books 1 through 13 **Rebuttal Testimony** Page 1 of 1

SUMMARY OF RATE SCHEDULES AND SUPPORTING DATA ASSOCIATED WITH STAFF PROPOSED RATE DESIGNS

BOOK 1 OF 13 - Staffs' Rate Design Alternatives:

STAND ALONE RATES

MODIFIED STAND ALONE RATES

- UNIFORM RATES
- MODIFIED STAND ALONE RATES WITH MINIMUMS
- CIAC / TREATMENT TYPE FACTORED RATES

BOOK 2 OF 13 - Summary 1996 Operating Income Under Staffs' Rate Design Alternatives: STAND ALONE RATES

BOOK 3 OF 13 - Summary 1996 Operating Income Under Staffs' Rate Design Alternatives: MODIFIED STAND ALONE RATES

BOOK 4 OF 13 - Summary 1996 Operating Income Under Staffs' Rate Design Alternatives: • UNIFORM RATES

- MODIFIED STAND ALONE RATES WITH MINIMUMS
- CIAC / TREATMENT TYPE FACTORED RATES

BOOK 5 OF 13 - Detailed 1996 Water Rate Base and Operating Income For Uniform Plants: AMELIA ISLAND - DOL RAY MANOR

BOOK 6 OF 13 - Detailed 1996 Water Rate Base and Operating Income For Uniform Plants: DRUID HILLS - HOLIDAY HAVEN

BOOK 7 OF 13 - Detailed 1996 Water Rate Base and Operating Income For Uniform Plants: HOLIDAY HEIGHTS - MARCO SHORES

BOOK 8 OF 13 - Detailed 1996 Water Rate Base and Operating Income For Uniform Plants: MARION OAKS - POINT O' WOODS

BOOK 9 OF 13 - Detailed 1996 Water Rate Base and Operating Income For Uniform Plants: POMONA PARK - ST. JOHNS HIGHLANDS

BOOK 10 OF 13 - Detailed 1996 Water Rate Base and Operating Income For Uniform Plants: **STONE MOUNTAIN - ZEPHYR SHORES**

BOOK 11 OF 13 - Detailed 1996 Wastewater Rate Base and Operating Income For Uniform Plants: AMELIA ISLAND - FLORIDA CENTRAL COMMERCE PARK

BOOK 12 OF 13 - Detailed 1996 Wastewater Rate Base and Operating Income For Uniform Plants: FOX RUN - PARK MANOR

BOOK 13 OF 13 - Detailed 1996 Wastewater Rate Base and Operating Income For Uniform Plants: POINT O' WOODS - ZEPHYR SHORES

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EXHIBIT - (FLL-7)

PAGE 1____OF__1____

SOUTHERN STATES UTILITIES

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COST PER CUSTOMER OF CUSTOMER ACCTS AND A&G EXPENSES W/O & WITH BUENAVENTURA LAKES (OOU) DOCKET NO. 950495-WS

		1996 CUSTOMER AND A&G COSTS PER CUSTOMER						
Line No.	Description	SSU W/O Buenaventura	Addition of Buenaventura Costs	SSU With Buenaventura (As Filed)				
	SSU Customers (Total Company)							
1 2 3	Water Sewer Gas	103,173 43,703 2,437	8,599 6,889	111,772 50,592 2,437				
4	Total	149,313	15,488	164,801				
	Customer Accounts Expenses							
5	Customer Cost	3,170,452	193,624	3,364,076				
6	Cost Per Customer	21.23	12.50	20.41				
	A&G Expense							
7	Customer Cost	9,645,059	273,397	9,918,456				
8	Cost Per Customer	64.60	17.65	60.18				
	Total Customer & A&G Expenses							
9	Combined Costs	12,815,511	467,021	13,282,532				
10	Cost Per Customer	85.83	30.15	80.60				

Note:

1) The Buena Ventura Customers offset the loss of the VGU customer base of 15,380 customers (7,751 water and 7,629 wastewater = 15,380 VGU Customers).

COMPARISON OF SSU'S CUSTOMER ACCOUNT AND A&G EXPENSES (CA/A&G) TO NAWC SURVEYED COMPANIES SUMMARY OF PERCENTAGE OF CA/A&G EXPENSES TO REVENUES SUMMARY FOR YEARS 1991 - 1996

		CUSTOMER AC	COUNT AND A&	G EXPENSES	PERCENTAGE OF EXPENSES TO REVENUES			
INVESTOR-OWNED WATER UTILITIES	OPERATING REVENUES	Cust Account	A&G	Subtotal CA + A&G	Cust Acct	A&G	Subtotal CA + A&G	
SOUTHERN STATES UTILITIES: (A) Total Company								
Actual Operating Revenues								
1991	32,830,368	1,669,313	6,857,412	8,526,725	5.1%	20.9%	26.0%	
1992	37,683,702	1,868,076	7,027,572	8,895,648	5.0%	18.6%	23.6%	
1993	50,236,218	2,150,542	7,288,683	9,439,225	4.3%	14.5%	18.8%	
1994	50,269,655	2,428,591	8,368,783	10,797,374	4.8%	16.6%	21.5%	
Requested Operating Revenues								
1994	57,934,205	2,469,232	8,499,374	10,968,606	4.3%	14.7%	18.9%	
1995	64,873,467	2,951,233	8,632,425	11,583,658	4.5%	13.3%	17.9%	
1996	76,426,789	3,364,079	9,918,456	13,282,535	4.4%	13.0%	17.4%	
NAWC SURVEYED COMPANIES: (B)								
Revenues \$30 - \$50 Million 1991 1992	222,050,926 332,915,849	13,207,412 19,050,368	32,401,377 53,194,637	45,608,789 72,245,005	5.9% 5.7%	14.6% 16.0%	20.5% 21.7%	
Revenues \$50 - \$70 Million 1993 1994	533,145,563 556,251,870	33,506,143 30,293,904	93,274,013 88,317,192	126,780,156 118,611,096	6.3% 5.4%	17.5% 15.9%	23.8% 21.3%	

NOTES:

 (A) SSU Operating Revenues for 1991 is Total Company Operating Revenues from audited 1991 Financial Statements for Lehigh + SSU. Docket No. 920199-WS includes only FPSC filed systems in amount of \$27,077,200.

SSU O&M Expenses for 1991 from Docket No. 920199-WS, Volume 1, Book 3 of 4, pages 16 - 19.

SSU Operating Revenues and Operating Expenses for 1992 and 1993 from Audited SSU Financial Statement for the Years Ended December 31, 1992 and December 31, 1993. SSU Requested Operating Revenues for 1994 - 1996 from Docket No. 950495-WS, Volume II-A, Book 1 of 4, page 37 "Requested Total Operating Revenues". SSU Operating Expenses for 1994 - 1996 from Docket No. 950495-WS, Volume II-A, Book 3 of 4, pages 5 - 16, "Water & Sewer - Total O&M Expenses".

(B) Summary of 1991 - 1994 NAWC Operating Revenues and Operating Expenses by revenue size summarized from 1991 - 1994 NAWC Financial & Operating Data, Table J-1 "Income Statements & Selected Ratios", pages 1-17. EXHIBIT (FLL-8)
PAGE 1 OF 2

COMPARISON OF SSU'S CUSTOMER ACCOUNT AND A&G EXPENSES (CA/A&G) TO NAWC SURVEYED COMPANIES SUMMARY OF CA/A&G EXPENSES PER CUSTOMER AND PER EMPLOYEE SUMMARY FOR YEARS 1991 - 1996

	Average		0	&M EXPENSE	S	Custome	r Accounts	A&GE	xpenses	Subtotal (CA + A&G
INVESTOR-OWNED WATER UTILITI	Number of ECustomers (A)	Number of Employees (B)	Cust Accts (C)	A&G (D)	Subtotal CA + A&G	per Customer	per Employee	per Customer	per Employee	per Customer	per Employee
SOUTHERN STATES UTILITIES: Total Company											
1991	158.594	438	1,669,313	6,857,412	8,526,725	10.53	3,811	43.24	15,656	53.76	19,467
1992	154,961	461	1,868,076	7,027,572	8,895,648	12.06	4,052	45.35	15,244	57.41	19,296
1993	159,626	475	2,150,542	7,288,683	9,439,225	13.47	4,527	45.66	15,345	59.13	19,872
1994	148,082	497	2,469,232	8,499,374	10,968,606	16.67	4,968	57.40	17,101	74.07	22,070
1995	149,313	473	2,951,233	8,632,425	11,583,658	19.77	6,239	57.81	18,250	77.58	24,490
1996	164,801	478	3,364,079	9,918,456	13,282,535	20.41	7,038	60.18	20,750	80.60	27,788
NAWC SURVEYED COMPANIES: (E) Customers 100,000 - 200,000											
1991	1,060,325	3,354	31,629,647	49,317,051	80,946,698	29.83	9,430	46.51	14,704	76.34	24,134
1992	1,177,753	3,555	33,051,254	66,670,573	99,721,827	28.06	9,297	56.61	18,754	84.67	28,051
1993	1,186,077	3,722	30,342,029	97,561,439	127,903,468	25.58	8,152	82.26	26,212	107.84	34,364
1994	1,356,590	3,742	27,431,085	99,763,067	127,194,152	20.22	7,331	73.54	26,660	93.76	33,991

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EXHIBIT

NOTES:

(A) SSU Number of Customers for year 1991 from Docket No. 920199-WS, Volume 1, Book 3 of 4, page 19.
 SSU Number of Customers for years 1992 - 1993 from the 1992-3 Average Number of Customers by System by Revenue Account prepared for the 1992-3 Annual Reports.

SSU Number of Customers for years 1994 - 1996 from Docket No. 950495-WS, Volume IIA, Book 1 of 4, page 349 "Allocation Method: Average No. of Customers - Including Gas".

(B) SSU Number of Employees and Total Gross Payroll for years 1991 - 1996 from Docket No. 950495-WS, Volume II, Book 1 of 4, page 39, "Avg. No. of Employees" and "Total Gross Payroll".

(C) SSU Customer Account Expenses for the year 1991 from Docket No. 920199-WS, Volume I, Book 3 of 4, page 18.

SSU Customer Account Expenses for years 1992 - 1993 from the Audited SSU Financial Statements for the Years Ended December 31, 1992 & 1993. SSU Customer Account Expenses for the years 1994 - 1996 from Docket No. 950495-WS, Volume II-A, Book 3 of 4, pages 5-16, "Water & Sewer - Total O&M Expenses".

(D) SSU A&G Expenses for the year 1991 from Docket No. 920199-WS, Volume I, Book 3 of 4, page 19. SSU A&G Expenses for years 1992 - 1993 from the Audited SSU Financial Statements for the Years Ended December 31, 1992 & 1993. SSU A&G Expenses for the years 1994 - 1996 from Docket No. 950495-WS, Volume II-A, Book 3 of 4, pages 5-16, "Water & Sewer - Total O&M Expenses".

(E) Summary of 1991 - 1994 NAWC data by number of customers summarized from 1991 - 1994 NAWC Financial & Operating Data, Table J-3 "Operating Data & Ratios", page 35-51.

EXHIBIT_		-	(FLL-9)
PAGE	1	OF	2

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ANALYSIS OF RATE CASE EXPENSE ACTUAL charges through January, 1996

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	(1)	(2)	(3)	(4)	(5)	(6)
Line	Firm or	Counsel, Consultant	Hourly Pate	Total Estimate of	Actual Charges	Type of
No.	Vendor Name	or Witness	Per Person	Charges by Firm	to date by Firm	Service Rendered
1	1995 Consolidated Rate Case:					
2 3	Hartman & Associates	Gerald Hartman	\$99	\$70,000	\$60,848	Testimony - Used & Useful and Economies of Scale Study
4 5	Watertech Consulting	John Whitcomb	\$95	49,750	42,870	Testimony - Conservation Rates
6 7	Guastella Assoc, Inc.	John Guastella	\$190	30,000	9,698	Testimony - Marco Reuse and Raw Water Rates
8 9	Minnesota Power	Bruce Gangnon	\$100	30,000	0	Testimony & Discovery - Taxes
10						
11	Minnesota Power	Dave Gartzke	\$125	30,000	1,111	Testimony & Discovery - MP/Cost of Capital
12	Dennis A. Peterson				3,919	
13 14	Mark A. Schober				1,238	
14 15	Douglas A. Weinetz James C. Erickson				627	
					250	
16 17	John A. Dick Debati D. Estimate				113	
	Robert D. Edwards				<u> </u>	
18 10					7,265	
19	THAT'S CONTRACT OF A DECISION	D D D D D D D D D D				
20 21	Utility Research Intml.	Dr. Roger Morin	\$250	21,500	11,542	Testimony - Cost of Capital
22	Self employed	Hugh Gower	\$300	20,000	17,755	Testimony - CIAC Imputation
23		-				
24	Jones, Edmunds and Associates, Inc.	Robert C. Edmunds	\$110	12,000	1,457	Testimony - Hydraulic Methodology Theory & Application
25						
26	Source, Inc.	James P. Elliott	\$125	10,000	2,337	Testimony - Used & Useful
27						
28 29	Rutledge, Ecenia, et al.	Kenneth Hoffman	\$150	200,000	84,305	Legal Services
30	Messer, Caparello, Masdsen			N/A	263	Legal Services
31 32	Radley, Hinkle, Thomas & McArthur			N/A	23,006	Legal Services
33		'		nvA.	23,006	Legal Services
34	Goodwins, Brooke & Dickenson			N/A	1,265	Legal Services
36 36	Subtotal - Counsel & Witnesses			\$473,250	\$262,610	
30 37	Southern States Utilities			171,600	216,002	Postage
38				100,000	127,993	Temporary Help
39				56,583	19,255	Travel
40				45,260	59,308	Office Supplies
41				41,500	241,778	Printing
42				28,631	13,695	Maps
43				26,000	15,260	Newspaper Notifications
44				13,000	106	Open Houses
45				10,000	88	Transcripts, Depositions, Court Reporter Fees
46				10,000	4,652	Miscelaneous
47				9,000	494	Advertising
48				4,500	9,000	Filing Fee - Rate Case
49				2,250	4,500	Filing Fee - Service Availability
50				2,078	293	Telephone
51				1,500	329	Dues & Subscriptions
					Contraction of the local division of the loc	•
52	Subtotat - Other Filing Costs			\$521,902	\$712,753	

EXHIBIT	(FLL-9)

PAGE 2 OF 2

ANALYSIS OF UNIFORM RATE INVESTIGATION ACTUAL charges through January, 1996

line	(1) Sim ar	(2) Counsel, Consultant	(3) Hourly Rate	(4) Total Estimate of	(5) Actual Charges	(6) Type of
Line No.	Firm or Vendor Name	or Witness	Per Person	Charges by Firm	to date by Firm	Service Rendered
•						
1 2	Uniform Rate Investigation:					
3 4	Hancock Information Group		N/A	\$34,358	\$34,358	Telemarketing and Telematch Services
5	Ernst & Young	E. Timothy Barnes	\$246	19,346	19,346	Testimony - Rate Structure
6 7		Travel		1,772 \$21,118	1,772 \$21,118	
8 9	Jade Tech, Inc.	Dave Aeba	\$60	20,160	20,160	Rate Structure Programming required for discovery reques
10		Travel		707	707	
11 12				\$20,867	\$20,867	
13	Minnesota Power	Robert Edwards	\$150	4,263	4,263	
14		David Gartzke	\$125	12,228	12,228	MP/Cost of Capital
15 16		Expenses		2,170 \$18,661	2,170 \$18,661	
17				\$10,001	410,001	
18	Guastella Assoc., Inc.	John Guastella	\$180	90	90	Testimony - Rate Structure
19		Vito Pennacchio	\$150	10,795	10,795	
20 21	н. С. С. С	Travel		<u>630</u> \$11,515	<u>630</u> \$11,515	
22	AU-01-01/7			a 447	a sof	To Marco Fool and the second state
23 24	CH2M Hill	P.L. Waller F.J. Williams	\$118 \$41	6,025 24	6,025 24	Testimony - Engineering and Hydrogeolical
25		J.S. Flair	\$41	61	61	,
26		P.E. Smith	\$64	64	64	
27		Y.M. Giovannetti	\$41	45	45	
28		Travel		567	567	
29 30		Miscellaneous Expense		<u>131</u> \$8,919	<u>131</u> \$8,919	
31 32	Landers & Parsons	Victoria Tschinkel	Flat Fee	7,485	7,485	Testimony - Environmental
33 33	Lanuers a Faisons	Travel	LIGI LEG	1,019	1,019	
34				N/A	1,885	Prepare testimony and attend legislative hearing
35 26				\$8,504	\$10,389	
36 37	image Marketing Assoc.		N/A	4,587	4,587	Assistance with Customer Education
36 39	Heater Utilities, Inc.	William E. Grantmyre	\$37	3,029	3,029	Testimony - Unitorm Rate Experience
40 41	Mark T. Stewart, PG	Mark T. Stewart	\$100	2,350	2,350	Testimony - Hydrogeological
42		Travel		162	182	
43 44				\$2,532	\$2,532	
45 46	Sun Trust	Jerry Ford - Travel		140	140	Testimony - Cost of Capitat
47 48	Rutledge, Ecenia, et al.			85,000	101,371	Legal Services
49	Messer, Vickers, et al.			17,629	17,629	Legal Services
50	Subtotal - Counsel & Witness	ies -	•	\$236,859	\$255,116	
51	Southern States Utilities			104,804	104,801	FPSC Customer Hearings - Notices, Transportation, Secu
51 52				54,963	56,003	Customer Education - Mailings (Postage and Printing)
52 53					17,414	Travel
52 53 54				17,414		linn
52 53 54 55				5,569	5,569	Maps Temporary Services
52 53 54				5,569 4,417	5,569 4,417	Temporary Services
52 53 54 55 56				5,569	5,569	•
52 53 54 55 56 57 58 59				5,569 4,417 2,078	5,569 4,417 2,078	Temporary Services Court Reporting Open Houses Office Supplies
52 53 54 55 56 57 58 59 60				5,569 4,417 2,078 1,574 3,278 1,006	5,569 4,417 2,078 1,574 3,278 1,006	Temporary Services Court Reporting Open Houses Office Supplies Federal Express
52 53 54 55 56 57 58 59	Subtotal - Other Filing Costs			5,569 4,417 2,078 1,574 3,278	5,569 4,417 2,078 1,574 3,278	Temporary Services Court Reporting Open Houses Office Supplies

PAGE____1__OF__5____

SOUTHERN STATES UTILITIES COMPARISON OF TREATMENT TYPES AND STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

No. Pient Treatment No. No. Net Cl2C (Est Award and NUU) Net Cl2C (Est Award and NUU) Stand-Alone (Est Award and NUU) Stand-Alone (Est Award and NUU) Stand-Alone (Est Award and NUU) 1 Later/ew Villas 1054 CL 12 12,889 0 0.00% 123,000 2 Hartony Homes 320 CL 15 90,029 3579 0.47% 53,008 3 Eart Lase Faint Estate 557 CL 178 597,721 3,850 0.27% 148,44 4 Paint Viatey 2001 PW 200 PW 210 11,130,40 1230 124% 40,337 3 Cawary Paint 104 PW 86 23,221 286 0.44% 40,33 4 Paint Mole Jenne Paint 559 102 11,133,10 21,75% 44,15 6 Paint Mole Jenne Paint 659 174 110,13 22,77% 24,75% 44,15 14 Paint Paint 659 174 117,138		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rate
Une Plant Treatment Customers Esci Dopice Exci Dopice <th< th=""><th></th><th></th><th></th><th></th><th></th><th>%</th><th>of CIAC to Pla</th><th>ant</th><th>Residential</th><th>(Weighted Avg.)</th></th<>						%	of CIAC to Pla	ant	Residential	(Weighted Avg.)
Line Plant Treatment Customers (Each Anon Customers (Each Anon Customers (Each Anon No. Type and NUU) and NUU) and NUU (Each Anon (Each Anon </th <th></th> <th></th> <th></th> <th></th> <th>No. of</th> <th>Net Plant</th> <th>Net CIAC</th> <th></th> <th>Stand-Alone</th> <th>Residential</th>					No. of	Net Plant	Net CIAC		Stand-Alone	Residential
No. Plant Name No. Type and NUU and NU and NU and NU<	Line		Plant	Treatment		(Excl Deprec	(Excl Amort	% of CIAC	Bill - 5/8"	Bill @ 10,000
I Lakeryker Vitas 1054 CL 12 12,2888 0 0.07% 123.00 2 Harmory Homes 326 CL 63 80.069 379 0.47% 153.08 3 East Lake Harn Estates 577 CL 178 677.261 3,850 0.47% 168.48 4 Paint Valley 201 PW 265 54.641 752 1.38% 30.79 6 Dateyopin Charces 105 PW 125 54.641 752 1.38% 30.79 7 Kingsperod 1701 PW 12 31.370 1.708 2.28% 166.11 5 Sat Springs 1115 CL 19 347.700 5.205% 64.16 1 Leksade 555 F 86 247.874 6.205 2.50% 61.41 18 Montprove 562 CL 37 7.778 2.206 2.31% 7.428 18 Mode Hills<		Plant Name				• •	•			
I Lakaview Visas 1054 CL 12 12,2888 0 0.00% 123.00 2 Harmony Harmes 328 CL 63 80.089 379 0.47% 153.08 4 Paint Valley 2011 PW 2011 PW 10 1,38.046 10.057 0.94% 108.44 5 Lake Carmary Park 104 PW 86 28.221 266 0.94% 40.88 6 Daveywider Shores 105 FW 126 54.641 722 1.34% 40.60 7 Ringsword 101 FW 62 11.138 216 2.37% 64.16 9 Sak Springs 115 64 247.874 6.205 2.57% 64.16 10 Homb Abbe Home Park 324 AV 184.23 7.663 2.37% 64.16 11 Lakeside 325 IF 66 247.874 6.205 2.57% 84.14 12							<u>``</u>			
2 Parmony Homes 326 CL 63 80089 979 0.47% 53.08 3 Eset Liske Hark Estates 657 CL 176 507.261 3.850 0.72% 189.44 4 Pain Valley 201 PW 210 1,139.046 10.657 0.94% 40.65 6 Datrying Shores 105 PW 125 64.041 752 1.38% 3.873 7 Kingswood 1701 PW 62 11.33 216 1.34% 40.65 8 Pains Mobie Hone PAK 559 IF 56 73.70 1.708 2.22% 185.11 16 Fern Park 324 AS 124 3.872 2.27% 44.83 11 Lakeside 995 IF 86 247.874 6,025 2.59% 81.41 12 Hemis Cove 438 AVS 124 248.78 140.22 158.44 13 Moningdrew 55			- 1054	C	10	10 909	0	0.00%	123.00	1,476.00
Set Late Family Estable Soft 201 176 507/281 3,650 0.72% 198,48 4 Pain Valey 2301 PW 210 1,139,046 10,657 0.94% 40,83 5 Lake Carway Pack 104 PW 86 28,221 296 0.94% 40,83 6 Datatryler Shorts 105 PW 125 54,641 752 1.38% 38,673 7 Krignewold 1701 PW 62 11,133 210 1.34% 40,601 8 Saft Springs 1715 CL 119 34770 8,277 2,37% 44,931 14 Heads 395 IF 89 247,474 6,205 2,50% 81,411 14 Heads 452 CL 37 77,758 2,280 2,33% 74,428 14 Chall Bkign 578 CL 16 30,277 2,776 2,36% 41,456 15 OL 15						-				3,344.04
4 Pain Valley 201 PW 210 1,130,046 10,657 0.94% 40,68 5 Leke Conway Park 106 PW 125 54,641 752 1.93% 40,00 6 Pains Mobile Hone Park 559 IF 56 72,570 1,708 2.32% 186,111 9 Sail Springs 1115 CL 113 347,780 8,227 2.25% 186,111 10 Fern Park 324 A/S 182 331,562 7,863 2.37% 54,165 11 Lakeside 985 IF 86 247,874 8,025 2.25% 44,851 12 Hermits Cove 438 A/S 174 161,071 5,260 2.91% 49,90 13 Moningdew 562 CL 37 77,758 2,280 2.93% 74,228 14 Gual Ridge 578 CL 115 319,146 11,329 3,43% 310,65		•								29,828.48
5 Lake Commary Park 104 PW 86 28,21 266 0.34% 40.88 6 Daakaryler Shores 105 PW 125 54,641 752 1.34% 40,60 7 Kingswold 1701 PW 62 11,139 216 1.34% 40,60 8 Paims Mobile Mona Park 569 IF 56 73,570 1.708 2.37% 54,16 10 Fern Park 324 A/S 182 33,362 7,463 2.37% 44,83 11 Lakeshe 995 IF 86 24,774 6,205 2.20% 44,83 12 Hemis Cove 438 A/S 174 161,031 5,260 2.20% 41,422 14 Cual Rukge 576 CL 18 32,727 2,770 3,645 31,05 17 Pailaske Country Club 579 CL 18 22,27 3,53% 45,40 16 Dirky Ma										26,657.40
6 Descriptor Shores 1105 PW 125 64,641 752 1.39% 33.79 7 Kingsevoor 1701 PW 62 11,139 216 1.39% 40.60 8 Pains Mobile Home Park 559 IF 56 73,570 1.708 2.37% 44.83 10 Fern Park 324 A/S 182 331,382 7,768 2.23% 186.11 11 Lakeside 995 IF 86 247,874 6,200 2.93% 14.11 11 Hemits Cove 438 A/S 177 161,031 5,260 2.93% 14.422 13 Moningview 562 CL 37 7,758 2.260 2.93% 14.52 14 Guals 537 CL 36 44.739 1,861 3.26% 3.640 17018 Balk Anor 38 A/S 61 73,213 2.657 3.65% 43.40 17		•								3,515.68
Parts None <										4,848.75
s Pairs Mobile Home Park 559 IF 56 73,770 17,08 2.32% 18811 9 Sat Springs 1115 CL 119 347,740 3.237 2.37% 5418 10 Perr Park 324 AVS 182 33,362 7,863 2.37% 46.33 11 Lakesde 995 IF 86 247,874 6,202 2.50% 81.41 12 Hemis Cove 484 AVS 174 181,031 5,260 2.91% 99.90 13 Moningview 562 CL 37 77,758 2.20% 2.03% 74.28 14 Cuals Bidge 578 CL 96 41,739 1.305 74.28 3.05 110.25 3.05 115 3.04 140.22 14.56 140.22 14.56 140.22 3.05 14.58 3.05 15.27 8.48 3.05 15.27 3.05 15.22 3.05 15.22 3.05 <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2,517.20</td>		•								2,517.20
stat Springs 1115 CL 119 947,700 82,27 2,37% 54,18 10 Pern Park 324 AVS 182 331,382 7,863 2,37% 45,33 11 Laksobe 995 FF 88 247,874 16(,011 5,205 2,50% 81,41 12 Hemis Cove 438 A/S 174 16(,011 5,205 2,50% 81,41 14 Laksobe 995 177,758 2,260 2,39% 74,28 14 Coal Ridge 578 CL 18 93,272 2,770 2,96% 140,22 14 Coal Ridge 578 CL 96 41,739 1,861 3,26% 3,155 17 Palisades Country Club 579 CL 80 251,275 8,862 3,53% 45,40 18 Dol Ray Manor 336 4,45 17,213 2,657 3,63% 45,40 19 Tropical Park 781 CL 548 628,188 23,229 3,64% 10,038 12,229 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>10,794.38</td></t<>										10,794.38
10 Ferri Park 324 A/S 182 331322 7,863 2.37% 44.33 11 Lakeskie 985 IF 88 247,874 6.205 2.50% 81.41 12 Hermis Cove 438 A/S 174 161,031 5.260 2.91% 99.90 13 Moningview 552 CL 37 77,758 2.260% 140.22 14 Cual Ridge 578 CL 96 41,733 1.326% 41.55 17 Plateades Country Club 579 CL 80 251,275 8.882 3.53% 38.40 18 Dol Ray Manor 336 A/S 61 73,213 2.657 3.63% 45.40 19 Topical Park 781 CL 514 1.313,148 12.322 3.86% 110.38 11 Styrrest 551 CL 115 313,148 12.324 3.86% 110.38 12 Lake Bardley 225 A/S 1682 2.4707 3.305 4.54% 140.84										6,445.04
11 Latesite 955 IF 86 247,874 5,205 2,20% 91,41 12 Hermits Cove 438 A/S 174 18,101 5,269 2,91% 99,90 13 Moriningdew 562 CL 37 77,758 2,280 2,93% 74,28 14 Cual Ridge 57.8 CL 18 35,727 2,770 2,96% 140,22 15 Hobby Hills 334 A/S 2,49 280,700 9,071 3,48% 31,05 16 Dol Pay Manor 36 A/S 61 73,213 2,857 3,53% 4540 15 Topical Park 781 CL 548 628,188 23,227 3,71% 57,29 29 25 A/S 67 155,273 6,125 3,94% 70,018 10,038 10,038 10,04 10,457 4,68% 48,26 48,26 48,26 48,26 48,26 48,26 48,26 48,26 48,26 48,26 48,26 48,46 48,26 48,26 48,46		• •								8,905.26
12 Hermis Cove 438 A/S 174 181,031 5,260 2,91% 99.90 13 Morningview 562 CL 37 77,758 2,280 2,93% 74,281 14 Cual Ridge 578 CL 18 39,272 2,770 2,96% 14,022 15 Hobby Hills 558 CL 96 41,739 1,361 3,26% 41,55 16 Druh Hills 334 A/S 61 72,217 8,882 3,53% 39,40 16 Druh Hills 336 A/S 61 72,213 2,657 3,53% 4540 17 Palsades Country Club 579 CL 153 131,91,48 12,223 3,84% 100,38 12 Lake Brantey 325 A/S 29 74,707 3,353 4,544 140,84 2 Silver Lake Cokos 473 A/S 29 74,707 3,353 4,544 140,84 2 Silver Woods 553 A/S 684 193,58 5335 762,5										,
13 Morning/ew 562 CL 37 77,758 2,200 2,33% 74,28 14 Cual Ridge 578 CL 18 93,727 2,770 2,96% 140,22 15 Holdy Hills 334 A/S 249 2260,780 9,071 3,44% 31,05 17 Palasades Courty Club 579 CL 86 251,275 8,882 353% 4540 18 Dol Ray Manor 36 A/S 61 73,213 2,857 3,53% 4540 19 Tropical Fark 781 CL 544 622,188 2,227 3,71% 5,729 20 Skyrersis 551 CL 115 319,148 12,229 3,86% 100,38 21 Lake Brantey 252 A/S 67 155,273 6,125 3,84% 70,81 22 Sherr Lake Oaks 473 A/S 24,856 4,858 5,856 4,56% 59,57 26 Chultota 335 A/S 168 224,201 10,457 4,66										7,001.26
14 Quail Pikkgp 578 OL 18 \$3,727 2,770 2,98% 140.22 15 Hobby Hills 558 OL 96 41,739 1,351 3,25% 41,58 16 Druki Hills 534 A/S 249 20,780 9,071 3,48% 31,05 17 Palisades Country Club 578 CL 80 251,275 8,822 3,53% 39,40 18 Doll Pay Manor 336 A/S 61 73,213 2,657 3,63% 45,40 19 Tropical Park 781 CL 548 626,188 23,227 3,71% 572.9 20 Skycrest 551 CL 115 319,148 13,229 3,86% 110.38 21 Lake Brantey 325 A/S 29 74,707 3,305 4,54% 40.84 22 Silver Lake Cakes 473 A/S 29 74,707 3,305 4,54% 40.84 23 Flow Woods 533 A/S 684 153,209 83,205 <										17,382.60
15 Hoby His 553 CL 96 41,739 1,361 3.28% 41.56 16 Drukt Hills 573 CL 80 249 280,780 8,071 3.48% 31.05 17 Palisade Soumty Club 577 CL 80 251,75 8,882 3.53% 45.40 18 Dol Ray Manor 336 A/S 61 7.213 2,257 3.63% 45.40 19 Topical Park 781 CL 548 623,127 3.65% 10.38 21 Lake Dantfey 225 A/S 67 155,273 6.125 3.94% 10.03 22 Shyerest 537 A/S 168 224,201 10.457 4.66% 48.26 24 Keystone Club Estates 1279 CL 108 109,399 5.836 5.33% 78.28 25 Golden Terrace 554 CL 106 109,399 5.836 5.33% 78.28 26 Chuluota 325 A/S 684 1,552,099 8.3205		•								2,748.36
16 Druki Hills 334 A/S 249 260,780 9,071 3.48% 31.05 17 Pailsades Country Club 573 CL 80 251,275 8,58% 38.40 18 DuR Manor 336 A/S 61 73,213 2,657 3,53% 454.40 19 Tropical Park 781 CL 548 628,186 22,227 3,71% 57.29 20 Skycrest 551 CL 115 319,148 12,329 3,86% 110.38 21 Lake Brantley 325 A/S 29 74,077 6,125 3,94% 70.81 22 Skycrest 553 A/S 29 74,077 4,66% 48.26 24 Keystone Club Estates 1279 CL 162 183,365 8,596 4,69% 59.57 25 Golden Terrace 992 CL 108 109,399 5,836 5,33% 72.28 26 Chulota 335 A/S 661 72.472 42.825 6,41% 30.93 </td <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2,523.96</td>		•								2,523.96
17 Palisades Country Club 579 CL 80 251,275 8,882 3.53% 39.40 18 Dol Ray Manor 336 A/S 61 73,213 2.657 3.63% 45.40 19 Tropical Park 781 CL 548 628,186 23,227 3.71% 57.29 20 Skycrest 551 CL 115 319,148 12,329 3.86% 110.38 21 Lake Brantley 325 A/S 67 155,273 6,125 3.84% 70.81 22 Skycrest 10 168 224,201 10,457 4.66% 48.26 24 Keystone Club Estates 1279 CL 162 183,365 8.596 4.69% 59.57 25 Golden Terrace 952 CL 108 109,399 5,838 5.33% 77.28 26 Chuluota 335 A/S 664 1,735,209 38,097 6.70% 54.27 27 Valencia Terrace 554 CL 365 193,140 11,410 5		•								3,989.76
18 Dol Ray Manor 336 A/S 61 73,213 2,657 3,63% 45,40 19 Tropical Park 781 CL 548 626,168 23,227 3,71% 57,29 20 Skyrerst 551 CL 115 319,148 12,329 3,86% 100,38 21 Lake Brantey 325 A/S 67 155,273 6,125 3,94% 70,81 22 Silver Lake Oaks 473 A/S 29 74,707 3,395 4,54% 140,84 21 Lake Brantey 325 A/S 168 224,201 10,457 4,66% 48,26 24 Keystone Club Estates 1279 CL 162 183,365 8,366 5,33% 78,28 26 Chuluota 335 A/S 684 1,535,209 83,205 5,42% 63,66 27 Valencia Terrace 554 CL 365 153,148 48,498 627% 31,44 29 Merodith Manor 330 A/S 651 752,472 48,2	16 Drui	id Hills	334							7,731.45
19 Tropical Park 781 CL 548 626,186 23.227 3.71% 57.29 20 Skycrest 551 CL 115 319,148 12,329 3.86% 110.38 21 Lake Brantley 325 A/S 67 155,273 6,125 3.84% 140.84 22 Silver Lake Oaks 473 A/S 29 74,707 3.395 4.54% 140.84 23 Piney Woods 553 A/S 168 224,201 10,457 4.66% 48.26 24 Keystone Club Estates 1279 CL 162 183,865 8,596 4.66% 55.57 25 Golden Terrace 962 CL 108 109,399 5,836 5.33% 78.28 26 Chuluota 335 A/S 664 1,535,209 83,205 5.42% 63,166 27 Valencia Terrace 304 A/S 1004 783,153 48,688 622% 31,44 28 Meredith Manor 30 A/S 651 752,472 <td< td=""><td>17 Pair</td><td>sades Country Club</td><td>579</td><td></td><td></td><td></td><td></td><td></td><td></td><td>3,152.00</td></td<>	17 Pair	sades Country Club	579							3,152.00
29 Skycrest 551 CL 115 319,148 12,329 3.86% 110.38 21 Lake Brantey 325 A/S 67 155,273 6,125 3.34% 70.81 22 Silver Lake Oaks 473 A/S 29 74,707 3.395 4.54% 140.84 23 Piney Woods 553 A/S 168 224,201 10,457 4.66% 48.26 24 Keystone Club Estates 1279 CL 162 183,365 8,586 4.69% 59.57 25 Golden Terrace 992 CL 108 109,399 5,836 5.33% 78.28 26 Chuluota 335 A/S 684 1,535,209 83,205 5.42% 63.66 27 Valencia Terrace 554 CL 3065 1782,472 48,225 6.41% 30.93 20 Valencia Terrace 574 CL 74 55,199 3,670% 6.427 21 Welaka 447 A/S 139 113,075 7,725 6.83%<										2,769.40
21 Lake Brantley 325 A/S 67 155,273 6,125 3.94% 70.81 22 Silver Lake Oaks 473 A/S 29 74,707 3,395 4,45% 140.84 23 Piney Woods 553 A/S 168 224,201 10,457 4,66% 48.26 24 Keystone Club Estates 1279 CL 162 183,365 8,596 4.69% 59.57 25 Golden Terrace 992 CL 108 109,399 5,836 5,33% 78.28 26 Chulotta 335 A/S 684 1,552,099 83.205 5,42% 63.66 27 Valencia Terrace 554 CL 365 193,140 11,410 5.91% 34.11 28 Keystone Heights 1094 A/S 1,004 783,153 48,888 6.22% 31.44 29 Meredith Manon 330 A/S 615 752,472 44,8225 6.41% 30.93 30 Bay Lake Estates 764 CL 74 55,199 <td>19 Trop</td> <td>pical Park</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>31,394.92</td>	19 Trop	pical Park								31,394.92
22 Silver Lake Daks 473 A/S 29 74,707 3,395 4.54% 140.84 23 Piney Woods 553 A/S 168 224,201 10,457 4.66% 48.26 24 Keystone Club Estates 1279 CL 162 183,385 8,596 4.69% 59.57 25 Golden Terrace 962 CL 108 109,399 5,836 5.33% 78.28 26 Chuluota 335 A/S 664 1,535,209 83,205 5.42% 63.66 27 Valencia Terrace 554 CL 365 193,140 11,410 5.91% 34.11 27 Keystone Heights 1094 A/S 1,004 783,153 48,698 6.22% 31.44 29 Meredith Manor 330 A/S 661 752,472 44,225 6.41% 30.93 30 Bay Lake Estates 784 CL 74 55,199 3,697 6.70% 54.27 31 Welaka 447 A/S 139 113,075 7,725 6.83% 86.67 32 Burnt Store 2202 RO 706 4,009,195 278,200 6.94% 96.84 31 intercession City 780 CL 258 206,698 14,447 6.99% 60.13 34 Ferr Terrace 552 CL 125 35,406 6,727 7.05% 39.08 35 Holiday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 imperial Mobile Terrace 570 CL 241 270,982 20,948 7,73% 45.35 37 Postmaster Village 1095 CL 160 233,972 13,756 8.02% 53.66 38 Sunny Hills 2801 A/S 437 695,064 56,690 8.16% 68.46 39 River Park 439 A/S 359 176,159 15,501 8.80% 125.40 40 Cartten Village 555 CL 148 382,295 3,4182 94.33% 69.76 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 47 Total - Less than 10.00% CIAC 8,704 15,094,820 799,081 52.94 47 A/S 199 68,44 47 Rosenont 988 CL 129 221,552 3,1,374 11.14% 55.55 48 Wootens 446 CL 25 28,746 3,189 11.09% 168.14 47 Rosenont 988 CL 129 221,552 3,1,374 11.14% 55.55 49 Wootens 446 CL 25 28,746 3,189 11.09% 48.13 40 Cakwood 1702 PW 209 27,565 2,747 9.97% 41.21 41 Arg - Less than 10.00% CIAC 8,704 15,094,820 799,081 52.94 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42 Total - Less than 10.00% CIAC 8,704 11,04% 55.55 43 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 8,8,495 10,0034 11.34% 58.04 40 Karc Istand 2010 RO & LS 6,144 39,678,429 4,5180 211.35% 54.61	20 Sky	crest	551					3.86%		12,693.70
23 Piney Woods 553 A/S 168 224,201 10,457 4,66% 48.26 24 Keystone Club Estates 1279 CL 162 183,365 8,596 4,69% 59.57 25 Golden Terrace 992 CL 108 109,399 5,836 5.33% 78.28 26 Chubota 335 A/S 664 1,535,209 82,205 5.42% 63.66 27 Valencia Terrace 554 CL 365 193,140 11,410 5.91% 34.11 26 Chubota 333 A/S 6661 752,472 48,288 6.22% 31.44 27 Valencia Terrace 300 A/S 6611 752,472 48,225 6.41% 30.93 30 Bay Lake Estates 784 CL 74 55,199 3,697 6.70% 54.27 31 Welaka 447 A/S 139 113075 7.725 6.83% 96.84 31 Intercession City 780 CL 258 206.698 14,4	21 Lake	e Brantley	325	A/S	67	155,273	6,125	3.94%	70.81	4,744.27
24 Keystone Club Estates 1279 CL 162 183,365 8,596 4,69% 59.57 25 Golden Terrace 992 CL 108 109,399 5,836 5,33% 78.28 26 Chuluota 335 A/S 684 1,535,209 83,205 5,42% 63,66 27 Valercia Terrace 554 CL 365 133,140 11,410 5,31% 34,11 28 Keystone Heights 1094 A/S 1,004 783,153 48,098 6,22% 31,44 29 Meredith Manor 300 A/S 651 752,472 48,225 6,41% 30,93 30 Bay Lake Estates 784 CL 74 55,199 3,697 6,70% 64,27 31 Welaka 447 A/S 139 113,075 7,725 6,83% 86,67 32 Burnt Store 2202 RO 706 4,009,195 27,70% 50,13	22 Silve	er Lake Oaks	473	A/S	29	74,707	3,395	4.54%	140.84	4,084.36
25 Golden Terrace 992 CL 108 109,399 5,836 5,33% 78,28 26 Chuluota 335 A/S 664 1,535,209 83,205 5,42% 63,66 27 Valencia Terrace 554 CL 365 131,10 11,410 5,91% 34,11 28 Keystone Heights 1094 A/S 10,004 783,153 48,688 6,22% 31,44 29 Meredith Manor 330 A/S 651 752,472 48,225 6,41% 30,93 30 Bay Lake Estates 784 CL 74 55,199 3,687 6,70% 54,27 31 Welaka 447 A/S 139 113,075 7,725 6,83% 86,67 20 Bror Terrace 552 CL 125 5,406 6,727 7,05% 39,08 31 Intercession City 780 CL 254 20,948 7,73% 45,35 35 Holiday Heights 121 CL 53 79,555 5,742 7,22% </td <td>23 Pine</td> <td>ey Woods</td> <td>553</td> <td>A/S</td> <td>168</td> <td>224,201</td> <td>10,457</td> <td>4.66%</td> <td>48.26</td> <td>8,107.68</td>	23 Pine	ey Woods	553	A/S	168	224,201	10,457	4.66%	48.26	8,107.68
26 Chuluota 335 A/S 684 1,535,209 83,205 5.42% 63,66 27 Valencia Terrace 554 CL 365 193,140 11,410 5.91% 34,11 28 Keystone Heights 1094 A/S 1,004 783,153 48,698 6.22% 31,44 29 Meredith Manor 330 A/S 651 752,472 48,225 6.41% 30.93 30 Bay Lake Estates 784 CL 74 55,199 3,697 6.70% 54.27 31 Welaka 447 A/S 139 113,075 7,725 6.83% 96.64 33 Intercession City 780 CL 258 206,698 14,447 6.99% 60.13 34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holiday Heights 121 CL 53 79,555 5,742 7.22% 56.50 <td>24 Key</td> <td>stone Club Estates</td> <td>1279</td> <td>CL</td> <td>162</td> <td>183,365</td> <td>8,596</td> <td>4.69%</td> <td>59.57</td> <td>9,650.34</td>	24 Key	stone Club Estates	1279	CL	162	183,365	8,596	4.69%	59.57	9,650.34
27 Valencia Terrace 554 CL 365 193,140 11,410 5.91% 34.11 28 Keystone Heights 1094 A/S 1,004 783,153 48,898 6.22% 31.44 29 Meredith Manor 330 A/S 651 752,472 48,225 6.41% 30.93 30 Bay Lake Estates 784 CL 74 55,199 3,697 6.70% 54,27 31 Welaka 447 A/S 139 113,075 7,725 6.83% 86.67 32 Burnt Store 2202 RO 706 4,009,195 278,200 6.44% 99% 60.13 34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holiday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160	25 Gold	den Terrace	992	CL	108	109,399	5,836	5.33%	78.28	8,454.24
28 Keystone Heights 1094 A/S 1,004 783,153 49,698 6.22% 31.44 29 Meredith Manor 330 A/S 651 752,472 48,225 6.41% 30.93 30 Bay Lake Estates 784 CL 74 55,199 3,697 6.70% 54.27 31 Welaka 447 A/S 139 113,075 7,725 6.83% 86.67 32 Burnt Store 2202 RO 706 4,009,195 278,200 6.94% 96.84 33 Intercession City 780 CL 258 206,698 14,447 6.99% 60.13 34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160 233,972	26 Chu	livota	335	A/S	684	1,535,209	83,205	5.42%	63.66	43,543.44
29 Meredith Manor 330 A/S 651 752,472 48,225 6.41% 30.93 30 Bay Lake Estates 784 CL 74 55,199 3,697 6,70% 54,27 31 Welaka 447 A/S 139 113,075 7,725 6,83% 86,67 32 Burnt Store 2202 RO 706 4,003,195 278,200 6,94% 96,84 31 Intercession City 780 CL 258 206,698 14,447 6,99% 60,13 34 Fern Terrace 552 CL 125 95,406 6,727 7,05% 39,08 35 Holkay Heights 121 CL 53 79,555 5,742 7,22% 56,50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7,73% 45,35 37 Postmaster Village 1095 CL 160 233,972 18,756 8,02% 53,66 38 Sunny Hills 2801 A/S 359 176,159	27 Vale	encia Terrace	554	CL	365	193,140	11,410	5.91%	34.11	12,450.15
29 Meredith Manor 330 A/S 651 752,472 48,225 6,41% 30.93 30 Bay Lake Estates 784 CL 74 55,199 3,687 6,70% 54,27 31 Welaka 447 A/S 139 113,075 7,725 6,83% 86,67 32 Burnt Store 2202 RO 706 4,003,195 278,200 6,94% 96,84 33 Intercession City 780 CL 258 206,698 14,447 6,99% 60,13 34 Fern Terrace 552 CL 125 95,406 6,727 7,05% 39,08 35 Holkay Heights 121 CL 53 79,555 5,742 7,22% 56,50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7,73% 45,355 37 Postmaster Village 1095 CL 160 233,972 18,756 8,02% 53,66 <td></td> <td>stone Heights</td> <td>1094</td> <td>A/S</td> <td>1,004</td> <td>783,153</td> <td>48,698</td> <td>6.22%</td> <td>31.44</td> <td>31,565.76</td>		stone Heights	1094	A/S	1,004	783,153	48,698	6.22%	31.44	31,565.76
30 Bay Lake Estates 784 CL 74 55,199 3,697 6.70% 54.27 31 Welaka 447 A/S 139 113,075 7,725 6.83% 86.67 32 Burnt Store 2202 RO 706 4,009,195 278,200 6.94% 98.84 33 Intercession City 780 CL 258 206,698 14,447 6.99% 60.13 34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holiday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 3559 176,159 15,051 8.60% 125.40 40 Carton Village 555 CL 148 362,295	•	•	330	A/S		752,472	48,225	6.41%	30.93	20,135.43
31 Welaka 447 A/S 139 113,075 7,725 6.83% 86.67 32 Burnt Store 2202 RO 706 4,009,195 278,200 6.94% 96.84 33 Intercession City 780 CL 258 206,698 14,447 6.99% 60.13 34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holiday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 359 176,159 15,501 8.80% 125.40 40 Carton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Cakwood 1702 PW 209 27,565 2								6.70%	54.27	4,015.98
32 Burnt Store 2202 RO 706 4,009,195 278,200 6.94% 96,84 33 Intercession City 780 CL 258 206,698 14,447 6.99% 60.13 34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holiday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 359 176,159 15,501 8.80% 125.40 40 Carton Village 555 CL 148 382,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 2,747 9.97% 41.21	•									12,047.13
33 Intercession City 780 CL 258 206,698 14,447 6.99% 60.13 34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holiday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 437 695,064 56,690 8.16% 68.46 39 River Park 439 A/S 3559 176,159 15,501 8.80% 125.40 40 Carton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42										68,369.04
34 Fern Terrace 552 CL 125 95,406 6,727 7.05% 39.08 35 Holkday Heights 121 CL 53 79,555 5,742 7.22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 437 695,064 56,690 8.16% 68.46 39 River Park 439 A/S 359 176,159 15,501 8.00% 125.40 40 Cartion Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42 Avg - Less than 10.00% CIAC 8,704 15,094,820 799,081 2,958.11 \$										15,513.54
35 Holiday Heights 121 CL 53 79,555 5,742 7,22% 56.50 36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7,73% 45.35 37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 437 695,064 56,690 8.16% 68.46 39 River Park 439 A/S 359 176,159 15,501 8.80% 125.40 40 Cartton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42 5.094,820 799,081 2,958,11 43 Total - Less than 10.00% CIAC 8,704 15,094,820 799,081 2,958,11 \$ 44 Avg - Less than 10.00% CIAC 8,704 15,094,820 799,081 10,95% \$ 72,15 \$ 4		-								4,885.00
36 Imperial Mobile Terrace 570 CL 241 270,982 20,948 7.73% 45.35 37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 437 695,064 56,690 8.16% 68.46 39 River Park 439 A/S 359 176,159 15,501 8.80% 125.40 40 Cartton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42										2,994.50
37 Postmaster Village 1095 CL 160 233,972 18,756 8.02% 53.66 38 Sunny Hills 2801 A/S 437 695,064 56,690 8.16% 68.46 39 River Park 439 A/S 359 176,159 15,501 8.80% 125.40 40 Cartton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42										10,929.35
38 Sunny Hills 2801 A/S 437 695,064 56,690 8.16% 68.46 39 River Park 439 A/S 359 176,159 15,501 8.80% 125.40 40 Cartton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42	•									8,585.60
39 River Park 439 A/S 359 176,159 15,501 8.80% 125.40 40 Carlton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42		•				•				29,917.02
40 Cartton Village 555 CL 148 362,295 34,182 9.43% 69.78 41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42		•				•				45,018.60
41 Oakwood 1702 PW 209 27,565 2,747 9.97% 41.21 42 43 Total - Less than 10.00% CIAC 8,704 15,094,820 799,081 2,958,11 44 Avg - Less than 10.00% CIAC 8,704 15,094,820 799,081 2,958,11 45 529% \$ 72.15 \$ 46 Wootens 446 CL 25 28,746 3,189 11.09% 168.14 47 Rosemont 988 CL 129 281,582 31,374 11.14% 55.55 48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61										10,327.44
42 43 Total - Less than 10.00% CIAC 8,704 15,094,820 799,081 2,958,11 44 Avg - Less than 10.00% CIAC 529% \$ 72.15 \$ 45 45 529% \$ 72.15 \$ 46 Wootens 446 CL 25 28,746 3,189 11.09% 168.14 47 Rosemont 988 CL 129 281,582 31,374 11.14% 55.55 48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61		-								8,612.89
43 Total - Less than 10.00% CIAC 8,704 15,094,820 799,081 2,958,11 44 Avg - Less than 10.00% CIAC 529% \$ 72.15 \$ 45 46 CL 25 28,746 3,189 11.09% 168.14 47 Rosemont 988 CL 129 281,582 31,374 11.14% 55.55 48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61		WOUL	1702	E 11	203	27,000	2,141	3.31 %	41.21	0,012.03
44 Avg - Less than 10.00% CIAC 529% \$ 72.15 \$ 45 45 46 CL 25 28,746 3,189 11.09% 168.14 46 Wootens 446 CL 25 281,582 31,374 11.14% 55.55 48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61		al Loop then 10 00%	CIAC			15 004 900	700.081		2.050.11	553,671.40
45 46 Wootens 446 CL 25 28,746 3,189 11.09% 168.14 47 Rosemont 988 CL 129 281,582 31,374 11.14% 55.55 48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61					0,704	10,094,620	799,001	E 20W		
46 Wootens 446 CL 25 28,746 3,189 11.09% 168.14 47 Rosemont 988 CL 129 281,582 31,374 11.14% 55.55 48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61	•	j- Less (nan 10.00%)	CIAC					0.23%	₽ /2.10	3 03.01
47 Rosemont 988 CL 129 281,582 31,374 11.14% 55.55 48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61		otens	446	CI	25	28 74F	3 189	11 09%	16R 14	4,203.50
48 St. Johns Highlands 471 A/S 84 49,766 5,587 11.23% 81.34 49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61										7,165.95
49 River Grove 442 A/S 105 88,495 10,034 11.34% 58.04 50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61										6,832.56
50 Marco Island 2601 RO & LS 6,144 39,678,429 4,516,062 11.38% 54.61		-								
						•				6,094.20 335,523.84
										•
51 Beecher's Point 472 PW 47 245,512 29,003 11,61% 123,59 52 Palm Port 440 A/S 106 111,551 13,877 12,44% 66.21					47	245,512	29,003		123.69	5,813.43 7,018.26

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SOUTHERN STATES UTILITIES COMPARISON OF TREATMENT TYPES AND STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx, Uniform Rate
					%	of CIAC to Pla	ant	Residentia	
				No. of	Net Plant	Net CIAC		Stand-Alon	ne Residential
1 1		Diant	Treatment	Customers	(Excl Deprec	(Excl Amort	% of CIAC	BIII - 5/8"	Bill @ 10,000
Line No.	Plant Name	No.	Туре		and NUU)	and NUU)	O PLANT	@ 10K gallons	
53	Oak Forest	993	CL	147	167,512	20,913	12.48%	40.4	42 5,941.74
53 54	Stone Mountain	565		8	9,738	1,251	12.85%	105.3	
55	Interlachen Lake Estates	470		250	140,823	19,191	13.63%	51.3	
55	Pomona Park	443		173	105,742	15,288	14.46%	53.5	
50	Geneva Lake Estates	1298		93	77,618	11,399	14.69%	33.5	
58	Deep Creek	2201	PW	3,182	1,889,372	287,036	15.19%	67.0	· · · · ·
59	Point O' Woods	987	IF	361	599,698	94,631	15.78%	67.9	
59 60	Citrus Springs	906		1,917	3,124,004	519,691	16.64%	38.6	
61		556		21	7,898	1,471	18.62%	54.0	
	Friendly Center	1106		2,797	5,488,734	1,095,117	19.95%	57.3	
62	Marion Oaks			2,757		23,611	19.99%	48.7	
63 64	Venetian Village	567	CL	140	118,121	20,011	13.33 %	40.1	70 0,022.20
65	Total - 10.00% - 20.00%	CIAC		15,729	52,213,341	6,698,726		1,225	.65 886,047.12
66	Avg - 10.00% - 20.00% C			10,720	02,210,011	•]•••],•=•	12.83%	\$ 68.0	
	MAB + 10100 % - 20100 % C						1210070	• •••	
67 67	Marco Shores	2602	LS	308	961,498	195,942	20.38%	102.3	30 31,508.40
68		675		396	325,396	67,054	20.61%	28.4	
69 70	Leilani Heights				1,409,433	296,622	21.05%	20.4	-
70	Silver Lake Estates	574		1,449	341,332	230,022	22.18%	90.0	
71	Fox Run	679		107				94.6	
72	Lake Ajay Estates	773		100	276,848	62,189	22.46%	94.0 30.1	
73	Lake Harriet Estates	323		284	130,164	29,335	22.54%		
74	Fisherman's Haven	673		144	57,749	13,805	23.91%	37.9	
75	Picciola Island	564		134	68,226	16,516	24.21%	34.1	
76	Jungle Den	1802		113	27,133	6,743	24.85%	79.	
77	Spring Gardens	994		134	46,711	11,664	24.97%	24.0	
78	Apache Shores	990		152	82,316	20,914	25.41%	111.3	
79	Apple Valley	332		983	730,936	188,902	25.84%	25.1	
80	Zephyr Shores	1427		484	160,857	44,826	27.87%	56.1	
81	Pine Ridge	907		938	4,125,230	1,171,325	28.39%	43.	
82	Palm Terrace	1429	CL	1,193	279,706	80,561	28.80%	37.9	92 45,238.56
83									<u> </u>
84	Total - 20.00% - 30.00%			6,919	9,023,535	2,282,119		817	
85	Avg - 20.00% - 30.00% C	CIAC					25.29%	\$ 547	49 \$ 40.08
86									
87	Lehigh	2901		9,079	9,273,000	2,906,684	31.35%	56.	
88	Grand Terrace	575		111	103,567	38,074	36.76%	38.	
89	Leisure Lakes	2401	A/S	243	140,834	54,362	38.60%	79.:	
90	Beacon Hills	886	A/S	3,178	4,455,692	1,766,103	39.64%	24.:	36 77,416.08
91									
92	Total - 30.00% - 40.00%	CIAC		12,611	13,973,093	4,765,223		199	
93	Avg - 30.00% - 40.00% C	CIAC					34.10%	\$ 49.	78 \$ 48.97
94									
95	Remington Forest	2302		87	139,147	56,204	40.39%	49.	
96	Deltona	1806	A/S	23,911	16,493,528	6,855,814	41.57%	20.0	86 498,783.46
97	Windsong	783		105	135,437	59,029	43.58%	53.	12 5,577.60
98	Fountains	772	A/S	34	240,536	108,972	45.30%	245.	92 -8,361.28
99	Woodmere	888	A/S	1,189	863,615	391,334	45.31%	21.	50 25,563.50
100	Holiday Haven	573	PW	111	33,509	15,198	45.35%	77.3	86 8,642.46
101 102	Buena Ventura Lakes	785		9,176	5,370,996	2,534,468	47.19%	27.:	36 251,055.36
103	Total - 40.00% - 50.00%	CIAC		34,613	23,276,769	10,021,019		496	802,289.29
104	Avg - 40.00% - 50.00% C			,		. ,	43.05%	\$ 70.	
105	-								

105

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SOUTHERN STATES UTILITIES COMPABISON OF TREATMENT TYPES AND STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rate
					%	of CIAC to PI	ant	Residential	(Welghted Avg.)
				No. of	Net Plant	Net CIAC		Stand-Alone	Residential
Line		Plant	Treatment	Customers	(Excl Deprec	(Excl Amort	% of CIAC	Bill - 5/8"	Bill @ 10,000
No.	Plant Name	No.	Туре	<u> </u>	and NUU)	and NUU)	to PLANT	@ 10K gallons (1	
106	Westmont	122	PW	139	34,264	17,410	50.81%	32.84	4.564.76
107	Sugar Mill Woods	989	AVS	2,622	3,424,194	1,773,532	51,79%	16.88	44,259,36
108	Sugar Mill	1801	LS	638	797 734	415,131	52.04%	81.26	51,843.88
109	Citrus Park	1117	CL	366	137,118	74,321	54.20%	27.87	10,200.42
110 111	Pine Ridge Estates	782	A/S	218	333,250	184,365	55.32%	46.01	10,030.18
112	Total - 50.00% - 60.00%	CIAC		3,983	4,726,559	2,464,759		204.86	120,898.60
113 114	Avg - 50.00% - 60.00% C	CIAC					52.15%	\$ 40.97	\$ 30.35
115	Crystal River Highlands	984	IF	80	136,014	82,724	60.82%	46.24	3,699.20
116 117	University Shores	106	A/S	3,890	3,807,693	2,576,131	67.66%	20.33	79,083.70
118	Total - 60.00% - 70.00%	CIAC		3,970	3,943,707	2,658,856		66.57	82,782.90
119 120	Avg - 60.00% - 70.00% C	CIAC					67 <i>A</i> 2%	\$ 33.29	\$ 20.85
121	Gospel Island Estates	986	IF	8	10,607	7,874	74.23%	105.50	844.00
122 123	Amelia island	1518	A/S	1,757	2,423,209	1,820,303	75.12%	15.58	27,374.06
124	Total - 70.00% - 80.00%	CIAC		1,765	2,433,816	1,828,177		121.08	28,218,06
125 126	Avg - 70.00% - 80.00% C	AC					75.12%	\$ 60.54	\$ 15.99
127 128	Enterprise	1807	PW	244	134,218	116,902	87.10%	30.03	7,327.32
129	Total - 80.00% - 100.00%	CIAC	:	244	134,218	116,902	,	30.03	7,327.32
130 131	Avg - 80.00% - 100.00%	CIAC					87.10%	\$ 30.03	\$ 30.03
132 133	Total FPSC Resident	lat			A 101 010 077	* ** ***		0.140.00	
133				88,538	\$ 124,819,857	\$ 31,634,861		6,118.89	3,376,146.02
	Average FPSC Resid	ential					25.34%	\$ 64.41	\$ 38.13

Treatment Type:	
A/S	Aeration/Storage
IF	Iron Filitration
PW	Purchased Water
RO	Revers Osmosis

Lime Softening

Chlorination

Note - The totals for each catagory are based on:

(1) Simple Average (Total of all plants / Number of Plants)

LS CL

(2) Weighted average which approximates a uniform rate (Total of all plants weighted by number of customers / Total Number of Customers).

EXHIBI1_____(FLL-10)

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SOUTHERN STATES UTILITIES COMPARISON OF % CIAC TO STAND-ALONE RESIDENTIAL BILLS - SEWER WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) Appr. Uniform Rai
					of CIAC to F	Plant	Residential	(Weighted Avg
			No. of	Net Plant	Net CIAC		Stand-Alone	Residential
ine		Plant	Customers	(Excl Deprec	(Excl Amort	% of CIAC	Bill - 5/8"	Bill @ 10,000
lo.	Plant Name	No.		and NUU)	and NUU)	to PLANT	@ 10K gallons (1)	
10/							(<u>e</u>)	<u> </u>
	FPSC Residential					x		
1	Sunny Hills	2801	179	173,205	1,837	1.06%	78.40	14,033.6
2	Chuluota	335	136	1,409,322	37,382	2.65%	271.11	36,870.9
3	Deltona	1806	4,719	10,941,176	430,077	3.93%	69.03	325,752.5
4	Holiday Haven	573	92	428,183	21,761	5.08%	203.81	18,750.5
5	Park Manor	444	30	41,254	2,121	5.14%	72.98	2,189.4
6	Valencia Terrace		366	235,753	12,347	5.24%	39.59	14,489.9
7	Fisherman's Haven	673	144	251,463	15,484	6,16%	84.76	12,205.4
8	Momingview	562	36	23,346	1,724	7.38%	84.10	3,027.6
9	Citrus Park	1117	272	591,021	47,350	8.01%	67.76	18,430.7
10	Citrus Springs	906	692	701,060	69,289	9.88%	54.31	37,582.5
11	Marion Oaks	1106	1,371	2,206,704	231,605	10.50%	69.26	94,955.4
12					•			,
13	Total - Less than 10.00	% CIAC	8,037	17,002,488	870,977		1,095.11	578,288.7
14	Avg - Less than 10.009					5.12%	\$ 99.56	\$ 71.9
15	,							
16	Palm Port	440	107	125,308	16,256	12.97%	109,91	11,760.3
17	Enterprise	1807	136	35,836	4,839	13.50%	40.72	5,537.9
18	Apache Shores	990	112	72,116	10,084	13.98%	89.39	10,011.6
19	Leilani Heights	675	391	384,501	59,024	15.35%	43.61	17,051.5
20	Silver Lake Oaks	473	. 27	42,953	6,702	15.60%	107.70	2,907.9
21	Beecher's Point	472	16	49,041	7,761	15.83%	209.76	3,356.1
22	Marco Island	2601	1,937	13,612,593	2,269,562	16.67%	44.66	86,506.4
23	Zephyr Shores	1427	482	402,609	75,390	18,73%	75.19	36,241.5
24	Tropical Isles	2101	284	358,245	69,528	19.41%	36.86	10,468.2
25	Hopida Ibida	2101	LUT	000,240	00,020	10.1170	\$5.55	10,10012
26	Total - 10.00% - 20.00%		3,492	15,083,202	2,519,146		757.80	183,841.7
27	Avg - 10.00% - 20.00%		•			16.70%	\$ 84,20	\$ 52.6
28	•						•	
29	Lehigh	2901	7,183	11,841,499	2,707,046	22.86%	53.66	385,439.7
30	Salt Springs	1115	114	151,483	35,631	23.52%	42.53	4,848.4
31	Jungle Den	1802	117	365,099	99,098	27.14%	162.26	18,984.4
32	Woodmere	888	1,180	1,589,073	443,368	27.90%	47.32	55,837.6
33	Apple Valley	332	167	84,606	24,004	28.37%	38.35	6,404.4
34					·			
35	Total - 20.00% - 30.00%	6 CIAC	8,761	14,031,759	3,309,147		344.12	471,514.6
36	Avg - 20.00% - 30.00%	CIAC				23.58%	\$ 68.82	\$ 53.8
37								
38	Point O' Woods	987	147	306,203	94,856	30.98%	79.42	11,674.7
39	Fox Run	679	104	356,198	119,590	33.57%	113,88	11,843.5
40	Paim Terrace	142 9	1,035	448,800	151,921	33.85%	44.16	45,705.6
41	Marco Shores	2602	265	786,137	305,947	38.92%	68.29	18,096.8
42								
43	Total - 30.00% - 40.00%	6 CIAC	t,551	1,897,338	672,314		305.75	87,320.7
44	Avg - 30.00% - 40.00%	CIAC				35.43%	\$ 75.44	\$ 56.3

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SOUTHERN STATES UTILITIES PAGE COMPARISON OF % CIAC TO STAND-ALONE RESIDENTIAL BILLS - SEWER WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

47 Buena Vantura Lakes 785 7,360 12,594,101 5,646,730 44,84% 47.61 350,406,60 49 University Shores 106 3,837 6,154,211 2,930,185 47.51% 44.24% 47.61 350,406,60 49 Total - 40,00% - 50,00% CIAC 12,452 23,570,762 10,734,053 128,31 570,200,60 50 Avg - 40,00% - 50,00% CIAC 12,452 23,570,762 10,734,053 45,54% \$ 43,54% \$ 44,84 47.61 350,406,60 51 Avg - 40,00% - 50,00% CIAC 12,452 23,570,762 10,734,053 45,54% \$ 43,54% \$ 45,54% \$ 42,84% 3,333,93 52 Beacon Hills 886 3,178 4,564,273 2,675,404 59,62% 32,811 104,270,11 56 Total - 50,00% CIAC 1,556 2,316,403 1,357,431 28,85 \$ 3,284 3,389,33 39,458 \$ 53,80% \$ 22,81 104,270,11 1,42,51 \$ \$ 44,84% 47,61 36,826 \$ \$ \$		(1)	(2)	(3)	(4)	(5)	(6)		(7)	Appr.	(8) Uniform Rate
Line Plant Name Plant Customers (Excl Deprec and NUU) (Excl Amort and NUU) </th <th></th> <th></th> <th></th> <th></th> <th>%</th> <th colspan="4">% of CIAC to Plant</th> <th>(We</th> <th>eighted Avg.)</th>					%	% of CIAC to Plant				(We	eighted Avg.)
No. Plant Name No. and NUU and NU an				No. of	Net Plant	Net CIAC		Star	nd-Alone	Re	esidential
46 Ametia Island 1518 1,455 4,822,450 2,157,138 44.73% 35.45 51,579.7 47 Buena Ventura Lakes 785 7,360 12,594,101 5,646,730 44.84% 47.61 399,406 48 University Shores 106 3,637 6,154,211 2,930,185 47.51% 46.25 168,211.21 49 Total - 40.09% - 50.09% CIAC 12,452 23,570,762 10,734,053 12,931 570,202.61 51 Avg - 40.09% - 50.09% CIAC 12,452 23,570,762 10,734,053 12,931 570,202.61 52 Spring Gardens 134 68,533 39,458 57.59% 24.88 3,333.91 54 Beacon Hills 886 3,178 4,564,273 2,675,404 58.69% 32.81 104.270.11 55 Total - 50.09% - 60.09% CIAC 1,656 2,316,403 1,357,431 28.65 53,802.01 59 Sugar Mill 1801 634 978,926 597,573 61.04% 53.45 33,887.31 50 Wendift Manor 330 29 52,597 <th></th> <th>Plant Name</th> <th></th> <th>Customers</th> <th>• •</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>		Plant Name		Customers	• •						
47 Buena Ventura Lakes 795 7,360 12,594,101 5,646,730 44,84% 47,61 350,409,60 49 University Shores 106 3,837 6,154,211 2,930,185 47,51% 46,225 168,211,21 50 Total - 40,00% - 50,00% CIAC 12,452 23,570,762 10,734,053 45,54% \$ 43,109 \$ 570,200,66 51 Arg - 40,00% - 50,00% CIAC 12,452 23,570,762 10,734,053 45,54% \$ 43,109 \$ 570,200,66 52 Spring Gardens 836 3,178 4,664,273 2,675,404 58,62% 32,81 104,270,11 56 Total - 50,00% - 60,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 53,802,00 57 Arg - 50,00% - 60,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 32,847 58 Sugar Mill 1801 634 978,926 597,573 61,04% 53,45 33,887,33 59 Sugar Mill 1801 634 978,926 597,578 66,65% 52,52 <t< td=""><td></td><td></td><td></td><td></td><td><u></u></td><td></td><td></td><td></td><td><u> </u></td><td></td><td></td></t<>					<u></u>				<u> </u>		
48 University Shores 106 3,637 6,154,211 2,930,185 47,61% 46,25 168,211,21 49 Total - 40,00% - 50,00% CIAC 12,452 23,570,762 10,734,053 129,31 570,200,61 50 Avg - 40,00% - 50,00% CIAC 12,452 23,570,762 10,734,053 45,54% \$ 43,10 \$ 45,77 53 Spring Gardens 134 68,533 39,458 57,55% 24,88 3,333,91 54 Beacon Hills 886 3,178 4,564,273 2,675,404 58,62% 32,281 104,270,11 55 Total - 50,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 53,802,00 56 Total - 50,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 32,847 59 Sugar Mill 1801 634 978,926 597,573 61,04% 53,455 33,887,33 60 Meredith Manor 330 29 25,927 16,599 64,62% 52,52 4,674,22 70 Venetian Village 587	46	Amelia Island	1518	1,455	4,822,450	2,157,138	44.73%		35.45		51,579.75
49 Total - 40.00% - 50.00% CIAC 12,452 23,570,762 10,734,053 45.54% \$ 129.31 570,200.6 50 Spring Gardens 134 68,533 39,458 57.58% 24.88 3,333.93 55 Spring Gardens 134 68,533 39,458 57.58% 24.88 3,333.93 56 Dotal - 50.00% CIAC 1,656 2,316,403 1,357,431 58.60% \$ 28.85 53,802.014 57 Avg - 50.00% CIAC 1,656 2,316,403 1,357,431 58.60% \$ 28.85 \$ 53,802.014 59 Sugar Mill 1801 634 978,926 597,573 61.04% 53.455 33,887.33 39.873 60 Merediti Manor 330 29 25,927 16,599 64.02% 52.52 4,574.22 74 venetian Village 567 89 83,703 55,788 66.65% 52.52 4,574.23 64 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174,58 60,539.13 65 Sugar Mill Woods <td>47</td> <td>Buena Ventura Lakes</td> <td>785</td> <td>7,360</td> <td>12,594,101</td> <td>5,646,730</td> <td>44.84%</td> <td></td> <td>47.61</td> <td></td> <td>350,409.60</td>	47	Buena Ventura Lakes	785	7,360	12,594,101	5,646,730	44.84%		47.61		350,409.60
50 Total - 40.00% - 50.00% CIAC 12,452 23,570,762 10,734,053 129.31 570,200.60 51 Avg - 40.00% - 50.00% CIAC 124.52 23,570,762 10,734,053 45.54% \$ 43.10 \$ 570,200.60 52 Spring Gardens 134 68,533 39,458 57.58% 24.83 3,333.91 54 Beacon Hills 886 3,178 4,564,273 2,675,404 58,62% 32.81 104.270.11 55 Total - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 3,33.91 56 Total - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 3,22.41 57 Mar - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 3,245 3,342.43 50 Sugar Mill 1801 634 978,926 597,573 61.04% 53.45 3,345.33 3,347.33 60 Mar edith Manor 3300 29 25,927	48	University Shores	106	3,637	6,154,211	2,930,185	47.61%		46.25		168,211.25
51 Avg - 40.00% - 50.00% CIAC 45,54% \$ 43.10 \$ 45,75% 53 Spring Gardens 134 68,533 39,458 57,58% 24,88 3,333,93 54 Beacon Hills 886 3,178 4,564,273 2,675,404 58,62% 32,281 104,270,104 55 Total - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 53,802,00 56 Total - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 53,802,00 57 Avg - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28,85 \$ 53,802,00 58 Sugar Mill 1801 634 978,926 597,573 61.04% 53,453 33,897,33 50 Meredith Manor 330 29 25,927 16,599 64,02% 35,955 1,042,52 61 Venetian Village 567 89 83,703 55,788 66,65% 52,52 4,574,21 64 total - 60,00% - 70,00% CIAC 1,393 1,757,077 1,123,119 <td>49</td> <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	49	·									
52 Spring Gardens 134 68,533 39,458 57,58% 24,88 3,333,93 54 Beacon Hills 886 3,176 4,564,273 2,675,404 58,62% 32,81 104,270,14 55 Total - 50,00% - 60,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$53,802,00 57 Avg - 50,00% - 60,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$53,802,00 58 Sugar Mill 1801 634 978,926 597,573 61,04%, 53,45 33,887,33 59 Sugar Mill 1801 634 978,926 597,578 66,65%, 52,52 1,042,55 61 Meredith Manor 330 29 25,927 16,599 64,02%, 35,95 1,042,55 61 Venetlin Village 567 89 83,703 55,788 66,65%, 52,52 4,674,24 64 Total - 60,00% - 70,00% CIAC 1,393 1,757,077 1,123,119 174,58 \$60,599,19	50	Total - 40.00% - 50.00%	6 CIAC	12,452	23,570,762	10,734,053			129.31		570,200.60
54 Beacon Hills 886 3,178 4,564,273 2,675,404 58,62% 32,81 104,270.11 56 Total - 50,00% - 60,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$3,281 104,270.11 57 Avg - 50,00% - 60,00% CIAC 1,656 2,316,403 1,357,431 28,85 \$3,30,229 59 Sugar Mill 1801 634 978,926 597,573 61,04% 53,455 33,807.31 50 Meredith Manor 330 29 25,927 16,599 66,65% 52,552 4,674.22 51 Venetian Village 567 89 83,703 55,788 66,65% 52,552 4,674.22 52 Burnt Store 2202 641 668,522 453,159 67,79% 32,66 20,935.01 64 Total - 60,00% - 70,00% CIAC 1,393 1,757,077 1,123,119 174,58 60,539.11 67 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88,39% 23,09 58,833.33 69 Total - 81,00% - 90,00% CIAC 2,548 <		Avg - 40.00% - 50.00%	CIAC				45.54%	\$	43.10	\$	45.79
55 Total - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28.85 \$3,802.00 57 Avg - 50.00% - 60.00% CIAC 1,656 2,316,403 1,357,431 28.85 \$3,802.00 58 Sugar Mil 1801 634 978,926 597,573 61.04% 53.45 33,887.30 59 Sugar Mil 1801 634 978,926 597,573 61.04% 53.45 53,887.30 60 Meredith Manor 330 29 25,927 16,599 64.02% 35.95 1,042.51 61 Venetian Village 567 89 83,703 55,788 66.65% 52.52 4.674.20 63 Eurit Store 22002 641 668,522 453,159 67.79% 32.66 20.935.01 64 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,593.91 67 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 \$8,833.32	53	Spring Gardens		134	68,533	39,458	57.58%		24.88		3,333.92
57 Avg - 50.00% - 60.00% CIAC 58.60% \$ 28.85 \$ 32.44 59 Sugar Mill 1801 634 978,926 597,573 61.04% 53.45 33,887.33 60 Meredith Manor 330 29 25,927 16,599 64.02% 35.95 1,042.55 61 Venetian Village 567 89 83,703 55,788 66.65% 52.52 4,674.22 62 Burnt Store 2202 641 668,522 453,159 67.79% 32.66 20,935.06 63 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539.13 64 Total - 61.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539.33 67 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 68 Total - 81.00% - 90.00% CIAC 2,548 3,618,288 3,196,301 88.39% 23.09 \$8,833.37,73 71 Leisure Lakes 2401 230 96,766 91,226		Beacon Hills	886	3,178	4,564,273	2,675,404	58.62%		32.81		104,270.18
57 Avg - 50.00% - 60.00% CIAC 58.60% \$ 28.85 \$ 32.44 59 Sugar Mill 1801 634 978,926 597,573 61.04% 53.45 33,887.33 60 Meredith Manor 330 29 25,927 16,599 64.02% 35.95 1,042.55 61 Venetian Village 567 89 83,703 55,788 66.65% 52.52 4,674.22 62 Burnt Store 2202 641 668,522 453,159 67.79% 32.66 20,935.06 63 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539.13 64 Total - 61.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539.33 65 Avg - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539.33 66 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 \$58,833.37 67 Sugar Mill Woods 989 2,548 3,618,288 3,196,301 88.39% <td>56</td> <td>Total - 50.00% - 60.00%</td> <td>CIAC</td> <td>1,656</td> <td>2,316,403</td> <td>1,357,431</td> <td></td> <td></td> <td>28.85</td> <td></td> <td>53,802.05</td>	56	Total - 50.00% - 60.00%	CIAC	1,656	2,316,403	1,357,431			28.85		53,802.05
60 Meredith Manor 330 29 25,927 16,599 64.02% 35.95 1,042.53 61 Venetian Village 567 89 83,703 55,788 66.65% 52.52 4,674.24 62 Burnt Store 2202 641 668,522 453,159 67.79% 32.66 20,935.06 63 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539.13 65 Avg - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539.13 66 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 67 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 68	57	,				-,,	58.60%	\$	28.85	\$	32.49
61 Venetian Village 567 89 83,703 55,788 66.65% 52.52 4,674.24 62 Burnt Store 2202 641 668,522 453,159 67.79% 32.66 20,935.06 63 Avg - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539,13 64 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539,13 65 Avg - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539,13 66 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 69 Total - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.33 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 88.39% 23.09 \$8,339% 23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09 \$23.09	59	Sugar Mill	1801	634	978,926	597,573	61.04%		53.45		33,887.30
62 Burnt Store 2202 641 668,522 453,159 67.79% 32.66 20,935.00 63 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,599.13 64 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,599.13 65 Avg - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,599.13 66 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 68 Total - 81,00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.33 69 Total - 81,00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.33 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 \$3,833.77 71 Leisure Lakes 2401 230 96,766 91,226 94.27% 43.05 9,901.57 70 Deep Creek 2201 3,259 3,304,378 3,248,379 98.31% 47.25	60	•	330	29	25,927	16,599	64.02%		35.95		1,042.55
63 Total - 60.00% - 70.00% CIAC 1,393 1,757,077 1,123,119 174.58 60,539,13 65 Avg - 60.00% - 70.00% CIAC 63.92% \$ 43.65 \$ 43.44 66 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 68 Total - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 69 Total - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.33 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 \$ 58,833.33 71 Leisure Lakes 2401 230 96,766 91,226 94.27% 43.05 9,901.50 73 Deep Creek 2201 3,259 3,304,378 3,248,379 98.31% 47.25 153,987.73 74 74 75 Total - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 163,889.24 76 Avg - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 <t< td=""><td>61</td><td>Venetian Village</td><td>567</td><td>89</td><td>83,703</td><td>55,788</td><td>66.65%</td><td></td><td>52.52</td><td></td><td>4,674.28</td></t<>	61	Venetian Village	567	89	83,703	55,788	66.65%		52.52		4,674.28
65 Avg - 60.00% - 70.00% CIAC 63.92% \$ 43.65 \$ 43.44 66 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.33 69 Total - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.33 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.33 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.33 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 \$58,833.33 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 \$58,833.33 71 Leisure Lakes 2401 230 96,766 91,226 94.27% 43.05 9,901.50 73 Deep Creek 2201 3,259 3,304,378 3,248,379 98.31% 47.25 153,987.75 74 75 Total - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 163,899.23		Burnt Store	2202	641	668,522	453,159	67.79%		32.66		20,935.06
65 Avg - 60.00% - 70.00% CIAC 63.92% \$ 43.65 \$ 43.44 66 Sugar Mill Woods 989 2,548 3,618,288 3,198,301 88.39% 23.09 58,833.32 69 Total - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 58,833.32 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 \$ 58,833.32 70 Avg - 81.00% - 90.00% CIAC 2,548 3,618,288 3,198,301 23.09 \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 23.09 \$ \$ 3.09 \$ \$ 3.09 \$ \$ \$	64	Total - 60.00% - 70.00%	6 CIAC	1,393	1,757,077	1,123,119			174.58	<u></u>	60,539.19
68 69 Total - 81,00% - 90,00% CIAC 2,548 3,618,288 3,198,301 23,09 58,833,33 70 Avg - 81,00% - 90,00% CIAC 88,39% \$ 23,09 \$ 3,09 \$ 23,09 \$ 23,09 \$ 3,09 \$ 3,09 \$ 3,09 \$ 3,09 \$ 3,09 \$ 3,09 \$ 3,09 \$ 3,09 \$ 3,09 \$ \$ 3,09 \$ \$ 3,09 \$ \$ \$ 3,09 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		Avg - 60.00% - 70.00%	CIAC				63.92%	\$	43.65	\$	43.46
70 Avg - 81.00% - 90.00% CIAC 88.39% \$ 23.09 \$ 23.09 71 Leisure Lakes 2401 230 96,766 91,226 94.27% 43.05 9,901.50 73 Deep Creek 2201 3,259 3,304,378 3,248,379 98.31% 47.25 153,987.75 74		Sugar Mill Woods	989	2,548	3,618,288	3,198,301	88.39%		23.09		58,833.32
71 71 72 Leisure Lakes 2401 230 96,766 91,226 94.27% 43.05 9,901.56 73 Deep Creek 2201 3,259 3,304,378 3,248,379 98.31% 47.25 153,987.75 74 75 Total - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 163,889.25 76 Avg - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 163,889.25 76 Avg - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 98.19% \$ 45.15 \$ 46.97 77 78 77 78 74 75 2,977.75 2,282,032.33 79 Total FPSC Residential 45,035 \$ 84,994,864 \$ 28,481,525 2,977.75 2,282,032.33	69	Total - 81.00% - 90.00%	6 CIAC	2,548	3,618,288	3,198,301			23.09		58,833.32
73 Deep Creek 2201 3,259 3,304,378 3,248,379 98.31% 47.25 153,987.74 74 75 Total - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 163,889.24 76 Avg - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 163,889.24 76 Avg - 91.00% - 100.00% CIAC 98.19% \$ 45.15 \$ 46.97 77 78 77 78 77 2,977.75 2,282,032.33 79 Total FPSC Residential 45,035 \$ 84,994,864 \$ 28,481,525 2,977.75 2,282,032.33		Avg - 81.00% - 90.00%	CIAC				88.39%	\$	23.09	\$	23.09
74 75 Total - 91.00% - 100.00% CIAC 3,489 3,401,144 3,339,605 90.30 163,889.22 76 Avg - 91.00% - 100.00% CIAC 98.19% \$ 45.15 \$ 46.97 77 78 79 Total FPSC Residential 45,035 \$ 84,994,864 \$ 28,481,525 2,977.75 2,282,032.33	72	Leisure Lakes	2401	230	96,766	91,226	94.27%		43.05		9,901.50
76 Avg - 91.00% - 100.00% CIAC 98.19% \$ 45.15 \$ 46.97 77 78 79 Total FPSC Residential 45.035 \$ 84,994,864 \$ 28,481,525 2,977.75 2,282,032.33		Deep Creek	2201	3,259	3,304,378	3,248,379	98.31%		47.25		153,987.75
77 78 79 Total FPSC Residential 45,035 \$ 84,994,864 \$ 28,481,525 2,977.75 2,282,032.33	75	Total - 91.00% - 100.00	% CIAC	3,489	3,401,144	3,339,605			90.30		163,889.25
79 Total FPSC Residential 45,035 \$ 84,994,864 \$ 28,481,525 2,977.75 2,282,032.33	77	Avg - 91.00% - 100.00%	6 CIAC				98.19%	\$	45.15	\$	46.97
		Total FPSC Residen	itial	45.035	\$ 84,994,864	\$ 28 481 525			2,977,75	<u> </u>	2 282 032 35
	80						33.51%	\$	72.63	\$	50.67

Note - The totals for each catagory are based on:

(1) Simple Average (Total of all plants / Number of Plants)

(2) Weighted average which approximates a uniform rate (Total of all plants weighted by number of customers / Total Number of Customers).

FPS

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Section 367.0816, Florida Statutes, requires that rate case expense be apportioned for recovery over a period of four years. The statute further requires that the rates of the utility be reduced immediately by the amount of rate case expense previously included in the rates. This statute applies to all rate cases filed on or after October 1, 1989. Accordingly, we find that the water rates should be reduced by \$9,026 and the wastewater rates should be reduced by \$9,026 and the wastewater rates should be reduced by \$940 as shown in Schedule No. 4, at the end of the four year recovery period. The revenue reductions reflect the annual rate case amounts amortized (expensed) plus the gross-up for regulatory assessment fees.

The utility shall file revised tariff sheets no later than one month prior to the actual date of the required rate reduction. The utility also shall file a proposed customer letter setting forth the lower rates and the reason for the reduction. If the utility files this reduction in conjunction with a price index or pass-through rate adjustment, separate data shall be filed for the price index and/or pass-through increase or decrease and the reduction in the rates due to the amortized rate case expense.

By Orders Nos. 22620 and 22620-A, issued March 1, 1990 and March 3, 1990, respectively, we authorized the utility to collect increased water rates on an interim basis, subject to refund with interest, pending the outcome of this proceeding. Since the final revenue requirement for the water system is larger than the interim water system revenue requirement, no refund of interim water rates is required.

Service Availability Charges

Stipulation 35, which we accepted, states that service availability (plant capacity) charges should be implemented for the Chuluota wastewater system and adjusted for the Florida Central Commerce Park, to be consistent with Rule 25-30.580, Florida Administrative Code. However, the stipulation did not address the specific level of service availability charges. The utility's position is that the service availability charges resulting from the stipulation should be designed to generate the minimum levels of CIAC rather than the maximum. We recognize that the utility did not request a change in its water service availability charges. However, it is our policy to review service availability charges when a company Comes in for a rate case so we can determine whether the utility's contribution levels are appropriate and consistent with our rule.

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EXHIBIT

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Upon review of the utility's water service availability charges, we find that no adjustment is necessary. Of the four wastewater systems contained in the utility's filing, we will make no changes to the existing service availability charges for the Apple Valley and Meredith Manor systems. We will, however, implement and adjust, respectively, the charges for the Chuluota and Florida Central Commerce Park wastewater systems in order to achieve the maximum CIAC level of 75 percent as set forth in Rule 25-30.580, Florida Administrative Code.

A new wastewater treatment plant has been built to replace the old Chuluota plant. This system has no existing plant capacity charge. In order to achieve the 75 percent contribution level in conformance with our rule, we find that the utility should charge a plant capacity charge of \$2,730 per ERC, with an ERC equalling 250 gallons per day (gpd) for residential customers. For all others, the charge is \$11.04 per gpd. The utility should continue collecting the existing service line installation fees shown in its tariff. If we were to accept the utility's position of using the minimum CIAC level permitted by the rule, this system would be 7.70 percent contributed. Such a very small contribution level would be contrary to the intent of our rule. The purpose of CIAC is to reduce the utility's investment and thereby keep service rates within a reasonable range, which benefits the utility's customers over the long term

The Florida Central Commerce Park wastewater treatment plant serves an industrial park. The existing plant capacity charge is \$350 per ERC.

At hearing, utility witness Lewis testified that the plant capacity charge should be increased from the present \$350 per ERC level. He further testified that the long range effect on wastewater rates would be to lower them if the plant capacity charge were increased. However, witness Lewis further expressed his concerns regarding a substantial increase in the plant capacity charge. He stated that the utility was now having problems getting the customers to abandon their septic tanks and hook-up to the utility's wastewater facilities at the present plant capacity charge of \$350 per ERC.

Utility witness Lewis further testified: "My concern is that if we don't come up with some kind of additional plant capacity fee, that keeping uniform rates, which we requested in

EXHIBIT

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this rate case, would put more exposure on Apple Valley and Meredith Manor customers. So the alternative is, as you say, to increase the CIAC portion of these plants to back off the revenue requirement for everyone."

This witness further testified that, under the uniform rates proposed in the utility's application, the Apple Valley and Meredith Manor systems would be subsidizing the Chuluota and Florida Central Commerce Park systems, and it was this cross-subsidization impact that was a factor in the utility's stipulating to an across-the-board increase of 20 percent.

Upon consideration, we do not believe that Florida Central Commerce Park should be treated differently than any other wastewater system. Accordingly, the present plant capacity charge of \$350 must be increased. In order to achieve the maximum CIAC level of 75 percent, the appropriate charge is \$1,435 per ERC, with an ERC equalling 220 gpd. For all others, the charge shall be \$6.52 per gpd. If we were to implement the minimum CIAC level, this system would be 34.93 percent contributed. In addition, the same service line fees applicable to the other three wastewater systems shall be established for this system.

The service line fees are set forth below:

SERVICE LINE FEES

COMMISSION
APPROVED
CHARGE

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DESCRIPTION

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Short Service Line (Note 1) --\$ 350Long Service Line (Note 2) --\$ 450Long Service Line (Note 3) --\$ 650

Note 1: Short Service Line - Tapping into the wastewater collection main located on the same side of the street as property to be served.

property to be served. Note 2: Long Service Line - Tapping into the wastewater collection main located on the opposite side of an unpaved road of the property to be served. FPSC

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Note 3: Long Service Line - Tapping into the wastewater collection main located on the opposite side of a paved road of the property to be served, requiring jacking or boring the service line under the street.

The approved service availability charges should become effective for all connections made on or after the stamped approval date on the revised tariff sheets. The revised tariff sheets will be approved upon staff's verification that the tariffs are consistent with the Commission's decision and the proposed service availability charge notice is adequate for those parties known by the utility who will be affected by the change.

Allowance for Funds Prudently Invested (AFPI) Charges

The AFPI charge is designed to allow the utility to recover a fair rate of return on the portion of the plant facilities which were prudently constructed, but exceed the amount necessary to serve current customers. The utility requested AFPI charges for its Chuluota and Florida Central Commerce Park AFPI Charges for its Chuluota and Florida Central commerce Fark systems. Stipulation 37 provides that since the utility agrees with the AFPI methodology and agrees to the used and useful percentages for the Chuluota and Florida Central Commerce Fark wastewater systems, the AFPI amounts are fall-out numbers. We have calculated the AFPI charges based on the audited actual costs of \$1,035,945 for the Chuluota system and \$1,372,667 for the Florida Central Commerce Park system. However, since \$479,413 of plant for the Florida Central Commerce Park system was contributed by the seller of this system, we have excluded this plant from the AFPI calculation because it does not represent an investment of the utility. This amount would be excluded from rate base in the ratemaking process, and the utility would not be allowed to earn a return on this contributed plant. Therefore, it is appropriate to exclude this amount from the AFPI calculation. Similarly, since advances for construction do not represent an investment of the utility and are excluded from earning a rate of return in the rate base calculation, advances for construction totalling \$400,000 have been excluded from the AFPI calculation. Therefore, based on these adjustments and the used and useful percentage of 20 percent for the Florida Central Commerce Park system, the amount of non-used and useful plant eligible to accrue AFUDC has been calculated to be \$433,254. The Chuluota plant was determined to be 39 percent used and useful. Therefore, the amount of non-used and useful plant eligible to accrue AFUDC was calculated to be \$742,496 for the Chuluota system.

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	EXHIBIT	(FLL-11)
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		* ==
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The calculation of the AFPI charges for the Chuluota and Florida Central Commerce Park systems is shown on Schedules Nos. 5 and 6, respectively. The cost of the qualifying assets is the net plant cost removed from the rate base. The capacity of the qualifying asset is that portion left over after considering test year consumption, fire flow, and margin reserve and the number of future customers is calculated based on the remaining capacity and the average usage of the current customers. The charge for the Chuluota system shall begin at \$46.25 in April 1990 and accumulate to \$3,197.04 over a five year period. The charge for the Florida Central Commerce Park system shall begin at \$20.07 at December 1989 and accumulate to \$1,372.75 over a five year period. While the utility is not prevented from collecting the charge after five years, after five years, the amount should remain fixed at the five year level. After the utility collects the charge from 244 ERCs for the Chuluota system and 347 ERCs for the Florida Central *Commerce* Park system, the charge should be discontinued.

Spray Irrigation Charge

.. .

During the course of this proceeding, the issue was raised regarding whether a charge should be implemented for spray irrigation and who should pay the charge if one is implemented.

The utility supports the establishment of a rate for treated effluent for spray irrigation. Its position is that this charge will reduce the charge for wastewater by the amount of revenues to be derived for effluent water and that the charge should only be applicable to the Florida Commerce Park system because none of the other systems have in place the necessary piping to transport effluent to individual property owners for use. In the future, it would be the intention of the utility to review the opportunity for expanding effluent disposal where cost effective. This will reduce the cost to the individual property owners in that they will not have to use and pay for potable water for irrigation purposes and, therefore, is a positive conservation effort on the part of the utility.

We believe a charge for spray irrigation is appropriate and have approved Stipulation 38 which explains how the charge should be developed. The only item absent at the time of the stipulation was the number of sprinkler heads to be used in the calculation. Our staff has received this information from the utility and we hereby develop the charge, which we find to be reasonable, as shown below.

EXHIBIT	-	(FLL-1	2)

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SOUTHERN STATES UTILITIES COMPARISON OF % CIAC WHEN SORTED BY TREATMENT TYPE AND STAND ALONE RESIDENTIAL BILL PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx, Uniform Rate
					0	6 of CIAC to PI	ant	Residential	(Weighted Avg.)
				No. of	Net Plant	Net CIAC		Stand-Alone	Residential
Line		Plant®	Ination	Customers	(Excl Deprec	(Excl Amort	% of CIAC	884.5%*	Bill @ 10,000
No.	Plant Name	No.	Туре		and NUU)	and NUU)	to PLANT	@ TOK gallons (1)	
	FPSC Residential								
1	Amelia Island	1518	A/S	1,757	2,423,209	1,820,303	75.12%	15.58	27,374.06
2	Sugar Mill Woods	989	AS	2,622	3,424,194	1,773,532	51.79%	16.88	44,259.36
3	University Shores	106	A/S	3,890	3,807,693	2,576,131	67.66%	20.33	79,083.70
4	Silver Lake Estates	574	A/S	1,449	1,409,433	296,622	21.05%	20.40	29,559.60
5	Deltona	1806 888	A/S A/S	23,911 1,189	16,493,528 863,615	6,855,814 391,334	41.57% 45.31%	20.86 21.50	496,783.46 25,563.50
6 7	Woodmere Beacon Hills	886	A/S	3,178	4,455,692	1,766,103	39.64%	24.36	77,416.08
, B	Apple Valley	332	A/S	983	730,936	188,902	25.84%	25.12	24,692.96
9	Buena Ventura Lakes	785	A/S	9,176	5,370,996	2,534,468	47.19%	27.36	251,055.36
10	Lake Harriet Estates	323	A/S	284	130,164	29,335	22.54%	30.25	8,591.00
11	Meredith Manor	330	A/S	651	752,472	48,225	6.41%	30,93	20,135.43
12	Druid Hills	334	A/S	249	260,780	9,071	3.48%	31.05	7,731.45
13	Keystone Heights	1094	A/S	1,004	783,153	48,698	6.22%	31.44	31,565.76
14	Citrus Springs	906 336	A/S A/S	1,917 61	3,124,004 73,213	519,691 2,657	16.64% 3,63%	38.65 45.40	74,092.05 2,769.40
15 16	Dol Ray Manor Pine Ridge Estates	782	A/S	218	333,250	184,365	55.32%	46.01	10,030.18
17	Piney Woods	553	A/S	168	224,201	10,457	4.66%	48.26	8,107.68
18	Fern Park	324	A/S	182	331,362	7,863	2.37%	48.93	8,905.26
19	Remington Forest	2302	A/S	87	139,147	56,204	40.39%	49,49	4,305.63
20	Interlachen Lake Estates	470	A/S	250	140,823	19,191	13.63%	51.31	12,827.50
21	Marion Oaks	1106	A/S	2,797	5,488,734	1,095,117	19.95%	57.79	161,638.63
22	River Grove	442	A/S	105	88,495	10,034	11.34%	58.04	6,094.20
23	Chuluota	335	A/S	684	1,535,209	83,205	5.42%	63.66	43,543.44
24	Palm Port	440 2801	A/S A/S	106 437	111,551 695,064	13,877 56,690	12.44% 8.16%	66.21 68.46	7,018.26 29,917.02
25 26	Sunny Hills Lake Brantley	325	A/S	43) 67	155,273	6,125	3.94%	70,81	4,744.27
27	Leisure Lakes	2401	A/S	243	140,834	54,362	38.60%	79.34	19,279.62
28	St. Johns Highlands	471	A/S	84	49,766	5,587	11.23%	81.34	6,832.56
29	Welaka	447	A/S	139	113,075	7,725	6.83%	86.67	12,047.13
30	Lake Ajay Estates	773	A/S	. 100	276,848	62,189	22.46%	94.83	9,483.00
31	Hermits Cove	438	A/S	174	181,031	5,260	291%	99.90	17,382.60
32	River Park	439	A/S	359	176,159	15,501	8.80%	125.40	45,018.60
33 34	Silver Lake Oaks Fountains	473 772	A/S A/S	29 34	74,707 240,536	3,395 108,972	4.54% 45.30%	140.84 245.92	4,084.36 8,361.28
34 35	rountains	112	Arə				40.30 /3		
36	Total - Aeration/Storage			58,584	54,599,147	20,667,007		1,983.32	1,622,294.39
37 38	Avg Aeration/Storage						37.85%	\$ 56.33	\$ 27.69
39	Spring Gardens	994	CL	134	46,711	11,664	24,97%	24.81	3,324.54
40	Citrus Park	1117	CL	366	137,118	74,321	54.20%	27.87	10,200.42
41	Leilani Heights	675	CL	396 93	325,396	67,054	20.61%	28.46 33.53	11,270.16
42 43	Geneva Lake Estates Valencia Terrace	1298 554	a a	365	77,618 193,140	11,399 11,410	14.69% 5.91%	33.53 34.11	3,118.29 12,450.15
4J 44	Picciola Island	564	a	134	68,226	16,516	24.21%	34.81	4,664.54
45	Palm Terrace	1429	ä	1,193	279,706	80,561	28.80%	37.92	45,238.56
46	Fisherman's Haven	673	CL	144	57,749	13,805	23.91%	37.94	5,463.36
47	Fem Terrace	552	CL	125	95,406	6,727	7.05%	39.08	4,885.00
48	Palisades Country Club	579	CL	80	251,275	8,882	3.53%	39.40	3,152.00
49	Oak Forest	993	CL Cl	147	167,512	20,913	12.48%	40.42	5,941.74
50 51	Hobby Hills Pine Ridge	558 907	CL CL	96 938	41,739 4,125,230	1,361 1,171,325	3.26% 28.39%	41.56 43.53	3,989.76 40,831.14
52	Imperial Mobile Terrace	570	CL	241	270,982	20,948	7.73%	45.35	10,929.35
53	Venetian Village	567	a	140	118,121	23,611	19.99%	48.73	6,822.20
54	Harmony Homes	326	CL	63	80,089	379	0.47%	53.08	3,344.04
55	Windsong	783	CL	105	135,437	59,029	43.58%	53.12	5,577.60
56	Pomona Park	443	CL	173	105,742	15,288	14.46%	53.58	9,269.34
57	Postmaster Village	1095	CL Cl	160	233,972	18,756	8.02%	53,66	8,585.60
58 59	Friendly Center Salt Springs	556 1115	CL CL	21 119	7,898 347,780	1,471 8,237	18.62% 2.37%	54.08 54.16	1,135.68 6,445.04
60	Bay Lake Estates	784	CL CL	74	55,199	3,697	6.70%	54.27	4,015.98
ଗ	Rosemont	988	CL	t29	281,582	31,374	11.14%	55.55	7,165.95
62	Zephyr Shores	1427	CL	484	160,857	44,826	27.87%	56.17	27,186.28
ଷ	Holiday Heights	121	α	53	79,555	5,742	7.22%	56.50	2,994.50

EXHIBIT	(FLL-12)

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SOUTHERN STATES UTILITIES COMPARISON OF % CIAC WHEN SORTED BY TREATMENT TYPE AND STAND ALONE RESIDENTIAL BILL PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rate
					9	6 of CIAC to Pla	ant	Residential	(Weighted Avg.)
				No. of	Net Plant	Net CIAC		Stand-Alone	Residential
Line		Plant [®]	Treatment	Customers	(Excl Deprec	(Excl Amort	% of CIAC	88.54*	Bill @ 10,000
No.	Plant Name	No.	Туре		and NUU)	and NUU)	to PLANT	@ 10K gollons (1)	
64	Tropical Park	781	a	548	626,186	23,227	3.71%	57.29	31,394.92
65	Keystone Club Estates	1279	a	162	183,365	8,596	4.69%	59.57	9,650.34
66	Intercession City	780	α	258	206,698	14,447	6.99%	60.13	15,513.54
67	Carlton Village	555	a	148	362,295	34,182	9.43%	69.78	10,327.44
68	Morningview	562	α	37	77,758	2 <i>,2</i> 80	2.93%	74.28	2,748.36
89	Golden Terrace	992	CL	108	109,399	5,836	5.33%	78.28	8,454.24
70	Stone Mountain	565	a	8	9,738	1,251	12.85%	105.39	843.12
71	Skycrest	551	CL	115	319,148	12,329 0	3,86% 0.00%	110.38 123.00	12,693.70 1,476.00
72	Lakeview Villas	1054 578	CL CL	12 18	12,898 93,727	2,770	2.96%	140.22	2,523.96
73 74	Quail Ridge Wootens	5/6 446	CL	25	28,746	3,189	11.09%	168.14	4,203.50
74 75	From the Harris Estates	440 557	CL	176	507,261	3,650	0,72%	169.48	29,828.48
76	Ediot Earto maina Estatoa								
77	Total - Chiorination			7,588	10,281,258	1,841,054		2,317.63	377,658.82
78 79	Avg - Chlorination						17.91%	\$ 62.64	\$ 49.77
80	Crystal River Highlands	984	IF	80	136,014	82,724	60.82%	46.24	3,699.20
81	Point O' Woods	987	IF	361	599,696	94,631	15.78%	67,55	24,385.55
82	Lakeside	995	IF	86	247,874	6,205	2.50%	81.41	7,001.26
83	Fox Run	679	١F	107	341,332	75,720	22.18%	90.02	9,632.14
84	Gospel Island Estates	986	١F	8	10,607	7,874	74.23%	105.50	844.00
85	Apache Shores	990	IF	152	82,316	20,914	25.41%	111.25	16,910.00
86 77	Palms Mobile Home Park	559	IF	58	73,570	1,708	2.32%	186.11	10,794.38
87 88	Total - Iron Filtration			852	1,491,411	289,777		688.08	73,266.53
89	Avg - Iron Filtration			~~	1,101,111	200,111	19.43%	\$ 98.30	\$ 85.99
90									
91	Lehigh	2901	LS	9,079	9,273,000	2,906,684	31.35%	56.90	516,595.10
92	Sugar Mill	1801	LS	638	797,734	415,131	52.04%	81,26	51,843.88
93 94	Marco Shores	2602	ts	308	961,498	195,942	20.38%	102.30	31,508.40
95	Total - Lime Softening			10,025	11,032,231	3,517,757	1	240.46	599,947.38
96	Avg - Lime Softening						31.69%	\$ 80.15	\$ 59.85
97	.				40.000	440.000			7.07.00
98 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Enterprise	1807	PW	244	134,218	116,902	87.10%	30.03 32.84	7,327.32 4,564.76
99 100	Westmont Grand Terrace	122 575	PW PW	139 111	34,264 103,567	17,410 38,074	50.81% 36.76%	32.54 38.53	4,276.83
101	Daetwyler Shores	105	PW	125	54,641	752	1.38%	38.79	4,848.75
102	Kingswood	1701	PW	62	11,139	216	1.94%	40.60	2,517.20
103	Lake Conway Park	104	PW	86	28,221	266	0.94%	40.88	3,515.68
104	Oakwood	1702	PW	209	27,565	2,747	9.97%	41.21	8,612.89
105	Deep Creek	2201	PW	3,182	1,689,372	287,036	15,19%	67.04	213,321.28
106	Holiday Haven	573	PW	111	33,509	15,198	45.35%	77.86	8,642.46
107	Jungte Den	1802	PW	1 13	27,133	6,743	24.85%	79.54	8,988.02
108	Beecher's Point	472	PW	47	245,512	29,003	11.81%	123.69	5,813.43
109	Paim Valley	2301	PW	210	1,139,046	10,657	0.94%	126.94	26,657.40
110 111	Total - Purchased Water			4,639	3,728,186	525,005		737.95	299,086.02
112	Avg - Purchased Water			4,009	3,120,100	323,000	14.08%	\$ 61.50	\$ 64.47
113	Ang - r droimado maar						14,0070	• • • • • •	L *
114	Burnt Store	2202	RO	706	4,009,195	278,200	6.94%	96.84	68,369.04
115	Marco Island	2601	RO&LS	6,144	39,678,429	4,516,062	11.38%	54.61	335,523.84
116 117	Total - Reverse Osmosia			6,850	43,687,624	4,794,262		151.45	470
118	Avg - Reverse Osmosia	•		0,000	43,007,024	4,/94,202	10.97%	\$ 75.73	403,892.88
119							19.97 /	÷ 10.10	
120	Total FPSC Residentia	-1		80 500	10/ 010 057	21 024 004		0.140.00	A 474 1 / A
121				88,538	124,819,857	31,634,861	BF 6 144	6,118.89	3,376,146.02
122	Average FPSC Reside	ential					25.34%	64.41	38.13

Note - The totals for each catagory are based on: (1) Simple Average (Total of all plants / Number of Plants) (2) Weighted average which approximates a uniform rate (Total of all plants weighted by number of customers / Total Number of Customers).

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SOUTHERN STATES UTILITIES COMPARISON OF STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY TREATMENT TYPE AND % CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rate
						% of CIAC to P	lant	Residential	(Weighted Avg.)
				No. of	Net Plant	Net CIAC		Stand-Alone	Residential
Line		Plant®	fraiment	Customers	(Excl Deprec	(Excl Amort	SACAC	Bill - 5/8"	Bill @ 10,000
No.	Plant Name	No.	Туря	003(011013	and NUU)	and NUU)		@ 10K gallons (1)	
								<u></u> ;	g (_/_/
	FPSC Residential	-							
1	Fern Park	324	A/S	182	331,362	7,863	2.37%	48.93	8,905.26
2	Hermits Cove	438	A/S	174	181,031	5,260	291%	99.90	17,382.60
3	Druid Hills Del Deu Mener	334	A/S	24 9	260,780	9,071	3.48%	31.05	7,731.45
4	Dol Ray Manor Lake Brantley	336 325	A/S A/S	61 67	73,213 155,273	2,657 6,125	3.63%	45.40 70.81	2,769.40 4,744.27
5	Silver Lake Oaks	473	A/S	29	74,707	3,395	4,54%	140.84	4,084.36
7	Piney Woods	553	A/S	168	224,201	10,457	4.66%	48,26	8,107.68
8	Chuluota	335	A/S	684	1,535,209	83,205	5.42%	63.66	43,543.44
9	Keystone Heights	1094	A/S	1,004	783,153	48,698	6.22%	31.44	31,565.76
10	Meredith Manor	330	A/S	651	752,472	48,225	6.41%	30.93	20,135.43
11	Welaka	447	A/S	139	113,075	7,725	6.83%	86.67	12,047.13
12	Sunny Hills	2801	A/S	437	695,064	56,690	8,16%	68.46	29,917.02
13	River Park	439	A/S	359	176,159	15,501	8.80%	125.40	45,018.60
14	St. Johns Highlands	471	AS	84	49,766	5,587	11.23%	81.34	6,832.56
15	River Grove	442	AS	105	88,495	10,034	11.34%	58.04	6,094.20
16	Palm Port	440	A/S	106	111,551	13,877	12.44%	66.21	7,018.26
17 18	Interlachen Lake Estates	470 906	A/S A/S	250 1,917	140,823 3,124,004	19,191 519,691	13.63% 16.64%	51.31 38.65	12,827.50 74,092.05
19	Citrus Springs Marion Oaks	1106	A/S	2,797	5,488,734	1,095,117	19.95%	57.79	161,638.63
20	Silver Lake Estates	574	A/S	1,449	1,409,433	296,622	21.05%	20.40	29,559.60
21	Lake Ajay Estates	773	AS	100	276,848	62,189	22.46%	94.83	9,483.00
22	Lake Harriet Estates	323	A/S	284	130,164	29,335	22.54%	30.25	8,591.00
23	Apple Valley	332	A/S	983	730,936	188,902	25.84%	25.12	24,692.96
24	Leisure Lakes	2401	A/S	243	140,834	54,362	38.60%	79.34	19,279.62
ක	Beacon Hills	886	A/S	3,178	4,455,692	1,766,103	39.64%	24.36	77,416.08
26	Remington Forest	2302	A/S	87	139,147	56,204	40.39%	49.49	4,305.63
27	Deltona	1806	A/S	23,911	16,493,528	6,855,814	41.57%	20.86	498,783.46
28	Fountains	772	A/S	34	240,536	108,972	45.30%	245.92	8,361.28
29	Woodmare	888	A/S	1,189	863,615	391,334	45.31%	21,50	25,563,50
30	Buena Ventura Lakes Succes VELWards	785 989	A/S A/S	9,176	5,370,996	2,534,468	47.19%	27.36	251,055.36
31 32	Sugar MRIWoods Pine Ridge Estates	989 782	A/S	2,622 218	3,424,194 333,250	1,773,532 184,365	51.79% 55.32%	16.88 46.01	44,259,36 10,030,18
33	University Shores	106	A/S	3,890	3,807,693	2,576,131	55.52% 67.66%	20.33	79,083.70
34	Amelia Island	1518	A/S	1,757	2,423,209	1,820,303	75.12%	15.58	27,374.06
35			()		e 1-mophoo	.,	,	10.00	
36	Total - Aeration/Storage			58,584	54,599,147	20,667,007		1,983.32	1,622,294.39
37	Avg - Aeration/Storage						37.85%	\$ 58.33	\$ 27.69
38									
39	Lakeview Villas	1054	CL.	12	12,898	0	0.00%	123.00	1,476.00
40	Harmony Homes	326	CL	63	80,089	379	0.47%	53.08	3,344.04
41	East Lake Harris Estates	557	CL Cl	176	507,261	3,650	0.72%	169.48	29,828.48
42 43	Salt Springs Morningview	1115 562	CL CL	119 37	347,780 77,758	8,237 2,280	2.37% 2.93%	54.16 74.28	6,445.04
44	Quail Ridge	578	CL	18	93,727	2,250	2.96%	140.22	2,748.36 2,523.96
45	Hobby Hills	558	CL	96	41,739	1,361	3.26%	41.56	3,989.76
46	Paisades Country Club	579	a	80	251,275	8,882	3.53%	39.40	3,152.00
47	Tropical Park	781	a	548	626,186	23,227	3.71%	57.29	31,394.92
48	Skycrest	551	CL.	115	319,148	12,329	3.86%	110.38	12,693.70
49	Keystone Club Estates	1279	a	162	183,365	8,596	4.69%	59.57	9,650.34
50	Golden Terrace	992	α	108	109,399	5,836	5.33%	78.28	8,454.24
51	Valencia Terrace	554	CL.	365	193,140	11,410	5.91%	34.11	\$2,450.15
52	Bay Lake Estates	784	a	74	55,199	3,697	6.70%	54.27	4,015.98
53	Intercession City	780	а. а	258	206,698	14,447	6.99%	60.13	15,513.54
54 55	Fern Terrace Holiday Heights	552 121	CL CL	125	95,406 70,555	6,727 5,742	7.05%	39.06	4,885.00
56	mperial Mobile Terrace	570	a	53 241	79,555 270,982	5,742 20,948	7 <u>.22</u> % 7.73%	56.50 45.35	2,994.50 10,929.35
57	Postmaster Village	1095	CL	160	233,972	18,756	8.02%	43.35 53.66	8,585.60
58	Carlton Village	555	CL.	148	362,295	34,182	9.43%	69.78	10,327,44
59	Woolens	446	αL	25	28,746	3,189	11.09%	168.14	4,203.50
60	Rosemont	988	CL	129	281,582	31,374	11.14%	55.55	7,165.95
ଗ	Oak Forest	993	CL	147	167,512	20,913	12.48%	40.42	5,941.74
62	Stone Mountain	565	CL	8	9,738	1,251	12.85%	105.39	843.12
ស	Pomona Park	443	CL	173	105,742	15,288	14.46%	53.58	9,269.34

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SOUTHERN STATES UTILITIES COMPARISON OF STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY TREATMENT TYPE AND % CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

<u></u>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rate
						% of CIAC to P	lant	Residential	(Weighted Avg.)
				No. of	Net Plant	Net CIAC		Stand-Alone	Residential
Line		Plant [§]	Treatment	Customers	(Excl Deprec	(Excl Amort	S of CARC	Bill - 5/8"	Bill @ 10,000
No.	Plant Name	No.	Type		and NUU)	and NUU)	IN PLANT	@ 10K gallons (1	
		×				<u></u>	21002000000		·
64	Geneva Lake Estates	1298	a	93	77,618	11,399	14,69%	33.53	3,118.29
65	Friendly Center	556	a	21	7,898	1,471	18.62%	54.08	1,135.68
66	Venetian Village	567	CL.	140	118,121	23,611	19.99%	48.73	6,822.20
67	Leitani Heights	675	CL.	396	325,396	67,054	20,61%	28.46	11,270,16
68	Fisherman's Haven	673	CL.	144	57,749	13,805	23.91%	37.94	5,463.36
69	Picciola Island	564	CL	134	68,226	16,516	24.21%	34.81	4,664.54
70	Spring Gardens	994	CL A	134	46,711	11,664	24.97%	24.81	3,324.54
71	Zephyr Shores	1427 907	a. a	484 938	160,857	44,826	27.87% 28.39%	56.17 43,53	27,186.28
72 73	Pine Ridge Palm Terrace	907 1429	a	1,193	4,125,230 279,706	1,171,325 80,561	28.39%	43,33 37.92	40,831.14 45,238.56
73	Windsong	783	CL	105	135,437	59,029	43.58%	53.12	43,238.36
75	Citrus Park	1117	CL	366	137,118	74,321	54.20%	27.87	10,200,42
76									
77	Total - Chlorination			7,588	10,281,258	1,841,054		2,317.63	377,658.82
78	Avg - Chlorination						17.91%	\$ 62.64	\$ 49.77
79									
80	Palms Mobile Home Park	559	IF	58	73,570	1,708	2.32%	186,11	10,794.38
81	Lakeside	995	IF	86	247,874	6,205	2.50%	81.41	7,001.26
82	Point O' Woods	987	١F	361	599,698	94,631	15.78%	67.55	24,385.55
83	Fox Run	679	궤	107	341,332	75,720	22.18%	90.02	9,632.14
84 65	Apache Shores	990	IF IF	152	82,316	20,914	25.41%	111.25	16,910.00
85 86	Crystal River Highlands	984 986	IF	80 8	136,014	82,724 7,874	60.82% 74.23%	46.24	3,699.20
87	Gospel Island Estates	900		•	10,607	7,074	14.23%	105.50	844.00
88	Total - Iron Filtration			852	1,491,411	289,777		688.08	73,266.53
æ	Avg - Iron Filtration			~~	1,461,411	200,111	19.43%	\$ 98.30	\$ 85.99
90								•	
91	Marco Shores	2602	LS	308	961,498	195,942	20.38%	102.30	31,508.40
92	Lehigh	2901	LS	9,079	9,273,000	2,906,684	31.35%	56.90	516,595.10
93	Sugar Mill	1801	LS	638	797,734	415,131	52.04%	81.26	51,843.88
94									
95	Total - Lime Softening			10,025	11,032,231	3,517,757		240.46	599,947.38
96	Avg - Lime Softening						31.89%	\$ 80.15	\$ 59.65
97 ~~~	D 1 37 B		-						
98 99	Palm Valley	2301 104	PW PW	210 86	1,139,046	10,657	0.94%	126.94	26,657.40
39 100	Lake Conway Park Daetwyler Shores	105	PW	ao 125	28,221 54,641	266 752	0.94% 1.38%	40.88 38.79	3,515.68
101	Kingswood	1701	PW	ت 20	11,139	216	1.36%	40.60	4,848.75 2,517.20
102	Oakwood	1702	PW	209	27,565	2,747	9.97%	41.21	8,612.89
103	Beecher's Point	472	PW	47	245,512	29,003	11.81%	123.69	5,813.43
104	Deep Creek	2201	PW	3,182	1,889,372	287,036	15.19%	67.04	213,321.28
105	Jungle Den	1802	PW	113	27,133	6,743	24.85%	79.54	8,988.02
106	Grand Terrace	575	PW	111	103,567	38,074	36.76%	38.53	4,276.83
107	Holiday Haven	573	PW	111	33,509	15,198	45.35%	77.86	8,642.46
108	Westmont	122	PW	139	34,264	17,410	50.81%	32.84	4,564.76
109	Enterprise	1807	PW	244	134,218	116,902	87.10%	30.03	7,327.32
110						· · · · · · · · · · · · · · · · · · ·			
111	Total - Purchased Water			4,639	3,728,186	525,005		737.95	299,086.02
112	Avg - Purchased Water						14.08%	\$ 61.50	\$ 64,47
113 114	Burnt Store	2202	RO	706	4,009,195	278,200	6.94%	96.84	68,369,04
115	Marco Island	2601	ROALS	6,144	39,678,429	4,516,062	0.94% 11.38%	96.64 54.61	335,523.84
116				•,	,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-	.,		04.01	000,0E0.04
117	Total - Reverse Osmosis			6,850	43,687,624	4,794,262		151.45	403,892.88
118	Avg - Reverse Osmosis						10.97%	\$ 75.73	\$ 58.96
119									
120									
121	Total FPSC Residentia			88,538	124,819,857	31,634,861		6,118.89	3,376,146.02
122	Average FPSC Reside						25.34%	64.41	38.13

Note - The totals for each catagory are based on: (1) Simple Average (Total of all plants / Number of Plants) (2) Weighted average which approximates a uniform rate (Total of all plants weighted by number of customers / Total Number of Customers).

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SOUTHERN STATES UTILITIES COMPARISON OF TREATMENT TYPES AND STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rate
					%	of CIAC to PI	ant	Residentiai	(Weighted Avg.)
				No. of	Net Plant	Net CIAC		Stand-Alone	Residential
Line		Piant	Treatment	Customers	(Excl Deprec	(Excl Amort	% of CIAC	Bill - 5/8"	Bill @ 10,000
No.	Plant Name	No.	Туре		and NUU)	and NUU)		@ 10K gallons (1) gallons (2)
						N .			
	FPSC Residential		ci		40.000	0	0.00%	102.00	1,476.00
1	Lakeview Villas	1054 326	CL CL	12 63	12,898 80,089	379	0.00%	123.00 53.08	3,344.04
2 3	Harmony Homes East Lake Harris Estates	326 557	CL	176	507,261	3,650	0.72%	169.48	29,828.48
4	Paim Vailey	2301	PW	210	1,139,046	10,657	0.94%	126.94	26,657.40
5	Lake Conway Park	104	PW	86	28,221	266	0.94%	40.88	3,515.68
6	Daetwyler Shores	105	PW	125	54,641	752	1.38%	38.79	4,848.75
7	Kingswood	1701	PW	62	11,139	216	1,94%	40.60	2,517.20
. 8	Palms Mobile Home Park	559		58	73,570	1,708	2.32%	186.11	10,794.38
9	Salt Springs	1115		119	347,780	8,237	2.37%	54.16	6,445.04
10	Fern Park	324	A/S	182	331,362	7,863	2.37%	48.93	8,905.26
11	Lakeside	995	IF	86	247,874	6,205	2.50%	81.41	7,001.26
12	Hermits Cove	438	A/S	174	181,031	5,260	2.91%	99.90	17,382.60
13	Morningview	562	CL	37	77,758	2,280	2.93%	74.28	2,748.36
14	Quail Ridge	578	CL	18	93,727	2,770	2.96%	140.22	2,523.96
15	Hobby Hills	558	CL	96	41,739	1,361	3.26%	41.56	3,989.76
16	Druid Hills	334	A/S	249	260,780	9,071	3.48%	31.05	7,731.45
17	Palisades Country Club	579		80	251,275	8,882	3.53%	39.40	3,152.00
18	Dol Ray Manor	336		61	73,213	2,657	3.63%	45.40	2,769.40
19	Tropical Park	781	CL	548	626,186	23,227	3.71%	57.29	31,394.92
20	Skycrest	551	CL	115	319,148	12,329	3,86%	110.38	12,693.70
21	Lake Brantley	325		67	155,273	6,125	3.94%	70.81	4,744.27
22	Silver Lake Oaks	473	A/S .	29	74,707	3,395	4.54%	140.84	4,084.36
23	Piney Woods	553		168	224,201	10,457	4.66%	48.26	8,107.68
24	Keystone Club Estates	1279		162	183,365	8,596	4.69%	59,57	9,650.34
25	Golden Terrace	992		108	109,399	5,836	5.33%	78.28	8,454.24
26	Chuluota	335		684	1,535,209	83,205	5.42%	63.66	43,543.44
27	Valencia Terrace	554	CL	365	193,140	11,410	5.91%	34.11	12,450.15
28	Keystone Heights	1094	A/S	1,004	783,153	48,698	6.22%	31.44	31,565.76
29	Meredith Manor	330	AIS	651	752,472	48,225	6.41%	30.93	20,135.43
30	Bay Lake Estates	784	CL	74	55,199	3,697	6.70%	54.27	4,015.98
31	Welaka	447	A/S	139	113,075	7,725	6.83%	86.67 96.84	12,047.13
32	Burnt Store	2202 780		706 258	4,009,195	278,200	6.94% 6.99%	90.84 60.13	68,369.04
33 34	Intercession City Fern Terrace	552		125	206,698 95,406	14,447 6,727	0.99% 7.05%	39.08	15,513.54 4,885.00
35	Holiday Heights	121	CL	53	79,555	5,742	7.22%	56.50	2,994.50
36	Imperiai Mobile Terrace	570		241	270,982	20,948	7.73%	45.35	10,929.35
37	Postmaster Village	1095		160	233,972	18,756	8.02%	53.66	8,585.60
38	Sunny Hills	2801	AVS	437	695,064	56,690	8.16%	68.46	29,917.02
39	River Park	439	A/S	359	176,159	15,501	8.80%	125.40	45,018.60
40	Carlton Village	555		148	362,295	34,182	9.43%	69.78	10,327.44
41	Oakwood	1702		209	27,565	2,747	9.97%	41.21	8,612.89
42	Tatal Lass than 10 000	~			15 004 000	700.004		0.050.44	
43	Total - Less than 10.00%			8,704	15,094,820	799,081	E 000/	2,958.11	553,671.40
44 45	Avg - Less than 10.00%	JAC					5.29%	\$ 72,15	\$ 63.61
46	Wootens	446	CL	25	28,746	3,189	11.09%	168.14	4,203.50
47	Rosemont	988		129	281,582	31,374	11.14%	55.55	7,165.95
48	St. Johns Highlands	471	A/S	84	49,766	5,587	11.23%	81.34	6,832.56
49	River Grove	442	A/S	105	88,495	10,034	11.34%	58.04	6,094.20
50	Marco Island	2601	80 & LS	6,144	39,678,429	4,516,062	11.38%	54.61	335,523.84
51	Beecher's Point	472		47	245,512	29,003	11.81%	123.69	5,813.43
52	Palm Port	440	A/S	106	111,551	13,877	12.44%	66.21	7,018.26

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SOUTHERN STATES UTILITIES COMPARISON OF TREATMENT TYPES AND STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rat
						of CIAC to Pla	ant	Resid	lential	(Weighted Avg.)
				No. of	Net Plant	Net CIAC			-Alone	Residential
ine		Plant	Treatment	Customers	(Excl Deprec	(Excl Amort	% of CIAC		- 5/8"	Bill @ 10,000
<u>io.</u>	Plant Name	No.	Туре		and NUU)	and NUU)	to PLANT	@ <u>10K g</u>	allons (1) gallons (2)
53	Oak Forest	993	CL	147	167,512	20,913	12.48%		40.42	5,941.74
54	Stone Mountain	565	CL	8	9,738	1,251	12.85%		105.39	843.12
55	Interlachen Lake Estates	470	A/S	250	140,823	19,191	13.63%		51.31	12,827.50
56	Pomona Park	443	CL	173	105,742	15,288	14.46%		53.58	9,269.3
57	Geneva Lake Estates	1298	CL	93	77,618	11,399	14.69%		33.53	3,118.2
58	Deep Creek	2201	PW	3,182	1,889,372	287,036	15.19%		67.04	213,321.2
59	Point O' Woods	987	IF	361	599,698	94,631	15.78%		67.55	24,385.5
60	Citrus Springs	906	AVS	1,917	3,124,004	519,691	16.64%		38.65	74,092.0
61	Friendly Center	556	CL	21	7,898	1,471	18.62%		54.08	1,135.6
62	Marion Oaks	1106	AVS	2,797	5,488,734	1,095,117	1 9 .95%		57.79	161,638.6
63 64	Venetian Village	567	CL	140	118,121	23,611	19.99%		48.73	6,822.20
65	Total - 10.00% - 20.00% C	SIAC		15,729	52,213,341	6,698,726			1,225.65	886,047.1
66 67	Avg - 10.00% - 20.00% Cl	AC					12.83%	\$	68.09	\$ 56.33
68	Marco Shores	2602	LS	308	961,498	195,942	20.38%		102.30	31,508.40
69	Leilani Heights	675	ĊL	396	325,396	67,054	20.61%		28.46	11,270.16
70	Silver Lake Estates	574	A/S	1,449	1,409,433	296,622	21.05%		20.40	29,559.60
71	Fox Run	679	IF	107	341,332	75,720	22.18%		90.02	9,632.1
72	Lake Ajay Estates	773	A/S	100	276,848	62,189	22.46%		94.83	9,483.0
73	Lake Harriet Estates	323	A/S	284	130,164	29,335	22.54%		30.25	8,591.0
74	Fisherman's Haven	673	CL	144	57,749	13,805	23.91%		37.94	5,463.38
75	Picciola Island	564	CL	134	68,226	16,516	24.21%		34.81	4,664.54
76	Jungle Den	1802	PW	113	27,133	6,743	24.85%		79.54	8,988.02
77	Spring Gardens	994	CL	134	46,711	11,664	24.97%		24.81	3,324.54
78	Apache Shores	990	lF	152	82,316	20,914	25.41%		111.25	16,910.00
79	Apple Valley	332	A/S	983	730,936	188,902	25.84%		25.12	24,692.96
80	Zephyr Shores	1427	CL	484	160,857	44,826	27.87%		56.17	27,186.28
81	Pine Ridge	907	CL	938	4,125,230	1,171,325	28,39%		43.53	40,831.14
82 83	Paim Tenace	1429	CL	1,193	279,706	80,561	28,80%		37.92	45,238.56
84	Total - 20.00% - 30.00% C	IAC		6,919	9,023,535	2,282,119			817.35	277,343.7
85 86	Avg - 20.00% - 30.00% CL	AC					25.29%	\$	54.49	\$ 40.08
87	Lehigh	2901	LS	9,079	9,273,000	2,906,684	31.35%		56.90	516,595.10
88	Grand Terrace	575	PW	111	103,567	38,074	36.76%		38.53	4,276.83
89	Leisure Lakes	2401	AVS	243	140,834	54,362	38.60%		79.34	19,279.62
90	Beacon Hills	886	A/S	3,178	4,455,692	1,766,103	39.64%		24.36	77,416.08
91	T-4-1 10 004 40 00-1 -	140			10.000					
92 93	Total - 30.00% - 40.00% C			12,611	13,973,093	4,765,223	A 4 54		199.13	617,567.6
94	Avg - 30.00% - 40.00% Ci						34,10%	\$	49.78	\$ 48.97
95	Remington Forest	2302	A/S	87	139,147	56,204	40.39%		49,49	4,305.63
96	Deltona	1806	A/S	23,911	16,493,528	6,855,814	41.57%		20.86	498,783.46
97	Windsong	783	CL	105	135,437	59,029	43.58%		53,12	5,577.60
98	Fountains	772	A/S	34	240,536	108,972	45.30%		245.92	8,361.28
99	Woodmere Helideu Henne	888	A/S	1,189	863,615	391,334	45.31%		21.50	25,563.50
100	Holiday Haven	573	PW	111	33,509	15,198	45.35%		77.86	8,642.46
101 102	Buena Ventura Lakes	785		9,176	5,370,996	2,534,468	47.19%		27.36	251,055.36
103	Total - 40.00% - 50.00% C	IAC		34,613	23,276,769	10,021,019			496.11	802,289.2
104	Avg - 40.00% - 50.00% Cl/						43.05%	\$	70.87	\$ 23,18

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SOUTHERN STATES UTILITIES COMPARISON OF TREATMENT TYPES AND STAND-ALONE RESIDENTIAL BILLS WHEN SORTED BY % OF CIAC TO PLANT PROJECTED TEST YEAR - 1996 (As Filed)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) Apprx. Uniform Rat
						of CIAC to Pla	ant	Residential	(Weighted Avg.)
				No. of	Net Plant	Net CIAC		Stand-Alone	Residential
Linø		Plant	Treatment	Customers	(Excl Deprec	(Excl Amort	% of CIAC	Bill - 5/8"	Bill @ 10,000
No.	Plant Name	No.	Туре	<u> </u>	and NUU)	and NUU)		@ 10K gallons (() gallons (2)
106	Westmont	122	PW	139	34,264	17,410	50,81%	32.84	4,564.7
107	Sugar Mill Woods	989	A/S	2,622	3,424,194	1,773,532	51,79%	16.88	4,259.3
108	Sugar Mill	1801	LS	638	797,734	415,131	52.04%	81.26	51,843.8
109	Citrus Park	1117	CL	366	137,118	74,321	54.20%	27,87	10,200.4
110 111	Pine Ridge Estates	782	A∕S	218	333,250	184,365	55.32%	46.01	10,030.1
112	Total - 50.00% - 60.00%	CIAC		3,983	4,726,559	2,464,759		204,86	120.898.
113 114	Avg - 50.00% - 60.00% C			0,000	-,120,000	2,404,133	52,15%	\$ 40.97	\$ 30.3
115	Crystal River Highlands	984	١F	80	100.01.1	60 70 /			
116	University Shores	304 106	A/S		136,014	82,724	60.82%	46.24	3,699.2
117		100	A/5	3,890	3,807,693	2,576,131	67.66%	20.33	79,083.7
118	Total - 60.00% - 70.00% (CIAC		3,970	3,943,707	2,658,856		66.57	82,782.
119 120	Avg - 60.00% - 70.00% C	IAC					67.42%	\$ 33,29	\$ 20.8
121	Gospel Island Estates	986	١F	8	10,607	7,874	74.23%	105.50	844.0
122 123	Amelia Island	1518	A∕S	1,757	2,423,209	1,820,303	75.12%	15.58	27,374.0
124	Total - 70.00% - 80.00% (CIAC		1,765	2,433,816	1,828,177		121.08	28,218.
125 126	Avg - 70.00% - 80.00% C	AC		ŗ		,	75.12%	\$ 60.54	\$ 15.9
127 128	Enterprise	1807	PW	244	134,218	116,902	87.10%	30.03	7,327.3
129	Total - 80.00% - 100.00%	CIAC		244	134,218	116,902		30.03	7,327.
130	Avg - 80.00% - 100.00% (L 11	, , , , , , , , , , , , , , , , , , ,	110,002	87.10%	\$ 30.03	\$ 30.0
131 132							•	,	L.T
133	Total FPSC Resident	ial		88,538	\$ 124,819,857	\$ 31,634,861		6,118.89	3,376,146.0
	Average FPSC Resid	ential					25.34%	\$ 64.41	\$ 38.1

ment Typé:	
A/S	Aeration/Storage
IF	Iron Filitration
PW	Purchased Water
RO	Revers Osmosis
LS	Lime Softening
CL	Chlorination

Note - The totals for each catagory are based on:

(1) Simple Average (Total of all plants / Number of Plants)

(2) Weighted average which approximates a uniform rate (Total of all plants weighted by number of customers / Total Number of Customers).

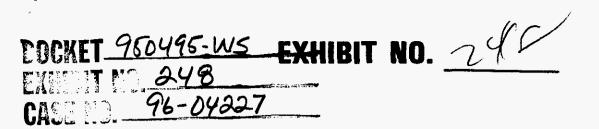
3 of 3

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PAGE 1 OF 1	

SOUTHERN STATES UTILITIES COMPARISON OF PROPOSED FINAL CONVENTIONAL AND REVERSE OSMOSIS UNIFORM RATES DOCKET NO. 950495-WS

_

	(1)	(2)	(3)	(4)	(5)
				se Osmosis (R.O	.)
		Uniform	2	Stand-/	lone
Line <u>No.</u>	Description	Conventional (95 Plants)	Uniform R.O.	Marco Island	Burnt Store
1	Base Charge	\$9.17	\$23.62	\$23.51	\$24.94
2	Gallonage Charge	\$2.16	\$3.27	\$3.11	\$7.19
3	Bill @ 10,000 Gallons	\$30.77	\$56.32	\$54.61	\$98.84



WITNESS: FORREST LUDSEN

DOCKET NO. 950495-WS

Application for rate increase by

SOUTHERN STATES UTILITIES, INC.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DESCRIPTION:

Ludsen Deposition on November 14, 1995: Late Filed Exhibit No. 4 --Anticipated Reduction in Operating Expenses From Conservation Program

FLOBIDA PUBLIC SERVICE COMMISSION DOCKET SDYGS-WS EXHIBIT NO 248, OMPANY/SSul Luds In

DEPOSITION LATE FILED EXHIBIT NO. 4 OF FORREST LUDSEN

(REQUESTED BY ROSANNE G. CAPELESS, ESQUIRE FLORIDA PUBLIC SERVICE COMMISSION STAFF)

ANTICIPATED REDUCTION IN OPERATING EXPENSES FROM CONSERVATION PROGRAM

DEPOSITION LATE FILED EXHIBIT NO. 4 OF FORREST LUDSEN

ANTICIPATED REDUCTION IN OPERATING EXPENSES FROM CONSERVATION PROGRAM

The Company did not adjust operating expenses in the MFR's for the reduction in consumption associated with the conservation program. Please refer to the attached schedule, Exhibit FLL-4, page 1 of 2, for the detailed operating expense adjustments by plant for the anticipated reduction in consumption associated with the conservation program.

The attached schedule uses the same methodology that was used to calculate the reduction in direct operating expenses associated with the price elasticity adjustment already accounted for in the MFR's for purchase water and chemicals. The Company assumes a direct relationship between water conserved and the associated expense reduction, therefore for every percent reduction in consumption an equal percent reduction is applied to the direct operating expenses for purchased water and chemicals. The Company used this same methodology for the direct purchased power expense for the price elasticity adjustment found in the MFR schedules, however this methodology overstates the reduction to purchased power expense because it fails to account for the fixed charges associated with purchased power which do not vary with consumption. Therefore, the reduction in purchased power expenses reflected in the MFR schedules associated with price elasticity is overstated. Therefore, the Company has removed the fixed charges (demand and customer charges) associated with purchase power expense before calculating the adjustment related to the conservation program. Please see the attached schedule, Exhibit FLL-4, page 2 of 2, for a detailed calculation of the fixed charges related to purchased power expense.

PAGE____ OF ____

DEPOSITION LATE FILED EXHIBIT NO. 4 - FORREST LUDSEN	
ANTICIPATED REDUCTION IN OPERATING EXPENSES FROM CONSERVATION PROGRA	M

Company: SSU / FPSC JURISDICTION Dacket No.: 950495-WS Schedule Year Endect: 12/31/96 Interim [] Final [x] Historical [] Projected [x] Simple Ave. [] 13 Month Ave. [x] Conventional [x] Reverse Cemasis [x]

-

	(1)	(2)	(3)	(4)	(5)	(6)	Ø
Line No.	Description	Dol Ray Manor	Palisades Country Club	Quel Pidge	Silver Lake Est./	Sugar Mill Woods	Marco Jaland
	1996 Consumption						
1	Projected Consumption	9,924,535	15,229,292	2,284,980	265,110,836	401,708,711	2,239,368,221
2	Conservation Program Savings	949,000	474,500	292,000	21,425,500	35,040,000	141,072,500
3	Adjusted 1996 Project Consumption	8,975,535	14,754,792	1,992,980	243,685,336	366,668,711	2,098,295,721
4	Percentage Reduction	-9.56%	-3.12%	-12.78%	-8.08%	-8.72%	-6.30%
	1996 Direct Operating Expense						
5	Purchase Water	1,000	0	0	0	0	0
6	Percentage Reduction	-9.56%	-3.12%	-12.78%	-8.06%	-8.72%	-6.30%
7	Adjustment to Purchased Water	(96)	0	0	0	0	0
8	Purchase Power	4,140	2,400	480	30,000	28,080	849,550
	Multiply by: Fixed Percentage Customer & Demand (Fixed) Charges	<u>34.63%</u> 1,434	<u>3.80%</u> 91	<u>27.27%</u> 131	<u> </u>	<u>24.13%</u> 6,776	<u>18.19%</u> 154,540
	Variable Energy Costs	2,706	2,309	349	19,051	21,304	695,010
9	Percentage Reduction	-9.56%	-3.12%	-12.78%	-8.08%	-8.72%	-6.30%
10	Adjustment to Purchased Power	(259)	(72)	(45)	(1,540)	(1,858)	(43,783)
11	Chemicals	102	265	53	1,802	2,426	313,774
12	Percentage Reduction	-9.56%	-3.12%	-12.78%	-8.08%	-8.72%	-6.30%
13	Adjustment to Chemicals	(10)	(8)	(7)	(146)	(212)	(19,767)
14	Total Operating Expense Adjustment	(364)	(60)	(51)	(1,685)	(2,070)	(63,550)

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PAGE_____ OF ____

DEPOSITION LATE FILED EXHIBIT NO. 4 - FORREST LUDSEN

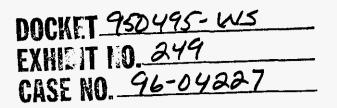
ANTICIPATED REDUCTION IN OPERATING EXPENSES FROM CONSERVATION PROGRAM WORKSHEET USED TO ESTIMATE FIXED PURCHASED POWER COSTS FOR WATER OAM

			Mon	thly Cha	ges			Annual		
				Fixed		Total		1996		Est.
Plant	Power Company	Account #	Customer	Demand	Total	Bill	% Fixed	Budget	% Fixed	Fixed (1)
	Dol Bay Ma	inor								
336	Fia. Power Corp.	41786 46005	12	68	80	231	34.63%	4,140		1,434
	Pailsades Coun	try Club								
579	Fla. Power Corp.	85721 49170	12	0	12	316	3.80%	2,400	3.80%	91
	Quall Rick	36								
578	Fia. Power Corp.		12	0	12	44	27.27%	480	27.27%	131
1	Silver Lake Est./Wes	stern Shores								
574	City of Leesburg	239175 407650	17	814	831	2,277	36.50%	30,000	36.50%	10, 94 9
	Sugar Mill W	oods								
969	Fla. Power Corp.	19639 05330	12	163	175	630	27.78%	6,618	27.78%	1.838
989	Fia. Power Corp.	23164 74452	12	0	12	135	8.89%	1,418	8.89%	126
969	Fia. Power Corp.	19546 88693	12	160	172	570	30.18%	5,988	30.18%	1,807
989	Fig. Power Corp.	19545 44687	12	194	206	814	25.31%	8,551	25.31%	2,164
969	Fla, Power Corp.	22872 40422	12	68	80	524	15.27%	5,505	15.27%	840
			60	585	645	2,673	24.13%	28,080	24.13%	6,776
	Marco Isla									
	Fla. Power & Light		38	0	38	38	100.00%	444	100.00%	444
	Fia. Power & Light		10	0	10	10	100.00%	117	100.00%	117
	Fia. Power & Light		41	3,250	3,291	6,654	49.46%	77,808	49.46%	38,483
	Fla. Power & Light		38	0	38	38	100.00%	444	100.00%	444
	Lee County Elect.	9109160125	. 15	275	290	1,951	14.86%	22,814	14.86%	3,391
	Les County Elect.	9109160073	15	270	285	2,460	11.59%	28,766	11.59%	3,333
	Lee County Elect.	9109160128	15	195	210	1,702	12.34%	19,902	12.34%	2,456
	Lee County Elect.	9109170246	15	285	300	1,733	17.31%	20,265	17.31%	3,508
	Lee County Elect.	9205080581	15	285	300	2,556	11.74%	29,888	11.74%	3,508
	Lee County Elect.	9205080585	15	290	305	356	85.67%	4,163	85.67%	3,566
2601	Lee County Elect.	8650100001	9	0	9	35	25.71%	409	25.71%	105
	Lee County Elect.	8696500000	15	5,100	5,115	39,294	13.02%	459,481	13.02%	59,812
	Lee County Elect.	8421650005	50	2,200	2,250	13,66 1	16.47%	159,744	16.47%	26,310
2601	Lee County Elect.	8421690003	50	250	300	323	92.88%	3,777	92.88%	3,508
2601	Lee County Elect.	8421700008	50	425	475	<u>1,841</u>	25.80%	<u>21,528</u>	25.80%	<u> </u>
			391	12,825	13,216	72,652	18.19%	849,550	18.19%	154,540

Note:

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(1) The estimated fixed charges for purchased power expense were developed using December 1995 bills for each meter as a sample. Based on that sample bill, we developed a ratio of fixed charges to the total costs. This ratio of fixed costs was then applied to the total 1996 budgeted expense to determine the annual amount of fixed purchased power expense.



<u>,</u> '

EXHIBIT NO. 249

WITNESS: FORREST LUDSEN

DOCKET NO. 950495-WS

Application for rate increase by

SOUTHERN STATES UTILITIES, INC

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DESCRIPTION:

COMPANY RESPONSES TO OPC'S INTERROGATORIES 84, 190,192 AND OPC'S POD 129

FLORIDA PUBLIC SERVICE COMMISSI	DN
DOCKET 950495-WS EXHIBIT NO	249
COMPANY/	
WITNESS: TAGTAL	
DATE: 7/25/50	

SOUTHERN STATES UTILITIES, INC. DOCKET NO.: 950495-WS RESPONSE TO INTERROGATORIES

REQUESTED BY: SET NO: INTERROGATORY NO: ISSUE DATE: WITNESS: RESPONDENT: OPC 1 84 07/18/95 CARLYN HARPER KOWALSKY Carlyn Harper Kowalsky

INTERROGATORY NO:

List each system of the Company's that resells effluent, indicate when the Company began reselling the effluent, and provide the gallons sold for years 1989 through 1994 and 1995 to date.

RESPONSE:

- 84

84

Attached as Appendix 84-A is a list of SSU's reclaimed water customers which have incurred a charge for reclaimed water to date.

The Mainsail Commons Condominium Association purchases effluent from Marco Island at the rate of \$0.25/1000 gallon. There is currently (as of 8/22/95) no Reuse Agreement.

The Marco Shores Country Club purchases effluent from Marco Island at the rate of \$0.25/1000 gallon. There is currently (as of 8/22/95) no Reuse Agreement.

PAGE_____OF___

Interrogatory #84

Plant Name Reuse Customer	Date the Sale of Reuse Began	Gallons Sold
Florida Central Commerce Park	March 1993	SSU does not record gallons sold at this facility. Pursuant to contract, SSU bills a flat rate for each sprinkler head. The following is a list of Businesses within Florida Central Commerce Park and the number of sprinkler heads associated with each business.
		AAA Business Center - 10
		United Parcel Service - 285
		Firestone =012734 - 18
		Storage USA - 20
		Broedell Plumbing Supply - 72
		Southcom Inc 71
		St. Laurent Properties - 78
		S I Goldman - 54
		Scan Design of Florida, Inc 40
Lehigh	– July 16, 1993	1993 - 198,200,000 gallons
Admiral Lehigh Resort		1994 - 277,120,000 gallons
		thru 07/27/95 - 42,118,000 gailons
Marco Island	1985	1989 - 22,985,400 gallons
Island Country Club		1990 - 71,234,700 gallons
		1991 - 32,108,499 gallons
		1992 - 53,172,700 gallons
		1993 - 61,582,700 gallons
		1994 - 72,965,000 gallons
		thru 08/03/95 - 35, 14 3,500 gallers
Marco Island	1985	1989 - 95,731,100 gailons
Marco Shores Country Club		1990 - 92,033,500 gallons
;		1991 - 39 3 44 ,499 ga ilors
		1992 - 59.179.300 gailons
		1393 - 53.397.730 gallons
		1994 - 54.95±.000 gallors
		mmi 18 13 25 - 36.331.200 gailons

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APPEN		84	-A	<u></u>
PAGE_	2	_OF	2	

Interrogatory #84

Marco Island	March 1993	1993 - 6,378,200 gallons
R & B Lawn Services - closed account on 2/10/95		1994 - 11,100,600 gallons thru 08/03/95 - 2,479,000 gallons
Stephan F. Fabiano - opened account on 2/10/95	•	
Marco Island	May 25, 1994	1994 - 1,234,300
Mainsail Commens Condominium Association		thru 08/08/95 - 3,245,300

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SOUTHERN STATES UTILITIES, INC. DOCKET NO.: 950495-WS RESPONSE TO INTERROGATORIES

REQUESTED BY:	OPC
SET NO:	6
INTERROGATORY NO:	190
ISSUE DATE:	09/15/95
WITNESS:	Carlyn Harper Kowalsky
RESPONDENT:	Carlyn Harper Kowalsky
INTERROGATORY NO:	190

For purposes of this request, please refer to the Company's response to OPC's interrogatory 84. Provide information analogous to that provided in this response for reuse customers that do not incur a charge and state why there is no charge. Also, with respect to the Company's response to interrogatory 85, please provide the rate charged to the reuse customers in each of the years 1989 through 1995 to date.

RESPONSE:

190

Attached as Appendix 190-A is a comprehensive chart of all customers that are provided with reclaimed water from the year 1989 - present. This presents the information in two parts. The first portion of the table lists reuse customers that incur a charge for reclaimed water. The second part of the table lists customers that do not incur a charge for reclaimed water.

The following is a list of all customers that do not incur a charge for reclaimed water and the plants that provide them service:

	<u>PLANT</u>	CUSTOMER
I.	Amelia Island Plant:	Amelia Links Long Point Golf Club Summer Beach
П.	Deltona Plant	Deitona Hills Golf & Country Club Glen Abbey Golf Club
Ш.	Point O' Woods Plant	The Moorings at Point O'Woods
IV.	University Shores Plant	Chapel Hill Cemetery

These customers have not incurred a charge for reclaimed water because SSU is obligated to provide reclaimed water at no charge pursuant to existing contracts with these customers. At the time SSU or its predecessor entered into these contracts, providing reclaimed water to these customers was the most cost effective and environmentally beneficial method of wastewater disposal available. As OPC is aware, no charge for reuse arrangements have been reviewed and approved by the Commission in the past.

CUSTOMERS INCURRING A CHARGE FOR RECLAIMED WATER - CHARGE AND GALLONS						
Plant Name Reuse Customer	Contract Date and Parties or Taritf	Date the Sale of Reuse Begau	Rate Charged for Reclaimed Water	Guilous Sold		
Harida Central Commerce Parts	January, 1988 Park Industrial Venture and Southern States Utilities, Inc.	March, 1993	 40/31/90 42/31/90 - \$.12 per sprinkler head (p.s.h.) 1991 - \$.12 p.s.h. 1992 - \$.12 p.s.h. 1/1/93-9/14/93 - \$.12 p.s.h. 9/15/93-12/31/93 - \$.06 p.s.h. 1994 - \$.06 p.s.h. thru 40/6/95 - \$.06 p.s.h. * The PSC approved rate through September 14, 1993 was \$.12 p.s.h. charged on a bi-monthly basis. This rate was changed to \$.06 p.s.h. on a monthly basis as of September 15, 1993. 	SSU does not record gallons sold at this facility. Pursuant to contract, SSU bills a flat rate for each sprinkler head. The following is a list of businesses within Florida Central Commerce Park and the number of sprinkler heads associated with each business AAA Business Center - 10 United Parcet Service - 285 Firestone #012734 - 18 Storage USA - 20 Broedell Plumbing Supply - 72 Southcom Inc 71 St. Laurent Properties - 78 S I Goldman - 54 Scan Design of Florida, Inc 40		
Lehigh Adminal Lehigh Resort	July, 1992 Lehigh Corp, Cliffside Properties, Inc., and Lehigh Utilities, Inc	July 16, 1993	1990 - \$.1065/1,000 gal. 1991 - \$.1065/1,000 gal. 1992 - \$.1065/1,000 gal. 1/1/93-12/11/93 - \$.1065/1,000 gal. 12/12/93-12/31/93 - \$.11/1,000 gal. 1994 - \$.11/1,000 gal. thru 10/6/95 - \$.11/1,000 gal.	1993 - 198,200,000 gallous 1994 - 277,120,000 gallous thru 7/27/95 - 42,118,000 gallous		

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Plant Name Reuse Customer	Contract Date and Parties or Tariff	Date the Sale of Reuse Began	Rate Charged for Reclaimed Water	Gallons Sold
Marco Island Island Country Club	August, 1986 Island Country Club, Inc. and Deltona, Utilities, Inc.	1985	1989 - \$.25/1,000 gal. 1990 - \$.25/1,000 gal. 1991 - \$.25/1,000 gal. 1992 - \$.25/1,000 gal. 1993 - \$.25/1,000 gal. 1994 - \$.25/1,000 gal. thru 10/6/95 - \$.25/1,000 gal.	1989 - 22,985,400 gallons 1990 - 71,234,700 gallons 1991 - 32,108,499 gallons 1992 - 53,172,700 gallons 1993 - 61,682,700 gallons 1994 - 72,965,000 gallons thru 8/3/95 - 35,443,500 gallons
Marco Island Marco Shores Country Club	Tariff	1985	1989 - \$.25/1,000 gal. 1990 ¹ - \$.25/1,000 gal. 1991 - \$.25/1,000 gal. 1992 - \$.25/1,000 gal. 1993 - \$.25/1,000 gal. 1994 - \$.25/1,000 gal. thua 10/6/95 - \$.25/4,000 gal.	1989 - 95,731,100 gallons 1990 - 92,033,600 gallons 1991 - 39,844,499 gallons 1992 - 59,179,000 gallons 1993 - 53,997,700 gallons 1994 - 56,954,000 gallons thru 8/3/95 36,831,000 gallons
Marco Island R. & B. Lawn Services - closed account on 2/10/95	Tariff	March, 1993	1993 - \$.25/1,000 gal. 1994 - \$.25/1,000 gal. thru 10/6/95 - \$.25/1,000 gal.	1993 - 6,878,000 gallons 1994 - 11,100,600 gallons thru 8/3/95 - 2,479,000 gallons
Stephen F. Fabiano - opened account on 2710/95				
Marco Isband Mansail Commons Condominium Association	Taritf	May 25, 1994	1994 - \$.25/1,000 gal. thuu 10/6/95 - \$.25/1,000 gal.	1994 - 1,234,300 gallons thru 8/3/95 - 3,245,300 gallons

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CUSTOMERS INCURRING NO CHARGE FOR RECLAIMED WATER - GALLONS					
Plant Name Reuse Customer	Date Contract Executed and Parties	Gattons Provided			
Amelia Island Amelia Euiks A	June, 1983 Ametia Plantation Co. and Ametia Island Waterworks, Inc.	1989 - 130,506,000 gallons 1990 - 126,598,000 gallons 1991 - 193,180,000 gallons 1992 - 228,300,000 gallons 1993 - 234,025,000 gallons 1994 - 250,147,000 gallons thru 8/31/95 - 164,492,000 gallons			
Amelia Island Long Point Golf Club	August, 1986 Long Point Development Co. and Amelia Island Waterworks, Inc.	1989 - 130,506,000 gallons 1990 - 126,598,000 gallons 1991 - 193,180,000 gallons 1992 - 228,300,000 gallons 1993 - 234,025,000 gallons 1994 - 250,147,000 gallons thru 8/31/95 - 164,492,000 gallons			
Ametia Island Summer Beach	August, 1986 Summer Beach Etd. and Amelia Island Waterworks, Inc.	No reclaimed water has been provided to date.			
Deltona Deltona Hills Golf & Country Club	August, 1992 Deltona Hills Golf & Country Club and Deltona Utilities, Inc.	1992 - 71,203,000 gallons 1993 - 200,901,000 gallons 1994 - 177,726,000 gallons thru 8/31/95 - 112,053,000 gallons			
Deltona Glor Abbey Golf Club	April, 1990 Glen Abbey Golf Club, Inc, and Deltona Utilities, Inc.	1992 - 21,575,000 gallons 1993 - 26,320,000 gallons 1994 - 27,030,000 gallons thru 8/31/95 - 0 gallons			

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CUSTOMERS INCURRING NO CHARGE FOR RECLAIMED WATER - GALLONS				
Plant Name Reuse Customer	Date Contract Executed and Parties	Gallons Provided		
Fornt O'Woods The Moorings at Point O'Woods '	July, 1988 Thomas and Frances Infantino, The Moorings at Point O'Woods, Inc., and Point O'Woods Utilities, Inc.	This use is not metered. Operators estimate that approximately 10,000 gallons per day or 3,650,000 gallons per year are delivered to the Moorings at Point O'Woods.		
University Shores Chapel Hill Cemetery	March, 1983 Chapel Hill Cemetery, Inc. and Southern States Utilities, Inc.	1989 - 65,835,000 gallons 1990 - 56,586,000 gallons 1991 - 52,383,000 gallons 1992 - 79,419,000 gallons 1993 - 112,957,000 gallons 1994 - 185,917,000 gallons thru 8/31/95 - 98,140,000 gallons		

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PAGE A OF A

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SOUTHERN STATES UTILITIES, INC. DOCKET NO.: 950495-WS RESPONSE TO INTERROGATORIES

REQUESTED BY: SET NO: INTERROGATORY NO: ISSUE DATE: WITNESS: RESPONDENT: OPC 5 192 09/15/95 Undetermined Charles E. Wood

INTERROGATORY NO: 192

Please provide the historical data used to calculate the consumption (reuse) for the Hideaway Beach project. Please explain how the company calculated/estimated the reuse consumption for Tommy Barfield School.

RESPONSE:

192

The historical data used to calculate the consumption (reuse) for the Hideaway Beach project was based on an average of the monthly data from 3/93 through 7/94 as follows:

<u>Customer Name</u>	Customer Number	<u>ADF (gal.)</u>
Hideaway Beach Association	973778	122.939
Hideaway Beach Association	35022	7,069
Royal Marco Point I	 994433	14.084
Royal Marco Point III	994944	7.771
TOTAL		151,363

SSU has since updated this data using an average of the historical data from 1990 through 1994. In addition, information received from the Hideaway Beach Association revealed that the Habitat Condo Association and the Royal Marco Point II condominiums may also be included in the total potential reuse quantity. These adjustments would result in a revised estimate for the total Hideaway Beach project of 131,000 gpd. Please also note that as of October 11, 1995 no agreement has been reached between Hideaway Beach and SSU. Completion of this project allowing for reuse to be available for Hideaway Beach is not expected before December 31, 1996.

The reuse quantity of 20.000 gpd for the Tommy Barfield Elementary School was requested by the School Board.

SOUTHERN STATES UTILITIES, INC. RESPONSE TO REQUEST FOR PRODUCTION OF DOCUMENTS DOCKET NO.: 950495-WS

REQUESTED BY:	OPC
SET NO:	1
DOCUMENT REQUEST NO:	129
ISSUE DATE:	07/18/95
WITNESS:	CARLYN HARPER KOWALSKY
RESPONDENT:	Carlyn Harper Kowalsky

Please provide a copy of all cost/benefit studies which address the Company's charges (or lack thereof) for

effluent reuse. Provide this for each customer that the Company provides reclaimed water.

RESPONSE:

DOCUMENT REQUEST:

129

129

Attached as Appendix DR129-A is a copy of the cost/benefit study that was done for the Timber Pines Reuse Project. Also attached in Appendix DR131 is a copy of the reuse contract with Collier County School Board which describes the cost justification for providing reclaimed water to the Tommy Barfield School at no charge. SSU initiated reuse service to the Mainsail Condominiums in May 1994. The rate charged is the rate reflected in the applicable tariff for Marco Island reuse service. No cost/benefit study was performed. All other reuse charges previously have been reviewed and authorized by the Commission. SSU responses to prior OPC document requests on this subject in Docket No. 920199-WS are attached as Appendix DR129-B.

PAGE _____OF ___

SOUTHERN STATES UTILITIES, INC. RESPONSE TO INTERROGATORIES DOCKET NO. 920199-WS

REQUESTED BY: SET NO.: INTERROGATORY NO.: ISSUE DATE: PREPARED BY: FPSC 1 17 Aug 26, 1992 Charles L. Sweat

INTERROGATORY: 17

Please identify all systems that provide effluent to golf courses or other commercial customers. For each system providing this type of service, specify who the effluent customer is, and the charge assessed, if any.

RESPONSE: 17

System	Customer
Point O'Woods	Point O' Woods Golf Club
Amelia Island	Amelia Island Golf & Country
	Club
Florida Central Commerce	Florida Central Commerce Park
Deitona Lakes	Deltona Lakes Golf & Country
	Club
	Glen Abbey Golf & Country Club
University Shores	Chapel Hill Cemetery

Agreement between Deltona Golf and Country (D.G. & C.C.) and Southern States Utilities, Inc. (SSUI) requires the golf course to repay the capital improvement for the pumping station and holding tank at a rate equal to the D.G. & C.C. operating cost (electric power) at 6¢ per 1,000 gallons over the 20 year life of the agreement.

Chapel Hill Cemetery located in East Orange County and served from our University Shores WWTF is permitted to use effluent for irrigation purposes on approximately 70 acres. Chapel Hill is permitted for 0.285 MGD and is a portion of the total disposal capacity. There is no charge to Chapel Hill for this disposal.

Florida Central Commerce Park has an approved rate of .12¢ per sprinkler head for each commercial establishment located within the industrial park.

Point O' Woods Golf Course is permitted by DER to dispose of treated effluent for

PAGE 2 OF 5

irrigation purposes. Under Easement and Disposal Agreement dated July 20, 1988 allows SSU to dispose of 50,000 GPD. No charges.

Amelia Island : is permitted to dispose of treated effluent from it's waste water treatment facility at three golf courses located on Amelia Island Plantation. Namely, Amelia Island Links, Summer Beach, and Long Point. Collectively the three courses are disposing of the total daily flows of the treatment facility, which averages slightly over 600,000 GPD. No charge.

Glen Abbey Golf & CC is permitted to dispose of an average of 420,000 GPD. No charge.

APPENDIX 12 RIZ

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SOUTHERN STATES UTILITIES, INC. RESPONSE TO INTERROGATORIES DOCKET NO. 920199-WS

REQUESTED BY: SET NO.: INTERROGATORY NO.: ISSUE DATE: PREPARED BY: FPSC 1 19 Aug 26, 1992 Charles L. Sweat

INTERROGATORY: 19

For those systems which provide effluent to golf courses or other commerical customers but which do not charge for that service, please provide a detailed justification for the absence of a charge.

RESPONSE: 19

Chapel Hill Cemetery: there are no charges billed to the cemetery. The agreement to provide effluent to the Chapel Hill Cemetery was entered into by the owner's of the cemetery and Southern States Utilities February 19, 1985. Typically effluent disposal agreements of this nature are negotiated at no charge to the user. The University Shores .275 MGD WWTF facility was reaching capacity in 1982 due to growth in the grea. The effluent of the .275 MGD plant was permitted through the waste load allocation method of permitting surface water discharges (through the DER) and such discharges were no longer being permitted by DER where alternative disposal was available. SSU was planning a 1.0 MGD expansion to its wastewater treatment plant to accommodate development that required effluent disposal by land application. The utility investigated numerous sites. Acreage in the nearby vicinity of the WWTP ranged from \$15,000 to \$60,000/acre. Using a median price of \$37,500/acre and needing 70+ acres would have required an investment of approximately \$2,625,000. Also, major improvements would have to be factored into the price for effluent disposal. Thus, the Chapel Hill agreement, even at no charge to the cemetery, was the most cost-effective alternative and in best interest of ratepayers.

Point O' Woods disposal to the golf course was in place and in operation at the time Southern States acquired the utility. In all probability the reasons for a no charge agreement are quite similar to the Chapel Hill scenario.

From the time of development the effluent from Amelia Island was disposed of via a golf course, known as Amelia Links. This agreement was negotiated by the former owners. As the area grew in population, so did the concern of the utility for having availability of effluent disposal. Around 1985, Southern States applied to DER in Jacksonville for a surface water discharge. The permit application was denied. Fortunately, a second golf course called Long Point became available for effluent disposal, and finally most recently Summer Beach, which also will be using effluent. Had there not been this fortuitous situation, the utility would have faced another very expensive exercise in locating land.

13

It must be noted that the utility only supplements the irrigation water for the golf courses. They have active wells and active CUP permits that supply the majority of the irrigation water. Therefore, there is no incentive for the owners of the courses to pay the utility for supplemental effluent water.

A reclaimed water delivery agreement was negotiated and entered into on April 5, 1990 by Deltona Utilities, Inc. and Gien Abbey Golf Club, Inc. The utility does not charge Glen Abbey for the effluent. Glen Abbey was unwilling to enter into an agreement if there was a charge for our effluent. It was essential that this land application be secured in order for the utility to meet a DER mandate (via consent order) to stop the discharge of effluent into Lake Monroe by November 1990.

APPENDIX

PAGE___

SOUTHERN STATES UTILITIES, INC. RESPONSE TO REQUEST FOR PRODUCTION OF DOCUMENTS DOCKET NO. 920199-WS

REQUESTED BY: SET NO.: DOCUMENT REQUEST NO.: ISSUE DATE: PREPARED BY: OPC 9 175 Oct 08, 1992 Charles Sweat

DOCUMENT REQUEST: 175

For purposes of this request, please refer to the Company's response to Staff Interrogatory 17. Please provide a copy of all cost/benefit studies which address the Company's charges (or lack thereof) for effluent reuse. Provide this for each customer that the Company provides reclaimed water.

RESPONSE: 175

The Point of Woods Country Club was using reclaimed water at the time Southern States Utilities, Inc. acquired it. Due diligence did not reveal any cost studies by the seller.

The Amelia Island facility was providing reclaimed water to two golf courses at the time of the acquisition. The due diligence did not reveal any cost studies associated with reclaimed water at the time of purchase.

The Florida Central Commerce Park system was designed to dispose of effluent on each commercial property being served at the time of the acquisition by Southern States Utilities.

Along with the Deltona Lakes Golf & Country Club a number of other sites were investigated. The least cost alternative was determined to be the Deltona golf course. The golf course consisted of approximately 150 acres and a functional existing irrigation system that did not have to be purchased by Southern States and ultimately the rate payers.

The Glen Abbey Golf & Country Club, once again, was the least cost alternative available to the utility. The utility needed this golf course in order to conclude the successful removal of the .9 MGD effluent from Lake Monroe. In addition, Glen Abbey has on site a three day wet weather storage pond that the utility was provided access to. And fortunately, contiguous to the Glen Abbey pond was a existing pond owned by others that the utility acquired. Thus completing the regulatory requirement that stated the utility had to have nine days of wet weather storage for approximately \$120,000.00. The alternative solution for disposal would have cost the utility approximately \$500,000.00.

There was no cost study for the Chapel Hill cemetery per say. The Chapel Hill cemetery is located across the street from our University Shores waste water facility. The cemetery consists of approximately 95 acres, which includes a holding pond of which effluent is stored and irrigated from. The alternative disposal method was to purchase large acres of land at a extremely high cost.

EXHIBIT NO.

WITNESS: FORREST LUDSEN

DOCKET NO. 950495-WS

Application for rate increase by

SOUTHERN STATES UTILITIES, INC

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DESCRIPTION:

LATE FILED EXHIBIT 2 TO MR. LUDSEN'S APRIL 9, 1996 DEPOSITION Late Filed Exhibit # 2 For Forrest Ludsen Concerning Reuse Rates.

Staff has requested information on plants where an agreement exists to provide reclaimed water for no cost. The following table highlights those plants.

Southern States Utilities, Inc. Forrest Ludsen Late Filed Exhibit # 2 **Reuse Customers With No Charge Contracts**

	(1)	(2)	(3) Alternative	(4) Àguired	(5)
Line. No.	Plant Name	Customer Name	Water Sources 1/	Contract With Plant	Disposal Problems 3/
1 2	Amelia Island	Amelia Island Links Golf Course Long Point Golf Course	Supply Well	Yes	
3 4		Summer Beach Golf Course			
5 6 7	Deltona	Deltona Hills Golf and Country Club Glen Abbey Golf Club, Inc.	Supply Well		Yes
8 9	Marco Island 2/	Tommie Barfield School	None		
10 11	Point O' Woods	Point O' Woods Golf Course	Supply Well	Yes	
12	University Shores	Chapel Hill Cemetery, Inc.	Supply Well		Yes

Note: In Docket #920199-WS the Florida Public Service Commission chose not to change revenues. (Marco island was not part of docket 920199-WS).

1/ Supply wells were taken off line as part of agreement to use reclaimed water.

2/ SSU has several water supply wells on Tommie Barfield School property and utility easement was granted to SSU partly in exchange for no charge reclaimed water.

All of the no charge reclaimed water customers, with the exception of Tommie Barfield School, had their own supply wells. They agreed not to use them if we would provide sufficient reclaimed water to meet their irrigation needs.

Disposal of effluent is of major concern. It takes very large tracts of land in order to have a spray field for disposal of reclaimed water. Our Deltona and University Shores plants are in densely populated areas where the price and/or availability of large tracts of land make acquiring sufficient land for disposal impractical.

No charge contracts for reclaimed water were acquired along with both the Amelia Island and Point O' Woods plants and Tommie Barfield School on Marco Island has granted SSU easements in exchange for no charge reclaimed water.

The language of the contracts with the no charge customers state that the utility is the benefiting party and the Commission, in Docket # 920199-WS, did not change revenues for them.

^{3/} Deltona and University Shores are densely populated areas where large tracts of land are not readily available and/or very expensive.

SCHEDULE OF WASTEWATER RATES - 1996 Summary of Proposed Rates for Proposed Uniform

Company: SSU / FPSC Jurisdiction / Present Uniform Docket No.: 950495-WS Schedule Year Ended: 12/31/96 Water [] Wastewater [x] Interim [] Final [x] Historical [] Projected [x] Present: FPSC Uniform [x] FPSC Non-uniform [] Proposed: FPSC Uniform [x]

FPSC Schedule: E1-1 Page 8 of 19 Preparer: Bencini Supporting Schedule: E1-2

Explanation: Provide a schedule of present, interim and proposed rates. State residential wastewater cap if one exista.

N	(1)	(2)	(3)	(4)	
Line			Proposed 1995	Proposed 1996	
<u>No.</u>	Class/Meter Size	Present Rates	Interim Rates	Final Rates	
	EMERGENCY TEMPORARY SERVICE	- Sugar Mill Woode			
27	5/8"x3/4"	\$12.67	8 40.04		
28	3/4"	NA	\$16.21	\$17.59	
29	1"	N/A	N/A	\$17.59	
30	1 - 1/2"		N/A	\$17.59	
31	2"	N/A	N/A	\$17.59	
32	3*	N/A	N/A	\$17.59	
33	4"	N/A	N/A	\$17.59	
34	6	N/A	N/A	\$17.59	
35	8"	N/A	N/A	\$17.59	
36	10"	N/A	N/A	\$17 59	
37		N/A	N/A	\$17.59	
38	GALLONAGE CHARGE / MG:				*
30	All Gallonage	\$4.39	\$5.61	\$5.69	
	EFFLUENT - Deltona 2/				,
39	5/8"x3/4"	\$0.00	\$0.00	1	
40	3/4"	\$0.00	\$0.00	\$6 88	
41	1"	\$0.00		\$0.00	
42	1 - 1/2"	\$0.00	\$0.00	\$0.00	/
43	2"	\$0.00	\$0.00	\$0 00	
44	3"	\$0.00	\$0.00	\$0.00	
45	4 "	\$0.00	\$0.00	\$0.00	
46	6"	•	\$0.00	\$0.00	
47	8"	\$0.00	\$0.00	\$0.00	
48	10"	\$0.00	\$0.00	\$0.00	
49	GALLONAGE CHARGE / MG:	\$0.00	\$0.00	\$0.00	
50	All Gallonage				
00	An Centrage	\$0.06	\$0.06 3/	\$0.06 3/	1/

1/ SS and Public Authority are not tarriffed classes but are shown separately on the E-2 and E-13 Schedules. The rates are the same as General and Multi-Family

2/ There is no billing history for Deltona.

3/ By contract, rate cannot be changed.

DOCKET 950495-W5 EXHIBIT NO. 250 CASE NO. 96-04227

EXHIBIT NO. 250

WITNESS: FORREST LUDSEN

DOCKET NO. 950495-WS

Application for rate increase by

SOUTHERN STATES UTILITIES, INC

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DESCRIPTION:

LATE FILED EXHIBIT 2 TO MR. LUDSEN'S APRIL 9, 1996 DEPOSITION

FLORIDA PUBLIC SERVICE COMMISS	ION
DOCKET 950495-WS EXHIBIT NO	250
WITNESS: Sou Jucken	
ATE EN 2617.T	

Late Filed Exhibit # 2 For Forrest Ludsen Concerning Reuse Rates.

Staff has requested information on plants where an agreement exists to provide reclaimed water for no cost. The following table highlights those plants.

Southern States Utilities, Inc. Forrest Ludsen Late Filed Exhibit # 2 Reuse Customers With No Charge Contracts

	(1)	(2)	(3) Alternative	(4) Àquired	(5)		
Line. Plant		Customer	Water	Contract	Disposai		
<u>No.</u>	Name	<u>Name</u>	Sources 1/	With Plant	Problems 3/		
1	Amelia Island	Amelia Island Links Golf Course	Supply Well	Yes			
2		Long Point Golf Course					
3		Summer Beach Gotf Course					
4							
5	Deltona	Deltona Hills Golf and Country Club	Supply Well		Yes		
6		Gien Abbey Golf Club, Inc.					
7		•					
8	Marco island 2/	Tommie Barfield School	None				
9							
10	Point O' Woods	Point O' Woods Golf Course	Supply Well	Yes			
11							
12	University Shores	Chapel Hill Cemetery, Inc.	Supply Well		Yes		

Note: In Docket #920199-WS the Florida Public Service Commission chose not to change revenues. (Marco Island was not part of docket 920199-WS).

- 1/ Supply wells were taken off line as part of agreement to use reclaimed water.
- 2/ SSU has several water supply wells on Tommie Barfield School property and utility easement was granted to SSU partiy in exchange for no charge reclaimed water.
- 3/ Deitona and University Shores are densely populated areas where large tracts of land are not readily available and/or very expensive.

All of the no charge reclaimed water customers, with the exception of Tommie Barfield School, had their own supply wells. They agreed not to use them if we would provide sufficient reclaimed water to meet their irrigation needs.

Disposal of effluent is of major concern. It takes very large tracts of land in order to have a spray field for disposal of reclaimed water. Our Deltona and University Shores plants are in densely populated areas where the price and/or availability of large tracts of land make acquiring sufficient land for disposal impractical.

No charge contracts for reclaimed water were acquired along with both the Amelia Island and Point O' Woods plants and Tommie Barfield School on Marco Island has granted SSU easements in exchange for no charge reclaimed water.

The language of the contracts with the no charge customers state that the utility is the benefiting party and the Commission, in Docket # 920199-WS, did not change revenues for them.

SCHEDULE OF WASTEWATER RATES - 1996 Summary of Proposed Rates for Proposed Uniform

Company: SSU / FPSC Jurisdiction / Present Uniform Docket No.: 950495-WS Schedule Year Ended: 12/31/96 Water [] Wastewater [x] Interim [] Final [x] Historical [] Projected [x] Present. FPSC Uniform [x] FPSC Non-uniform [] Proposed: FPSC Uniform [x]

Explanation: Provide a schedule of present, interim and proposed rates. State residential wastewater cap if one exists.

FPSC Schedule: E1-1 Page 8 of 19 Preparer: Bencini Supporting Schedule: E1-2

\$0.00

\$0.00

\$0.00

\$0.06 3/

(1) (2) (3) (4) Line Proposed 1995 Proposed 1996 Class/Meter Size No Present Rates Interim Rates Final Rates EMERGENCY TEMPORARY SERVICE - Sugar Mill Woods 27 5/8"x3/4" \$12.67 \$16.21 \$17.59 28 3/4" N/A N/A \$17.59 29 1" N/A N/A \$17.59 30 1 - 1/2" N/A N/A \$17.59 31 2" N/A N/A \$17.59 32 3" N/A N/A \$17.59 33 4" N/A N/A \$17.59 34 6" N/A N/A \$17.59 35 8" N/A N/A \$17 59 36 10" N/A N/A \$17.59 37 GALLONAGE CHARGE / MG: 38 All Gallonage \$4.39 \$5.61 \$5.69 EFFLUENT - Deltona 2/ 39 5/8"x3/4" \$0.00 \$0.00 \$8.88 40 3/4" \$0.00 \$0.00 \$0.00 41 1" \$0.00 \$0.00 \$0.00 42 1 - 1/2" \$0.00 \$0.00 \$0.00 43 2" \$0.00 \$0.00 \$0.00 44 3" \$0.00 \$0.00 \$0.00 45 4" \$0.00 \$0.00 \$0.00

\$0,00

\$0.00

\$0.00

\$0.06

1/ SS and Public Authority are not tarriffed classes but are shown separately on the E-2 and E-13 Schedules The rates are the same as General and Multi-Family

\$0.00

\$0.00

\$0.00

\$0.06 3/

2/ There is no billing history for Deltona.

GALLONAGE CHARGE / MG:

46

47

48

49

50

6"

8"

10"

All Gallonage

3/ By contract, rate cannot be changed.

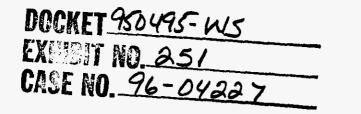


EXHIBIT NO. 251

WITNESS: FORREST LUDSEN

DOCKET NO. 950495-WS

Application for rate increase by

SOUTHERN STATES UTILITIES, INC.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DESCRIPTION:

REQUESTED INFORMATION BY FPSC STAFF DURING APRIL 9, 1996, DEPOSITION--WHICH RWO CUSTOMERS ARE METERED AND WHICH ARE NON-METERED.

FLORIDA PUBLIC SE	RVICE COMMISSIC)Ni
DOCKET SD495-V	VSEXHIBIT NO	261
WITNESS: 4/2	Ludsen	
DATE:	4/94	

DEPOSITION LATE FILED EXHIBIT NO. 3

OF

FORREST L. LUDSEN

REQUESTED BY FPSC STAFF DURING APRIL 9, 1996 DEPOSITION

WHICH RWO CUSTOMERS ARE METERED AND WHICH ARE NON-METERED?

Late Filed Exhibit # 3 For Forrest Ludsen Concerning Residential Wastewater Only Customers.

Residential Wastewater Only (RWO) customers are customers that are charged a flat rate for their wastewater service because we do not supply the water and therefore have no meter readings by which to charge them. The following table reflects the nine service areas in this case where the RWO type flat rate is charged. All customers except Tropical Isles receive water service from wells. The Tropical Isles customers receive their water from the City of Ft. Pierce.

Southern States Utilities, Inc. Forrest Ludsen Late Filed Exhibit # 3 Residential Wastewater Only Customers - 1995

(1)		(2)	(3)				
		1995 Wastewater Custon					
Line.	Plant	Total SSU	Residential				
No.	Name	Metered	Non-Metered 1/				
1	Apache Shores	98	15				
2	Beacon Hills	3107	1				
3	Fisherman's Haven	138	7				
4	Lehigh	6876	6				
5	Morningview	35	1				
6	Sugar Mill	621	5				
7	Tropical Isles	0	228				
8	Unirversity Shores	3260	1				
9	Venetian Village	85	1				

1/ To the best of SSU's knowledge, based on a cursory field review, all RWO customers besides Tropical Isles are on wells.

Staff has suggested getting water meter readings for RWO customers and charging them as we do our other wastewater customers. There are several problems with doing that. First of all, the only plant where that would be applicable is Tropical Isles, which gets water service from the City of Ft. Pierce. We have had experience in the past dealing with a municipal to get their readings in order to bill our wastewater customers. Problems arise for any number of reasons. Meter change outs and misreads occur as well as adjustments to bills. Since all we get are monthly billing records, we do not always know when a problem has occurred. Once we find out a problem has occurred, it can take a great deal of effort to determine what the problem was and then try to correct it in our billing system. Getting the meter readings from a third party could result in additional costs due to additional billing requirements.

Tropical Isles has no customers other than RWO. Therefore, those customers are responsible for the revenue requirements of that plant. Any change in the billing structure from a flat rate just redistributes the revenue requirements among those 228 customers.

Page 2 of Late Filed Exhibit # 3 For Forrest Ludsen Concerning Residential Wastewater Only Customers.

Along the same lines it has been suggested that perhaps we should have a vacation rate for the customers of Tropical Isles. Again, the revenue requirements would just be redistributed among those 228 customers. And I feel it should be pointed out that you would have to do a survey to determine how often and how many people were on vacation at a time to develop rates. Then there is the verification problem when someone says they are on vacation. In the end, either the full time residents would subsidize the part time residents as addressed in the previous paragraph, or the rates would have to increase for the non-vacation time the same amount as the decrease during vacation time to collect the appropriate revenue requirements. This would mean that the residents would still pay the same for their annual service as under the flat rate structure. I see no gains with that methodology.

For all of the reasons mentioned above, I can find no compelling argument for changing the rate structure in Tropical Isles. Any attempt to change the rate structure would require significantly more administrative overhead, with the only gain being that you have managed to re-allocate the revenue requirements of that plant.

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July 12, 1988

Ms. Lynn Adams Division of Research Florida Public Service Commission 101 East Gaines Street Tallahassee, Florida 32399-0872

Re: Data Information Request on Uniform System Wide Rates

Dear Ms. Adams:

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The following is my response to the questionnaire regarding uniform system wide rates, and I apologize for not meeting your May 2, 1988 deadline.

Southern States Utilities, Inc. is somewhat unique for a Florida water and sewer utility. We own and operate 115 plus systems in 19 counties of Florida from Amelia Island down to West Palm Beach across the state to Fort Myers area upward into Citrus County. Our water systems use such different water operations as "basic pumping systems," "lime softening and filtration," and "reversed osmosis". Our sewer operations include "basic secondary treatment," "tertiary," and "advanced wastewater treatment." Our large service territory has many different geographical as well as geopolitical considerations which management must deal with at the grass roots level on a daily basis.

- 1. Uniform countywide rates have been implemented for certain groups of systems owned by your company.
 - a. For the purposes of setting these rates, why are systems grouped the way they were within the same county?
 - b. Why were consolidated rate making treatments and uniform rates been requested only on a countywide basis?
 - c. Why were consolidated rate making treatments and uniform rates not requested for all your water and sewer systems within one county?

4 CUV

ORIDA PUBLIC SERVICE COMMISSION COMPANY/ WITNESS: DATE

Uniform System Wide Rates, Data Information Request Page 2

In the counties which Southern States has systems with uniform rates, those systems are grouped in such a way to reflect similar types of water and sewer plant operations including O&M expense similarities. The geographical locations of the systems are also critical to combining systems without causing undo cross-subsidization within the rate structure of the various classes of customers.

One can assume that uniform rates should be designed for systems that are similar in nature and for geographical purposes close enough to exchange operators and/or supervisors. In other words, one could have similar type operations overlapping into two or more counties which theoretically support having the same cost based rates.

Over the past four years, all county wide rate applications requested for by Southern States involved consolidated rate making treatment and a request for uniform water and/or sewer rates.

- 2. What prompted your company to file its initial request for separate systems to be considered together for the purposes of determining total revenue requirements?
 - a. In what ways did adoption of uniform rates benefit your company?

Southern States has requested uniform rates in geographic areas, i.e., counties where plant operations are similar, fixed and variable O&M associated with these plants is comparable and cross-subsidization was at a minimum.

The company, and in the last analysis the customer, should receive the benefits one realizes from the use of uniformed rates. His or her rates should reflect lower A&G expense through simplified accounting, streamlined applications and billing, less manpower and man hours needed in the Rate Department area to produce indexing and pass-through filings.

3. What kinds of customer reactions have there been to the uniform rates charged by your company?

Customer reactions have been (1) positive in the case where their rates actually were decreased and (2) negative where the customer saw his rates go up. No matter how close you get to cost based rates, the customer only cares about the dollar impact!

4. Would you like to see uniform rates implemented in all of the systems operated by your company statewide? Why or why not?

Uniform rates should be implemented in geographic areas which have: similar operating characteristics, compariable O&M levels, and compariable social economic levels and life styles. Do we want to base our rate design on cross-subsidizations merely to placate a difference in social economic levels within a geopolitical area? Uniform System Wide Rates, Data Information Request Page 3

see AdG

5. Do you have any recommendations for ways to implement uniform rates such that the benefits of reduced administrative costs could be realized while minimizing the negative aspects of cross-subsidization? Please describe your recommendations in detail.

Because Southern States Utilities allocated A&G expense based on customers back to all its systems, it would take a tremendous savings to offset a situation where you were faced with cross-subsidization.

6. A certain amount of cross-subsidization occurs with any rate making scheme and no rate structure is entirely perfect. With that in mind, please comment on the issue of cross-subsidization associated with uniform rates. Specifically, do you believe cross-subsidization is a legitimate concern and why?

If you combine, for rate design purposes, 3 or 4 systems with completely different modes of operations, dissimilar expenses, and very uneven social economic levels, you are going to have a real problem with cross-subsidization within that combined system's service territory.

Cross subsidization is a very legitimate concern not only to rate design experts and regulators, but also to the customer trying to make ends meet. There probably has to be a compromise between cost based rates and uniformity. As a general rule, rates should be cost based using an embedded or marginal cost study as your allocation tool. However, industry and regulators may want to blend into a rate a mix of cost embedded rates with that of uniformity over a period of time. There are always exceptions.

7. Please identify and estimate, if possible, the kinds of cost savings that have been realized as a result of uniform rates in those areas where they are in effect?

I would think that if any cost savings were realized as a result of uniform rates, it would be seen in A&G expense versus a decrease in the level of O&M expenses associated with the systems being examined. I wouldn't attempt to estimate a dollar value at this time.

8. Have uniform rates caused you to incur any unanticipated additional costs? If yes, please identify and estimate those costs. Were they one-time or recurring costs?

According to the Managers in billing, operations, and accounting, Southern States has not incurred any unanticipated additional costs do to uniform rates in the counties that have been authorized uniform rates.

9. One of the claimed benefits of uniform rates is that they facilitate centralized recordkeeping and billing functions. However, centralized recordkeeping and billing activities are benefits which appear to be due to centralized management and ownerhsip rather than to the use of uniform rates. How have uniform rates enabled your company to reduce costs over and above cost reductions attributable to centralized Uniform System Wide Rates, Data Information Request Page 4

management?

After discussing the subject with other managers at Southern States, I don't believe that we can show a cost savings associated with implementation of uniform rates over and above that obtained from going to a certralized management.

10. How much would you estimate your company saves in rate case expenses by virtue of consolidated rate filings and uniform rates? (Please describe how you arrive at your estimate.)

Over a period of years Southern States' expenses associated with rate case expenses would decrease due to (1) consolidated filing fees, (2) direct labor allocated to one consolidated filing versus multiple systems filings, (3) outside services, i.e., legal, engineering, etc. would be consolidated. There is a cross over point as to the cost of a consolidated filing but I wouldn't attempt to estimate that savings at this time.

See Outside Services

Sincerely,

SOUTHERN STATES UTILITIES, INC.

Chuck Lewis Director of Rates

CL/jp

DELTONA UTILITIES CONSULTANTS, INC. A SUBSIDIARY OF THE DELTONA CORPORATION 3250 S.W. THIRD AVENUE MIAMI, FLORIDA 33129 PHONE (305) 854-1111

May 12, 1988

Ms. Lynn Adams Division of Research Florida Public Service Commission Fletcher Building 101 East Gaines Street Tallahassee, Florida 32301

Re: Data/Information Request on Uniform Systemwide Rates

Dear Ms. Adams:

m ?

Enclosed is our response to your questionnaire regarding the impact of systemwide rates on our company.

If you need additional information please contact me at (305) 854-1111, Ext. 350.

Sincerely,

Deltona Utilities, Inc. United Florida Utilities Corporation

ush-

Eileen Babka, Regulatory Accounting Manager

11g

cc: Mary Andrews Bane, Director of Research Charles Hill, Director Water and Sewer Division Gilbert C. Betz, Esq.

DATA/INFORMATION REQUEST ON UNIFORM SYSTEMWIDE RATES

COMPANY NAME: Deltona Utilities, Inc. United Florida Utilities Corporation

PERSON TO CONTACT: Eileen Babka, Regulatory Accounting Manager (305) 854-1111 Ext. 350

1. Do you favor uniform rates for all systems operated by your company? Why or why not?

We would favor uniform rates for all our utilities because it would simplify our accounting, reporting and billing. The rate increase percentage that is required to bring us to an equitable return would be relatively small because we would be spreading this increase over a large customer base.

2. Even though you may not favor uniform rates for all systems operated by your company, do you favor uniform rates for certain groups of systems operated by your company? Why or why not?

We would not favor uniform rates for certain groups of systems because in doing so would not maximize the cost benefits of systemwide rates. Since most of our utility divisions do not operate in the same county, systemwide rates by county would not apply to our utilities.

a. If yes, how would you group systems to apply uniform rates?

Not applicable.

.

3. Is there any likelihood that some of your systems will by interconnected in the future?

At this time, we do not anticipate the likelihood of interconnections.

a. If so, which ones and why?

Not applicable.

4. Do you anticipate cost savings to your company if uniform rates are implemented?

Yes.

aims

a. If yes, please describe in detail what kinds of costs would be saved and the magnitude of those cost savings. Would these savings be recurring or nonrecurring?

Recurring costs savings would occur in the following areas:

1. Data Processing.

The monthly costs of preparing individual balance sheets, income statements would be reduced by approximately 50%.

- 2. <u>Allocation of General and Administrative costs</u> would be simplified, and cost variances would be easily traceable.
- 3. <u>Accounting labor</u> associated with preparing individual annual reports, tax reports, indexing, gross receipt tax reports, etc. would be reduced.
- 4. <u>Customer billing</u> would be simplified, however we would not expect cost savings in this area because the number of bills rendered would not be reduced.
- 5. <u>Rate case</u> expense over a four year period would be reduced by approximately 50%. Although the cost of preparing a consolidated rate case would be initially greater (probably more than double the cost of a divisional rate case) the decrease in the frequency of filing rate cases would result in a overall cost reduction.

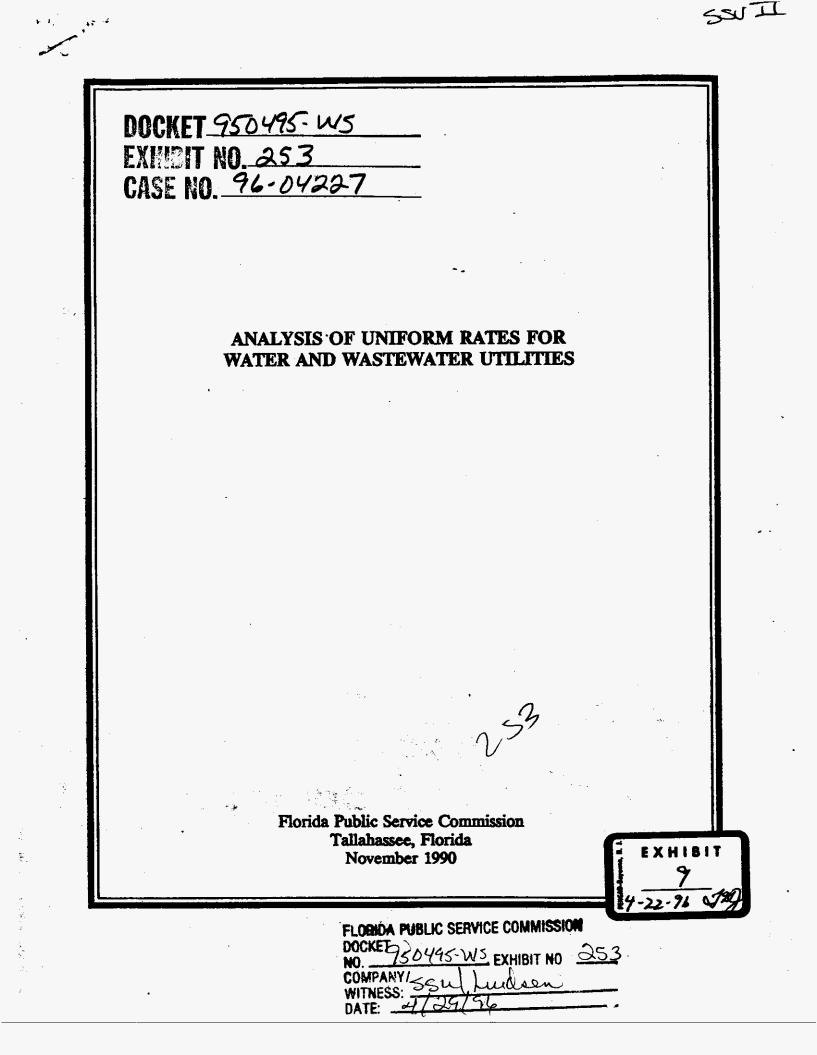
Overall we would expect to see the following cost savings: 50% reduction in data processing, 15-20% reduction in financial accounting labor, and 50% reduction in regulatory accounting labor.

- NOTE: Please include a discussion of rate case expenses, billing costs, and recordkeeping costs.
- 5. What, if any, additional costs do you anticipate would be incurred to implement uniform rates?

Initial costs to convert to systemwide rates would be minimal.

6. What kind of customer reactions do you anticipate to uniform systemwide rates? Why?

If we had systemwide rates in effect today, and if we were allowed the revenues currently in effect, the average residential customer (assuming 10,000 gallons per month for water and 6,000 per month for sewer) would pay approximately \$15.39 a month for water and \$22.05 for sewer. Customers at Deltona and Spring Hill would have an overall increase.



REPORT ON COMPANYWIDE RATES

by

E. Frank Oguike, Regulatory Analyst IV

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Division of Research

Mary Andrews Bane, Director M. Patricia Clifford, Former Public Utilities Supervisor

> Florida Public Service Commission Tallahassee, Florida November 1990

ANALYSIS OF UNIFORM RATES FOR MATER AND WASTEWATER UTILITIES

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CHAPTER 1 INTRODUCTION

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1.1 Precedent-Setting Case for Uniform Companywide Rates

Over the past several years, the Florida Public Service Commission has considered the issue of uniform companywide rates (UCRs) for water and wastewater utilities with multiple systems. The term "uniform rates" refers to a pricing structure in which the same price is charged for a unit of output throughout a company's service area (uniform compnaywide rates), or a portion of its service area such as a county (uniform countywide rates), despite the fact that these areas are not served by the same system or division of the company. Uniform rates represent an average rate by which customers of some systems or divisions may pay more than the costs of providing their service while others may pay less than their full service costs.

In the early 1970s, the Commission permitted Florida Gas Company (FGC) to file a consolidated rate case for its seven operating divisions for ratemaking purposes.¹ The company regarded gas distribution as a unified operation and did not view geographical dispersion of the divisions--Jacksonville to Miami--as an impediment to consolidation or uniform rates because all the systems were physically connected. In support of its request, the utility stated that it would be cost effective to consolidate its rate cases in a single filing and use a single tariff for all customers.

The Commission's decision to permit a consolidated filing was

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based on findings in Docket number 71625-GDU, in which proponents of uniform companywide rates claimed that UCRs, if approved, would create operating efficiencies and reduce accounting and recordkeeping costs, administrative costs, and the frequency and expense of rate cases. Arguments in favor of UCRs were strong, but the proponents did not substantiate their claims with estimates of likely sizes of cost savings in each category.² Comments indicated some controversy concerning whether cost savings would be sufficient to overcome potential, undesirable cross-subsidization among customers of different divisions. A detailed summary of the arguments of the intervenors is contained in Appendix A. Based on the record, commission staff believed that there was sufficient justification to allow Florida Gas Company to consolidate its seven operating divisions for ratemaking purposes.

The Commission's decision to allow FGC to file a consolidated rate case and implement uniform rates established a precedent for other Florida utilities to request similar treatment. Issues debated twenty years ago regarding uniform rates still dominate current discussions on their implementation. No guidelines have been established for when uniform rates may clearly benefit utility ratepayers, and no tests of whether claimed savings actually accrue have ever been conducted. This report attempts to fill this void.

<u>1.2 The Development of UCRs in Florida Water and Wastewater Utilities</u>

Uniform companywide rates (UCRs) have developed in Florida's water and wastewater industry in two ways: (1) consolidated rate case filings

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and (2) system by system rate adjustments. Southern States Utilities, Inc. (SSUI) provides an example of a water and wastewater utility which formally requested consolidated ratemaking treatment for its 13 water systems and 4 wastewater systems in Lake County in 1985. The company claimed that it made "good economic sense" to treat these systems as a single ratemaking unit because plant operations and operating and maintenance expenses were similar. In addition, SSUI claimed that geographic proximity ensured similar water treatment and customer demand characteristics, and comparable capital investments per customer across systems encouraged a single tariff pricing method.

More recently, companies have used pass-through or rate adjustment indexing to achieve uniform companywide rates rather than undertaking consolidated full rate case proceedings. Atlantic Utilities of Jacksonville (Atlantic) is such a company. Atlantic acquired some of its 9 water and 2 wastewater systems in Duval County from Atlantis Utilities and Southern Utilities in 1984. After the acquisition, Atlantic retained the single price tariff already in place for the systems. The utility did not file a formal request for consolidation, but instead has utilized pass-throughs and indexed rate adjustments to increase rates and preserve their uniform rate structure across individual systems.

Pass-throughs and indexed rate adjustments have permitted other utilities, such as General Development Utilities (GDU), Florida Cities Water Company (Florida Cities), Utilities Inc. of Florida (UIF), and Jacksonville Suburban Utilities (JAX), to acquire UCRs selectively throughout their systems by changing rates of the individual systems. That is, some utilities have effectively implemented UCRs without filing

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a consolidated rate case, but rather by phasing them in through separate rate cases or through the use of pass-through rate adjustments and indexing.

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1.3 The Issues

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From claims made in the FCG case and from claims by Florida water and wastewater companies that have implemented uniform rates, cost savings occur directly from reduced accounting and recordkeeping expenses when uniform rates are implemented. The cost of preparing annual reports and statements of sources and uses of funds, balance sheets, and depreciation accounts for individual systems or divisions should be reduced significantly. Further, one customer billing cycle could be maintained for the consolidated systems' customers. This process would streamline customer accounts and collections and reduce related expenses. Finally, filing one consolidated rate case rather than separate rate cases for each individual system should significantly reduce rate case related expenses.

The most significant criticism of UCRs is the possibility of cross-subsidization.³ Uniform rates could result in cross-subsidization among systems if the costs of providing water services are significantly different for the systems being consolidated for ratemaking purposes. Costs may differ across systems for a number of reasons. For example, in the Jacksonville area, water treatment requires a simple application of an aeration and chlorination process, whereas Southeastern Florida systems require a more costly lime-softening and reverse-osmosis treatment to meet the required water quality. Therefore, the cost of

serving customers who live in areas where water is more abundant and inexpensive to treat is lower than the cost for treating water for customers who live in areas where water is scarce and expensive to treat. Similarly, costs of providing service may be larger, on a per customer basis, for a new plant with a relatively small customer base than for an older plant with a mature customer base. In each of these instances, if the costs are averaged so that both sets of customers pay the same rates, then cross-subsidization could occur.

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1.3.1 Specific Claims by Florida Companies. Florida water and wastewater companies who responded to a recent Division of Research uniform companywide rates presented varying current survey on perspectives on uniform companywide rates. The surveyed utilities are identified in Table 1.1. Survey responses for the utilities with consolidated systems and those without consolidated systems are contained in Appendix B and Appendix C, respectively. Some Florida water and wastewater utilities contended that consolidation and uniform rates would result in cost savings for utilities and ratepayers. For instance. Florida Cities Water Company stated that the utility's four districts filed separate rate cases at a cost of \$50,000 for water and \$50,000 for wastewater for a total cost of \$400,000. The utility stated that the total cost would have been \$150,000 (\$75,000 for water and \$75,000 for wastewater) if one consolidated rate case was filed for all the Similarly, Southern States Utilities, Inc. claimed that districts. consolidation and uniform companywide rates would generate savings in administrative and general costs, accounting and recordkeeping costs. data processing and rate case expenses. The utility stated that costs

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associated with these functions could be reduced if some of the operations were centralized. Deitona Utilities Consultant, Inc., a subsidiary of Deltona Corporation claimed that the utility would save 50 percent "in data processing costs, 15-20 percent in accounting and recordkeeping, and 50 percent in regulatory accounting labor costs if consolidation and uniform rates were implemented."

Kingsley Service Company has three systems: Heritage Farm, Orange Park, and Fleming Island. Kingsley uses different billing cycles for each of these systems. The Heritage Farm system uses a monthly billing cycle, while the Orange Park and Fleming Island systems bill their customers on a quarterly cycle. The utility contended that if uniform rates were implemented for the three systems, it would generate savings in postage stamps, supplies, meter reading costs, and accounting costs for eight billings per year for approximately 350 customers. In addition, cost savings were expected from consolidation of accounting and recordkeeping for the three systems.

According to Kingsley, increased costs resulting from implementation of uniform rates would depend on the FPSC's requirements to switch to consolidated filing and uniform rates. For example, if the FPSC requires a full rate case hearing before switching to UCRs, the costs would be high, but if the FPSC did not require a full rate case hearing, the utilities affected will not experience substantial cost increases. Additional costs could arise from the need to send notices to customers regarding changes in rate structure.

Water and wastewater utilities who indicated in their survey responses that they opposed uniform companywide rates are: Atlantic Utilities of Jacksonville, Inc. (AUJI) and General Development Utilities, Inc. (GDU). Most of their concerns centered around the amounts of cross-subsidies that would arise under such a pricing plan. AUJI strongly opposed uniform companywide rates on the basis of: (1) plant investment per customer, and (2) price differential. The utility argued that bulk water service purchasers would experience a sharp decline in rates compared to customers of self-sustained systems. The utility believed that investment per customer would differ considerably from county to county, or within a utility's service area. Secondly, AUJI contended that geographical dispersion and sources of water and cost of water treatment would create substantial cost differentials. That means, customers who live in geographical areas where water is abundant and inexpensive to treat would subsidize customers who live in areas where water is scarce and expensive to treat.

GDU contended that such rates would create substantial cross-subsidization. For instance, GDU stated that uniform companywide rates would create a "high degree" of cross-subsidization because customers of one system would share the costs associated with a new plant built to serve another system and might not benefit directly from the new plant.⁴

<u>1.3.2 The Debate in Selected Other States</u>. To present additional perspectives on uniform rates, questionnaires were sent to 21 states and nine other states were contacted by telephone regarding the existence of uniform rates for utilities subject to their regulatory jurisdiction. Questions were also asked concerning the justification for allowing such rates when implemented. A list of the states surveyed and a selected summary of their responses are contained in Appendix D. Chapter 1-8

Of the 30 commissions surveyed, 27 (90 percent) responded. Out of the 27 respondents, 17 (63 percent) stated that they have uniform rates on either a companywide or a countywide basis. Eight (80 percent) of the 10 commissions who do not have UCRs indicated that the water and wastewater utilities subject to their jurisdiction do not have multiple systems. Indiana and Maryland are the only-two surveyed states without UCRs which have multiple water or wastewater systems under their jurisdiction. The Indiana Utility Regulatory Commission indicated that Indiana Cities Water Company favors uniform rates to reduce rate case expense and other related costs.

Three of the states where uniform rates are currently in effect reported that most, if not all, of the water and wastewater utilities under their jurisdiction have uniform companywide rates. The North Carolina Utility Commission stated that all of its water and wastewater utilities have uniform statewide rates. Mid-South Water Company, the state's largest water and wastewater utility with about 3,722 water connections and 388 wastewater connections, has about 90 service areas throughout the state. South Carolina stated that most of its multiple system water and wastewater utilities have uniform rates, while Texas indicated that about 90 percent of its 132 water and wastewater utilities have uniform companywide rates.

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While other states varied considerably in their responses, the survey results indicate that uniform rates are used in 17 (89.5 percent) of the 19 surveyed states which have multiple system water or wastewater utilities.

All of the respondents agreed that cross-subsidization was a

legitimate concern; however, only six of the states with uniform rates addressed cross-subsidization as an issue when the rates were implemented. Several states contended that the benefits associated with uniform rates generally offset any negative impacts of cross-subsidization. Only one state, Indiana, indicated that it has not approved uniform rates because it has favored "cost-based" rates.

<u>1.3.3 Summary</u>. In general, the main concern of all those who argued against uniform companywide rates was the potential for cross-subsidization and how to resolve it. Costs of providing services could vary across divisions or systems because of different treatment requirements and different customer and plant characteristics facing each division. Uniform rates would mask these cost differences and could result in customers in lower cost systems or divisions subsidizing customers in higher cost systems or divisions.

Proponents of uniform companywide rates generally claimed that UCRs would create operating efficiencies, reduce accounting and recordkeeping costs, reduce administrative costs, minimize the frequency of rate cases and reduce associated rate case expenses.

1.4 Study Overview

The purpose of this study is to investigate whether uniform companywide rates are desirable for Florida water and wastewater utilities with multiple operating systems. In particular, we explore the extent of savings and the consequences for rates resulting from implementation of uniform rates. Chapter 2 describes the phases of the study and method used to obtain and analyze data. The chapter describes

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the sample selection and data collection procedures, and defines two groups of sample utilities---the treatment group and the control group. The groups are used to analyze the consequences of uniform companywide rates. Chapter 3 presents our analysis. It discusses changes in expenses and rates for both groups and presents a comparison of the results. Finally, Chapter 4 presents some general conclusions which may be drawn based on the results of the analysis in Chapter 3.

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FOOTNOTES

- 1. The Florida Gas Company (FGC) was the parent company of Florida Gas Transmission Company with a number of diversified subsidiaries. The utility distributed natural gas through its seven distribution divisions in the state. The distribution centers were: Jacksonville, Daytona Beach, Eustis, Orlando, St. Petersburg, Lakeland, and Miami. The seven distribution centers were interconnected through a single transmission pipeline.
- 2. Attempts may have been made to measure the expected savings because 75 percent of the utility managers we interviewed for this report stated unhesitatingly that such savings were difficult to quantify.
- 3. Subsidization occurs when a person, government, or agency voluntarily or involuntarily provides financial assistance to another person, government, or agency to achieve a reduction in cost or price of goods and services for the latter group. Cross-subsidization is prevalent in service industries where costs of providing services often are difficult to measure discretely or to trace to a specific user. In such cases, one group of customers may pay more than the cost of providing them with service while another group may pay less than the cost of providing their service. Usually, the two groups are receiving different services or else the two groups are physically separate. This report addresses customers of different water systems which are physically separate but owned by the same utility.
- 4. In the long run, as each system replaces existing plant, the benefits of shared costs should accrue to all customers.

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Chapter 1-12

TABLE 1.1 LIST OF FLORIDA WATER AND WASTEWATER UTILITIES SURVEYED*

Utilities With Consolidated Systems

Florida Cities Water Company (Lee County) Southern States Utilities, Inc. Jacksonville Suburban Utilities Corporation Atlantic Utilities of Jacksonville, Inc. Marion Utilities, Inc. Utilities Inc. of Florida

Utilities Without Consolidated Systems

Aloha Utilities, Inc. Deltona Lakes Utilities Kingsley Service Company Marion Oaks Utilities Central Florida Utilities, Inc. General Development Utilities, Inc.

"A sample survey questionnaire sent to the utilities with uniform rates and a summary of their survey responses are provided in Appendix B. The survey questionnaire and summary of survey responses for the utilities without uniform rates are provided in Appendix C.

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CHAPTER 2 METHODOLOGY AND DATA SOURCES

2.1 Chapter Introduction

In the last chapter, we defined uniform companywide rates (UCRs) and presented the historical background of UCRs in Florida with emphasis on the Florida Gas Company case. We reviewed arguments in favor of and against UCRs from various gas utilities, and from water and wastewater (WANN) utilities in Florida. It was clear from these comments that no consensus was ever reached concerning the net benefits (or costs) of uniform rates. As we pursued our review, it also became apparent that no tests were ever conducted on whether claimed benefits were realized following their implementation or of how much cross-subsidization accompanied their use. This chapter is the first of two which attempt to determine the effects of uniform rates on utility ratepayers. The chapter outlines the sources of data and the method of analyzing and presenting data. The chapter also defines the "treatment" and "control"

2.2 Study Methodology

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The study of the appropriateness of uniform companywide rates for Florida NAMM utilities was conducted in phases. First, we selected a sample of Florida NAMM utilities to survey. Next, we selected treatment and control groups from the surveyed companies and collected rates and cost data for these companies. Cost data were limited to those

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Chapter 2-2

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categories of accounting costs which historical and survey claims indicated would be most likely to be reduced by implementation of uniform companywide rates. Finally, we analyzed these data to determine the consequences of consolidation and uniform companywide rates.

2.2.1 Sample Selection. The sample was initially limited to utilities with annual operating revenues of at least \$150,000. We believed that utilities of this size would be more affected in absolute terms by implementation of uniform rates. As we discuss below in Section 2.3, our sample was classified into control and treatment groups and further limited to permit comparisons between the two groups.

It should be noted here that no Florida water and wastewater utilities have uniform <u>companywide</u> rates, although some have uniform <u>countywide</u> rates. Our sample therefore comprised utilities with and without uniform countywide rates. This means that the conclusions of our analysis are based on the reasonable assumption that the analysis findings generalize to applications of uniform companywide rates.

Table 2.1 lists the selected utilities and the systems of each utility on which data were collected. The utility systems are listed in two groups: a treatment group composed of those which had countywide uniform rates and a control group composed of those which did not have countywide uniform rates.

Our cost analysis was limited to consideration of sample accounts with balances in excess of \$100. The accounts and their compositions are described in Section 2.2.3.

Rate data were restricted to sample water treatment rates to further limit substantial differences between the control and treatment groups. <u>2.2.2 Survey Phase</u>. Questionnaires were sent to twelve selected Florida WAWW utilities.¹ Six of the selected utilities had divisions with countywide uniform rates while six did not have countywide uniform rates.

The questionnaire sent to utilities with countywide uniform rates was to determine: (1) why some divisions were selected and their individual systems grouped together for consolidated rate case filings while other divisions with multiple systems were not consolidated; (2) what prompted some companies to initially request consolidated rate case filings; (3) the types of benefits utilities derived from countywide uniform rates, and the magnitude of associated cost savings; and (4) the concerns of utilities regarding cross-subsidization and their perceptions regarding how to mitigate the negative impacts of cross-subsidization. The questionnaire and selected survey results for the four responding utilities are contained in Appendix B.

The questionnaire sent to six utilities without countywide uniform rates was to: (1) obtain information on whether or not the utilities would favor uniform companywide rates for all of their systems or divisions, or for selected systems or divisions; and (2) determine the types of benefits and the cost savings the utilities would expect if uniform rates were implemented. The questionnaire and selected survey results for the three responding utilities are contained in Appendix C.

2.2.3 Data Collection Phase. In the data collection phase, cost and rate data were developed from utility annual reports and water service tariffs, respectively. Expense data were collated for entire divisions. While every attempt was made to collate rates for entire

Chapter 2-4

divisions, the irregularity of utility requests for rate adjustments made such collations impossible. Rates were therefore collated for selected systems.

We collated data from annual reports and water service tariffs for the years 1984 to 1988. Expense categories were selected for analysis based on utility management claims of accounts most likely to be affected by implementation of UCRs: Customer Accounts and Collections, Outside Services, and Regulatory Related Expenses. Expense data were deflated to 1984 dollars to facilitate comparison over time.²

The account for Outside Services Employed consists of costs for all contractual services except those incurred from rate cases. The account is divided into the following subaccounts: (1) Contractual Services - Engineering, which includes all monies paid to an outside engineer or engineering firm to work on the plant except those services performed for rate case purposes; (2) Contractual Services - Accounting, which includes all costs of outside accounting services performed in relation to maintaining and auditing the books and records of the utility or system: (3) Contractual Services - Legal, which includes costs of all legal services performed by outside firms for the utility with the exception of rate case related legal services; (4) Contractual Services -Management Fees, which includes all costs of services performed as a management function which could not be charged to any other subaccount; and (5) Contractual Services - Other, which includes all operations costs which could not be charged to the other contractual service subaccounts.

The Customer Accounts and Collections Expenses account includes all costs of labor, materials used, and expenses associated with processing customer applications, contracts, orders, credit investigations, customer billings, collections and complaints.

The Regulatory Related Expenses account includes all costs incurred in connection with formal cases before regulatory commissions plus other related expenses, including charges and fees assessed against the utility, its agents, officers, and employees. It also includes salaries and retainer fees for accountants, attorneys, engineers and witnesses, solicitors, clerks, and others engaged in prosecution who are not regular employees of the utility. Other expenses include office supplies, printing, travel and other miscellaneous expenses incurred in connection with rate cases.

Water rates selected were those faced by the "typical" residential customer, one with an assumed usage of 7,000 gallons of water per month. These rates were used to estimate bimonthly average bills for each system for the period 1984-1988.

2.2.4 <u>Analysis Phase</u>. The analysis phase comprised several parts. Survey responses were reviewed, along with case histories, to determine the problems or advantages associated with uniform rates. Survey responses also helped to highlight guidelines on when such rates may be appropriate; that is, when such rates would be more advantageous than costly to both the utilities and ratepayers. The expense and rate data were collated into tables and graphs, as were data on percent changes for rate data, and compared over time for the same utilities. The data were also compared for utilities with UCRs and for those without UCRs to determine if significant changes in costs and rates have occurred subsequent to implementation of UCRs. Judgments of significance of differences were subjective.

Chapter 2-6

2.3 Definition of the Treatment Group and the Control Group

2.3.] The Treatment Group. As was observed in Section 2.2.1, the treatment group was to be comprised of a selected number of WAHM utilities with both multiple systems and uniform countywide rates. To be included in the treatment group, a utility had to meet several requirements. First, the utility must have had two or more systems within the same county and have converted to uniform rates for those systems during the study period.³ Second, accounting data and tariffs must have been available for the study period, 1984–1988. Finally, each utility's account balances for the three selected accounts must have exceeded \$100 for each of the five years.

Only one of the six sample utility companies with uniform rates met all of the requirements, Southern States Utilities, Incorporated (SSUI).⁴ SSUI was incorporated in 1961, a wholly-owned subsidiary of Minnesota Power Company. The company is considered the largest investor-owned water and wastewater utility in Florida. SSUI operates multiple systems in 15 counties, including 80 water and 30 wastewater system. Five of the 15 counties have systems with uniform countywide rates. The SSUI counties selected for the treatment group were Seminole, Putnam, and Lake Counties because each of these three counties had a fairly large number of systems with uniform rates. The other SSUI counties each had fewer than five systems.

<u>2.3.2 The Control Group.</u> The control group was defined to include selected water and wastewater utilities or systems that operate one or more water and wastewater systems with different rate structures for the same class of customers within the same county or service area

over the sample period. As with selection of utilities for the treatment group, control group utilities had to have accounting and rate data for the five-year study period and the account balances had to be of sufficient size to permit comparisons over time. The control group included systems from three utility companies: Southern States Utilities, Inc., Florida Cities Water Company, and General Development Utilities, Inc. (GDU). SSUI's Citrus County division was included in the control group and had two systems: Oak Forrest and Apalachee Shores.

Florida Cities Water Company is a medium sized water and wastewater utility that provides water and wastewater services to three counties: Brevard, Lee, and Collier Counties. The Brevard County division was selected for the control group and has one system: Barefoot Bay.

The third utility, GDU, operates several small unconsolidated water systems in ten Florida counties with varied rate structures. The Florida Public Service Commission has regulatory jurisdiction over seven of the ten counties. Unconsolidated GDU systems in two counties were selected for inclusion in the control group: Silver Spring Shores in Marion County and Port Malabar in Brevard County.

FOOTNOTES

- 1. A list of Florida WAWH utilities surveyed was provided in Table 1.1.
- 2. Deflation was based on the Bureau of Labor Statistics Consumer Price Index--All Urban (CPI-U) found in Bureau of the Census (1987).
- 3. The countywide breakdown was used because none of the selected utilities have uniform companywide rates.
- 4. Florida Cities Water Company operates in three counties which are under the FPSC's regulatory authority, but the utility does not have multiple systems within a county. Atlantic Utilities of Jacksonville has had uniform rates for over seven years so its rates and cost data for the five-year period analyzed would not provide information for before and after implementation of uniform rates. Suburban Utilities of Jacksonville phased in uniform rates over a period of time, so it would be difficult to identify specific impacts at a point in time. Marion Utilities, Inc. and Utilities Incorporated of Florida maintain a single rate structure for all of their customers, but neither company has multiple systems.

1.1

TABLE 2.1 LIST OF UTILITIES SELECTED FOR ANALYSIS

I. The Treatment Group

- A. Southern States Utilities, Inc.
 - Seminole County
 - a. Chuluota Water System
 - b. Lake Harriet Water System
 - c. Apple Valley Water System
 - d. Harmony Homes Water System
 - e. Dol Ray Manor Water System
 - 2. Putnam County
 - a. River Grove Water System
 - b. River Park Water System
 - c. Saratoga Harbour Water System
 - d. Welaka Water System
 - e. Wootens Water System
 - 3. Lake County
 - a. Spring Lake Manor Water System
 - b. Piney Woods Water System
 - c. Morningview Water System
 - d. Palms Mobile Home Park Water System
 - e. Picciola Island Water System
 - f. Carlton Village Water System
 - g. Friendly Center Water System

II. The Control Group

- A. General Development Utilities 1. Marion County
 - a. Silver Spring Shores Division
 - 2. Brevard County
 - a. Port Malabar Division
- B. Florida Cities Water Company
 - 1. Brevard County
 - a. Barefoot Bay Division
- C. Southern State Utilities, Inc.

- 1. Citrus County a. Apalachee Shores Water System
 - b. Oak Forrest Water System

- f. Meredith Manor Water System
- g. Lake Brantley Water System
- h. Druid Hills Water System
- i. Fern Park Water System
- f. Palm Port Water System
- g. Park Manor Water System
- h. Pomona Park Water System
- i. Hermits Cove Water System
- h. Western Shores Water System
- i. Fern Park Water System
- j. Hobby Hills Water System
- k. Venetian Village
- 1. Fern Terrace Water System
- m. Skycrest Water System
- n. East Lake Harris Water System

CHAPTER 3 ANALYSIS OF DATA

3.1 Chapter Introduction

As was discussed in Chapter 1, proponents of uniform companywide rates contended that implementation of such rates would result in cost savings for the utility by reducing accounting and recordkeeping costs and reducing rate case expenses. Opponents asserted that UCRs would result in an excessive amount of subsidization of customers in higher cost systems by customers in lower cost systems. To assess the validity of these contentions, two types of data were analyzed. First, if UCRs resulted in cost savings, one would expect these savings to be reflected in affected accounts in the annual reports. We examined three such accounts: Outside Services Employed, Regulatory Related Expenses, and Customer Accounts and Collections. The second type of data analyzed was rate data for the selected utilities. Cost savings should also be reflected in reduced average rates when UCRs take effect. Both the account data and the rate data were compared for the five-year period, 1984 through 1988.

This chapter discusses the results of the data analyses. Section 3.2 describes the analysis for the sample utility divisions which implemented UCRs, the treatment group. Section 3.3 describes similar analyses of data for the control group of utilities whose divisions did not implement UCRs. Section 3.4 compares the results for the treatment group with the results for the control group. Section 3.5 addresses

cross-subsidization and what can be concluded about the issue based on the results of the analyses.

3.2. Analysis of Data for the Treatment Group

As discussed in Chapter 2, the treatment group consisted of SSUI's divisions in Lake, Putnam, and Seminole counties. Consolidation became effective in Putnam County in 1986 and in Lake County and Seminole County in 1987.

The expense data for the treatment group are presented in Table 3.1 and Chart 3.1. The rate data are presented in Tables 3.2, 3.3, and 3.4.

3.2.1 Analysis of Changes in Expenses for the Treatment Group. As shown in Table 3.1, the account for Outside Services Employed in SSUI/Seminole County and SSUI/Lake County demonstrated a consistent pattern of change over the five-year period, but the data for SSUI/Putnam County did not show a consistent pattern over the same period. To the extent that the utilities used outside consulting services for assistance for individual systems, one would expect the expenses shown in the Outside Services Employed account to decline if the individual accounts are consolidated into one basic system. With the degree of variation shown in Table 3.1, however, it is not possible to draw any conclusions about the effect of consolidation on expenditures for outside services. SSUI/Seminole County and SSUI/Lake County each showed a steady increase while SSUI/Putnam County generally declined.

The second account reviewed, Regulatory Related Expenses, showed even greater variability. As can be seen in Table 3.1, none of the three

divisions evidenced a consistent pattern of increase or decline in these expenses over the five-year period. Rather, fluctuations appeared to be random and volatile. The lack of pattern of increase or decline may be due in part to the fact that utilities are not permitted to recoup all costs of rate cases in the year in which the expenditure occurs. Another possibility is that the account largely reflects costs which are not tied directly to rate cases, but are incurred in compliance with other regulatory requirements. In any case, there is no clear correlation between the sizes of balances in this account and the consolidation of ratemaking which occurred in 1986 and 1987.

The third account examined, Customer Accounts and Collections, did reflect a general pattern of decrease after consolidation occurred in 1986 and 1987. Proponents of UCRs stated that consolidation for ratemaking purposes would simplify the billing process and reduce costs associated with processing customer accounts. The data seem to support this contention. The balances reported in this account increased for the years 1984 and 1985 and declined after the 1986 consolidation of Putnam County systems. SSUI/Seminole County showed increases for 1984-1986 and the account balances then declined in 1987, the year consolidation became effective, and 1988. SSUI/Lake County varied from the general pattern in that its account balances declined for the years 1984-1987 and increased somewhat in 1988, following consolidation of its systems in 1987.

The data for the three accounts are shown graphically in Chart 3.1. It is evident that Customer Accounts and Collections is the only one of the three accounts which demonstrated the expected pattern of decline after consolidation.

3.2.2 Analysis of Changes in Rates for the Treatment Group. The residential water rates analyzed for the treatment group consisted of rates for systems in SSUI/Lake County, SSUI/Putnam County and SSUI/Seminole County. Bimonthly water bills shown in Table 3.2 were estimated using each system's bimonthly tariffs and an assumed average residential consumption of 7,000 gallons per month or 14,000 gallons bimonthly. The changes in rates are discussed for each division individually, beginning with Lake County.

Lake County. Table 3.2 shows that every water system in SSUI/Lake County increased its residential rates in 1985 and all but one of the 14 systems increased their rates in 1986. The increases ranged from 1.92 percent to 2.18 percent in 1985 and from 8.04 percent to 9.17 percent in 1986. The exception to the increases was the Stone Mountain system which had a 20.91 percent decrease in 1986. With consolidation of the systems in 1987, residential rates declined for 10 of the systems and increased for four systems. If each system had only one customer, revenues would have declined by a total of \$39.02 for the ten systems with rate decreases and increased by \$25.28 for the four systems with rate increases, resulting in a net decrease in revenues of \$13.74 for the Lake County Division.

A Start in

Since the number of customers per system varies considerably. Table 3.3 estimates the general direction of revenue impact on the division by using the average number of residential customers (equivalent residential connections or ERCs) in each system in 1986/1987 as weights. As shown, weighting the effect of the rate changes by the number of customers in each system did not change the direction of revenue effect. Net revenues still declined for the division overall. The net decline in revenues indicates that customers in general had lower rates after consolidation even though customers in four of the systems had higher rates.

Table 3.4 provides yet another perspective on the same data. The typical bimonthly bills have been indexed with 1984 being the base year.¹ Based on the indexed data, 57.14 percent of the systems paid 2.4] percent less in residential water rates in 1988 than they paid in 1984 and paid 3.84 percent less in 1987 than in 1984. Furthermore, 21.43 percent (3) of the systems paid 2.79 percent higher rates in 1988 than they paid in 1984 and another 21.43 percent (3) paid between 39.9 percent and 56.5 percent more in 1988 than in 1984. To focus on the effects of consolidation, consider the change in the indexes between 1986 and 1987 for the Lake County systems. Eight systems had 1986 rates which were 10.19 percent higher than in 1984 but these systems had 1987 rates which were 3.84 percent lower than in 1984. This constitutes a 14.03 percent decline between 1986 and 1987 relative to 1984 rates for those eight systems. Two other systems, Fern Terrace and Skycrest, experienced declines of 8.88 percent between 1986 and 1987 relative to 1984 rates. The remaining four systems (Picciola Island, Stone Mountain, Venetian Shores, and Western Shores) experienced increases between 1986 and 1987 of 43.82 percent, 20.52 percent, 25.21 percent and 27.31 percent. respectively, relative to 1984 rates. •

<u>Putnam County</u>. Table 3.2 shows that rates increased by 2.95 percent in 1985 for 5 of the 9 Putnam County systems, and by 3.77 percent, 13.29 percent and 44.25 percent for an additional three systems,

respectively. A ninth system experienced a decline in rates of 2.84 percent. In 1986, the year of consolidation, rates increased dramatically for all systems: the typical bill increased by 29.49 percent for four systems and by 34.96 percent for five systems. However, in 1987, rates declined by 4.66 percent for all Putnam County systems. The 1987 decline may have been a delayed result of consolidation reflecting associated cost adjustments. Table 3.3 shows that the 1987 decline in revenues (rate changes weighted by the average number of customers per system in 1986/1987) was greater than the subsequent 1988 increase in revenues. The estimates provided in Table 3.3 are intended to indicate direction and general magnitude of revenue changes. Although countywide rates increased in 1988, the rate level was still lower than the 1986 rate level.

Table 3.4 shows that the 1988 typical bill in Putnam County was 37 percent higher for 5 of the nine systems and 24.2 percent, 32.7 percent, 44.8 percent and 84.4 percent higher for the remaining four systems, respectively, than in 1984. Considering the change in indexes between 1986 and 1987, all Putnam County systems had lower rates in 1987 than in 1986, with rate decreases ranging from 5.86 percent to 8.70 percent, relative to 1984 rates.

<u>Seminole County</u>. Water systems in Seminole County experienced moderate rate increases in 1985 and 1986, ranging from 1.87 percent to 5.43 percent. With consolidation in 1987, rates declined for 6 of the nine systems (2 by 14.75 percent and 4 by 5.45 percent) and increased by 12.23 percent for the remaining 3 systems. If each system had only one customer, division revenues in 1987 would have declined by \$5.50. Table 3.3 shows that when adjusted by the average number of customers per system in 1986/1987, the direction of the net revenue impact was the same: the rate adjustments in 1987 resulted in lower net revenues for SSUI/Seminole County after consolidation. All Seminole County systems experienced small rate increases of 1.14 percent in 1988. However, the 1987 decrease in revenues exceeded the 1988 increase in revenues so the average customer still paid less in 1988 than he did in 1986.

The indexes in Table 3.4 show that for 1986, the year in which consolidation occurred, rates were 3.79 percent higher for four systems, 5.09 percent higher for three systems and 13.14 percent higher for the remaining two systems than 1984 rates. Subsequent rate declines in 1987 resulted in four systems having 1987 rates which were 1.87 percent lower than 1984 rates and another two systems with rates which were 7.60 percent lower. Three systems' rates increased to 17.94 percent more than the 1984 rates. The pattern continued for 1988. Six Seminole County systems had rates which were lower in 1988 than in 1984 while three systems had higher rates in 1988 than in 1984.

<u>Summary</u>. It appears that consolidation results in lower revenues for the company for at least one year after consolidation. This is consistent with the premise that consolidation would lower utility expenses and result in reduced rates. The increases in rates which occurred subsequent to consolidation were minor, ranging from 1.14 percent to 3.54 percent for the three divisions.

3.3 Analysis of Data for the Control Group

As indicated in Chapter 2, a group of unconsolidated water

utilities or systems were identified and selected as the control group. The group consisted of systems from three utilities: Southern States Utilities, General Development Utilities and Florida Cities. The expense data for the control group is presented in Table 3.5 and Chart 3.5. Information on the typical water rates of these systems is presented in Tables 3.6, 3.7, and 3.8.

3.3.1 Analysis of Changes in Expenses for the Control Group. As shown in Table 3.5, the Outside Services Employed account varied considerably during the five-year period. GDU/Marion County's expenses for outside services remained fairly constant in the first two years. increased markedly in 1986 and declined in 1987 and 1988. Similarly, GDU/Brevard County's outside services expense increased moderately between 1984 and 1985, increased noticeably during 1986, and then declined in 1987 and 1988. Florida Cities/Brevard County's outside service expenses declined slightly between 1984 and 1985, then increased more than tenfold in 1986. Expenses then declined in 1987 and increased SSUI/Citrus County's outside service account 1988. again in demonstrated a steady increasing trend throughout the 1984-1988 period. Thus, the GDU and the Florida Cities divisions evidenced similar trends: dramatic increases in outside service expenses in 1986, preceded by stable or moderate increases in the years 1984 and 1985, and followed by lower expenses in the subsequent years 1987 and 1988. The SSUI division differed in that its expenses for outside services increased steadily throughout the five-year period.

None of the control group's divisions had a consistent pattern of change in Regulatory Related Expenses. The pattern of fluctuations and

volatility exhibited may be attributed to the fact that utilities are permitted to amortize rate case expenses over a four-year period and amounts not recouped are added to current expenditures for recovery. Another possibility is that the account may contain costs which are not tied directly to rate cases but are incurred in compliance with other regulatory requirements.

The third and final account reviewed, Customer Accounts and Collections, showed general increases over the period for three of the four divisions: the two GDU divisions and the Florida Cities division. SSUI/Citrus county did not show a consistent pattern of change in Customer Accounts and Collections expenses during the period. Account balances decreased in 1985 and 1986, increased in 1987 and decreased again in 1988.

The lack of consistent patterns of change in the expenses of the control group is illustrated graphically in Chart 3.5. Comparison of changes in the control group's expenses with changes in the treatment group's expenses will be discussed in Section 3.4.

3.3.2 Analysis of Changes in Rates for the Control Group. Residential rate data analyzed for the control group consisted of rates utilities and four unconsolidated water divisions. three from SSUI/Citrus County was the only control group division with more than one County, Florida system. GDU/Marion GDU/Brevard County. and Cities/Brevard County each had only one system serving in a given T. . . V. P. selected county.

As shown by the bimonthly water bills in Table 3.6, rates increased over the five-year period for both SSUI/Citrus County systems

and for the Florida Cities system, Barefoot Bay. GDU's Brevard County system had no rate change over the period while the GDU/Marion County system had a dramatic decrease of 61.67 percent in 1987. The latter system's rates then increased by 23.61 percent in 1988.

Table 3.7 shows that rates were somewhat higher in 1988 than in 1984 for three of the five systems. SSUI/Citrus County's two systems had 1988 rates which were 18.78 percent and 14.92 percent higher than their 1984 rates. Florida Cities' Barefoot Bay system had rates which were 8.47 percent higher in 1988 than in 1984. GDU's Marion County system, Silver Spring Shores, had rates which were 52.62 percent lower in 1988 than they were in 1984 while GDU's Brevard County system, Port Malabar, had rates which remained the same. With the exception of GDU/Marion County, there were no rate declines for the control group during the five-year period reviewed. While there were no dramatic rate increases, ratepayers in the control group did not experience the rate decreases over the period analyzed that ratepayers in the treatment group received.

<u>3.4 Comparison of Results for the Treatment Group</u> with the Results for the Control Group

<u>Expenses</u>. As discussed in Section 3.2, the treatment group expense accounts for Outside Services Employed and Regulatory Related Expenses did not demonstrate the expected pattern of change: declines in expenses following consolidation of rate case filings. To the contrary, these two accounts for the treatment group showed general increases in expenses over the five-year period. Reviewing the analysis of the same two accounts for the control group, three of the divisions demonstrated a consistent pattern of increases through 1986, followed by declines in 1987 and 1988.² The pattern for the control group clearly differs from that shown for the treatment group, but neither pattern supports the alleged effects of consolidation on expenses.

For the treatment group, expenses in the Customer Accounts and Collections account increased through 1986 and then declined significantly in 1987. This is the effect one would have expected if consolidation resulted in reduced expenses associated with billing and collections. The control group's expenses for the Customer Accounts and Collections account did not demonstrate this pattern. These expenses for the control group divisions either remained stable over the period or increased steadily. It appears that there is support for the contention that consolidation would result in lower expenses associated with customer accounts and collections.

Rates. Analysis of rate changes for the two groups produced interesting comparative results. The treatment group clearly demonstrated rate decreases for the majority of the affected systems after consolidation, while four of the five control group's systems experienced no decline in rates during the same five-year period. Three of the five control group systems showed steady, though moderate, increases in rates during the period. Further, while some treatment group systems did experience rate increases, these increases were outweighed by rate decreases in other systems so that revenues for the affected divisions actually declined for the year. Overall, customers of the consolidated systems in the treatment group had lower rates after consolidation. This evidence supports the contention of proponents of

consolidation that reduced costs would result in lower overall rates when uniform countywide rates are implemented.

In summary, it appears that there are potential expense savings and the possibility of lower overall rates where systems are consolidated for ratemaking purposes and uniform rates are implemented. The issue of cross-subsidization will be discussed in the next section.

3.5 Analysis of the Results Regarding Cross-Subsidization

As discussed in Chapter 1, the most significant criticism of uniform rates is the possibility of cross-subsidization of high cost systems by the customers of lower cost systems. A certain amount of cross-subsidization occurs with any ratemaking methodology, so the issue is one of the degree of cross-subsidization rather than whether cross-subsidization occurs. Table 3.2 indicates that consolidation generally resulted in lower typical bills for the affected systems. While the typical bills of a few systems increased, Table 3.3 shows that the net revenues declined in an absolute sense for each of the three utility divisions after consolidation. Therefore, customers in general had lower rates after consolidation.

Some additional points regarding the issue of cross-subsidization merit mention. The telecommunications industry and the electric industry have long been subject to criticisms of cross-subsidization of one class of customers by another class of customers or of customers of one type of service by customers of another type of service. Cost-based pricing is one of many objectives of regulation. Achieving other objectives may justify setting prices either above or below the actual cost of providing

a particular group of customers with service. Further, traditional regulatory pricing is based on historical costs rather than on current costs of providing service. Customers who are paying their share of historical costs may in fact be paying either more or less than the current (or incremental) cost of providing them with service. In general, cross-subsidization among customers of the regulated portion of a utility's business has not been of as much concern to regulators as cross-subsidization of unregulated services by regulated services.

While consolidation of multiple systems of a water and wastewater company for ratemaking purposes could cause some systems' rates to either increase or decrease, it is not possible to conclude that these changes result in undesirable cross-subsidization of customers of one system by customers of another system. The efficiencies associated with a consolidated approach to a multi-system utility may result in long-run rates for all customers being at lower levels than they would have been with each system treated separately. Consequently, the issue of cross-subsidization should be addressed on a utility-by-utility basis and the decision regarding uniform rates based on the findings in the particular case being considered.

FOOTNOTES

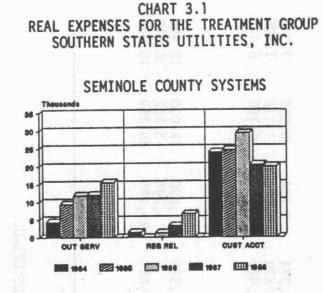
- 1. An index greater than I means that the rates in that year were greater than the rates in 1984 for the subject system. An index less than one indicates that the rates were lower in that year than in 1984.
- 2. One control group division demonstrated increases in outside service expenses throughout the period, as did the treatment group divisions.

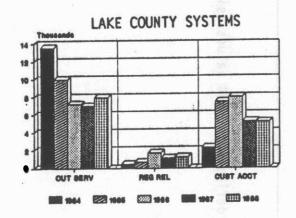
•)				t:		
Expense Account	1984	1985	1986	1987	1988	
			-	an na san an a		
LAKE COUNTY SYSTEMS						
Outside Services Regulatory Related Customer Accounts	2,643 4,033 11,725	3,188 2,663 10,243	5,810 1,181 9,982	6,183 1,327 5,337	7,505 7,056 6,037	
PUTNAM COUNTY SYSTEMS						
Outside Services Regulatory Related Customer Accounts	13,580 469 2,287	9,974 678 7,427	7,174 1,678 7,985	6,989 1,115 5,198	7,946 1,205 5,143	
SEMINOLE COUNTY SYSTEM	S					
Outside Services Regulatory Related Customer Accounts	4,383 1,465 23,963	9,399 6 24,541	11,890 1,248 29,295	12,080 3,262 20,389	15,495 6,610 19,964	

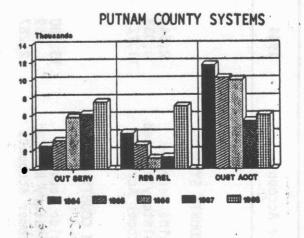
TABLE 3.1 REAL EXPENSES FOR THE TREATMENT GROUP* SOUTHERN STATES UTILITIES, INC.

*Values deflated to 1984 values using BLS CPI-U.









- Source: 1984-1988 annual reports.
- Notes: Putnam consolidated in 1986; Seminole and Lake consolidated in 1987. All values deflated to 1984 using BLS CPI-U.

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TABLE 3.2 NOMINAL RESIDENTIAL WATER RATES FOR THE TREATMENT GROUP TYPICAL BIMONTHLY BILLS* SOUTHERN STATES UTILITIES, INC.

		% Chg		% Chg		🕱 Chg		🐒 Chg	
County/System	1984	84-85	1985	85-86	1986	86-87	1987	<u>87–88</u>	198
LAKE COUNTY SYSTEMS									
Carlton Village	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.50
East Lake Harris	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.50
Fern Terrace	28.70	2.13	29.31	7.88	31.62	(8.06)	29.07	1.48	29.5
Friendly Center	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.5
Hobby Hills	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.5
Norningview	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.5
Palms HH Park	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.5
Picciola Island	18.85	2.18	19.26	8.05	20.81	39.69	29.07	1.48	29.5
Piney Woods	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.5
Skycrest	28.70	2.13	29.31	7.88	31.62	(8.06)	29.07	1.48	29.5
Spring Lake Manor	30.23	1.98	30.83	8.04	33.31	(12.73)	29.07	1.48	29.50
Stone Mountain	28.70	2.13	29.31	(20.91)	23.18	25.41	29.07	1.48	29.50
Venetian Village	21.30	1.92	21.71	9.17	23.70	22.66	29.07	1.48	29.50
Western Shores	21.09	1.99	21.51	8.37	23.31	24.71	29.07	1.48	29.50
PUTNAM COUNTY SYSTEMS						•			
Hermits Cove	31.54	2.95	32.47	34.96	43.82	(4.66)	41.78	3.54	43.20
Palm Port	32.61	3.77	33.84	29.49	43.82	(4.66)	41.78	3.54	43.20
Park Manor	23.46	44.25	33.84	29.49	43.82	(4.66)	41.78	3.54	43.26
Pomona Park	34.83	(2.84)	33.84	29.49	43.82	(4.66)	41.78	3.54	43.2
River Grove	29.87	13.29	33.84	29.49	43.82	(4.66)	41.78	3.54	43.26
River Park	31.54	2.95	32.47	34.96	43.82	(4.66)		3.54	43.26
Saratoga Harbor	31.54	2.95	32.47	34.96	43.82	(4.66)	41.78	3.54	43.26
Velaka	31.54	2.95	32.47	34.96	43.82	(4.66)	41.78	3.54	43.26
Wooten	31.54	2.95	32.47	34.96	43.82	(4.66)	41.78	3.54	43.26
SEMINOLE COUNTY SYSTEMS								-	
Apple Valley	22.44	1.87	22.86	1.88	23.29	(5.45)	22.02	1.14	22.27
Chuluota	18.67	2.52	19.14	2.51	19.62	12.23	22.02	1.14	22.27
Dol Ray Manor	18.67	2.52	19.14	2.51	19.62	12.23	22.02	1.14	22.27
Druid Hills	18.67	2.52	19.14	2.51	19.62	12.23	22.02	1.14	22.27
Fern Park	22.44	1.87	22.86	1.88	23.29	(5.45)	22.02	1.14	22.27
Harmony Homes	23.83	2.81	24.50	5.43	25.83	()4.75)	22.02	7.14	22.27
Lake Brantley	23.83	2.81	24.50	5.43	25.83	(14.75)	22.02	1.14	22.27
Lake Harriet	22.44	1.87	22.86	1.88	23.29	(5.45)	22.02	1.14	22.27
Heredith Manor	22.44	1.87	22.86	1.88	23.29	(5.45)	22.02	1.14	22.27

"The typical bimonthly bills were estimated using each system's tariffs and an assumed average residential consumption of 7,000 gallons per month.

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TABLE 3.3 EFFECT OF RATE CHANGES ON AVERAGE WATER BILLS AND ON TREATMENT GROUP SYSTEM REVENUES* SOUTHERN STATES UTILITIES, INC.

	Average			Aver	ge Vate	r Bills	and Ch	anges .				Changes	per Syste	
ounty/System	ERCs for <u>86-87</u>	1984	\$ Chg 84-85	1985	\$ Chg 85-86	1966	\$ Chg 86–87	1987	\$ Chg 87-88	1968	84-85	85-86	86-87	87-88
AKE COUNTY SYSTEMS														
Carlton Village	41.72	30.23	0.60	30.83	2.48	33.31	(4.24)		0.43	29.50	25.03	103.47	(176.89)	17.94
East Lake Harris	43.15	30.23	0.60	30.83	2.48	33.31	(4.24)	29.07	0.43	29.50	25.89	. 107.01	(182.96)	18.55
Fern Terrace	81.11	28.70	0.61	29.31	2.31	31.62	(2.55)	29.07	0.43	29.50	49.48	187.36	(206.83)	34.88
Friendly Center	11.01	30.23	0.60	30.83	2.48	33.31	(4.24)	29.07	0.43	29.50	6.61	27.30	(46.68)	4.73
Hobby Hills	66.04	30.23	0.60	30.83	2.48	33.31	(4.24)	29.07	0.43	29.50	39.62	163.78	(280.01)	28.40
<pre>Morningview</pre>	a 33.10	230.23	0.60	30.83	2.48	33.31	(4.24)	29.07	0.43	29.50	19.86	82.09	(140.34)	14.23
Palms HH Park	23.12	30.23	0.60	30.83	2.48	33.31	(4.24)	29.07	0.43	29.50	13.87	57.34	(98.03)	9.94
Picciola Island	96.00	18.85	0.41	19.26	1.55	20.81	8.26	29.07	0.43	29.50	39.36	148.80	792.96	41.28
Piney Woods	126.34	30.23	0.60	-30.83	2.48	33.31	(4.24)	29.07	0.43	29.50	75.80	313.32	(535.68)	54.33
Skycrest	29.75	28.70	0.61	29.31	2.31	31.62	(2.55)	29.07	0.43	29.50	18.15	68.72	75.86	12.79
Spring Lake Manor	126.35	30.23	0.60	30.83	2.48	33.31	(4.24)	29.07	0.43	29.50	75.81	313.35	(535.72)	54.33
Stone Mountain	8.50	28.70	0.61	29.31	(6.13)	23.18	5.89	29.07	0.43	29.50	5.18	; (52.11)		3.66
Venetian Village 🎰	38.66	21.30	0.41	21.71	1.99	23.70	5.37	29.07	5 0.43	29.50	15.85	76.93	207.60	/ 16.62
Western Shores	č 61.66 b	21.09	0.42	21.51	1.80	23.31	5.76	29.07	·· 0.43	29.50	25.90	_110.99	_355.16_	26.51
	· · · · · · · · · · · · · · · · · · ·			1.1.1							436.41	1708.36	(721.49)	338.21
														а. К. <u>к</u>
PUTNAH COUNTY SYSTEMS	المتكليا ه	0										·		
Hermits Cove	37.12	31.54	0.93	32.47	11.35	43.82		41.78	1.48	43.26	34.52	421.31	(75.72)	
Palm Port	31.33	32.61	1.23	33.84	9.98	43.82	(2.04)	41.78	1.48	43.26	38.54	312.67	(63.91)	46.37
Park Manor	12.81	23.46	10.38	33.84	9.98	43.82	(2.04)		1.48	43.26	132,97	127.84	(26.13)	18.96
Pomona Park	142.40	34.83	(0.99)	33.84	9.98	43.82	(2.04)	41.78	1.48	43.26	(140.98)	1421.15	(290.50)	210.75
River Grove	67.80	29.87	3.97	33.84	9.98	43.82	(2.04)		1.48	43.26	269.17	676.64	(138.31)	100.34
River Park	79.89	31.54	0.93	32.47	11.35	43.82	(2.04)		1.48	43.26	74.30	906.75	(162.98)	118.24
Saratoga Harbor	16.52	31.54	0.93	32.47	11.35	43.82	(2.04)		1.48	43.26	15.36	187.50	(33.70)	24.45
Velaka	30.46	31.54	0.93	32.47	11.35	43.82	(2.04)		1.48	43.26	28.33	345.72	(62.14)	45.08
Wooten	3.53	31.54	0.93	/32.47	11.35	43.82	(2.04)	41.78	1.48	43.26	3.28	40.07	(7.20)	5.22
	e										455.49	4439.67	(860.59)	624.35
SEMINOLE COUNTY SYSTEM		22.44	0.42	59 BE	0.43	22 20	/1 971	22 02	0.25	22.27	394.55	402 DE	(1)93.05)	234.85
Apple Valley	939.41			22.86		23.29	(1.27)		0.25		183.02	186.92	934.58	97.35
Chuluota	389.41 93.77	18.67 18.67	0.47	19.14 19.14	0.48	19.62 19.62	2.40	22.02 22.02	0.25	22.27 22.27	44.07	45.01	225.05	23.44
Dol Ray Manor						19.62	2.40				171.62	175.27	876.36	91.29
Druid Hills	365.15	18.67 22.44	0.47	19.14 22.86	0.48	23.29	(1,27)	22.02	0.25 0.25	22.27 22.27	52.47	53.72	(158.67)	31.24
Fern Park	124.94								0.25	22.27	42.50	84.38	(241.71)	15.86
Harmony Homes	63.44	23.83	0.67	24.50	1.33	25.83	(3.81)	22.02				62.02	(177.66)	11.66
Lake Brantley	46.63	23.83	0.67	24.50	1.33	25.83	(3.81)	22.02	0.25	22.27	31.24			
Lake Harriet	200.09	22.44	0.42	22.86	0.43	23.29	(1.27)	22.02	0.25	22.27	84.04	86.04	(254.11)	
- Meredith Manor 🕻 👘 🤻	558.02	22.44	0.42	22.86	0.43	23.29	(1.27)	22.02	0.25	22.27	234.37	239.95	(708.69)	139.51
		1.		:							1237. 9 0	1337.25	(697.90)	695.22

*Changes in water bills based on average ERCs in 1986-87 and bimonthly consumption of 14,000 gallons.

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TABLE 3.4 RESIDENTIAL WATER RATES INDEX FOR THE TREATMENT GROUP SOUTHERN STATES UTILITIES, INC.

County/System	1984	1985	1986	1987	1988
LAKE COUNTY SYSTEMS					
Carlton Village	1.00	1.0198	1.1019	0.9616	0.9759
East Lake Harris	1.00	1.0198	1.1019	0.9616	0.9759
Fern Terrace	1.00	1.0213	1.1017	1.0129	1.0279
Friendly Center	1.00	1.0198	1.1019	0.9616	0.9759
Hobby Hills	1.00	1.0198	1.1019	0.9616	0.9759
Morningview	1.00	1.0198	1.1019	0.9616	0.9759
Palms MH Park	1.00	1.0198	1.1019	0.9616	0.9759
Picciola Island	1.00	1.0218	1.1040	1.5422	1.5650
Piney Woods	1.00	1.0198	1.1019	0.9616	0.9759
Skycrest	1.00	1.0213	1.1017	1.0129	1.0279
Spring Lake Manor	1.00	1.0198	1.1019	0.9616	0.9759
Stone Mountain	1.00	1.0213	0.8077	1.0129	1.0279
Venetian Village	1.00	1.0192	1.1127	1.3648	1.3988
Western Shores	1.00	1.0199	1.1053	1.3784	1.3988
PUTNAM COUNTY SYSTEMS					
Hermits Cove	1.00	1.0295	1.3893	1.3247	1.3716
Palm Port	1.00	1.0377	1.3438	1.2812	1.3266
Park Manor	1.00	1.4425	1.8679	1.7809	1.8440
Pomona Park	1.00	0.9716	1.2581	1.1995	1.2420
River Grove	1.00	1.1329	1.4670	1.3987	1.4483
River Park	1.00	1.0295	1.3893	1.3247	1.3716
Saratoga Harbor	1.00	1.0295	1.3893	1.3247	1.3716
Welaka	1.00	1.0295	1.3893	1.3247	1.3716
Wooten	1.00	1.0295	1.3893	1.3247	1.3716
SEMINOLE COUNTY SYSTEMS					
Apple Valley	1.00	1.0187	1.0379	0.9813	0.9924
Chuluota	1.00	1.0252	1.0509	1.1794	1.1928
Dol Ray Manor	1.00	1.0252	1.0509	1.1794	1.1928
Druid Hills	1.00	1.0252	1.0509	1.1794	1.1928
Fern Park	1.00	1.0187	1.0379	0.9813	0.9924
Harmony Homes	1.00	1.0731	1.1314	0.9240	0.9345
Lake Brantley	1.00	1.0731	1.1314	0.9240	0.9345
Lake Harriet	1.00	1.0187	1.0379	0.9813	0.9924
Meredith Manor	1.00	1.0187	1.0379	0.9813	0.9924

Putnam consolidated in 1986; Seminole and Lake consolidated in 1987.

Expense Account	1984	1985	1986	1987	1988
FLORIDA CITIES MATER CO BREVARD COUNTY	MPANY		-,		
Outside Services Regulatory Related Customer Accounts	4,683 5,621 27,346	4,522 5,026 32,480	46,647 5,145 21,363	34,867 459 21,613	40,711 711 23,998
GENERAL DEVELOPMENT UTI BREVARD COUNTY	LITIES, INC	•			
Outside Services Regulatory Related Customer Accounts	29,726 11,516 34,033	-40,765 1,771 53,700	217,630 4,358 108,950	114,067 694 120,923	89,337 2,865 120,271
GENERAL DEVELOPMENT UTI MARION COUNTY	LITIES, INC.		-		
Outside Services Regulatory Related Customer Accounts	26,155 11,624 116,799	25,677 3,542 126,633	351,996 4,421 153,583	156,213 1,593 150,820	152,841 18,016 158,233
SOUTHERN STATES UTILITI CITRUS COUNTY	ES, INC.				
Outside Services Regulatory Related Customer Accounts	875 1,141 3,586	1,819 0 3,174	2,159 0 3,133	2,894 559 4,788	4,499 23 4,655

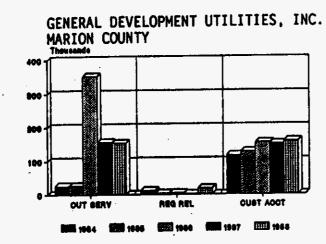
TABLE 3.5 REAL EXPENSES FOR THE CONTROL GROUP*

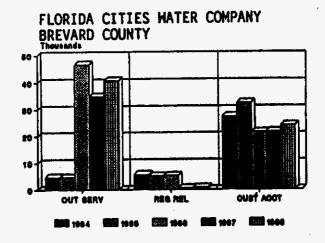
Source: 1984-1988 annual reports.

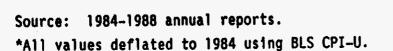
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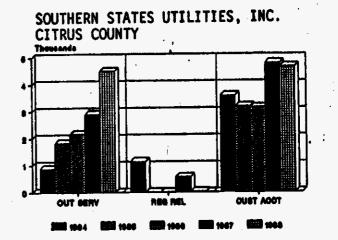
*Values deflated to 1984 values using BLS CPI-U.

CHART 3.5 REAL EXPENSES FOR THE CONTROL GROUP*









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		TABLE	E 3.6					
NOMINAL	RESIDENTIAL W						GROUP	
	TYPICA	L BIM	WTHLY	BIL	LS*	•		

		% Chg		% Chg		% Chg		% Chg	
- . - .		-		-	1000	+	1007	-	1988
County/System	1984	84-85	1985	85-86	1986	86-87	<u>1987</u>	<u>87-88</u>	1.200
FLORIDA CITIES WATER CO BREVARD COUNTY	MPANY				•-				
Barefoot Bay	21.84	3.66	22.64	1.59	23.00	1.48	23.34	1.50	23.69
		. Me .							
BREVARD AND MARION COUN	TIES	0.00	36.68	0.00	36.68	0.00	36.68	0.00	36.68
			36.68 36.68	0.00	36.68 36.68	0.00 (61.67)	36.68 14.06	0.00 23.61	
	36.68 36.68	0.00		+ - + -				• • • • •	36.68 17.38
BREVARD AND MARION COUN Port Malabar Silver Spring Shores SOUTHERN STATES UTILITI	36.68 36.68	0.00		+ - + -				• • • • •	

*The typical bimonthly bills were estimated using each system's tariffs and an assumed average residential consumption of 7,000 gallons per month.

TABLE 3.7 RESIDENTIAL WATER RATES INDEX FOR THE CONTROL GROUP

County/System	1984	1985	1986	1987	1988
FLORIDA CITIES WATER COMPAN BREVARD COUNTY	۱Y				
Barefoot Bay	1.00	1.0366	1.0531	1.0687	1.0847
GENERAL DEVELOPMENT UTILIT					
Port Malabar Silver Spring Shores	1.00 1.00	1.0000	1.0000 1.0000	1.0000 0.3833	1.0000 0.4738
SOUTHERN STATES UTILITIES, CITRUS COUNTY SYSTEMS	INC.				
Apache Shores Oak Forrest	1.00 1.00	1.0272 1.0443	1.0417 1.0869	1.0940 1.1312	1.1492 1.1878

CHAPTER 4 SUMMARY AND CONCLUSIONS

This report has assessed the validity of claims that consolidated ratemaking and UCRs benefit ratepayers and result in cost savings. We utilized financial accounting data, contained in selected utilities' annual reports, and water service tariff data to evaluate the issues associated with UCRs. Data were also obtained from a survey of the water and wastewater industry in Florida and from a survey of commissions across the nation. Data reviewed were those we believed would reveal the claimed consequences of UCRs: selected operating costs and residential water rates.

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In some cases, data collection, and hence analysis, was hampered by inconsistency in recordkeeping across utilities. Data sought were not compatible across utilities and in some cases were unavailable. The need for compatible data across companies placed severe restrictions on the number of utilities and systems that were included in the study.

Chapter 1 defined uniform companywide rates, reviewed selected history of UCRs in Florida, and discussed issues surrounding implementation of UCRs in Florida utilities and in utilities across the nation. Chapter 2 mapped out the study methodology, described the data collected, and defined the treatment and the control groups. Chapter 3 outlined the selected accounts, presented analysis of the accounting data and analysis of the residential water rates for both the treatment and the control groups. Chapter 4-2

As indicated in Chapter 1, proponents of UCRs claim that consolidation and uniform rates will reduce costs for accounting and recordkeeping and will streamline activities related to processing customer accounts and collections, resulting in reduced costs in this area. Further, filing one rate case for multiple systems rather than filing separate rate cases for individual systems will reduce rate case related expenses. Opponents contend that uniform rates will result in cross-subsidization among systems if the costs of providing water or sewer services are significantly different for the systems being consolidated for ratemaking purposes.

Based on the results of this study, some general conclusions may be drawn regarding the validity of these claims. Our analysis of the treatment group data did not reveal the expected decreases in two of the expense accounts examined: Outside Services Expenses and Regulatory Related Expenses. The third account examined, Customer Accounts and Collections, did decline as expected. Customer Accounts and Collections expenses for the control group either remained stable over the period analyzed or increased steadily. It appears that there is support for the contention that consolidation would result in lower expenses for processing customer accounts and collections.

If consolidation results in reduced costs to the utility, then one evidence of the reduced costs should be reduced rates. Analysis of rate changes for the treatment and control groups produced interesting comparative results. The treatment group clearly demonstrated rate decreases for the majority of the affected systems after consolidation while four of the five control group's systems experienced no rate declines during the five-year period analyzed. Further, while some treatment group systems did experience rate increases after implementation of uniform countywide rates, these increases were outweighed by rate decreases in other systems so that revenues for the consolidated divisions actually declined after consolidation took effect. A net decline in revenues is consistent with a net reduction in costs. The analysis of rate changes for the treatment group supports the claim that consolidation would result in reduced costs for the utility.

The analysis of rates also permits us to generally assess the likelihood that uniform rates result in undue cross-subsidization of customers of higher cost systems by customers of lower cost systems. While it is not possible to draw a definitive conclusion regarding the degree of cross-subsidization without a detailed analysis of the costs of each system, the rate analysis indicates that the average customer had a lower bill after consolidation since more customers experienced rate declines than rate increases. Further, the decline in net revenues lends support to the contention that consolidation increases utility efficiency and results in reduced overall costs. Additional gains in efficiency may be achievable in the long run as the utility is able to plan on a consolidated basis for additional plant needs. If such-long run gains occur, then all customers may have lower rates in the future than would have been the case if the utility had not consolidated. Therefore, while some customers may experience short-run increases in rates when a utility converts to uniform rates, one cannot conclude that such increased rates constitute undue cross-subsidization.

While the size of the sample used for this study was constrained

Chapter 4-4

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by a number of factors, these preliminary results indicate that consolidation and uniform rates merit serious consideration on a utility-by-utility basis. A rate case proceeding would facilitate obtaining the detailed data necessary to more definitively assess the benefits to be gained from consolidation and uniform rates for a given utility.

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APPENDIX A ARGUMENTS OF INTERVENORS IN THE FLORIDA GAS COMPANY CASE

A number of intervenors in the Florida Gas Company Case presented testimony on the appropriateness of uniform companywide rates. The Industrial Gas Consumer Committee (IGCC)—an organization with large industrial users in the Jacksonville and Lakeland areas did not support uniform rates. IGCC stated that many costs differed and were relative to the therms of gas sold, and that cost characteristics of the markets served varied considerably. IGCC argued that while uniform companywide rates would not immediately result in rate increases for all divisions, application of a single tariff throughout the company's distribution divisions would eventually create a high level of cross-subsidization between customers of different divisions. IGCC identified density of customers per square mile, the load factor of the market served, and the size of load per customer as factors which would vary by service area. IGCC argued that changes in these factors would cause costs to vary across divisions and result in subsidization of customers of one division by customers of another division if the rates were the same. Therefore, according to IGCC, if rates were to reflect costs, rates should be determined on an individual system basis rather than on a companywide basis.

The Florida Public Utilities Company (FPUC) also argued against uniform companywide rates. FPUC distributes natural gas in Florida through three separate noninterconnected divisions: Palm Beach, West Palm Beach and Lakeland. The utility stated that consolidated filing and uniform companywide rates would not produce the kind of cost savings claimed by other utilities because of variances in operating costs for the different systems. The utility's argument that costs would vary by system was based on three main factors: the market characteristics facing the divisions, the geographical dispersion of the operating divisions, and the climatic conditions affecting each of the divisions.

FPUC stated that climatic differences and different customer characteristics would discourage uniform companywide rates. For example, the West Palm Beach division serves a tourist-oriented market with hotels. restaurants numerous motels. and similar commercial establishments whose space heating requirements are minimal. The Lakeland division serves customers whose demand for space heating is greater because of relatively colder temperatures during the winter The costs for serving these two divisions would vary season. considerably because the demand characteristics are different. FPUC contended that if uniform rates were implemented, there could be significant cross-subsidization between customers of these divisions.

Peoples Gas System (PGS) presented arguments in favor of consolidation and uniform companywide rates. The utility stated that

consolidation of different divisions of its company for ratemaking purposes was desirable because it would reduce operating costs by over 50 percent. Furthermore, the utility claimed that all of its operating divisions were comparable in system age, number of employees, service characteristics, and method of distribution. The utility concluded that consolidation and uniform companywide rates could be achieved with significant advantages that would outweigh the effects of cross-subsidization.

Florida Gas Company (FGC) argued that the advantages of consolidated rate case filings and uniform companywide rates would far exceed their disadvantages. The utility took this position based on the results of a number of in-house studies conducted on consolidation. One of the studies we reviewed demonstrated that one consolidated "Statement Of Income And Expense Account" would provide the same data, including sources and uses of funds for each of the seven divisions that would be available if each division filed separately. A consolidated filing was expected to eliminate preparing and filing seven separate statements of income and expenses. Costs associated with this expedited process alone would be more than 50 percent less than the costs associated with separate filings.

Furthermore, the FGC study showed that if the operating plants were treated as a single unit rather than as separate systems, the accounting department could consolidate all plant depreciation records and reflect a complete picture of the entire utility. This would assist in identifying plants requiring increased safety checks and additional maintenance because each plant's operational capability would be measured against other plants with the same life span. The utility concluded that uniform companywide rates would reduce total operating costs and the savings would be passed on to the ratepayers.

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APPENDIX B OUESTIONNAIRE FOR UTILITIES NITH UNIFORM COUNTYWIDE RATES

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DATA/INFORMATION REQUEST ON UNIFORM SYSTEMMIDE RATES

Company Name:

Name, title, and telephone number of company official responding to request:

PLEASE RETURN TO:

Division of Research Florida Public Service Commission 101 East Gaines Street Tallahassee, Florida 32399-0872

Please be as specific as possible

- 1. Uniform countywide rates have been implemented for certain groups of systems owned by your company.
 - a. For the purposes of setting these rates, why were systems grouped the way they were within the same county?
 - b. Why were consolidated ratemaking treatments and uniform rates requested only on a countywide basis?
 - c. Why were consolidated rate making treatments and uniform rates not requested for all your water and wastewater systems within one county?
- 2. What prompted your company to file its initial request for separate systems to be considered together for the purposes of determining total revenue requirements?
 - a. In what ways did adoption of uniform rates benefit your company?
- 3. What kinds of customer reactions have there been to the uniform rates charged by your company?

- 4. Would you like to see uniform trates implemented in all of the systems operated by your company statewide? Why or why not?
- 5. Do you have any recommendations for ways to implement uniform rates such that the benefits of reduced administrative costs could be realized while minimizing the negative aspects of crosssubsidization? Please describe your recommendations in detail.
- 6. A certain amount of cross-subsidization occurs with any rate making scheme and no rate structure is entirely perfect. With that in mind, please comment on the issue of cross-subsidization associated with uniform rates. Specifically, do you believe crosssubsidization is a legitimate concern and why?
- 7. Please identify and estimate, if possible, the kinds of cost savings that have been realized as a result of uniform rates in those areas where they are in effect.
- 8. Have uniform rates caused you to incur any unanticipated additional costs? If yes, please identify and estimate those costs. Were they one-time or recurring costs?
- 9. One of the claimed benefits of uniform rates is that they facilitate centralized recordkeeping and billing functions. However, centralized recordkeeping and billing activities are benefits which appear to be due to centralized management and ownership rather than to the use of uniform rates. How have uniform rates enabled your company to reduce costs over and above cost reductions attributable to centralized management?
- 10. How much would you estimate your company saves in rate case expenses by virtue of consolidated rate filings and uniform rates? (Please describe how you arrive at your estimate.)
- 11. Comments:

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RESPONSES OF FLORIDA WATER AND WASTEMATER UTILITIES WITH UNIFORM RATES

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QUESTION 1:	Uniform countywide rates have been implemented for certain groups of systems owned by your company. For the purposes of setting these rates:
	 (a) Why were systems grouped the way they were within the same county? (b) Why were consolidated ratamaking treatments and uniform rates requested only on a countywide basis? (c) Why were consolidated ratemaking treatments and uniform rates not requested for all your water and wastewater systems within one county?
UTILITY	RESPONSE
Atlantic Utilities of Jacksonville, Inc.	(a) Atlantic Utilities operates nine water systems and two wastewater systems, all of which are located within the consolidated City of Jacksonville. When these systems were acquired in 1983, they already had uniform rates in place. All of AUJI's systems are managed and operated by a commonly shared group of employees. Consequently, these systems share common costs. (b) Atlantic Utilities of Jacksonville, Inc., owns no FPSC-regulated water and wastewater utilities outside of Duval County. (c) Not applicable.
Florida Cities Water Company	(a) The company operates only one system in each county regulated by the FPSC, except for Lee County. Within Lee County, there are five systems (three systems south of the Caloosahatchee River and two systems north of the river), with each system providing both water and wastewater treatment. Initially, uniform rates were adopted by region, with one set of rates for water in the northern region and another set of rates for water in the southern region. A similar rate structure applied to wastewater. At a later date, countywide uniform rates were implemented, with one set of rates for water systems and another set of rates for wastewater tystems. In 1986, the company reverted to regional uniform rates for wastewater when the company built an advanced wastewater treatment plant in south Fort Myers. The new plant resulted in a significant cost differential between wastewater treatment in the southern region and wastewater treatment in the northern region and the company felt that countywide uniform rates for water were no longer justified. Countywide uniform rates for water were retained. (b) Not addressed. (c) Countywide uniform water rates are still in place in Lee County, the only county where Florida Cities has more than one system. The countywide rates for wastewater were revised because of the construction of the new plant which resulted in significant cost differentials between systems.
Jacksonville Suburban Utilities	(a) Systems in the same county were grouped together so that separate financial records would not be maintained for each system. When separate rates were used in the same county, the company maintained separate recordkeeping for each system which required additional personnel, equipment, and office supplies. Each system would have to file its own rate case, and meet all FPSC filing requirements, and incur additional rate case expense. All these added operating expenses are eliminated by uniform rates through consolidation of operations. (b) The company operated in only one county at the time of the last rate case. As a result, uniform rates provided administrative efficiency since the company did not have to determine which geographical location or which customer certain rates applied to and in what order they applied. (c) Not applicable.

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QUESTION	3.	
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UTILITY RESPONSE

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(continued)

Southern States Utilities (a) In the counties where Southern States has uniform rates, systems are grouped to reflect similar types of water and wastewater plant operations and operation and maintenance expenses. In geographical areas where systems are interconnected or co-located, the same group of employees could be used to provide services in all the systems. This practice would save the utility additional labor costs. For example, one system manager is used to manage the many systems. Office administrative personnel are utilized to manage all customer accounts and billings, and one group of maintenance engineers is utilized to supervise and maintain all systems. Water and wastewater treatment costs may be similar, and power costs for pumping water may be similar since water is drawn from the same source. Geographical locations of systems are critical and require consideration before combining the systems for ratemaking purposes. This is because of factors such as the sources of water supply, e.g. surface water, deep well, or lake well supplies. A careful evaluation of these factors would assist in determining rate uniformity for the company without creating undue cross-subsidization between various customer groups. (b) Uniform rates should be designed for systems that are similar in nature and geographically close enough to exchange personnel. Where similar operations overlap in two or more counties, uniform rates across county lines should be supported. (c) SSUI stated that over the past four years they have requested consolidated ratemaking treatments for all their systems in counties where they have multiple systems. Some of those requests involving consolidation and uniform rates are still pending with the FPSC.

QUESTION 2:

What prompted your company to file the initial request for a consolidated rate case rather than to file separate petitions for each system's revenue requirements? . .

UTILITY RESPONSE

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Atlantic Utilities of Jacksonville

Florida Cities 👘 Water Company

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. The FPSC has authorized countywide uniform rates for all of AUJI's systems since 1974. AUJI thought such rates were in agreement with the ratesetting policy of the FPSC. Since all nine of the water systems and two wastewater systems are managed and operated by a group of ten employees, operating costs are fairly similar. The benefit of shared employees is one of many characteristics that encourage uniform systemride rates in the utility industry. The company benefits from uniform rates because of shared costs. Employees, assets and liabilities; and the overall costs of service are distributed commonly to all of the facilities. Thus, the effect of sharing common employees, equipment, maintenance, distribution, and supplies among the systems would greatly reduce the burden on any one particular system. Florida Cities tater Company believes that where there are like costs, there should be like rates, and where there are significant differences in costs, there should be different rates. In Lee county, operating costs are generally similar because of centralized

differences in costs, there should be different rates. In Lee county, operating costs are generally similar because of centralized planning. For example, in Lee County, administrative costs in both the local and the general office are similar because of shared labor. In Lee County water systems, where uniform rates are in effect, customer accounts and billing are centralized, and data processing cost, recordkeeping, and maintenance costs are reduced because general administrative functions are not duplicated. The company has a common depreciation rate and cost of capital because the systems have a fairly equal life. Cost of service and cost of water treatment are similar because sources and treatment of water are fairly comparable. The largest savings from uniform rates have been in reduced rate case expense. Each system maintains separate financial records, because they want to be able to deal with any ratemaking standards that may be imposed in the future. Because of this anticipation, the company has not realized any cost savings in the area of accounting and data processing.

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Jacksonville Suburban Utilities

Southern States

Utilities

Uniform rates provide administrative efficiency, since some costs such as administrative and overhead are difficult to allocate. Under UCRs, utilities do not have to show discrete costs as they apply to each system; rather, costs are aggregated as company costs. If uniform rates were not implemented, management would have to determine the time spent on each system to segregate costs associated with each system's recordkeeping, billings, and maintenance; rate cases would be filed separately; and each system would require perconnel for operations, including emergencies. Separate rates personnel for operations, including emergencies. Separate rates would cause the company to maintain separate accounting and financial records. These added expenses would result in higher rates to the customers.

Southern States Utilities requests uniform rates in geographic areas where plant operations are similar, fixed and variable operating and maintenance costs are comparable, and cross-subsidization is at a minimum. Cross-subsidization results when you combine three or more systems with completely different modes of operation, such as dissimilar expenses, uneven socioeconomic levels, geographical isolation, and disparate water source and treatment techniques. Additionally, cross-subsidization is minimized if the multiple water and wastewater utilities share operational similarities such as administrative and general expenses, systems' ages, types of treat-ment, sources of water, geographical proximity, labor costs, and similar social and economic factors. The implementation of uniform rates has benefited the company in several ways. For example, administrative and general operating expenses are lower than ever in Southern States Utilities requests uniform rates in geographic areas

QUESTION 2:	(continued)	
UTILITY	RESPONSE	_

Southern States Utilities (continued)	the past. The accounting and data processing costs have been streamlined and reduced by about 50 percent; the same cost savings have occurred in customer billing and collections. Labor hours needed in the rate department to keep up with rate cases, including indexing and filing rate cases, have also been reduced. All these benefits are attributable to uniform companywide rates.

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QUESTION 3:	What kinds of customer reactions have there been to the uniform rates charged by your company?
UTILITY	RESPONSE
Atlantic Utilities of Jacksonville	Customers in some systems have said that they do not favor sharing costs associated with operation of other systems which do not benefit them directly. Customers' reactions were negative because they felt they would be subsidizing other customers' rates. Generally, customers react positively when their rates decrease and negatively when their rates increase. In cases where customers assumed that their rates would likely increase, customer reactions have been negative.
Florida Cities Water Company	Florida Cities Water Company reported no customer reaction to the introduction of uniform rates. This is partly because customers did not notice any marked difference in their water or wastewater rates. Inasmuch as there was no customer reaction, the company suggested a more practical approach to ratemaking. The FPSC should set ground rules and guidelines for implementing uniform rates and let ratemaking and implementation be the functions of utility managers. The term <u>statewide</u> rates should not be interpreted to mean that utilities are forced to implement one rate structure throughout the state regardless of costs associated with providing such services.
Jacksonville Suburban Utilities	There was no reaction at the time when uniform rates were implemented because the new rates were phased in gradually over a period of time. The change was spread out to minimize the impact on customer bills.
Southern States Utilities	Customer reactions have been positive when rates decreased and negative when rates increased. Regardless of how rates are calculated, customers' main concern is the dollar impact.

QUESTION 4:	Would you like to see uniform rates implemented in all of the systems operated by your company statewide?
UTILITY	RESPONSE
Atlantic Utilities of Jacksonville	The company operates in only one county. However, the company opposes statewide uniform rates for the following reasons: (1) Source of water and the type of water and wastewater treatment required to meet the standard may differ. (2) Utilities that purchase water and wastewater services for resale have different costs than utilities who produce these services and are self-sustained. (3) Per customer investment in plant will differ markedly in different counties. For uniform companywide rates to be favorably implemented, the following conditions must be similar: (a) per customer investment must be fairly similar in all systems, (b) there should not be a marked difference in treatment and purification costs, (c) systems should have geographical proximity to avoid additional cost of distribution, and (d) most of all, the rate of depreciation must be the same.
Florida Cities Water Company	Florida Cities does not oppose companywide rates. However, the company operates under three regulatory jurisdictional bodies: the FPSC; the Sarasota Board of County Commissioners (SBCC); and the Hillsborough Board of County Commissioners (HBCC). The company has to have approval to recover operating costs from each of the regulatory bodies to set rates. Additional consideration suggests that one rate structure may not be appropriate for all systems since every system has different classes of customers, different geographical locations, different financial mixes, and different operating characteristics.
Jacksonville Suburban Utilities	Not applicable. The company operates in only one county.
Southern States Utilities	Uniform rates should be implemented in geographical areas with similar operating characteristics, comparable operating and maintenance costs, and similar social and economic compatibilities.

QUESTION 5:

۰. بر ۲۰ (a) Do you have any recommendations for ways to implement uniform rates, such that the benefits of administrative efficiency will be maximized, while minimizing the negative impact of cross-subsidization?

(b) A certain amount of cross-subsidization occurs with any ratemaking methodology, and no rate structure is entirely perfect. With this in mind, please comment on the issue of cross-subsidization associated with uniform rates. Specifically, do you believe that cross-subsidization is a legitimate concern and why?

UTILITY	RESPONSE

Atlantic Utilities of Jacksonville

Florida Cities Water Company

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(a) No response. (b) Cross-subsidization exists in most governmental taxing authorities: municipalities, counties, state government, and the federal government. A private utility should not be any different and the issue should be of little concern to customers.

(a) If rate differentials between areas are substantial, uniform rates could be phased in over time either automatically or over a series of rate cases. To implement uniform rates, the rate structure will have to recognize the variety of treatment in both water and wastewater services. (b) Cross-subsidization is a phrase which has raised concern among regulatory bodies, but if there is similarity in costs for multiple systems, cross-subsidization would be insignificant. With water and wastewater plant being supported in large part by CIAC, the cost of supply and treatment of water and wastewater is the main difference in evaluating the degree of cross-subsidization. The form of the rates can reflect most of the cost differentials. For example, rates designed for residential customers would reflect the amount of cross-subsidization between the residential customers if each system is treated on a stand-alone basis. Secondly, if rates are designed based on usage characteristics, the degree of cross-subsidization would be determined using meter devices. The cost of providing services to customers who live further from the distribution center would be determined or estimated.

(a) Uniform rates could be phased in over a period of time so that the impact of change could be spread out. (b) Cross-subsidization is not a legitimate concern. Each time a customer is added to a system, there is some degree of subsidization. For example, the concept of margin reserve allows utilities to put into rate base a portion of unused plant in order to provide for short-run growth in new customers. This makes current customers pay for a portion of the plant in the rate base that would normally be considered nonused and useful. However, when existing customers' plants are replaced without additional rate increases, there is subsidization for the existing customers who receive the benefit of the replaced plant. Cross-subsidization goes both ways and eventually averages out for all customers.

(a) To achieve administrative efficiency and maximize the benefits of uniform rates, uniform rates should be implemented on a geographical basis in which operating costs are comparable with each other, and fixed and variable costs associated with plant operation and maintenance are also similar. Thus, cross-subsidization would be minimized. The geographical locations of the systems are crucial when considering uniform rates. (b) Cross-subsidization is a legitimate concern. There has to be a compromise between cost-based rates and uniform rates. As a general rule, rates should be cost-based using a cost study as the allocation tool. However, industry and regulators may want to blend a rate mix of cost based rates and uniform rates over a period of time. This two-part pricing method would produce a two-way analysis to assist in determining the degree of cross-subsidization.

Jacksonville Suburban Utilities

Southern States Utilities

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QUESTIONS 7, 8, 9, AND 10:	 (a) Please identify and estimate, if possible, the kind of cost savings your company has realized as a result of uniform rates in those areas where they are in effect. (b) Have uniform rates caused you to incur unanticipated costs? (c) How have uniform rates enabled your company to reduce costs over and above cost reductions attributable to centralized management? (d) How much do you estimate your company saves in rate case expenses by virtue of consolidated rate case filings and uniform rates?
UTILITY	RESPONSE
Atlantic Utilities of Jacksonville	(a) Since AUJI has had uniform rates in place for a long period, it would be difficult to estimate what the savings would be. (b) No. (c) Sharing personnel between more than one system could be accomplished with or without uniform rates. Cost of labor is reduced by 50 percent if personnel are shared among the systems. Although uniform rates may reduce rate case expenses, systems could share personnel and save labor costs whether uniform rates were implemented or not. For example, if multiple water and wastewater systems file rate cases separately and if the systems combine their rate cases, rate case cost would be reduced by 75 percent. Combining all the company's rate cases would reduce the number of legal representatives needed to argue the cases. (d) If uniform rates are not implemented, rate case expenses would increase by an estimated 50 percent or \$88,099, based upon current rate case estimates of \$176,197.38, assuming a three-year amortization period with estimated annual increased expenses of \$29,366.
Florida Cities Water Company	(a) The visible cost savings from uniform rates in Lee County are the estimated \$50,000 resulting from combining two rate cases into one rate case for the water systems in the southern and northern regions of the county. (b) Not addressed. (c) Price policy can be implemented more effectively and efficiently under USRs. Uniform rates for all systems would facilitate a capital improvement cycle which would smooth out and produce a more stable level of rates. If all system records are consolidated, there would be substantial savings in the cost of recordkeeping. Field operating personnel could maintain time by function only rather than by function and area. This would save keypunch time, data processing time, paper, and storage costs. Budgeting could be done for the entire company has four water and wastewater district files its water and wastewater rate cases at different times. Rate cases are estimated to cost about \$50,000 each. For the four districts, total rate case expenses (water and wastewater) are estimated at about \$400,000 (\$50,000 x 8), if separate rate cases are filed. If one rate case is filed for all systems, the cost would be around \$75,000 for water and
Jacksonville Suburban Utilities	(a) Not addressed. (b) Not addressed. (c) If uniform rates were not used, management would have to segregate and allocate time spent on each system's billing and recordkeeping activities. It is possible that without maintaining separate records, centralized costs could be allocated in a manner that could benefit one system while penalizing another. (d) Separate rate cases would cause the company to maintain separate bookkeeping for each system. This would require additional personnel. Each system would have to file its own rate case and prepare the extensive minimum filing requirements of the commission, thus increasing rate case expenses. All of these func- tions could be consolidated into one if rates are uniform in nature.

QUESTIONS 7, 8, 9, AND 10:	(continued)	1000 (1000) 1000 (1000) 1000 (1000)	
UTILITY	RESPONSE		-
Southern States Utilities	(a) If any additional cost savings w rates, it would be seen as a change (ALG) Expenses rather than as a deci and Haintenance (OLM) Expenses. It i dollar value of the savings. (b) incurred any additional costs due to unable to show cost savings associate rates over and above those obtain management. (d) A consolidated rate case expenses to decrease because of cost of labor, and reduced cost of leg	in Administrative and General rease in the level of Operation is not possible to estimate the No Southern States has not b uniform rates (c) We are d with implementation of uniform ed from going to centralized a case filing would cause rate f reduced filing fees, reduced	l n h t h d e

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APPENDIX C QUESTIONNAIRE FOR UTILITIES WITHOUT UNIFORM COUNTYWIDE RATES

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QUESTIONNAIRE FOR UTILITIES WITHOUT UNIFORM COUNTYWIDE RATES

Company Name:

Name, title, and telephone number of company official responding to request:

PLEASE RETURN TO:

Division of Research Florida Public Service Commission 101 East Gaines Street Tallahassee, Florida 32399-0872

Please be as specific as possible

- 1. Do you favor uniform rates for all systems operated by your company? Why or why not?
- Even though you may not favor uniform rates for all systems operated by your company, do you favor uniform rates for certain groups of systems operated by your company? Why or why not?
 - a. If yes, how would you group systems to apply uniform rates?
- 3. Is there any likelihood that some of your systems will be interconnected in the future?
 - a. If so, which ones and why?
- 4. Do you anticipate cost savings to your company if uniform rates are implemented?
 - a. If yes, please describe in detail what kinds of costs would be saved and the magnitude of those cost savings. Would these savings be recurring or nonrecurring?
 - Note: Please include a discussion of rate case expenses, billing costs, and recordkeeping costs.

- 5. What, if any, additional costs do you anticipate would be incurred to implement uniform rates?
- 6. What kind of customer reactions do you anticipate to uniform systemwide rates? Why?
 - a. What would your company do to mitigate any adverse reactions?
- 7. A certain amount of cross-subsidization occurs with any rate making scheme and no rate structure is entirely perfect. With that in mind, please comment on the issue of cross-subsidization associated with uniform rates. Specifically, do you believe crosssubsidization is a legitimate concern and why?

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RESPONSES OF FLORIDA WATER AND WASTEWATER UTILITIES WITHOUT UNIFORM RATES

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QUESTIONS 1 AND 2:	 (a) Do you favor uniform rates for all systems operated by your company? (b) Assume you do not favor uniform rates for all systems operated by your company, would you favor uniform rates for certain groups of systems operated by your company? 			
UTILITY	RESPONSE			
Deltona Corporation	(a) We would favor uniform rates for all our utilities because such rates would simplify our accounting, reporting and billing systems. The rate increase required to bring us to an equitable rate of return would be relatively small because we would be spreading this increase over a large customer base. (b) Not applicable. Deltona would favor companywide uniform rates but would not support uniform rates for selected groups of systems.			
Kingsley Service Company	(a) Yes, we favor uniform rates for all systems operated by our company because all of our treatment processes are the same in all of the areas we serve. There are no benefits associated with having different rates in the systems within our service area. (b) As stated above, all of our treatment processes are the same throughout our system. We believe that uniform rates should be applied unless there are extreme situations where the operating or plant cost on certain systems is substantially more than that of other systems.			
General Development Utilities	(a) General Development Utilities opposes statewide uniform rates, because, as new plants are built in one geographical area, the higher cost would result in a substantial rate increase for customers living in a different geographical area who would not benefit directly from such new plants and otherwise would not have been affected. (b) No response.			

QUESTION 3:	Is there any likelihood that some of your systems will be interconnected in the future?
UTILITY	RESPONSE
Deltona Corporation	Not applicable.
Kingsley Service Company	All systems that have interconnecting potential have been interconnected. No further interconnections are anticipated.
General Development Utilities	No response.

QUESTIONS 4 AND 5: (a) Do you anticipate cost savings to your company resulting from the implementation of uniform rates? (b) What, if any, additional costs do you anticipate would occur in implementing uniform rates? UTILITY RESPONSE Deltona Corporation (a) Yes. Recurring cost savings would occur in the following areas: (1) Data processing. The monthly costs of preparing individual balance sheets, income statements, and other minimum requirements would be reduced by approximately 50 percent. (2) Allocation of general and administrative costs would be simplified and cost variances would be easily traceable. (3) Accounting labor associated with preparing individual annual reports, tax reports, indexing, and gross receipts tax reports would be reduced. (4) Customer billing

	gross receipts tax reports would be reduced. (4) Lustomer billing would be simplified. However, we would not expect cost savings in this area because the number of bills that go out to the customers would not be reduced. (5) Rate case expense over a four year period would be reduced by approximately 50 percent. Although, the cost of preparing a consolidated rate case would be greater initially (probably more than double the cost of a divisional rate case), the overall cost would decrease by about 50 percent as the number of rate case filings decreased. (b) Initial cost to convert to uniform systemwide rates would be minimal.
Kingsley Service Company	(a) Kingsley Service Company uses monthly billing for its Heritage Farms customers and quarterly billing for its Orange Park and Fleming Island systems. If uniform rates were used for the three systems, the utility would save postage, supplies, meter readings, and accounting costs for 8 billings per year for approximately 350 customers. An additional cost savings would result if the FPSC would not require separate books to be maintained for each system. (b) Additional costs of uniform rates would depend on FPSC requirements for the utility to switch to uniform rates. For example, would the FPSC require a full rate case to effect the switch? If the FPSC does not require the substantial filings by utilities to effect the switch, then the primary costs would be the costs for sending notices to customers regarding a change in rate structure.

General Development (a) The primary benefit of uniform rates would be a reduction of rate Utilities case expenses. Considering the relative number of customers served by water and wastewater utilities in Florida, it is an important consideration. (b) No response.

Appendix C-6

QUESTION 6:	What reaction d	do you	anticipate	from	customers	if	uniform	rates	are
	<pre>implemented?</pre>								

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UTILITY	RESPONSE
Deltona Corporation	Customers of the Deltona and Spring Hill systems would have an overall increase in water rates of about 21.37 percent and 75.56 percent, respectively, and an increase of 75.56 percent and 0.05 percent on sewer services, respectively. Customers of Marco Island and Sunny Hills systems would have an increase of approximately 6.0 percent. All other utilities would experience a decrease of more than 40.0 percent. Adverse reactions are expected in the Deltona and Spring Hill systems. However, since a rate increase has not been filed in these jurisdictions during the past five years, the opposition would be minimal. The best way to mitigate adverse reaction is to place the issue of uniform rates on a generic docket and hold a hearing so that all parties can be represented and both sides could be heard on the issue.
Kingsley Service Company	If uniform rates cause customer rates to increase, customer reaction will be negative. If customer water rates decrease because of uniform rates, customer reactions will be positive. The primary thing the company can do to mitigate negative reactions is to promote the efficiency and the economy which results from uniform rates for the systems.
General Development Utilities	General Development Utilities would expect customers of systems with lower costs to be reluctant to accept rate increases related to asset additions in other systems.

QUESTION 7:	A certain amount of cross-subsidization occurs with any ratemaking scheme and no rate structure is entirely perfect. With that in mind, please comment on the issue of cross-subsidization associated with uniform rates. Do you believe cross-subsidization is a legitimate concern and why?
UTILITY	RESPONSE
Deltona Corporation	In 1986, Spring Hill customers received approximately \$1.3 million in refunds and Marco Island customers may have received as high as \$1.5 million in refunds. These customers benefited from the cost savings of a consolidated group. Some form of cross-subsidization will occur regardless of the form of rate structure adopted, but there are benefits as a result of economies of scale.
Kingsley Service Company	Cross-subsidization is a legitimate concern. However, there may be a situation where a group of customers may be required to pay more for the services because of extenuating circumstances such as unexpected population growth. For example, if demand for water exceeds supply plus capacity to serve future customers due to an unexpected population surge, the new customers should be required to bear the additional cost. Should such a situation occur, a multiplier may be applied to the uniform rates rather than introducing a different rate.
General Development Utilities	Cross-subsidization is an extremely important issue. Customers of systems with lower costs are going to be reluctant to accept rate increases related to asset additions in other systems. If the FPSC determines that uniform companywide rates are advantageous, a phase-in of the rates over a five- to ten-year period would reduce rate shock to customers in systems who may experience rate increases.

APPENDIX D SURVEY OF OTHER STATES

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LIST OF STATES SURVEYED

	Multiple	UCRs	Cross-Subsidization
<u>State</u>	System Utilities?	Implemented?	an Issue?
STATES CONTACTED B	Y SURVEY QUESTIONNAL	RES*	
Arizona	Yes	Yes	Yes
California	Yes	Yes	Yes
Connecticut	Yes	Yes	No
Illinois	Yes	Yes	No
Indiana	Yes	No	No
Kentucky	No	No	No
Louisiana	Yes	Yes	Yes
Maine	No	No	No
Massachusetts	No	No	No
Mississippi	Yes	Yes	No
New York	Yes	Yes	No
North Carolina 👘	Yes	Yes	Yes
Pennsylvania	Yes	Yes	Yes
South Carolina	Yes	Yes	Yes
Texas	Yes	Yes	No
Vermont	No	No	No
Virginia	Yes	Yes	No
Washington	Yes	Yes	No
STATES CONTACTED BY	TELEPHONE		
Alabama	Yes	Yes	No
Delaware	No	No	No
Maryland	Yes	No	No
Michigan	No	No	No
Montana	Yes	Yes	No
Ohio	Yes	Yes	No
Oklahoma	No	No	No
Utah	No	No	No
Wisconsin**	Yes	Yes	No

Source: Survey questionnaires and telephone interviews.

*Missouri, New Jersey, and West Virginia were contacted, but did not provide survey responses. **Regulates investor-owned and municipally owned water and wastewater

utilities.

DATA/INFORMATION REQUEST ON UNIFORM SYSTEMWIDE RATES

Agency Name:

Name, title, and telephone number of agency official responding to request:

PLEASE RETURN TO:

Division of Research Florida Public Service Commission 101 East Gaines Street Tallahassee, Florida 32399-0872

Please be as specific as possible

- 1. Please describe the range of sizes (gallons per day and number of customers) of investor-owned water and wastewater utilities in your state. Approximately how many companies are in each size range?
- 2. Please approximate the range of rates charged by each size category. (Please provide estimates of both the lowest rates charged and the highest rates charged by these utilities.)
- 3. Do any of the multiple system water and wastewater utilities under your jurisdiction have uniform rates?
- 4. If no, has the issue been previously addressed by your agency?
 - a. What issues were raised in connection with uniform rates at that time?
- 5. If you answered yes to question 3, how many of your utilities use uniform rates and how long have such rates been in effect?

- a. Are these uniform rates in effect on a countywide basis, statewide basis, or some other basis (please describe)?
- b. Was cross-subsidization between ratepayers an issue prior to implementation of uniform rates, and, if so, how was it resolved?

In Florida, levels of contributed property (CIAC) relative to total plant often vary considerably between separate utility systems. This creates problems in that with uniform rates, ratepayers of highly contributed systems would be subsidizing ratepayers of systems which are not as highly contributed.

- c. What were your agency's justifications for implementing uniform rates?
- 6. Did the size and organization of water and wastewater utilities in your state influence whether or not there were obstacles to implementing uniform rates? Why or why not?
- 7. What kind of research into the issues surrounding uniform rates was performed prior to implementing such rates?
 - a. Please supply the names and telephone numbers of investigators or other persons who conducted such research so that we may obtain copies of any reports.
- 8. Would you like a copy of our results? Yes____ No____

OTHER STATE COMMISSION SURVEY RESPONSES

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QUESTION 3:	Do any of the multiple water and wastewater utilities under your jurisdiction have uniform rates?
STATE	RESPONSE
Arizona	The Arizona Corporation Commission regulates about 380 water companies and 37 wastewater companies, mainly privately owned utilities. Among this number, there are three with multiple systems that have uniform rates in place: E&R Water Company since August 1984; Bell Vista Company, Inc., since November 1986; and Wilhoit Water Company since May 1981. There are no multiple system wastewater utilities that have uniform rates in the state.
California	Yes. The California Public Utilities Commission has not addressed the subject of uniform rates alone, rather, the commission discussed a related issue at the utility's request. There are about twelve small companies with companywide uniform rates.
Connecticut	Yes. The Connecticut Water Company has "equalized rates." Equalized rates are rates designed to encourage uniformity of rates among water utilities. The Connecticut Department of Public Utility Control adopted this rate system to gradually phase in uniform rates in water and wastewater utilities without stirring controversy among ratepayers.
Illinois	Yes. Citizen's Utilities Company of Illinois had uniform rates approved in consolidated Dockets No. 50181 and No. 50182 entered November 12, 1964. Citizens Utilities Company of Illinois operates eleven separate water and wastewater systems and serves three counties.
Indiana	No. However, Indiana Cities Water is in the process of gradually moving towards a uniform service charge (no water consumption included), based on a cost of service study completed in 1984.
Kentucky	There are no multiple system water companies within the state.
Louisiana	Yes. The Louisiana Public Service Commission has approved companywide rates for water utilities.
Maine	No. Maine does not have any multiple system water companies that use uniform rates.
Massachusetts	No. There are no multiple water and wastewater systems in Massachusetts.
Mississippi	Yes. No further information was given.
New York	The New York Department of Public Service regulates only investor-owned water companies. Some of the multiple water system utilities have had uniform rates in effect for up to twenty years.
North Carolina	Yes. All the water and wastewater companies under our jurisdiction have statewide uniform rates. Uniform rates have been fairly standard since 1979.

Yes. The Pennsylvania Public Utility Commission has been phasing in single tariff pricing (uniform rates) since 1960 for systems owned by the American Waterworks. Pennsylvania

Yes. Most of South Carolina's multiple system water and wastewater utilities have uniform rates. Rates range from \$12 minimum per 3,000 gallons to a maximum of \$35.45 per 3,000 gallons per month. South Carolina

Appendix D-6

QUESTION 3:	(continued)		
STATE	RESPONSE		
Texas	Yes. Texas has 132 water and wastewater utilities with UCRs and about 90 percent of them have companywide rates.		
Vermont	Vermont has no multiple water system companies.		
Virginia	Yes. Three utility companies have uniform rates.		
Washington	Yes. Nine of the multiple water systems regulated have uniform rates.		

QUESTION	5:	(conti	nued)
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STATE	RESPONSE
New York	(a) Companywide uniform rates. (b) Cross-subsidization was not considered as an issue at the time many of the existing uniform rates were implemented. Potential cost-subsidization is checked on a case-by-case basis. The process takes a comparative approach. The company compares the rates each class of customer is paying to the rate the customer would be paying under uniform rates. For example, X company provides water services to customers A, B, and C from different systems. Further, assume that the company's operating characteristics are similar, including cost of operations in all the systems. However, due to differences in distance from point of supply to point of consumption, each customer pays \$300, \$350, or \$400, respectively. If, after rate consolidation, a customer pays \$20 more or less as a result of rate uniformity, the New York Department of Public Service considers that level of subsidization insignificant. Where cost subsidization appears to be significant, uniform rates are not implemented. (c) The New York Department of Public Service justified implementation of uniform rates on the basis of cost savings resulting from reduced recordkeeping, interchange of labor, general administrative expenses, and customer billings, where systems are interconnected.

North Carolina (a) Most companies operate in one to three county areas. Mid-South Water Systems operates in about fifteen counties and Carolina Water Services operates across the state. (b) Subsidization was addressed when a coastal subdivision of Carolina Water Services claimed that it was subsidizing some of the company's mountain and midstate systems. The utility was able to present a convincing argument that the coastal system's rates would have been higher on a stand-alone basis. Implicitly, coastal systems rates are collectively being subsidized by other systems. However, it was apparent that allocations of company expenses make it difficult to quantify subsidization. Another case involved Carolina Water Services purchasing a company operating five systems near Charlotte. The utility being acquired had a net investment of \$200 per customer while Carolina Water Services had an average net investment of \$400 per customer. The net difference per customer investment was 100 percent and the facility needed substantial improvement. Carolina Water Services acquired the system through another company, made capital improvements until net investments per customer reached \$400, or became comparable to the acquiring company's net investment per customer. The companies were merged when the needed capital improvements were made, and the company's rates were made uniform. If cross-subsidization is occurring, it is difficult to quantify unless the difference is so large as to be obvious to everyone. (c) No response.

Pennsylvania (a) The Pennsylvania commission has been phasing in companywide single tariff pricing for American Water Works since 1960. (b) During numerous rate proceedings, consolidation was the major issue. The City of Pittsburgh contested the company's proposed consolidation on the grounds of cost-of-service differentials, stating that single tariff pricing was unjust and unreasonable, fairly discriminatory. The city representative stated that cross-subsidization by customers with proximity advantage is inevitable, because it would cost more to service customers living farther from the service center as compared to customers living closer to the service center, and that the city should have rates that reflected the actual costs of providing it with service. The Commonwealth court ruled in favor of the commission's decision to allow single tariff pricing. The court used a two-step process to establish what is "just" and "reasonable": (1) the court established that the commission made a valid determination of allowable increases in operating revenue, and (2) the increase in operating revenue was equitably allocated among customer classes. (c) The commission's findings were supported with sufficient data which indicated the commission's position was a meaningful step toward establishing uniform rates.

QUESTION 5: (a) Where uniform rates are in effect, are these rates in effect on a countywide basis, statewide basis, or other basis? (b) Was cross-subsidization between ratepayers an issue prior to implementation of uniform rates, and if so, how was it resolved? (c) What were your agency's justifications for implementing uniform rates?

Arizona (a) Not addressed. (b) Cross-subsidi (c) The commission reviewed and analyz those costs into cost components, as characteristics, customer usage ch intralabor utilization.	zed historical costs, breaking down well as reviewing operating cost
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- (a) The commission authorized companies to implement uniform rates on a companywide basis. There is no policy guideline for implementing uniform rates.
 (b) Cross-subsidization was an issue. During Fresno Utility's rate case hearing, customers objected to the implementation of uniform rates. They contended that UCRs would create a situation where some customers would pay for services they did not use.
 (c) The decision to implement UCRs is made based on costs and rate data from each utility. Data must show that systems share similar operating characteristics and consolidated systems for ratemaking purposes would generate substantial cost savings for the utilities and ratepayers.
- Connecticut (a) Uniform rates are in effect on a companywide basis. The Connecticut Department of Public Utility Control classifies water and wastewater utilities into categories A, B, and C based on their operating revenues. The companies' annual operating revenues are over "\$100,000," "\$50,000 to 100,000," and "less than \$50,000," respectively. There are twelve companies in class A with flat rates for unmetered customers, while class B has only one company which maintains flat rates for unmetered customers. Class C utilities do not have unmetered customers and do not maintain flat rates. (b) Not addressed. (c) Not addressed.
- Illinois (a) Not addressed. (b) According to the commission staff, crosssubsidization did not appear to have been an issue when the Citizens Utilities Company of Illinois asked for uniform rates in its 1964 rate case filing. (c) The utility requested uniform rates in 1964 and the Illinois Commerce Commission approved them upon review of cost data submitted by the utility.
- Indiana (a) Not applicable. (b) Whenever the issue of uniform rates has been raised, the commission has consistently favored separate rates or cost-based rates. (c) Not applicable.

Kentucky Not applicable.

RESPONSE

STATE

Louisiana (a) Louisiana approved companywide rates for water utilities. (b) Crosssubsidization was an issue, but the commission's decisions to approve or deny uniform rates were based on cost data submitted by the utilities. (c) The propriety of uniform rates is handled on a case-by-case basis. The Louisiana Public Service commission encourages multisystem operations either through purchase agreement or acquisition. It allows the company which acquires the water and wastewater company to apply its existing rates to form rate uniformity across the companies' service area or allow customers to maintain their present rates. Either way, the purpose is to streamline operational costs and design rates that adequately recover such costs in all the systems without creating a situation where the customers of one system subsidize the customers of another system.

Maine Not applicable.

Massachusetts Not applicable.

Mississippi No response.

QUESTION 5: (continued)

STATE	RESPONSE
South Carolina	(a) Most of South Carolina's investor-owned water and wastewater utilities have uniform rates on a companywide basis. (b) Cross- subsidization was an issue. Many customers stated that uniform rates are unfair because operating and maintenance expenses are less for newer, more technically advanced systems than older ones, which are more expensive to maintain. Affluent customers who live in the suburban, newly developed areas felt that uniform rates will result in higher water and wastewater rates for them, resulting in cross-subsidization. (c) Reports compiled during a company's rate case would include justification for the implementation of such rates. No justifications were stated for granting uniform rates. However, any justification for requesting uniform rates would be presented to the commission during rate case hearings. Commission staff were convinced that uniform rates were in the best interests of the ratepayers.
Texas	(a) Uniform rates are implemented on a companywide basis. Implementation

(a) Uniform rates are implemented on a companywide basis. Implementation of uniform rates has nothing to do with political boundaries. (b) Companies with a great many systems may be permitted to use nonuniform rates. For example, allowing companies with multiple systems that do not have the proximity advantage, similarity in systems' age, common labor costs, and similar operating characteristics to adopt nonuniform rates is likely to eliminate subsidization between expensive and low cost systems. However, uniform rates have been generally encouraged since the inception of the regulatory program in 1976. The water companies were encouraged to take advantage of cost savings resulting from uniform systemwide rates if the operating characteristics are similar. Advantages are reduced accounting, recordkeeping, and data processing costs, and normalization of costs across a large pool of customers who may have bad systems through no fault of their own. (c) The commission staff support companywide rates because they avoid extra accounting costs and because most utilities have poor records to support cost differences. Additionally, consolidation and the spread of costs across a large customer base benefit customers who have inefficient systems.

Vermont

Not applicable.

Virginia

(a) Three companies have companywide uniform rates. (b) Subsidization was not an issue because there was no commission order mandating water utilities to implement uniform rates. Second, uniform rates were never brought to the commission as an issue requiring consideration. And the commission did not propose policies or rules on uniform rates. (c) Uniform rates have been in effect for over fifteen years. The Virginia State Corporation Commission encouraged water utilities with multiple systems in the state to adopt flat rates (uniform rates) where general and administrative costs are characteristically similar. The commission staff determined that costs savings result from simplified customer billing systems, water conservation, reduced data processing costs, and reduced accounting costs.

Washington (a) Companywide. (b) In 1967, when the "class A" utility companies moved to implement uniform rates on a companywide basis, the rates were low (8 cents/100 cubic feet). As a result, there was no public outcry. (c) In the State of Washington, when a regulated company acquires a new service area, the rates charged will be the rates before acquisition or the acquiring system's tariff rate, whichever is lower. The acquiring company may request uniform rates during a general rate case.

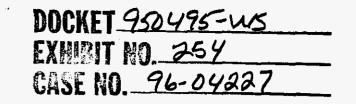


EXHIBIT NO. 25

DOCKET NO. 950495-WS

Application for rate increase by

SOUTHERN STATES UTILITIES, INC.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DESCRIPTION:

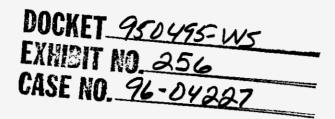
December 12/03/95

Customer bill with suggestion by company that customer contact their legislator

FLORIDA PUBLIC SERVI	CE COMMISSION
DOCKET 950 495-645	EXHIBIT NO 254
COMPANY/SBULL WITNESS: H/24/9/	udsen
DATE - A/24/41	

Moto Gizo, With With Motor Number - 30182706 1		33. 80 2 8.01
Deposit \$.00	TOTAL CURRENT CHARGES	46 TT
Connect Date 8/20/85	TOTAL AMOUNT BUE	\$ 48.11
SEWER Rule Code- 062		
Cannec: Dato 8/20/85	UNIFORM RATES AT RISK. VOICE YOUR CHINION TO THE FPSC In September 1995, The Florida Public Service Commission reveal rates. Unless they reconsider, the average monthly water and waster average monthly usage from your plant, will increase: water from \$12, from \$34,63 to \$58,11. SSU a seeking reconsideration of this cham uniform rates, please write or call the Florida Public Service Commission Boulevard, Tallahassee, Florida 32398-0550, or chame: 1-900-342-38 (The Florida Legislature, Tallahassee, Florida, or at their-local officers)	its 1993 Decision on uniform water bill, based on the .74 to \$14.94 and wastewater igs. If you want to keep your tort 1254C Shuhard Oak
	 In observance of the holidays our offloes will be closed on November 22nd & 26th and January 1st, Happy Holidays. 	23rd & 24th, December
Cally Average Water Use:		
Current Month 187 Gal/Dav		
Same Month Last Yr 354 Gal/Day		
Dally Average Water Cost: \$	k a na an a	· •
	20aae bring entire bill when paying in person Make on	COS DAVADIO IO SSU
Pietse	Wurn this port on with payment	Bill Date 11/13/95
SSU Britist hat		CURRENT CHARGES
Unter For Honeda's Justice	Office Phone 1-407-880-0100 or Cail Toll Free 1-800-432-4501	12/03/95
		TOTAL AMOUNT DUE
	80UTHERN STATES UTILITIES P.O. BOX 2047	\$ 46. 11
CUSTOMER NUMBER 1115	H3 APCPKA, FL 32/04-2047	DUE UPON RECEIPT
KARL NEUFELD 4041 SE 21 CT	PLEASE SHOW AMOU OF PAYME	
OCALA FL 32671-7108		
	11:58-3	3 Plant 1117 WS

011158301117100046110



Ralph Terrero's

Late Filed Exhibit No. 256

Docket No. 950495-WS

Marco Island January 1996 and Beacon Hills October 1994 Lead & Copper Information

FLORIDA	PUBLIC S	SERVICE (X0MMISSI	
DOCKET	5049	S-WSFY		256
COMPAN	''Ssu	Thus	HIBIT NO.	
DATE:	4/29	1/56		

Late File Hearing Exhibit No. 256

Provide copies of Marco Islands January 1996 lead & copper test results and proof of lead education requirements and Beacon Hills October 1994 lead & copper test results and proof of lead education requirements. (SSU Witness Ralph Terrero).

Marco Island

The samples referred to as January 1996 lead and copper test results were actually submitted to the lab on December 22, 1995. The results of this sampling event are shown in Appendix 256-A.

As noted by these results, Marco Island exceeded the action level for lead. As a result of this exceedance, SSU then proceeded with the required public education program. A summary of this sampling event and the public education program is attached as Appendix 256-B.

As a part of the public education program, SSU provided copies of a public service announcement to area newspapers, televisions and radio stations. Copies of these notifications are attached as Appendix 256-C.

Another portion of the public education program is notification to customers who exceeded the action level for lead. Examples of the customer notification letters is provided in Appendix 256-D. As noted on the first page of this appendix notification of the newspapers, radio stations and television stations was not done by Marco Island personnel, but was performed by Apopka personnel.

According to SSU's Marco Island personnel, area day care centers & schools received the lead information brochures required by 62-551.810 by hand delivery the week of February 26, 1996. A copy of the first page of the day care/school brochure is the last page of Appendix 256-D.

The public education program also requires a notice to be placed on the customers bills and a FDEP approved pamphlet to be inserted with the same bills. While SSU does not make photocopies of bills, it does keep copies of bills on microfiche. Appendix 256-E is a copy of a sample bill pulled from microfiche with the required notice language thereon and a copy of the FDEP approved pamphlet which was inserted with the bill.

Beacon Hills

As testified to by Mr. Terrero, SSU has historically sampled Beacon Hills for lead and copper separately from Cobblestone. However, Beacon Hills and Cobblestone should have been combined for lead and copper rule purposes. The distribution facilities are inter-connected in four places so water from both treatment facilities is mixed in the distribution network. The PSC recognizes Beacon Hills and Cobblestone as one plant for all regulatory purposes: ratemaking, territory, etc. The St. Johns Water Management District has only one permit for water withdrawals for Beacon Hills/Cobblestone. When Beacon Hills and Cobblestone are combined for lead and copper rule purposes, as Mr. Terrero testified, the lead action level is not exceeded for the May 1996 sampling,

and, thus, the notification requirements of the rule would not properly be invoked. In short, SSU believes that since October 1994, it undertook notification measures for Beacon Hills in excess of that required by the rule.

The results of the October 1994 sampling event are attached in Appendix 256-F. Also attached in this appendix are copies of the notification letters to the customers who exceeded the action level for lead.

A summary of the sampling events and the public education program for 1994 and 1996 are attached as Appendix 256-G.

As noted by the 1994 results, Beacon Hills, when not combined with Cobblestone, exceeded the action level for lead. However, as a result of this exceedance, SSU undertook the required public education program. Exhibit No. 83 is a copy of a sample bill with the required notification language thereon. The public education program requires a notice to be placed on the customers bills. While SSU does not make photocopies of bills, it does keep copies of bills on microfiche. Appendix 256-H is another copy of a sample bill pulled from microfiche with the required notice language thereon. SSU does not have record of the inserts being included in the billing for November/December 1994.

The public education program includes providing copies of a public service announcement to area newspapers, televisions and radio stations. It also includes providing Lead information brochures to area daycare centers. A letter summarizing the information that was distributed is attached as Appendix 256-I.

The results of the March 1996 sampling event for Beacon Hills and Cobblestone are being included as Appendix 256-J.

As noted by these results, Beacon Hills, when not combined with Cobblestone, exceeded the action level for lead. However, SSU is performing the required public education program. The sampling results show that when Beacon Hills and Cobblestone are combined, the lead action level is not exceeded. A summary of the sampling events and the public education program is attached as Appendix 256-G.

The copies of the individual customer letters are is attached as Appendix 256-K.

The copies of the Media package which provided notification to the newspaper, Television Stations & Radio Stations is attached as Appendix 256-L

Beginning with the May 20, 1996 billing cycle the required on bill notification along with the approved lead and copper brochure and a general map of the effected area is being mailed to the customers in Beacon Hills and Cobblestone (Beacon Hills and Cobblestone cannot practically be separated for billing purposes). Copies of the approved lead and copper brochure and the general map of the effected area is attached as Appendix 256-M

APPENDIX 256-A

Sheet1

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PAGE____OF___4

COPPER TAP SAMPLE ANALYSIS REPORT MARCO ISLAND

Date Submitted to the Lab:	12/22/95
Analysis Date:	12-28/29-95
Lab Analysis Method:	SM3111B
Copper Action Level Concentration:	1.3 mg/L

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			SAMPLE	COPPER	LEAD
TIER	LOCATION	LAB #	DATE	mg/L	mg/L
	459 Marquesee	AL00471	12/20/95	<0.02	
	1186 Sunbird Ave	AL00472	12/20/95	<0.02	
	541 Heathwood	AL00488	12/20/95	<0.02	
	1274 Jamica R	AL00495	12/20/95	<0.02	
	1149 Strawberry Ct	AL00496	12/20/95	<0.02	
	1232 Fruitland Ave	AL00534	12/22/95	<0.02	
	1160 Fourwinds Ave	AL00552	12/22/95	<0.02	
	522 Nassau Rd	AL00582	12/21/95	0.018	
	199 Society	AL00463	12/20/95	0.02	
	362 Bali Court	AL00497	12/19/95	0.02	
	275 Figi Ct	AL00532	12/21/95	0.02	
	1250 Osprey	AL00560	12/22/95	0.02	
	1270 Oaprey	AL00561	12/22/95	0.02	
	370 Edgewater Ct	AL00478	12/20/95	0.03	
	390 Waterleaf Ct	AL00498	12/19/95	0.03	
	1356 Merrimac Ave	AL00547	12/21/95	0.03	
	264 Shadow Ridge	AL00462	12/20/95	0.04	
	279 Marquesas	AL00470	12/19/95	0.04	
	123 Landmark St	AL00556	12/21/95	0.04	
	1264 Fruitland	AL00473	12/20/95	0.05	
	510 Almeda Ct	AL00494	12/20/95	0.05	
	164 Colombus Way	AL00558	12/21/95	0.05	
	811 Buttonwood	AL00487	12/20/95	0.08	
	608 Nesseu Rd	AL00474	12/19/95	0.06	
	646 Bambo Ct	AL00479	12/20/95	0.06	
	517 Sommerset Ct	AL00481	12/19/95	0.06	
	1211 Mimosa Ct	AL00492	12/19/95	0,06	
	549 Tigertall Ct	AL00544	12/20/95	0.06	
	810 Arcipo	AL00485	12/20/95	0.07	
	1631 Caxambac Ct	AL00490	12/20/95	0.07	
	1370 Auburn Dale Ave		12/22/95	0.07	
	1161 Breakwater Ct	AL00554	12/21/95	0.07	
	744 Falriawn Ct	AL00476	12/20/95		
	1429 Collingwood Ave	AL00535	12/21/95	0.08	
	736 Fairlawn Ct	AL00543	12/21/95	0.08	
	149 Cyrus St	AL00461	12/20/95	0.09	
	311 Nassau Ct	AL00477	12/19/95		
	885 Magnoila Ct	AL00528	12/19/95	0.1	
	192 Leeward Ct	AL00464	12/20/95	0.11	l

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Page 3

APPENDIX 256-A PAGE 2 OF 4

Sheet1

COPPER TAP SAMPLE ANALYSIS REPORT MARCO ISLAND

Date Submitted to the Lab:	12/22/95
Analysis Date:	12-28/29-95
Lab Analysis Method:	SM3111B
Copper Action Level Concentration:	1.3 mg/L

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			SAMPLE	COPPER	LEAD
TIER	LOCATION	LAB #	DATE	mg/L	mg/L
	608 Nassau Ct	AL00537	12/22/95	0.12	
	2030 Sheffield Ave	AL00460	12/20/95		
	850 So Barfield Dr	AL00483	12/19/95	0.14	
	811 Scott Dr	AL00487	12/20/96	0.14	
	1210 Stone Ct	AL00489	12/20/95	0.14	
	214 Tahiti Rd	AL00469	12/20/95	0.15	
	990 Hyacinth Ct	AL00559	12/20/95	0.15	
	1753 Dogwood Dr	AL00539	12/20/95	0.17	
	206 Mavorca Dr	AL00541	12/21/95	0.17	
	924 Juniper Ct	AL00551	12/22/95	0.17	
	1166 Four Winds	AL00475	12/20/95	0.2	
	1210 Ember Ct	AL00491	12/20/95	0.22	
	589 Hernando Ct	AL00482	12/20/95	0.25	
	695 Embassy	AL00468	12/19/95		
	346 Edge Water Ct	AL00499	12/19/95		
	230 Hideway Cir	AL00664	12/20/95		
	188 Star Fish	AL00488	12/20/95	0.39	
	214 Rock Hill Ct	AL00466	12/20/95		
	421 Cottage	AL00480	12/20/95		
	230 Wind Brook	AL00465	12/20/95		
	310 Henderson Ct	AL00484	12/20/95		
	700 Seagrape Dr	AL00493	12/20/95	0.83	

Sheet1

APPENDIX 256-A 0F <u>4</u>

LEAD TAP SAMPLE ANALYSIS REPORT MARCO ISLAND

	iteri tr	tha lah			12/22/95				
Date Submitted to the Lab:					2-28/29-95				
Analysis Date: Lab Analysis Method:					EPA200.9				
		Concentration:			.015 mg/L		001		
Lead Actor						$-I^{\circ}$	994		
······	a				SAMPLE .		1-1-1-1	LE	AD
TIER		TION	LAB	#	DATE	R	g/L		
TIER		yrus St		0461	12/20/95	(2		.001
		mbassy		0468	12/19/95		5	_	.001
		Sunbird Ave		0472	12/20/96			-	.001
		Fruitiand		0473	12/20/95	14	107		.001
		Four Winds		0475	12/20/95	1	002	_	.001
		leathwood		0488	12/20/95		104	_	.001
		Stone Ct		0489	12/20/95				0.001
		Jamica R		0495	12/20/95	1	0	4	0.001
		Waterieat Ct		0498	12/19/95		,011	4	0.001
		Figl Ct		0532	12/21/95			~	0.001
	213	Fruitiand Ave		00534	12/22/95	1	_	-	0.001
	1234	Fourwinds Ave		00562	12/22/95	1			0.001
				00550	12/22/98	1.	009	<	0.001
				00681	12/22/95		0.		0011
	12/	Caxambac Ct		00490	12/20/85	1	019		.0014
		0 Ember Ct		00491	12/20/95		16	Ō	.0014
				00496	12/20/95		0	Q	.0014
		Strawbarry Ct		.00552	12/21/95			TC	0.0014
		Nassau Rd		00463	12/20/95		0	10	0.0015
		Society		00464	12/20/95		Ū	1	0.0015
		Looward Ct		00494	12/20/95		0		0.0015
Ľ		Almeda Ct		00492	12/19/95	_	1097		0.0017
V		1 Mirnosa Ct		100497	12/19/95		.002		0.0019
~		Ball Court		100356	12/21/9		1003	T	0.0019
		Landmark 8t		100467	12/20/9				0.002
	81	Buttonwood		100478			1006	Т	0.0021
	37	0 Edgewater Ct	1	100481	12/19/9		0	T	0.0022
	- 181	7 Sommerset Ct 61 Breakwater Ct		1.00554		5			0.0022
				100482			0		0.0023
	28	4 Shedow Ridge		100480	12/20/5		100	3	0.0025
	20	30 Sheffield Ave	I	AL0063			Q		0.0027
K	- 174	70 Auburn Dale					0		0.0027
		STU AUBUM Dale	100	AL0047					0.0028
	2	79 Marquesas 356 Merrimac Ave		ALDO54	-		.00	\square	0.0028
<u> </u>		59 Marquessa		AL0047		95	100	2	0.0031
·		49 Tigertail Ct		AL0054	4 12/20/	85	100		0.0031
	Ft?	14 Tanti Rd		AL0048	12/20		00:		0.0032
_		24 Juniper Ct		ALCOSE	1 12/22		.00	4	0.0033
		46 Bambo Ct		AL0047	12/20	195	10	25	0.0035
<u>~</u>									

1226 Store - 1001

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Sheet1 And PENDIX 256-A

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LEAD

mg/L 0.0035 0.0039 0.0048 0.0047 0.0054 0.0062 0.0085 0.0072 0.0085 0.0086 0.0090

0.0107

0.0134

0.0155

0.0171

0.0211

0.0278

0.0289

0.0683

0.151

0.302

0.325

1026

106

.03

0

0

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1007

411

008

LEAD TAP SAMPLE ANALYSIS REPORT MARCO ISLAND

AL00474

AL 00499

AL 00584

AL00485

AL00455

AL00843

AL00483

AL00484

AL00483

AL00482

Date Submitted to the Lab: Analysis Date: Lab Analysis Method: Ľ.

608 Nassau Rd

230 Hideway Cir

214 Rock Hill Ct

736 Fairtawn Ct

1850 So Barfield Dr

310 Henderson Ct

700 Sesgrape Dr

589 Hernando Ct

188 Star Fish

348 Edge Water Ct

12/22/95 12-28/29-95 EPA200.9

12/19/96

12/19/95

12/20/95

12/20/95

12/20/95

12/21/95

12/19/95

12/20/95

12/20/95

12/20/95

ad Action Level Concentration:			0.015 mg/L	1994
ER	LOCATION	LA8 #	SAMPLE DATE	mo/L
	164 Colombus Way	AL00558	12/21/95	1003
	205 Mavorca Dr	AL00541	12/21/95	<u> </u>
	990 Hyacinth Ct	AL00559	12/20/95	.009
	811 Scott Dr	AL00487	12/20/95	0
	1753 Dogwood Dr	AL00539	12/20/95	1007
	421 Cottage	AL00480	12/20/96	1037
	685 Megnoila Ct	AL00528	12/19/95	,00/
	608 Nassau Ct	AL00537	12/21/95	1020
<u> </u>	230 Wind Brook	ALCO465		1001
	810 Arcino Arcalia	AL00485	12/20/95	1013
<u>k</u>	744 Fairlawn Ct -	AL00478		.002
ł	311 Nesseu Ct	AL00477		1011

177 Gulfron -. 003 831 Button Lord - . 004 1031 Valley - .007 474 Yellow Bird 1005 228 Chansteine 1007 511 Alanodia - 0 225 Bald Engle - 0 1241 Enter 64 1005

Page 2

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APPENDIX 256B
AFFLINDIA

PAGE____

	Lead & Copp	er Summary	Sheet			
System Name: Marco Island Plant #:			501 PW	'S ID #	5110183	
Regulating Agency FDEP SSU			: Sout	h		
		County: C	ollier			
Sampling Period:	July 95 - Dec 95	Sample Dat	e:	12/28/95		
Sample Results:	# of exceedances / # of Sampl		oles	W	as 90% Exceeded	
Lead	9/61			Yes		
Copper	0/61			No		
90% was exceeded for lead - the following was completed:			Date Requ		Date Completed	
Water Quality Parameters			0	Ongoing Evaluation /96 02/28/96		
Individual Customer Noti			03/02/	03/02/96		
Insert notices in each customer's water utility bill			03/02/	/96	3/96	
Submit the information editorial departments of newspapers			03/02/	03/02/96 03/15/96		
Deliver pamphlets or brochures			03/02/	/96	02/96	
Submit the public service announcement to radio and television			n 03/02/	/96	03/15/96	
Corrosion Control Study				Already	completed	

256-C APPENDIX

OF 12 PAGE



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Southern States Utilities • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

March 15, 1996

WGUF 2640 Golden Gate Pkwy. Suite 316 Naples, FL 33942

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-380-0058 ext. 131. Thank

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Ida Roberts

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APPENDIX 256-C OF 12 PAGE



Southern States Utilities • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

March 15, 1996

WSGL P.O. Box 7789 Naples, FL 33941

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 131. Thank you.

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Ida Roberts

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APPENDIX 256-C

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Southern States Utilities • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

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March 15, 1996

WNOG & WARO 333 8th St. South Naples, FL 33940

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 131. Thank

you. abert

Ida Roberts

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1 APPENDIX

OF ____ PAGE



Southern States Utilities • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

March 15, 1996

WIXI 3337 Tamiami Trail, N. Naples, FL 33940-4165

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 131. Thank yoų.

heit Ida Roberts

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256-C APPENDIX

5 OF PAGE



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Southern States Utilities • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

March 15, 1996

WNPL-TV Channel 46 2150 Goodlette Rd. Naples, FL 33940

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 131. Thank

you, Ida Roberts

APPENDIX

OF lo PAGE



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Southern States Utilities • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

March 15, 1996

WSRX 2132 Shadowlawn Dr. Naples, FL 33962

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 131. Thank

you, lo t Ida Roberts

ARRENDIX	256-C

PAGE_____OF____2

> Marco Island Eagle 579 Elkam Circle P.O. Box 579 Marco Island, FL 33969

WGUF 2640 Golden Gate Pkwy. Suite 316 Naples, FL 33942

WSGL P.O. Box 7789 Naples, FL 33941

WNPL-TV Channel 46 2150 Goodlette Rd. Naples, FL 33940

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Naples Daily News 1075 Central Avenue P.O. Box 7009 Naples, FL 33940

WIXI 3337 Tamiami Trail, N. Naples, FL 33940-4165

WSRX 2132 Shadowlawn Dr. Naples, FL 33962 WAVV 11800 Tamiami Trail, E. Naples, FL 33962

WNOG & WARO 333 8th St. South Naples, FL 33940

WODX 599 S. Collier Blvd., Suite 203 P.O. Box 1480 Marco Island, FL 33937

APPEN	אוס	256	<u> </u>
PAGE_	8	OF	12

PUBLIC SERVICE ANNOUNCEMENT

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"Know The Facts About Lead"

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Why should everyone want to know the facts about lead and drinking water? Because unhealthy amounts of lead can enter drinking water through the plumbing in your home. That's why you should get your water tested -- and the cost is minimal -- about thirty dollars. Contact Southern States Utilities at 1-800-432-4501 for information on testing and on simple ways to reduce your exposure to lead in drinking water.

APPENDIX OF_12 PAGE



hern States Utilities • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

March 15, 1996

WODX 599 S. Collier Blvd., Suite 203 P.O. Box 1480 Marco Island, FL 33937

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 131. Thank

you. bert

Ida Roberts

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PAGE 10 OF 12



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Southern States Utilities • 1000 Color Place • Apopka, RL 32703 • 407/880-0058

March 15, 1996

WAVV 11800 Tamiami Trail, E. Naples, FL 33962

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 131. Thank you.

Ida Roberts

APPENDIX	256-C
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FAGE 11 OF 12



1000 Color Place, Apopka, Florida 32703 Phone 407-880-0058 Facsimile 407-884-7740

Media Release

Contacts: Tracy Smith, Ida Roberts or Eileen Ballard

Date: March 15, 1996

FOR IMMEDIATE USE

Southern States Utilities Issues Lead Advisory On Marco Island

Residents on Marco Island have been notified by Southern States Utilities that some drinking water samples taken recently have indicated elevated lead levels. The customer advisories suggest steps to reduce the exposure to lead in the home and provide other information about lead in drinking water.

Although most of the 61 random sampling locations in the community had very low levels of lead, 9 locations measured slightly higher than 15 parts per billion, or 0.015 milligrams of lead per liter of water, which is the designed "action level" set by the federal government.

Because of the health concerns related to lead exposure, especially for young children and pregnant women, the sampling is conducted under a "worst case" scenario. Generally, homes included in the sampling are constructed prior to 1986. Water samples are taken only after water sits undisturbed in plumbing for at least six hours, allowing extended contact of the water with plumbing that possibly contains some lead. Then, the first draw of water is collected and tested. Earlier sampling conducted in the same locations tested at below the action level.

By merely "flushing" the system -- allowing the water to run for a few seconds -- low level lead contaminates are generally removed. Brochures, approved by the Environmental Protection Agency (EPA), provided to home owners in Marco Island describe the health effects of lead, and recommend specific steps to reduce exposure in the home.

APPENDIX 250 FAGE 12 OF 12

Page two - Marco Island Lead Advisory

The EPA estimates that drinking water can make up to 20 percent or more of a person's total lead exposure. Lead seldom occurs naturally in drinking water supplies, but enters the drinking water system primarily as a result of corrosion of materials in the distribution system or household plumbing that contain lead. These materials include lead-based solder used to join copper pipe.

In 1986, Congress banned the use of lead-based solder containing greater than .2 percent lead and restricted the lead content of faucets, pipes, and other plumbing material to .8 percent. When water stands for several hours or more in lead pipes or plumbing material containing lead, the lead may dissolve into the water. Therefore customers are always advised to let the water run from the cold water faucet for 15 to 30 seconds before using it for drinking or cooking any time the water has gone unused for more than six hours.

Southern States Utilities, based in Apopka, is Florida's largest privately held water and wastewater utility serving more than 150,000 customers in 113 communities located in 24 counties.

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PPENDIX 256-0

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OF 14

FAX TRANSMITTAL

OF PGS TO FOLLOW: 13 DATE: 4-22-96 TO: Preceso Deis Now FROM: FAX 🗲: 813/394-8137 SOUTHERN STATES UTILITIES MARCO ISLAND PLANT P.O. BOX 197 MARCO ISLAND, FL 33969 407.884- 7740 _ SUBJ : We Did Not do Andio SPECIAL INSTRUCTIONS: Per Mel Fisher. T.V. . 00 We did do The Customers That exceded AND go To DAY Care, schools ETC. Rould When

If you do not receive all material being transmitted, please call (813)394-3880.

APPENDIX	256-0	

F AGE OF 14



MARCO ISLAND OFFICE • 960 N. Collier Blvd. • P.O. Box 197 • Marco Island, R. 33969 Customer Service [813] 394-3168 : Business [813] 394-3880

March 4, 1996

Dear Customer:

Our water plant personnel have been by your home several times to speak with you regarding our lead and copper sampling program. To date, we have arrived while no one is home.

Please call our secretary, Rhonda Smith, at 394-3880 or 394-3160, 8:00 a.m. to 5:00 p. m. We would like to set up a time and date to speak with you personally.

Thank youll

Sincerely,

la fa

Larry Lebovitz Marco Island Plant Lead Operator

APPENDIX	256-0

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MARCO ISLAND OFFICE ern States Utilities • 960 N. Collier Blvd. • P.O. Box 197 • Marco Island, FL 33969 Customer Service [813] 394-3168 • Business [813] 394-3880

February 28, 1995

Francis Rillett 188 Starfish Marco Island, FL 33937

Dear Mr. or Ms. Rillett:

Thank you for participating in the lead and copper sampling program recently conducted by Southern States Utilities within your neighborhood. Attached is a copy of the laboratory analysis performed on the samples you collected.

The testing program is designed to look at a "worse case" situation where contamination would most likely occur. In taking samples, for example, it was necessary for the water to be drawn the first thing in the morning after it sat undisturbed in the plumbing for at least six hours.

In the samples taken from your home, copper action levels were within the "action level" standard of 1.3 parts per million. However, lead levels were above the 0.015 parts per million standard. Reduction of lead in your water can be simply accomplished by running the cold water for only about 15 seconds, especially when it has not been used for a long period; overnight for example.

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain exposure levels. Materials that contain lead have frequently been used in the construction of water supply distribution systems and plumbing systems in private homes and buildings. The most commonly found materials include service lines, pipes, brass and bronze fixtures, and solders and fluxes. Lead in these materials can contaminate drinking water as a result of the corrosion that takes place when water comes in contact with those materials. Lead can cause a variety of adverse health effects in humans. At relatively low levels of exposure, these effects may include interference with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight defects in the attention span, hearing, and learning abilities of children, and slight increases in the blood

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pressure of some adults. EPA's national primary drinking water regulations require all public water systems to optimize corrosion control to minimize lead contamination resulting from the corrosion of plumbing materials. Public water systems serving 50,000 people or fewer that have lead concentrations below 15 parts per billion (ppb) in more than the 90 percent of tap water samples (the EPA "action level") have optimized their corrosion control treatment. Any water system that exceeds the action level must also monitor their source water to determine whether treatment to remove lead in the source water is needed. Any water system that continues to exceed the action level after installation or corrosion control and/or source water treatment must eventually replace all lead service lines contributing in excess of 15 ppb of lead to drinking water. Any water system that exceeds the action level must also undertake a public education program to inform consumers of ways they can reduce their exposure to potentially high levels of lead in drinking water.

Southern States Utilities has monitored the source water to determine whether additional treatment is needed. Those results have indicated that no detectable levels of lead or copper were found in our source water. Nonetheless, you are still encouraged to use the recommended steps above.

To measure the effectiveness of the long term treatment alternatives, we would like to continue to have you collect water samples from your home periodically in the future. A Southern States Utilities representative will be contacting you when the next test is scheduled. Again, we appreciate your continued cooperation.

If you have any questions regarding this announcement, please call 1-800-432-4501 or 407-880-0058 and request to speak to our Environmental Services Department. For specific information regarding the sampling and analysis, call the Southern States Utilities Central Laboratory at 407-860-7946.

> Sincerely, Southern States Utilities, Inc. Marco Island Plant

LL/rs

APPENDIX

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MARCO ISLAND OFFICE THE Utilities • 960 N. Collier Blvd. • P.O. Box 197 • Marco Island, R. 33969 Customer Service (813) 394-3168 • Business (813) 394-3860

March 4, 1996

Dear Customer:

Our water plant personnel have been by your home several times to speak with you regarding our lead and copper sampling program. To date, we have arrived while no one is home.

Please call our secretary, Rhonda Smith, at 394-3880 or 394-3160, 8:00 a.m. to 5:00 p.m. We would like to set up a time and date to speak with you personally.

Thank you!!

Sincerely,

Larry Lebovitz Marco Island Plant Lead Operator

APPENDIX



MARCO ISLAND OFFICE • 860 N. Collier Blvd. • P.O. 80x 197 • Marco Island. FL 33969 Customer Service (813) 394-3168 • Business (813) 394-3880

February 28, 1995

Dana Lips 700 Scagrape Drive Marco Island, FL 33937

Dear Ms. Lips:

Thank you for participating in the lead and copper sampling program recently conducted by Southern States Utilities within your neighborhood. Attached is a copy of the laboratory analysis performed on the samples you collected.

The testing program is designed to look at a "worse case" situation where contamination would most likely occur. In taking samples, for example, it was necessary for the water to be drawn the first thing in the morning after it sat undisturbed in the plumbing for at least six hours.

In the samples taken from your home, copper action levels were within the "action level" standard of 1.3 parts per million. However, lead levels were above the 0.015 parts per million standard. Reduction of lead in your water can be simply accomplished by running the cold water for only about 15 seconds, especially when it has not been used for a long period; overnight for example.

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that lead is a health concern at certain exposure levels. Materials that contain lead have frequently been used in the construction of water supply distribution systems and plumbing systems in private homes and buildings. The most commonly found materials include service lines, pipes, brass and bronze fixtures, and solders and fluxes. Lead in these materials can contaminate drinking water as a result of the corrosion that takes place when water comes in contact with those materials. Lead can cause a variety of adverse health effects in humans. At relatively low levels of exposure, these effects may include interference with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight defects in the attention span, hearing, and learning abilities of children, and slight increases in the blood

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Southern States Utilities has monitored the source water to determine whether additional treatment is needed. Those results have indicated that no detectable levels of lead or copper were found <u>in our source water</u>. Nonetheless, you are still encouraged to use the recommended steps above.

To measure the effectiveness of the long term treatment alternatives, we would like to continue to have you collect water samples from your home periodically in the future. A Southern States Utilities representative will be contacting you when the next test is scheduled. Again, we appreciate your continued cooperation.

If you have any questions regarding this announcement, please call 1-800-432-4501 or 407-880-0058 and request to speak to our Environmental Services Department. For specific information regarding the sampling and analysis, call the Southern States Utilities Central Laboratory at 407-860-7946.

> Sincerely, Southern States Utilities, Inc. Marco Island Plant

LL/rs

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MARCO ISLAND OFFICE Tes Utilities • 960 N. Collier Blvd. • P.O. Box 187 • Marco Island, FL 33989 Customer Service (813) 394-3168 • Business (813) 394-3880

March 4, 1996

Dear Customer:

Our water plant personnel have been by your home several times to speak with you regarding our lead and copper sampling program. To date, we have arrived while no one is home.

Please call our secretary, Rhonda Smith, at 394-3880 or 394-3160, 8:00 a.m. to 5:00 p. m. We would like to set up a time and date to speak with you personally.

Thank you!!

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Sincerely,

Larry Lebovitz Marco Island Plant Lead Operator

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MARCO ISLAND OFFICE tes Utilities • 860 N. Calliar Blvd. • P.O. Box 197 • Marco Island, R. 33869 Customer Service (813) 394-3168 • Business (813) 394-3880

February 28, 1995

Robert Mair 316 Henderson Ct. Marco Island, FL 33937

Dear Mr. Mair:

Thank you for participating in the lead and copper sampling program recently conducted by Southern States Utilities within your neighborhood. Attached is a copy of the laboratory analysis performed on the samples you collected.

The testing program is designed to look at a "worse case" situation where contamination would most likely occur. In taking samples, for example, it was necessary for the water to be drawn the first thing in the morning after it sat undisturbed in the plumbing for at least six hours.

In the samples taken from your home, copper action levels were within the "action level" standard of 1.3 parts per million. However, lead levels were above the 0.015 parts per million standard. Reduction of lead in your water can be simply accomplished by running the cold water for only about 15 seconds, especially when it has not been used for a long period; overnight for example.

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Southern States Utilities has monitored the source water to determine whether additional treatment is needed. Those results have indicated that no detectable levels of lead or copper were found in our source water. Nonetheless, you are still encouraged to use the recommended steps above.

To measure the effectiveness of the long term treatment alternatives, we would like to continue to have you collect water samples from your home periodically in the future. A Southern States Utilities representative will be contacting you when the next test is scheduled. Again, we appreciate your continued cooperation.

If you have any questions regarding this announcement, please call 1-800-432-4501 or 407-880-0058 and request to speak to our Environmental Services Department. For specific information regarding the sampling and analysis, call the Southern States Utilities Central Laboratory at 407-860-7946.

> Sincerely, Southern States Utilities, Inc. Marco Island Plant

LL/rs

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MARCO ISLAND OFFICE tes Utilities • 960 N. Collier Blvd. • P.O. Box 197 • Marco Island, FL 33969 Customer Service [813] 394-3168 • Eusiness [813] 394-3880

March 4, 1996

Dear Customer:

Our water plant personnel have been by your home several times to speak with you regarding our lead and copper sampling program. To date, we have arrived while no one is home.

Please call our secretary, Rhonda Smith, at 394-3880 or 394-3160, 8:00 a.m. to 5:00 p. m. We would like to set up a time and date to speak with you personally.

Thank you!!

Sincerely,

Larry Lebovitz Marco Island Plant Lead Operator

WATER FOR FLORIDA'S FUTURE

APPENDIX	256-1
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OF



MARCO ISLAND OFFICE • 950 N. Collier Blvd. • P.O. Box 197 • Merco Island, FL 33969 Customer Service (813) 394-3188 • Business (813) 394-3880

March 21, 1996

Nicholas Palazzo 1502 #2 Mainsail Drive Marco Shores, FL 33962

Dear Mr. Palazzo:

Thank you for participating in the lead and copper sampling program recently conducted by Southern States Utilities within your neighborhood. Attached is a copy of the laboratory analysis performed on the samples you collected.

The testing program is designed to look at a "worse case" situation where contamination would most likely occur. In taking samples, for example, it was necessary for the water to be drawn the first thing in the morning after it sat undisturbed in the plumbing for at least six hours.

In the samples taken from your home, copper action levels were within the "action level" standard of 1.3 parts per million. However, lead levels were above the 0.015 parts per million standard. Reduction of lead in your water can be simply accomplished by running the cold water for only about 15 seconds, especially when it has not been used for a long period; overnight for example.

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WATER FOR FLORIDA'S FUTURE

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Southern States Utilities has monitored the source water to determine whether additional treatment is needed. Those results have indicated that no detectable levels of lead or copper were found <u>in our source water</u>. Nonetheless, you are still encouraged to use the recommended steps above.

To measure the effectiveness of the long term treatment alternatives, we would like to continue to have you collect water samples from your home periodically in the future. A Southern States Utilities representative will be contacting you when the next test is scheduled. Again, we appreciate your continued cooperation.

If you have any questions regarding this announcement, please call 1-800-432-4501 or 407-880-0058 and request to speak to our Environmental Services Department. For specific information regarding the sampling and analysis, call the Southern States Utilities Central Laboratory at 407-860-7946.

> Sincerely, Southern States Utilities, Inc. Marco Island Plant

LL/rs

APPENDIX



WHAT YOU SHOULD KNOW ABOUT LEAD

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Bill Date 3/14/96 Location Number 2600000323 Plant Number 26001 WATER Rate Code-MIR Billing Period 2/02/96 TO 3/05/96 Days in Billing Period: 32 Meter Readings: Present Previous Usage 2736580 2689140 47440 Gal Meter Size: 1"	WATER BASE FACILITY CHARGE GALLONAGE CHARGE 474 TOTAL WATER TOTAL CURRENT CHARGES TOTAL AMOUNT DUE	21.3 40 Gal@\$ 003210 152.2/ 	
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Daily Average Water Cost: \$ 5	.43		
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CUSTOMER NUMBER 1)43-9	P.O. BOX 2047 APOPKA, FL 32704-2047	DUE UPON RECEIPT
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Lc	ica) Office Phone 1-813-394-3166 or Call Toll Free 1-800-4	32-4501	1870-5
SERVICE ADDRESS	HARRY T GORMAN 1540 DANA CT MARCO FL 33937-4524	CURRENT CHARGES PAST DUE AFTER 3/25/ 96	TOTAL AMOUNT DU \$ 99.75
3ili Date 3/05/96 .ocation Number 2600000352 Plant Number 26001	WATER BASE FACILITY CHARGE GALLONAGE CHARGE WATER CHARGES	8.40 91.35	
NATER Rate Code-MIR	TOTAL WATER	·	99.75
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Daily Average Water Use: Current Month 964 Gal/Di Same Month Last Yr 859 Gal/Di Daily Average Water Cost; \$ 3. Plea	 Some homes in your community have elevated a significant risk to your health. Please read ay ay By 33 Please bring entire bill when paying in person se return this portion with payment 	h to 2 a.m, d lead levels in their drinkin the enclosed notice for fur Make check	ther information. Is payable to SSU Bill Date 3/05/96 CURRENT CHARGE: PAST DUE AFTER 3/25/96
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Public Education Materials For NuThe Control Of Lead And Copper

Marco Island Water System

SOME HOMES IN MARCO ISLAND HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION.

March, 1996

Department of Environmental Protection Bureau of Drinking Water and Ground Water Resources 2600 Blair Stone Road Twin Towers Office Building Tailahassee, FL 32399-2400 (904) 481-1762

> Virginia B. Watherall, Secretary Lawton Chiles, Governor



INTIGUCTION

The United States Environmental Protection Agency (EPA) and Southern States Utilities are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law, we are required to have a program in place to minimize lead in your drinking water by January 1997.

This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace each lead service fine that we control if the line contributes to lead concentration of 15 ppb or more after we have completed the comprehensive treatment program.

If you have any questions about how we are carrying out the requirements of the lead regulation, please give us a call at 1-800-432-4501. This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

HEALTH EFFECTS OF LEAD

Lead is a common, natural and often useful metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery, porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body.

Lead builds up In the body over many years and can cause damage to the brain, red blood cells and kidneys.

The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination like dirt and dust that rarely affect an adult.

It is important to wash children's hands and loys often, and to try to make sure they only put food in their mouths.

LEAD IN DRINKING ATER

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing.

These materials include lead-based solder used to join copper pipe made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of laucets, pipes and other plumbing materials to 8.0%.

When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

STEPS YOU CAN TAKE IN THE HOME TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high.

To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water.

Some local faboratories that can provide this service are listed at the end of this booklet.

P

more information having your water tested, ise call Southern States Utilities at 1-800-432-4501. water test indicates that the drinking water drawn n a tap in your home contains lead above 15 ppb, n you should take the following precautions:

1. Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your house's plumbing, the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer lime, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you will need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one or two gallons of water and costs less than 10 cents per month. The cost estimate is based on flushing two times a day for 30 days.

2. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible, use first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more and sometimes larger pipes than smaller buildings. Ask your landlord to help in locating the source of the tead and for advice on reducing the lead level.

 Try not to cook with or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and boil it on the slove.

4. Remove loose lead solder and dobris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has reconly been replaced. This can be done by removing the faucet strainers from all taps and running the water up to five minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

If your copper pipes are joined with lead solder that has been installed ittegalty since it was banned in 1986, notily the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify the Collier County Public Health Unit (941) 774-8200, about the violation. 5. Determine whether or ng a service line that connects your home or aparliment to the water main is made of lead. The best way to determine if your service line Is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line.

You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in files of the Collier County Building Department. A licensed plumber can at the same time check to see it your home's plumbing contains lead solder, lead pipes or ope fittings that contain lead.

-- The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the to the water contributes more than 15 ppb to drinking water, after our comprehensive treatment program is in place, we are required to replace the line.

- If the line is only partially controlled by Southern States Utilities, we are required to provide you with information on how to replace your portion of the service line, and offer to replace that portion of the line at your expense and take a follow-up tap water sample within 14 days of the replacement. Acceptable replacement alternatives include copper, steel, iron and plastic pipes.

6. Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of 15 ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

1. Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only lie water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or dislifiers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the lap, however, all lead reduction claims should be investigated. Be sure to check the actual performance of a specific home treatment device bel Ind after installing the unit.

2. Purchase bottled water for drinking and cooking.

You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. State and local government agencies that can be contacted include:

Southern States Utilities, 1-800-432-4501, can provide you with information about your community's water supply and a list of local laboratories that have been contracted by EPA for testing water quality.

The Collier County Building Department (941) 643-8400 can provide you with information about building permits records that should contain the names of plumbing contractors that plumbed your home; and

The Collier County Public Health Unit '941) 774-8200 can provide you with Information about the health effects of lead and how you can have your child's blood tested.

The following is a list of some State-approved laboratories in you area that you can call to have your water tested for lead:

Culligan Operating Services, Inc.	(941) 597-6059
Englewood Water District	(941) 474-3217
Sanders Laboratory	(941) 488-8103
Thornton Laboratory	(813) 223-9702

APPENDIX 356-E

a secondario de la composición de la co La composición de la c	SOUTHERN STATES UTILITIES, IN	c.	
Local	APOPKA, FL 32703 Office Phone 1-813-334-3166 or Call Toll Free 1-800	-432-4501	1043-9
STRVICE ADDRESS SHORECREST CT	ANDREW F MALETICH 506 E FRONTAGE RD N BOLINGBROOK IL 60440-0000	CURRENT CHARGES PAST DUE AFTER 4/03/96	TOTAL AMOUNT DUE \$ 173.62
Bill Date 3/14/96 Location Number 2600000323 Plant Number 26000 WATER Rate Code-MIR Billing Period 2/02/96 TO 3/05/96 Days in Billing Period: 32 Metar Readings: Present Previous Usage 2736580 2689140 47440 Gal	WATER BASE FACILITY CHARGE GALLONAGE CHARGE 47440 Gai @ \$ TOTAL WATER TOTAL CURRENT CHARGES TOTAL AMOUNT DUE	21, 34 . 003210 152, 28 	173. 62 173. 62 \$ 173.62
Meter Size: 1" Meter Number 9175254 3 Deposit \$.00 Connect Date 8/12/92	Please reset all sprinkler timing devices to ho week, time and odd or even house numbers: LOCATIONS AN Mondays and Thursdays: N of Collier Bivd Tuesdays and Fridays: E of Collier Bivd, a Wednesdays and Saturdays: S of SR92 a WATEF WATEF	D DAYS OF THE WEEK , W to the Gulf and S to # and N of SR92. and E of Collier. RING TIMES; n. to 5 a.m. .m. to 2 a.m. teo fead levels in their drinkin	he end of collier Ct.
	e ognineaux nex o your nouse. Trage je	ad the enclosed houce for the	ther information.
Daily Average Water Use: Current Month 1483 Gal/Day		ad one enclosed nouce for tw	ther information.
Daily Average Water Use: Current Month 1483 Gal/Day Same Month Last Yr 1417 Gal/Day		ad one enclosed nouce for tw	ther information.
Daily Average Water Use: Current Month 1483 Gal/Day Same Month Last Yr 1417 Gal/Day Daily Average Water Cost: \$ 5, 43	Please bring entire bill when paying in person		ther information. s payable to SSU
Daily Average Water Use: Current Month 1483 Gal/Day Same Month Last Yr 1417 Gal/Day Daily Average Water Cost: \$5.43 Please r		Make check	ther information. Is payable to SSU Bill Date 3/14/96 CURRENT CHARGES PAST DUE AFTER
Daily Average Water Use: Current Month 1483 Gal/Day Same Month Last Yr 1417 Gal/Day Daily Average Water Cost: \$5.43 Please r	Please bring entire bill when paying in person return this portion with payment	Make check	ther information. s payable to SSU Bill Date 3/14/96 CURRENT CHARGES PAST DUE AFTER 4/03/96
Daily Average Water Use: Current Month 1483 Gal/Day Same Month Last Yr 1417 Gal/Day Daily Average Water Cost: \$5.43 Please r	Please bring entire bill when paying in person return this portion with payment Office Phone 1-813-394-3168 or Call Toll Free 1-800-	Make check	ther information. Is payable to SSU Bill Date 3/14/96 CURRENT CHARGES PAST DUE AFTER
Daily Average Water Use: Current Month 1483 Gal/Day Same Month Last Yr 1417 Gal/Day Daily Average Water Cost: \$5,43 Please	Please bring entire bill when paying in person return this portion with payment Office Phone 1-813-394-3166 or Call Toll Free 1-800- SOUT	Make check 432-4501	ther information. s payable to SSU Bill Date 3/14/96 CURRENT CHARGES PAST DUE AFTER 4/03/96 TOTAL AMOUNT DUE
Same Month Last Yr 1417 Gal/Day Daily Average Water Cost: \$ 5.43 Please Local	Please bring entire bill when paying in person return this portion with payment Otfice Phone 1-813-394-3168 or Call Toll Free 1-800- SOUT 29 AP	Make check 432-4501 IHERN STATES UTILITIES P.O. BOX 2047	ther information. Is payable to SSU Bill Date 3/14/96 CURRENT CHARGES PAST DUE AFTER 4/03/96 TOTAL AMOUNT DUE \$ 173.62 DUE UPON RECEIPT

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APPENDIX 256-E	
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	SOUTHERN STATES UTILITIES, INC 1000 COLOR PLACE	۰.	CUSTOMER NUMBE
	APOPKA, FL 32703 Local Office Phone 1-813-394-3168 or Call Toll Free 1-800-	-432-4501	1870-5
	HARRY T GORMAN		
ERVICE ADDRESS	1140 DANA CT MARCO FL 33937-4524	CURRENT CHARGES	TOTAL AMOUNT D
U DARK GI	WRRCO FL 3393/4324	PAST DUE AFTER 3/25/96	\$ 99.75
			• • • • • • •
ill Date 3/05/96 ecation Number 2500000352	WATER		
ant Number 26001	BASE FACILITY CHARGE	8,40	
ATER	GALLONAGE CHARGE WATER CHARGES	91.35	
Rate Code-MiR Billing Period 1/17/96 TO 2/16	TOTAL WATER		99. 75
Days in Billing Period: 30	TOTAL CURRENT CHARGES	-	
Meter Readings: Present Previous Usage 135490 107580 28910 G	TOTAL AMOUNT DUE		\$ 99.75
Meter Size: %" x %" Meter Number: 95252527 1	* EMERGENCIES CALL 1-813-549-2809		
Deposit \$.00 Connect Date 9/10/92	WATER CONS	ERVATION RECUEST	
	Please reset all sprinkler timing devices to hon week, time and odd or even house numbers:	or a voluntary irrigation sche	duis, by day of the
	LOCATIONS AND Mondays and Thursdays: N of Collier Blvd. Tuesdays and Fridays: E of Collier Blvd. a Wednesdays and Saturdays: S of SR92 ar	and N of SB02	e and of callier Ct.
	WATER Odd:2 a.m.	ING TIMES:	
	Even: 10 o	m m 2 s m	
	Some names in white community have already	and devided the second second	
	Some homes in your community have elevate a significant risk to your health. Please real	ed lead levels in their dimkin Id the enclosed notice for fur	g water. Lead can po ther information.
	a signinicaant risk to your nealith. Pleasse rea al/hav	ed lead levels in their dimkin ad the enclosed notice for fur	g water. Lead can po ther information.
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WATER USE ally Average Water Use: Current Month 964 G Same Month Last Yr 859 G	a significant risk to your nealth. Please rea al/Day al/Day 3.33	id the enclosed notice for fur	ther information.
Life WATER USE Nily Average Water Use: Current Month 964 G Same Month Last Yr 859 G Nily Average Water Cost: \$	a significant risk to your nealth. Please rea al/Day al/Day 3. 33 Please bring entire bill when paying in person	nd the enclosed notice for fur Make check	ther information.
Life WATER USE Nily Average Water Use: Current Month 964 G Same Month Last Yr 859 G Nily Average Water Cost: \$	a significant risk to your nealth. Please rea al/Day al/Day 3.33	nd the enclosed notice for fur Make check	ther information.
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-i ⁻ wATER USE sily Average Water Use: Current Month Serie 964 G Same Month Last Yr 859 G aily Average Water Cost: \$	a significant risk to your nealth. Please rea al/Day al/Day 3. 33 Please bring entire bill when paying in person Please return this portion with payment Local Office Phone 1-813-394-3168 or Call Toll Free 1-800-4	nd the enclosed notice for fur Make check 432-4501	ther information. s payable to SSU Bill Date 3/05/96 CURRENT CHARGE PAST DUE AFTER 3/25/96 TOTAL AMOUNT DU
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CUSTOMER NUMBER	a significant risk to your nealth. Please rea al/Dey al/Dey 3. 33 Please bring entire bill when paying in person Please return this portion with payment Local Office Phone 1-913-394-3168 or Call Toll Free 1-600-4 SOUTH 1870-5	Make check 132-4501 HERN STATES UTILITIES P.O. BOX 2047 DPKA. FL 32704-2047 PLEASE SHOW AMOUNT	s payable to SSU Bill Date 3/05/96 CURRENT CHARGE PAST DUE AFTER 3/25/96 TOTAL AMOUNT DU \$ 99.75
CUSTOMER NUMBER	a significant risk to your nealth. Please rea al/Dey al/Dey 3. 33 Please bring entire bill when paying in person Please return this portion with payment Local Office Phone 1-913-394-3168 or Call Toll Free 1-800-4 SOUTH 1870-5 APC	Make check 132-4501 HERN STATES UTILITIES P.O. BOX 2047 DPKA. FL 32704-2047 PLEASE SHOW AMOUNT	ther information. s payable to SSU Bill Date 3/05/96 CURRENT CHARGE PAST DUE AFTER 3/25/96 TOTAL AMOUNT DU \$ 99.75 DUE UPON RECE(PT
CUSTOMER NUMBER	a significant risk to your nealth. Please rea al/Dey al/Dey 3. 33 Please bring entire bill when paying in person Please return this portion with payment Local Office Phone 1-913-394-3168 or Call Toll Free 1-800-4 SOUTH 1870-5 APC	Make check 132-4501 HERN STATES UTILITIES P.O. BOX 2047 DPKA. FL 32704-2047 PLEASE SHOW AMOUNT	ther information. s payable to SSU Bill Date 3/05/96 CURRENT CHARGE PAST DUE AFTER 3/25/96 TOTAL AMOUNT DU \$ 99.75 DUE UPON RECE(PT

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Public Education Materials For White Control Of Lead And Copper

Marco Island Water System

SOME HOMES IN MARCO ISLAND HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION.

March, 1996

Department of Environmental Protection Bureau of Drinking Water and Ground Water Resources 2600 Blair Stone Road Twin Towers Office Building Tallahassee, FL 32399-2400 (904) 481-1762

> Virginia B. Watherali, Secretary Lawton Chiles, Governor



INTELUCTION

The United States Environmental Protection Agency (EPA) and Southern States Utilities are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law, we are required to have a program in place to minimize lead in your drinking water by January 1997.

This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace each lead service line that we control if the line contributes to lead concentration of 15 ppb or more after we have completed the comprehensive treatment program.

If you have any questions about how we are carrying out the requirements of the lead regulation, please give us a call at 1-800-432-4501. This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

HEALTH EFFECTS OF LEAD

Lead is a common, natural and often useful metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery, porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body.

Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys.

The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination like dirt and dust that rarely affect an adult.

It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

LEAD IN DRINKING ATER

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of inlants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing.

These materials include lead-based solder used to join copper pipe made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%.

When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in-the afternoon after returning from work or school, can contain fairly high levels of lead.

STEPS YOU CAN TAKE IN THE HOME TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high.

To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water.

Some local laboratories that can provide this service are listed at the end of this booklet.

APPENDIX 256-F

more information having your water tested, se call Southern States Utilities at 1-800-432-4501. water test indicates that the drinking water drawn a tap in your home contains lead above 15 ppb, you should take the following precautions:

1. Let the water run from the tap before using it for irinking or cooking any time the water in a faucel has gone unused for more than six hours. The onger water resides in your house's plumbing, the more ead it may contain. Flushing the tap means running the old water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system. you will need to flush the water in each laucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one or two gallons of water and costs less than 10 cents per month. The cost estimate is based on flushing two times a day for 30 days.

2. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible, use first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more and sometimes larger pipes than smaller buildings. Ask your landlord to help in locating the source of the lead and for advice on reducing the lead level.

3. Try not to cook with or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and boil it on the stove.

4. Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced. This can be done by removing the faucet strainers from all taps and running the water up to five minutes. Thereatter, periodically remove the strainers and flush out any debris that has accumulated over time.

If your copper pipes are joined with lead solder that has been installed itlegally since it was banned in 1986, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify the Collier County Public Heatth Unit (941) 774-8200, about the violation. 5. Determine whether or no service line that connects your home or aparliment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line.

You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in files of the Coiller County Building Department. A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes or pipe fittings that contain lead.

- The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the to the water contributes more than 15 ppb to drinking water, after our comprehensive treatment program is in place, we are required to replace the line.

- If the line is only partially controlled by Southern States Utilities, we are required to provide you with information on how to replace your portion of the service line, and offer to replace that portion of the line at your expense and take a follow-up tap water sample within 14 days of the replacement. Acceptable replacement attentives include copper, steel, iron and plastic pipes.

6. Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine If your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and lire hazards.

The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your lap contains lead concentrations in excess of 15 ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

1. Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only the water that llows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap, however, all lead reduction claims should be Investigated. Be sure to check the actual ordormance of a specific home treatment device bel Ind after installing the unit.

2. Purchase bottled water for drinking and cooking.

You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. State and local government agencies that can be contacted include:

Southern States Utilities, 1-800-432-4501, can provide you with information about your community's water supply and a list of local laboratories that have been contracted by EPA for testing water quality.

The Collier County Building Department (941) 643-8400 can provide you with Information about building permits records that should contain the names of plumbing contractors that plumbed your home; and

The Collier County Public Health Unit '941) 774-8200 can provide you with Information about the health effects of lead and how you can have your child's blood tested.

The following is a list of some State-approved laboratories in you area that you can call to have your water tested for lead:

Culligan Operating Services, Inc.	(941) 597-6059
Englewood Water District	(941) 474-3217
Sanders Laboratory	(941) 488-8103
Thornton Laboratory	(813) 223-9702



APPENDIX 256-E

APPENDIX 256-F

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THORNTON LABORATORIES, INC. MARINE, ANALYTICAL AND ENVIRONMENTAL SERVICES

1145 EAST CASS STREET, TAMPA, FLORIDA 33602 P.O. BOX 2880, TAMPA, FLORIDA 33601-2880 HRS# 84147 HRS# E84100, E84324 Public Drinking Water System Laboratory Analysis Reporting Format for Lead and Copper Tap Samples

TELEPHONE (813) 223-9702 FAX (813) 223-9332

CERTIFIED LABORATORY NAME: THORNTON HRS CERTIFICATION NUMBER: 84

THORNTON LABORATORIES, INC.

84147

LABORATORY CONTACT: AND PHONE NUMBER: RICHARD LEWIS (813) 223-9702

SUBCONTRACTORS NAME CERTIFICATION NUMBER AND PHONE NUMBER

The attached sampling analytical results were submitted by the following public water system. Each sample container contained one liter of solution (\pm 100mL). All samples were to the best of our knowledge taken properly by the following system and analyzed in accordance with the requirements listed on page 26560 of the June 7, 1991 <u>Federal Register</u>. Tap sampling dates were reported for each sample received.

PUBLIC WATER SYSTEM'S DER I.D. N	NUMBER: 216	0064
PUBLIC WATER SYSTEM'S NAME:	Beacon	Hills
(MUST BE INCLUDED WITH SAMPLE :	SUBMITTAL)	

I do HEREBY CERTIFY that all data submitted are correct.

isharf Lewis

SIGNATURE NAME (PRINT) DATE

RICHARD LEWIS

DER/ACPHU REVIEWING OFFICIAL:

DATA SUBMITTAL (CHECK ONE) SATISFACTORY () UNSATISFACTORY () NOT PROPERLY IDENTIFIED ()

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PAGE 2	OF	6

 THORNTON LABORATORIES, INC.
 HI3

 MARINE, ANALYTICAL AND ENVIRONMENTAL SERVICES
 HI3

 1145 EAST CASS STREET, TAMPA, FLORIDA 33602
 TELEPHONE (813) 223-9702

 P.O. BOX 2880, TAMPA, FLORIDA 33601-2880
 TELEPHONE (813) 223-9702

 HRS, 84147
 HRS, E84100, E84324

 .21-Oct-1994
 Page 1

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LEAD TAP SAMPLE ANALYSIS AND RESULT RANKING REPORT

BEACON HILLS	Date Submitted to Lab:	6-0CT-1994
2160064	Analysis Date:	<u>17-Oct-1994</u>
Thornton Laboratories	Lab Analysis Method:	EPA 239.2
84147	Lead Analysis	
Richard Lewis	Method Detection Limit:	0.001 mg/L
(813) 223-9702	90th Percentile Value:	0.019 mg/L
	<u>2160064</u> Thornton Laboratories 84147 Richard Lewis	216 0064Analysis Date:Thornton LaboratoriesLab Analysis Method:84147Lead AnalysisRichard LewisMethod Detection Limit:

Rank	Location Code	Lab Sample ID	Date Site	Lead (Pb)
A (ascending)	No. Tier		Sampled	(mg/L)
1 2 3 4 5 6 7 6 7 8 8 8 8 8 8 8 10 10 12 12 13 14 15 16 16 17 19 19 20 21	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	885967 885968 885975 885975 885973 886008 885976 885976 885981 885981 885981 885988 885958 885958 885953 885955 886014 885956 885957 885957 885957 885957 885957 885959 885969 885966	$\begin{array}{c} 10 - 4 - 94 \\ \hline 9 - 27 - 94 \\ \hline 9 - 26 - 94 \\ \hline 9 - 26 - 94 \\ \hline 7 - 4 - 94 \\ \hline 7 - 26 - 94 \\ \hline 9 - 26 - 94 \\ \hline 7 - 5 - 94 \\ \hline 9 - 26 - 94 \\ \hline 7 - 5 - 94 \\ \hline 7 - 94 \\$	0 0 0 0.001 0.002 0.003 0.003 0.004 0.004 0.005 0.007 0.009 0.011 0.012 0.012 0.012 0.014 0.018 0.019 0.022 0.036 0.048

The action limit for Lead is 0.015 mg/L

Sample It BEGOIZ rANK I B was reported ON wrong plant ranking report.

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PAGE	3	_OF	6	

	THORNTON LABORATORIES, INC. MARINE, ANALYTICAL AND ENVIRONMENTAL SERVICES	
	1145 EAST CASS STREET, TAMPA, FLORIDA 33602 P.O. BOX 2880, TAMPA, FLORIDA 33601-2880 HRS# 84147 HRS# E84100, E84324	TELEPHONE (813) 223-9702 FAX (813) 223-9332
· · ·		21-Oct-1994

21-06t-1994 Page 1

COPPER TAP SAMPLE ANALYSIS AND RESULT RANKING REPORT

System Name:	BEACON HILLS	Date Submitted to Lab:	6-0CT-1994
PWS-ID:	2160064	Analysis Date:	18-Oct-1994
Laboratory:	Thornton Laboratories	Lab Analysis Method:	EPA 220.1
Lab-ID:	84147	Copper Analysis	
Contact:	Richard Lewis	Method Detection Limit:	0.05 mg/L
Phone:	(813) 223-9702	90th Percentile Value:	0.21 mg/L

Rank	Location Code	Lab Sample ID	Date Site	Copper (Cu)
A (ascending)	No. Tier		Sampled	(mg/L)
1	,	885948	9-26.94	0

	+		000040	1	0
	2		885968	9-27-94	0.06
	3	<u> </u>	885970	9-26-94	0.06
—	Ă		885973	- 7: 20.71	0.06
	4			9-26.94	
	5	t	885975	10-4-94	0.06
	6	i	885958	9-29-91	0.07
	-17				
—	-8		886014	10-5-94	0.07
	á		885981	10-5-94	0.08
		······································			
—	ee q		885955	10-1-94	0.09
	10	ŀ	885969	10-4-94	0.09
	12		885953	10.4.94	0.15
	11	<u> </u>	885956	9-26.94	0.16
	13		885964	9-26-94	0.16
	15		885967	10-4-94	0.16
	15 16	<u> </u>	885974	10-4-94	0.16
	16		885977	9-26-94	0.16
	178	·	885957	10.5-94	0.20
	18		885966	10-4-94	0.21
—	1 9		885976	10-4-94	0.49
	20		886008	10-25-94	1.37
	27		885982	9-26.94	2.98

The action limit for Copper is 1.3 mg/L

semple # 886012 ranking # 7 was reported on wrong plant ranking report.

APPENI	XIX	256-1	2	
PAGE	4	OF	6	

November 1994

Dear SSU customer:

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Thank you for participating in our recent program to determine Lead and Copper concentrations in your drinking water.

Samples were collected from 21 Beacon Hills SSU customers, 5 of the 21 residences exceeded the EPA "action level" of 0.015 ppm for Lead, and 2 of the 21 residences exceeded the EPA "action level" of 1.3 for Copper. For your information, a copy of the laboratory report for your home is enclosed.

We would like to continue to sample in your home for future studies with your permission. Since your home was on the original list of the sampling plan, you may remain on the program and will not be required to pay for this additional customer service.

A representative will be dropping off a bottle for our next sampling period when date is determined. Thank you for your cooperation.

If you have any specific questions on the sample report or any questions regarding the sampling plan for Lead and Copper, please call our Technical Services Department or Environmental Compliance Department at 1-800-423-4501. We will be glad to answer any questions you may have.

Thank you

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November 1994 PUBLIC SERVICE ANNOUNCEMENT

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that copper is a health concern at certain exposure levels. Copper, a reddishbrown metal, is often used to plumb residential and commercial structures that are connected to water distribution systems. Copper contaminating drinking water as a corrosion by-product occurs as a result of the corrosion of copper pipes that remain in contact with water for a prolonged period of time. Copper is an essential nutrient, but at high doses it has been shown to cause stomach and intestinal distress, liver and kidney damage, and anemia. Persons with Wilson's disease may be at a higher risk of health effects due to copper than the general public.

Public water systems must meet the EPA "action level" which requires that at least 90% of drinking water samples analyzed must have copper concentrations below 1.3 ppm. Southern States Utilities is required to notify you that the laboratory test on a water sample from inside your particular home did exceed 1.3 ppm for Copper. Attached is a copy of the laboratory analysis performed on the water sample collected in your home.

SSU will be performing a water corrosion control study to determine the best way to limit possible corrosive effects in home plumbing systems. Copper levels in your drinking water are likely to be highest if your home has copper piping and the water sits in the piping for several hours. Reduction of copper in your water can simply be accomplished by running the cold water tap for approximately 15 seconds.

Thank you for your participation in our lead and copper sampling program. With your permission, we would like to continue to collect water from your home in the future. If you have any questions regarding this Announcement, please feel free to call Southern States Utilities/Jacksonville office at 641-8332 and request to speak with our operations supervisor.

APPENDIX	256-F
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PAGE 6 OF 6

November 1994

PUBLIC SERVICE ANNOUNCEMENT

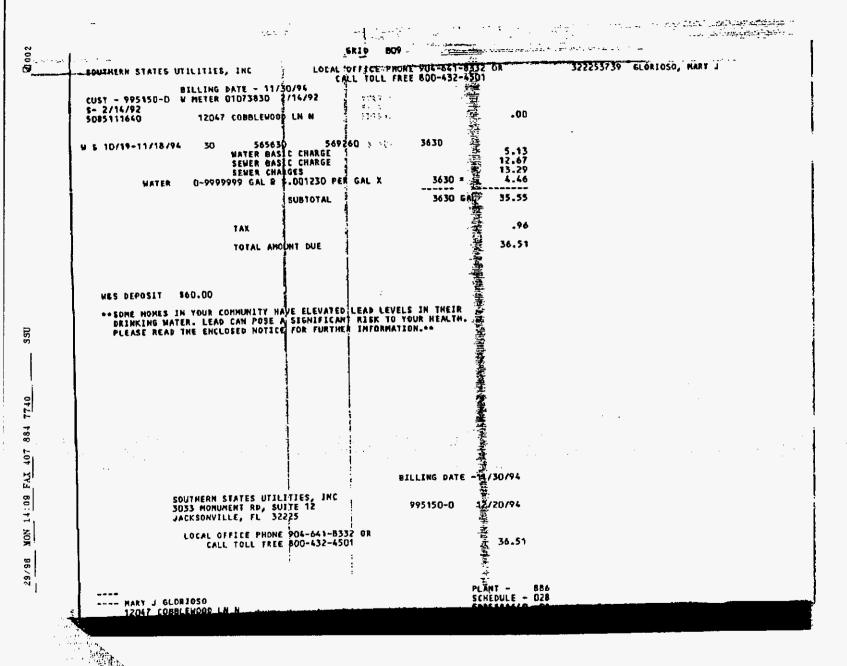
The Environmental Protection Agency has determined that Lead in high levels can be harmful to your health. Southern States Utilities has started a program to monitor and control levels of Copper and Lead in our drinking water. The results of your water sample collected from your home have exceeded the EPA "action level" for Lead. The attachments will help you understand Lead and the effects it has on people. Thank you again for participating in our study and feel free to call our Operations supervisor at 641-8332 and we will be glad to speak with you.

APPENDIX_______OF_____

	Lead & Copp	er Summary S	heet			
System Name: Beacon	Hills	Plant #: 886	5 PW	'S ID #	2160064	
Regulating Agency Du	val County	SSU Region:	Nort	n		
Sampling Plan Submitted		County: D	uval			
Sampling Period:	June 94 - Sept 94	Sample Date	:	9/26/94	4 - 10/5/94	
Sample Results:	# of exceedanc	es / # of Sampl	es	W	as 90% Exceeded	
Lead	5	/ 21			Yes	
Copper	2	/ 21			No	
90% was exceeded for lea	ad - was the following co	ompleted:	Date Requ		Date Completed	
Water Quality Parameters			12/31/	94	prior to 12/06/94	
Individual Customer Not		sing)	12/21/	'94	11/94	
Insert notices in each cus			12/21/		11/30/94	
Submit the information e	ditorial departments of n	ewspapers	12/21/		05/02/95	
Deliver pamphlets or bro			12/21/		05/03/95	
Submit the public service			12/21/		05/02/95	
Corrosion Control Study		aluation)	04/24/		03/03/95	
Sampling Period:	Jan 95 - June 95	Sample Date			5-09/29/95	
Sample Results:	# of exceedanc					
Lead		/ 40	No			
Соррег		/ 40			No	
Sampling Period:	Jan 96 - June 96	Sample Date		03/28/		
Sample Results:	# of exceedanc		les	Was 90% Exceeded		
Lead		/ 50			Yes	
Copper		/ 50			No	
If 90% was exceeded for	lead was the following c	ompleted:	Date Req		Date Completed	
Water Quality Parameter	s (WQP)		06/30/			
Individual Customer Not			05/31/		05/17/96	
Insert notices in each cus		05/31/96		05/20/96		
Submit the information e		ewspapers	05/31/		05/20/96	
Deliver pamphlets or bro			05/31/		**	
Submit the public service			05/31/		05/20/96	
Corrosion Control Study	Completed (Desktop Ev	aluation)	N/A			

** Will be completed by 05/28/96.

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APPENDIX 25(a++

PAGE____

•	APPENDIX 2013-I
SSU	PAGEOF
	 1000 Color Place Apopka, FL 32703 407/880-0058

May 3, 1995

Mr. Chris C. Carter, Environmental Specialist III HRS Duval County Public Health Unit Environmental Health/Engineering Division 900 University Boulevard North 900 Bldg/Ste. 300 Jacksonville, Florida 32211

RE: Non-Compliance Letter Beacon Hills PWS ID#2160064 dated 4/26/95

Dear Mr. Carter.

Please be advised that your letter was received on May 2, 1995 by Mr. Rafael A. Terrero. In accordance with the stipulations of your letter regarding our public education complaince, I am providing the following information.

- On Monday, May 1, all residents of Beacons Hills affected by the lead advisory were mailed a copy of the attached lead brochure, which received final approval from your office on Thursday, April 27.
- On Tuesday, May 2, a news release was mailed to the Florida Times Union along with a copy of the approved lead advisory brochure. A copy of the release is attached.
- On Tuesday, May 2, a letter and public service advisory were sent to WAPE, WROO, WJKS, WJXT and WTLV broadcast stations along with a copy of the approved lead advisory brochure and the news release.
- On Wednesday, May 3, a letter was sent to Ms. Catherine Jones at Hidden Hills Learning Center along with a copy of the news release and copies of the approved lead advisory brochure for distribution to parents. A copy of that letter is attached.

Please advise if we need to take further actions in order to comply with the public education requirements in Duval County.

Sincerely,

Donald Holcomb Lead Operator III Teresa K. Ingram Communications Administrator

WATER FOR FLORIDA'S FUTURE

Southern States Utilit

APPENDIX 256-I

MAGE 2 OF 4

ies • 1000 Color Place • Apopka, FL 32703 • 407/880-0058

Contact: Tracy Smith (407) 880-0058

FOR IMMEDIATE RELEASE

Southern States Utilities Issues Lead Advisory **To Beacon Hills Water Customers**

APOPKA, FL, May 1, 1995 -- The Environmental Protection Agency and Southern States Utilities (SSU) are concerned about lead in drinking water in one Jacksonville area community. In accordance with required lead sampling protocol, samples were taken at various locations around the Beacon Hills community after the water had been stagnant for at least six hours.

Although most of the 21 random sampling locations in that SSU service area had very low levels, five locations measured at higher than 15 parts per billion, or 0.015 milligrams of lead per liter of water (mg/l), which is the designated "action level." The analytical results for the samples that exceeded the action level are as follows:

Location	<u>Result/(Mg/1)</u>
11267 Harbour Woods South	0.018
11401 Portside	0.019
4355 Fulton	0.048
4616 Charles Bennett	0.036
11253 Harbour Woods	0.022

SSU has mailed an informational brochure that outlines the nature of the advisory to all customers in the affected area. The material outlines what steps should be taken to minimize, test for, or eliminate exposure (see attachment).

(continued)

WATER FOR FLORIDA'S FUTURE

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PAGE_	3	OF	4	

Page Two -- Beacon Hills Lead Advisory

What Customers Should Know About Lead In Drinking Water

Under federal law, SSU is required to have a program in place to minimize lead in drinking water by January 1997. This program includes corrosion treatment, source water treatment, and public education. If customers have any questions or how Southern States Utilities is carrying out the requirements of the lead regulation, please call the SSU Customer Service Office at 1-800-432-4501.

Health Effects of Lead

Lead is a common, natural and often useful metal found throughout the environment in lead-based paint, air, soil, household dust, food, porcelain, water, and certain types of pottery. Lead can pose a significant risk to human health if too much of it enters the body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells, and kidneys.

The greatest risk is to young children and pregnant women. Amounts of lead that will not hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination such as dirt and dust that rarely affect an adult. It is important to wash children's hands and toys often and try to ensure that children only put food in their mouths.

Lead In Drinking Water

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water.

(continued)

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Page Three -- Beacon Hills Lead Advisory

The Environmental Protection Agency (EPA) estimates that drinking water can make up to 20 percent or more of a person's total lead exposure. Lead seldom occurs naturally in drinking water supplies such as rivers and lakes, but enters the drinking water systems primarily as a result of corrosion of materials in the distribution system or household plumbing that contain lead. These materials include lead-based solder used to join copper pipe made with lead that connect homes in the service lines.

In 1986, Congress banned the use of lead-based solder containing greater than .2 percent lead and restricted the lead content of faucets, pipes, and other plumbing materials to .8 percent. When water stands for several hours or more in lead pipes or plumbing systems containing lead, the lead may dissolve into the water. This means that the first water drawn from the tap in the morning or late in the afternoon after returning from work or school can contain fairly high levels of lead. Therefore, customers are advised to let the water run from the cold water for 15 to 30 seconds before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours.

For additional information regarding the sampling results or for a brochure on how to reduce exposure to lead in drinking water, call the SSU Customer Service Office at 1-800-432-4501.

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PPENDIX 25(-)

LEAD TAP SAMPLE ANALYSIS BEACON HILLS AND COBBLESTONE

Date Submitted to Lab: Lab Analysis Method; Method Detection Limit: Lead Action Level:

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3/22/96 and 3/28/96 EPA 200.9 0.001 mg/L 0.015 mg/L

		SAMPLE		DATE	LEAD	COPPER
	TIER	NUMBER	LOCATION	SAMPLED	mg/L	mg/L
<u>A</u>	HER	BC00678	144-12120 Famsworth	3/12/96		. <u></u>
		BC00678	152-3228 Pathway	3/27/96	<0.001	
		BC00773	25-11841 Valley Garden	3/27/96	<0.001	
		BC00775	254-3945 Holiaws	3/27/96	<0.001	
		BC00778	142-12065 Candlewick	3/27/96	<0.001	
		BC00784	40-4611 Fulton	3/27/96	<0.001	
			31-11341 Harbor Wood s	3/27/96	<0.001	
		BC00792	26-11818 Founders Cove	3/27/96	<0.001	
	ļ	BC00793	187-4044 Arbor Lake	3/12/96	0.001	
	 	BC00658	189-3962 Hollows	3/12/96	0.001	
	ļ	BC00661	135-12139 Chippinham	3/12/96	0.001	
		BC00674	132-12248 Chippinham	3/12/96	0.001	
	 _	BC00676	143-12123 Balfour Ct	3/12/96	0.001	
ļ		BC00677	150-3127 Roundham	3/12/90	0.001	
		BC00679	124-3311 Brackberry	3/12/9	5 0.001	
	<u> </u>	BC00681	149-11883 Hidden Hills	3/12/9	5 0.001	
		BC00683	257-11962 Harbor Cove	3/27/9	6 0.001	
		BC00772		3/27/9	8 0.001	
		BC00774	30-3924 Valley Garden	3/12/9	6 0,001	
		BC00713	177-4626 Morris 27-11725 Seaview	3/27/9	6 0.001	
		BC00794	157-11672 Brushridge	3/12/9	6 0.00	2
		BC00663		3/12/9	6 0.002	2
Ĺ		BC00569	127-2724 Moorsefield	3/12/9	_	2
		BC00672	128-2826 Moorsefield	3/12/5	0.00	2
۹ 🗌		BC00675	133-12155 Chippenham	3/12/		2
· [BC00680	153-3138 Pathway	3/12/		2
		BC00682	151-3208 Southwell	3/12/		2
^ 🗌		BC00684	148-11904 Hidden Hills	3/27/	_	2
1		BC00769	181-3992 High Pine	3/27/		12
×Γ		BC00776	179-3970 High Pine Rd	3/27/		02
.» [BC00781	258-12469 Anesworth	3/12		12
$\langle [$		BC00687	100-11523 Starboard	3/12	/96 0.00	2
ŗ.[_		BC00699	161-4408 Monument Rd	3/12		02
55		BC00700	175-4420 Monument	3/12	_	02
4		BC00701	163-4544 Monument	3/12		02
-5		BC00707	115-11441 Portside	3/12		02
4.		BC00717	173-4571 Historical Trall	3/12		102
~! F	_	BC00718	176-4834 Mariners 41-4848 Charles Bennett	3/2		

 $\begin{array}{c} \text{APPENDIX} \quad 25(6-) \\ \text{PAGE} \quad 2 \quad \text{OF} \quad (6-1) \\ \end{array}$

LEAD TAP SAMPLE ANALYSIS BEACON HILLS AND COBBLESTONE

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_		SAMPLE		DATE	LEAD mg/L	mg/L
A	TIER	NUMBER	LOCATION	SAMPLED	_	
$\frac{2}{1}$		BC00785	47-11559 Starboard	3/27/96	0.002	
_ 		BC00786	44-4631 Monument Point	3/27/96		
		BC00659	180-4051 Arbor Lake	3/12/96	0.003	
		BC00660	183-11964 Harbor Cove	3/12/96	0.003	
		BC00671	147-4002 Redford	3/12/96	0.003	
	┣────	BC00780	255-12453 Anesworth	3/27/96	0.003	
		BC00689	139-4513 Charles Bennett	3/12/96	0.003	
	<u> </u>	BC00686	101-4659 Fulton Rd	3/12/96	0.003	
		BC00706	118-11414 Portside Dr	3/12/96	0.003	
	┼───	BC00708	190-4516 Bluff	3/12/96	0.003	
		BC00708	152-4647 Bluff	3/12/96	0.003	
	ļ	BC00710	103-4671 Bluff	3/12/96	0.003	
		BC00712	121-4604 Morris	3/12/96	0.003	
			111-11350 Honey Tree	3/12/98	0,003	·
	<u> </u>	BC00714 BC00716	140-11625 Jonathon	3/12/96		
			174-5054 Mariners	3/12/96	0.003	<u> </u>
_	<u> </u>	BC00719	171-11466 Sweet Cherry	3/12/96	0.003	3
		BC00722	195-11472 Sweet Cherry Ln	3/12/98	0.00	3
		BC00723	129-2818 Moorsefield	3/12/96	0.00	4
L		BC00670	146-11622 Sherborne	3/12/96	0.00	4
		BC00685	155-12014 Cobblewood	3/27/98	0.00	4
	_	BC00777	145-11869 Hidden Hills	3/27/9	0.00	4
		BC00782	141-4428 Charles Bennett	3/12/9	0.00	4
		BC00688	122-4832 Charles Bennett	3/12/9	5 0.00	4
Ĺ		BC00694	136-11350 Beacon Dr	3/12/9	6 0.00	<u>ه</u>
		BC00721	46-4661 Monument	3/27/9	6 0.00	4
		BC00787	105-4041 Arbor Lake	3/12/9	6 0.00	5
		BC00657	188-3964 High Pine	3/12/9	6 0.00	05
'L		BC00662	185-12041 Candlewick	3/12/9		05
		BC00667	107-4635 Charles Bennett Dr	3/12/9		05
۱L		BC00693	107-4635 Chanes Berner D. 113-4625 Fulton Rd	3/12/5	6 0.0	05
		BC00697	158-3058 Cobbiewood	3/12/9	96 0.0	06
۹۲	_	BC00686	134-2623 Moorsefield	3/12/	36 0.0	06
		BC00668	102-4611 Monument Rd	3/12/	96 0.0	06
νL		BC00724	118-11401 Portside Dr	3/12/	96 0.0	06
۶L		BC00705	182-4031 Smokeridge	3/12/	96 0.0	07
×4 [BC00664	256-12038 Arbor Lake	3/27/	96 0.0	07
<u>۲</u> ۰ [BC00771	120-4613 Charles Bennett	3/12/	96 0.0	707
~• [BC00690	108-4509 Fulton Rd	3/12	96 0.(007
ΥĽ		BC00696	33-11267 Harbor Wood Rd s	3/27		007
5		BC00791	154 12012 Cobblewood	3/12	/96 0.	009
\sim		BC00665	154 12012 Cabblewood 117-11333 Portside	3/12	/96 0,	009
ခုသ		BC00704	106-12160 Ft. Caroline	3/12	/951 0.	009

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APPENDIX <u>256</u>

LEAD TAP SAMPLE ANALYSIS BEACON HILLS AND COBBLESTONE

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	r					DATE	LEAD	COPPER
			TIER	SAMPLE NUMBER	LOCATION	SAMPLED	mg/L	mg/L
		<u> </u>			36-4620 Bluff	3/27/96	0.009	
	2			BC00788	112-4721 Fulton Rd	3/12/96	0.010	
	₹7			BC00698	45-4658 Bluff Rd	3/27/96	0.010	
1	84			BC00789	123-4642 Bluff	3/12/96	0.022	
1	^ر د			BC00709	137 4355 Fulton Rd	3/12/96	0.024	
	<i>و</i> اره		L	BC00695	253-2671 Moorsefield	3/27/96	0.025	
ļ.	4 ¹			BC00779	110-4627 Charles Bennett Dr	3/12/96	0.029	
	27		ļ	BC00692		3/12/96	0.040	
	59		L	BC00720	192-11251 River Knoll	3/12/96	0.042	
	80			BC00703	114-11267 Portside Dr	3/12/96	(0.355	
	al			BC00691	138-4616 Charles Bennett	3/12/30		L,

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COPPER CUSTOMER TAP SAMPLE ANALYSIS BEACON HILLS AND COBBLESTONE

3/22/96 and 3/28/96 Date Submitted to Lab: SM3111B Lab Analysis Method: 0.02 mg/L Method Detection Limit: 1.30 mg/L Copper Action Level:

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		SAMPLE		DATE	LEAD	COPPER
А	TIER	NUMBER	LOCATION	SAMPLED	mg/L	mg/L
T		BC00666	158-3058 Cobblewood	3/12/96		<0.02
-+		BC00770	152-3228 Pathway	3/27/96		<0.02
	··-	BC00703	114-11267 Portside Dr	3/12/96		<0.02
		BC00717	173-4571 Historical Trail	3/12/96		<0.02
		BC00697	113-4625 Fulton Rd	3/12/96		0.0
		BC00699	151-4408 Monument Rd	3/12/96		0.
		BC00704	117-11333 Portside	3/12/96		0.
		BC00674	135-12139 Chippinham	3/12/96		0.
	<u> </u>	BC00723	195-11472 Sweet Cherry Ln	3/12/96		0.
	<u> </u>	BC00662	188-3964 High Pine	3/12/96		0.
		BC00771	256-12038 Arbor Lake	3/27/96		
	<u> </u>	BC00773	25-11841 Valley Garden	3/27/96		0.
	<u> </u>	BC00690	120-4613 Charles Bennett	3/12/96		0
		BC00692	110-4627 Charles Bennett Dr	3/12/96		0
		BC00687	100-11523 Starboard	3/12/96		0
		BC00700	175-4420 Monument	3/12/96		0
	<u> </u>	BC00713	177-4626 Morris	3/12/96		0
		BC00772	257-11962 Harbor Cove	3/27/96		0
	-	BC00774	30-3924 Valley Garden	3/27/96		
	+	BC00715	106-12160 Ft. Caroline	3/12/96		
	+	BC00792	31-11341 Harbor Wood s	3/27/96		
	+	BC00698	112-4721 Fulton Rd	3/12/96		
		BC00721	136-11350 Beacon Dr	3/12/96		
	1	BC00793	26-11818 Founders Cove	3/27/96		
<u> </u>	1	BC00706	118-11414 Portside Dr	3/12/96		
	+	BC00710	162-4647 Bluff	3/12/96		
┢		BC00701	163-4544 Monument	3/12/96	1	
—		BC00709	123-4642 Bluff	3/12/96	<u> </u>	
-	-	BC00722	171-11456 Sweet Cherry	3/12/96		
		BC00672	128-2826 Moorsefield	3/12/96		
		BC00705	116-11401 Portside Dr	3/12/96		
		BC00784	40-4611 Fulton	3/27/96		
	-	BC00680	153-3138 Pathway	3/12/96		
E		BC00695	137 4355 Fulton Rd	3/12/96		
		BC00791	33-11267 Harbor Wood Rd s	3/27/96		
,⊢		BC00684	148-11904 Hidden Hills	3/12/96	-	
ηĹ		BC00785	47-11559 Starboard	3/27/96		
	1 -	BC00718	176-4834 Mariners	3/12/9	인	

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COPPER CUSTOMER TAP SAMPLE ANALYSIS BEACON HILLS AND COBBLESTONE

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		SAMPLE		DATE	LEAD	COPPER
A	TIER	NUMBER	LOCATION	SAMPLED	mg/L	mg/L
		BC00693	107-4635 Charles Bennett Dr	3/12/96		0.1
		BC00686	101-4659 Fulton Rd	3/12/96		0.1
		BC00725	103-4671 Bluff	3/12/96		0,
	[BC00688	141-4428 Charles Bennett	3/12/96		0.1
	<u> </u>	BC00657	105-4041 Arbor Lake	3/12/96		0.1
	<u> </u>	BC00780	255-12453 Anesworth	3/27/96		0.
 		BC00786	44-4631 Monument Point	3/27/96		0.
<u> </u>		BC00769	181-3992 High Pine	3/27/96		0.
	1	BC00712	121-4604 Morris	3/12/98		0,
—		8C00667	165-12041 Candlewick	3/12/96		0.
<u> </u>		BC00679	150-3127 Roundham	3/12/96		0.
	1	BC00778	142-12065 Candlewick	3/27/96		0.
-		BC00779	253-2671 Moorsefield	3/27/96		0.
<u>├</u> ──	1	BC00789	45-4658 Bluff Rd	3/27/96		0.
		BC00794	27-11725 Seaview	3/27/96		0.
-		BC00665	154 12012 Cobblewood	3/12/96		0.
	1	BC00719	174-5054 Mariners	3/12/96		0.
<u> </u>	1	BC00696	108-4509 Fulton Rd	3/12/96		0.
-		BC00708	190-4515 Bluff	3/12/96		0
	1	BC00787	48-4661 Monument	3/27/96		0.
-		BC00676	132-12248 Chippinham	3/12/96		0.
-		800681	124-3311 Brackberry	3/12/96		0
		BC00714	111-11350 Нопеу Тлее	3/12/96		0.
		8000660	183-11964 Harbor Cove	3/12/96		0
	1	BC00707	115-11441 Portside	3/12/96		0
	1	BC00783	41-4848 Charles Bennett	3/27/96		0
	1	BC00781	258-12469 Anesworth	3/27/96		0
		BC00670	129-2818 Moorsefield	3/12/96		0
		BC00675	133-12155 Chippenham	3/12/96		0
		BC00669	127-2724 Meorsefield	3/12/96		0
		BC00683	149-11883 Hidden Hills	3/12/96		0
	1	BC00788	36-4620 Bluff	3/27/96		0
		BC00720	192-11251 River Knoll	3/12/96		0
		BC00691	138-4615 Charles Bennett	3/12/96		0
		BC00694	122-4832 Charles Bennett	3/12/96		
		BC00782	145-11869 Hidden Hills	3/27/96		
5		BC00682	151-3208 Southwell	3/12/96		
0		BC00716	140-11625 Jonathon	3/12/96		
		BC00775	254-3945 Hollows	3/27/96		
		BC00685	148-11622 Sherborne	3/12/96		
1		BC00661	189-3962 Hollows	3/12/96		
		BC00777	155-12014 Cobblewood	3/27/98		
-		BC00658	187-4044 Arbor Lake	3/12/96		1

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COPPER CUSTOMER TAP SAMPLE ANALYSIS BEACON HILLS AND COBBLESTONE

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Page 3

		SAMPLE		DATE	LEAD	COPPER
A	TIER	NUMBER	LOCATION	SAMPLED	mg/L	mg/L
$\frac{1}{1}$		BC00677	143-12123 Balfour Ct	3/12/96		1.22
-+		BC00776	179-3970 High Pine Rd	3/27/96		1.27
-+		BC00668	134-2623 Moorsefield	3/12/96		1,31
	·	BC00671	147-4002 Redford	3/12/96		1.39
		BC00663	157-11672 Brushridge	3/12/96		1.45
		BC00664	182-4031 Smokeridge	3/12/96		1.50
		BC00689	139-4513 Charles Bennett	3/12/96		1.50
+		BC00659	180-4051 Arbor Lake	3/12/96		1.5
+		BC00678	144-12120 Farnsworth	3/12/96		1.7
		BC00724	102-4611 Monument Rd	3/12/96		2.0

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INDIVIDUAL CUSTOMER LETTERS

BEACON HILLS/COBBLESTONE LEAD AND COPPER SAMPLING FIRST QUARTER, 1996

Below act	tion level
for lead	
APPENDIX	256-K
PAGE	_OF_14

May 17, 1996

«CustName» «Address1» Jacksonville, Florida 32225

Re: Lead and Copper Sampling Program

Dear «CustLastName»:

Thank you for participating in our most recent water sampling program to determine lead and copper concentrations in the tap water in your home. You were one of nearly 100 SSU customers from the Beacon Hills/Cobblestone areas who assisted in the test.

The results of the sampling showed that the vast majority of homes, including yours, were within acceptable limits for lead and copper. That good news, because the sampling techniques are intended to create a "worst case" situation -- one in which the greatest potential for concentrations of lead and copper will be collected from the plumbing. The results of the sample collected from your home are a follows:

Lead «Lead» milligrams per liter (EPA action level = 0.015 milligrams per liter) Copper «Copper» milligrams per liter (EPA action level = 1.3 milligrams per liter)

In accordance with the U. S. Environmental Protection Agency (EPA), the Florida Department of Environmental Protection, and HRS Duval County Public Health Unit requirements, the action levels for lead and copper are exceeded when more than 10 percent of tap samples collected are above the 0.015 mg/l for lead or 1.3 mg/l for copper.

Although your home was below the action level, as a general precaution, we recommend that the following steps be taken in regarding to drinking water:

- 1. Let the water run for up to 60 seconds prior to use for drinking or cooking, especially when the water faucet has not been used for six or more hours. This "flushing" will greatly reduce the concentration of any metals from the plumbing. We recommend that you collect this water for other uses, such as watering house plants.
- 2. Only use water from the cold water tap for drinking or cooking.

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Lead and Copper Sampling Program - page 2

For your information, we have enclosed a brochure that gives additional information regarding the health effects of lead and additional steps you can take to reduce your exposure to lead.

As a result of earlier testing, Southern States Utilities installed additional treatment facilities in the Beacon Hills/Cobblestone area in January 1996 to reduce lead and copper corrosion. It is expected that the treatment will take several additional months to become fully effective. The most recent sampling was conducted to measure the progress of the newly installed equipment. We will keep customers apprised of the progress over time.

Again, thank you for your participation and assistance. If you have any specific questions, please call us at 1-800-432-4501.

Sincerely,

Karla Olson Teasley, Vice President Southern States Utilities, Inc.

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PENDIX	256-1	\leq

		P	AGE	- OF
CustName	Address1	CustLastName	Lead	Copper
Mr. Raymond A.	4571 Historical Trail Cv	Mr. Matheny	0.002	0.00
Matheny		<u>_</u>		
D. C. Thompson	4625 Fulton Road	D. C. Thompson	0.005	0.02
R. C. Carter	4408 Monument Pt Drive	R. C. Carter	0.002	0.02
Mr. Lang D. Mikell	11333 Portside Drive	Mr. Mikell	0.009	0.02
J. L. Teague	4620 Bluff Avenue	J. L. Teague	0.009	0.02
Ms. Carol Wheeler	4658 Bluff Avenue	Ms. Wheeler	0.010	0.02
Dr. P. F. Wubbbena, Jr.	11267 Harbour Woods Road S.	Dr. Wubbena	0.007	0.02
Ms. Donna Gallagher	11341 Harbour Woods Road S.	Ms. Gallagher	0.000	0.02
Mr. James A.	11818 Founders Cove	Mr. WeetenKamp	0.000	0.02
Weetenkamp Mr. Gary L. Massar	11725 Seaview Drive	Mr. Massar	0.001	0.02
Mr. Larry D. Jones	11472 Sweet Cheery Lane S	Mr. Jones	0.003	0.03
R. H. Aprile	11523 Starboard Drive	R. H. Aprile	0.002	0.04
Mr. Thomas H. Williams	4613 Charles Bennett Drive	Mr. Williams	0.007	0.04
Mr. Richard Price	4420 Monument Point Drive	Mr. Price	0.002	0.04
Ms. Deborah Baker	4626 Morris Road	Ms. Baker	0.001	0.04
Hidden Hills Learning Tree	12160 Fort Caroline Road	Customer	0.009	0.05
Ms. Donna Ruark	4721 Fulton Road	Ms. Ruark	0.010	0.06
R. L. Martin	11350 Beacon Drive	R. L. Martin	0.004	0.06
Mr. Leland Brewsaugh	11414 Portside Drive	Mr. Brewsaugh	0.003	0.07
Mr. Kevin Merrill	4647 Bluff Avenue	Mr. Merrill	0.003	0.08
Mr. William Randolph	4544 Monument Point Drive	Mr. Randolph	0.002	0.09
Ms. Karen W. Duncan	11466 Sweet Cherry Lane S.	Ms. Duncan	0.003	0.09
Mr. Charles Kiseljack	11401 Portside Drive	Mr. Kiseljack	0.006	0.10
Mr. Lloyd Shipman	4611 Fulton Road	Mr. Shipman	0.000	0.10
Mr. William T. Morrison	11559 Starboard Drive	Mr. Morrison	0.002	0.15
Mr. Randy Allen	4834 Mariners Point Drive	Mr. Allen	0.002	0.16
Mr. Ernest Hermann	4659 Fulton Road	Mr. Hermann	0.003	0.17
Ms. Elaine Scanlon	4635 Charles Bennett Drive	Ms. Scanlon	0.005	0.17
Mr. Sean Thompson	4671 Bluff Avenue	Mr. Thompson	0.003	0.17
Mr. Dennis Bailey	4428 Charles Bennett Drive	Mr. Bailey	0.004	0.18
Mr. Lynwood O. Mercer	4631 Monument Point Drive	Mr. Mercer	0.002	0.19
J. D. Hufham	4604 Morris Road	J. D. Hufham	0.003	0.21

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HAGE 5_OF 4

CustName	Address1	CustLastName	Lead	Copper
Mr. Gordon Amidon, Jr.	5054 Mariners Point Drive	Mr. Amidon	0.003	0.27
Mr. Donald Rowe	4509 Fulton Road	Mr. Rowe	0.007	0.29
Mr. Charles Belcher	4516 Bluff Avenue	Mr. Belcher	0.003	0.31
Mr. Ronald L. Delucia	4661 Monument Point	Mr. Delucia	0.004	0.31
	Drive			
Mr. Richard Reed, Jr.	11350 Honeytree Lane N.	Mr. Reed	0.003	0.32
J. M. Davis	11441 Portside Drive	J. M. Davis	0.002	0.41
Mr. Robert E. Estlund	4848 Charles Bennett Drive	Mr. Estlund	0.002	0.41
Mr. Randy C. Townsend	4832 Charles Bennett Drive	Mr. Townsend	0.004	0.59
Mr. Scott Palmer	11625 Jonathan Road	Mr. Palmer	0.003	0.87
Ms. Lydia Richardson	3058 Cobblewood Lane	Ms. Richardson	0.006	0.00
	West			
Mr. David Honeyman	3228 Pathway Ct	Mr. Honeyman	0.000	0.00
R. H. Wiswell	12139 Chippenham Ct.	R. H. Wiswell	0.001	0.03
Mr. Scott MacGregor	3964 High Pine Road	Mr. MacGregor	0.005	0.04
Ms. Lucretia A. Brown	12038 Arbor Lake Drive	Ms. Brown	0.007	0.04
Mr. William D. Sickles	11841 Valley Garden Drive	Mr. Sickles	0.000	0.04
Mr. Vincent G. Sams	11962 Harbour Cove Drive	Mr. Sams	0.003	0.05
	South			-
Mr. Charles Wrona	3924 Valley Garden Drive	Mr. Wrona	0.001	0.05
	West			
Mr. Don Jackson	2826 Moorsfield Lane	Mr. Jackson	0.002	0.10
Ms. Jacquelyn H.	3138 Pathway Ct	Ms. Bouknight	0.002	0.11
Bouknight				
Mr. David Bennett	11904 Hidden Hills Drive	Mr. Bennett	0.002	0.12
Mr. Jack McDonough	4041 Arbor Lake Drive	Mr. McDonough	0.005	0.18
	West			
Mr. Mark Riskin	12453 Anesworth Ct.	Mr. Riskin	0.003	0.18
Mr. Segundo Llamado	3992 High Pine Road	Mr. Llamado	0.002	0.21
Ms. Mary K. Sullivan	12041 Candlewyck Lane	Ms. Sullivan	0.005	0.22
Mr. William Urbannski	3127 Roundham Lane N.	Mr. Urbanski	0.001	0.24
Mr. Tomas Toomey	12065 Candlewyck Lane	Mr. Toomey	0.000	0.25
Ms. Jean Stoll	12012 Cobblewood Lane	Ms. Stoll	0.009	0.27
	N.			
Ms. Maria Degado	12248 Chippenham Ct.	Ms. Degado	0.001	0.32
Mr. Charles E. Hickman	3311 Brackenbury Lane	Mr. Hickman	0.001	0.32
Mr. Ralph F. Mears	11964 Harbour Cove Drive	Mr. Mears	0.003	0.36
	S.			
Ms. Laura Foss	12469 Anesworth Ct.	Ms. Foss	0.002	0.42
Ms. Mary Jean Wallis	2818 Moorsfield Lane	Ms. Wallis	0.004	0.43
Mr. Kelly H. Wilck	12155 Chippenham Ct.	Mr. Wilck	0.002	0.46
Mr. Gary Bibeau	2724 Moorsfield Lane	Mr. Bibeau	0.002	0.49

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CustName	Address1	CustLastName	Lead	Copper
Mr. Tommie Reese	11883 Hidden Hills Drive	Mr. Reese	0.001	0.50
Mr. James M. Ullery	11869 Hidden Hills Drive	Mr. Ullery	0.004	0.65
Mr. Yury Kovalenco	3208 Southwell Ct.	Mr. Kovalenco	0.002	0.67
Mr. William Gay	3945 Hollows Drive	Mr. Gay	0.000	0.89
Mr. Bob Powell	11622 Sherborne	Mr. Powell	0.004	0.95
Ms. Dorothy De Francis	3962 Hollows Drive	Ms. De Francis	0.001	0.96
Mr. Leslie J. Personeus	12014 Cobblewood Lane N.	Mr. Personeus	0.004	0.99
Mr. William J. Gray	4044 Arbor Lake Drive West	Mr. Gray	0.001	1.13
Mr. Fermin Bautista	12123 Balfour Ct.	Mr. Bautista	0.001	1.22
W. E. Causey	3970 High Pine Road	W. E. Causey	0.002	1.27

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Exceeded Copper
action level
Cobblestone
APPENDIX 256K
AGEOF4

May 17, 1996

«CustName» «Address1» Jacksonville, FL 32225

Re: Southern States Utilities Lead and Copper Sampling Program

Dear «CustLastName»:

Thank you for participating in our recent program to determine lead and copper concentrations in the tap water in your home. Samples were collected from a total of forty-three homes in the general area of Cobblestone. Of those tested, seven homes, including yours, had water samples that are above the 1.3 milligram per liter limit used to calculate the action level for copper, and one home had a sample that exceeded the 0.015 milligram per liter limit used to calculate the action level for calculate the action level for lead. The results of the sample collected from your home are as follows:

Lead	«Lead» mg/l	
Copper	«Cooper» mg/l	

Although there are no acute health effects related to elevated copper levels, we recommend that the following precautions be taken:

- 1. Let the water run for up to 60 seconds prior to use for drinking or cooking. This is especialy important when the water has not been used for over 6 hours. This "flushing" will greatly reduce the concentration of lead or copper in the water. We suggest that you capture this water for other uses, such a watering house plants.
- 2. Use only water from the cold water tap for drinking or cooking.

These simple steps will minimize your exposure to copper or lead from your drinking water. The attached brochure gives additional information regarding the health effects of lead and offers additional steps you can take to reduce your exposure to lead.

Remember, the sampling techniques used are intended to create a "worst case" situation -one in which the greatest potential for concentrations of lead and copper will be collected from the plumbing.

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Lead and Copper Sampling - page 2

In accordance with USEPA, Florida Department of Environmental Protection, and HRS Duval County Public Health Unit Requirements, the "action levels" for lead and copper referred to above are exceeded when the concentration of lead or copper is greater than 0.015 mg/l or 1.3 mg/l, respectively for lead and copper, for more than 10 percent of tap samples collected during any monitoring period. During this monitoring period, the action level was exceeded for lead in the area served by the Beacon Hills Water Treatment Plant, and the action level for copper was exceeded for the area served by the Cobblestone water treatment plant.

When the action level is exceeded for two consecutive monitoring periods, the water supplier (SSU) is required to implement a program of treatment to reduce lead or copper concentrations at the homeowners' tap. SSU installed treatment in January, 1996 to reduce lead and copper corrosion, as required by law. It is expected that the treatment will take several months to be effective. The last sampling event was conducted to measure the progress of the newly installed treatment. We will keep you apprised of the progress of the treatment.

Thank you again for your assistance with the sampling program.

Sincerely:

Karla Olson Teasley, Vice President Southern States Utilities, Inc.

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CustName	Address1	CustLastName	Lead	Cooper
Mr. Arturo Devera	2623 Moorsfield Lane	Mr. Devera	0.006	1.31
Mr. Kyle M. Waites, Jr.	4002 Retford Drive	Mr. Waites	0.003	1.39
Mr. Alan R. Paquette	11672 Brushridge Circle S.	Mr. Paquette	0.002	1.45
Mr. Ray J. Cristman	4031 Smoke Ridge Circle E.	Mr. Cristman	0.007	1.50
Mr. Steve D. Duncan	4051 Arbor Lake Drive W.	Mr. Duncan	0.003	1.52
Mr. Alton L. Whitehead	12176 Safeshelter Drive S.	Mr. Whitehead	0.000	1.55
Mr. Mark Trauthwein	12120 Farnsworth Ct.	Mr. Trauthwein	0.000	1.71
Ms. Barb Klinger	2671 Moorsfield Lane	Ms. Klinger	0.025	0.25

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Exce	edal	kad	or
Copp	er i	action	levels
_		Hills	
APPEND	ых	25e	K
AGE	10	OF	14

May 17, 1996

«CustName» «Address1» Jacksonville, FL 32225

Re: Southern States Utilities Lead and Copper Sampling Program

Dear «CustLastName»:

Thank you for participating in our recent program to determine lead and copper concentrations in the tap water in your home. Samples were collected from a total of fifty homes in the service area for the Beacon Hills Water Treatment Plant. Of those tested, two homes had water samples that are above the 1.3 milligram per liter limit used to calculate the action level for copper, and seven homes had samples that exceeded the 0.015 milligram per liter limit used to calculate the action level for calculate the action level for lead. The results of the sample collected from your home are as follows:

Lead «Lead» mg/l Copper «Copper» mg/l

Because of health concerns related to lead exposure, we recommend that the following precautions be taken:

- 1. Let the water run for up to 60 seconds prior to use for drinking or cooking. This is especialy important when the water has not been used for over 6 hours. This "flushing" will greatly reduce the concentration of lead or copper in the water. We recommend that this water be collected for other uses, such as watering house plants.
- 2. Use only water from the cold water tap for drinking or cooking.

These simple steps will minimize your exposure to lead from your drinking water.

The attached brochure gives additional information regarding the health effects of lead and additional steps you can take to reduce your exposure to lead. The same recommendations should be followed for copper, although there are no acute health effects related to copper.

In accordance with USEPA, Florida Department of Environmental Protection, and HRS Duval County Public Health Unit Requirements, the "action levels" for lead and copper referred to

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Lead and Copper Sampling -- page 2

above are exceeded when the concentration of lead or copper is greater than 0.015 mg/l or 1.3 mg/l, respectively for lead and copper, for more than 10 percent of tap samples collected during any monitoring period. During this monitoring period, the action level was exceeded for lead in the area served by the Beacon Hills Water Treatment Plant, and the action level for copper was exceeded for the area served by the Cobblestone water treatment plant.

When the action level is exceeded for two consecutive monitoring periods, the water supplier (SSU) is required to implement a program of treatment to reduce lead or copper concentrations at the homeowners' tap. SSU installed treatment in January, 1996 to reduce lead and copper corrosion, as required by law. It is expected that the treatment will take several additional months to be fully effective. The last sampling event was conducted to measure the progress of the newly installed treatment. We will keep you apprised of the progress of the treatment.

Thank you again for your assistance with the sampling program.

Sincerely:

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Karla Olson Teasley, Vice President Southern States Utilities, Inc.

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CustName	Address1	CustLastName	Lead	Copper
Mr. James Rouse	4642 Bluff Avenue	Mr. Rouse	0.022	0.09
H. D. Wade	4355 Fulton Avenue	H. D. Wade	0.024	0.11
Mr. Bobby Joe Goode	11253 Harbour Woods Road S.	Mr. Goode	0.025	0.02
Mr. Ray Thalmueller	4627 Charles Bennett Drive	Mr. Thalmueller	0.029	0.04
Mr. Hector M. Soto	11251 River Knoll Drive	Mr. Soto	0.040	0.53
Mr. Harry B. Toban	11267 Portside Drive	Mr. Toban	0.042	0.00
W. E. Sullivan	4616 Charles Bennett Drive	W. E. Sullivan	0.355	0.57
Mr. John F. Pierce	4513 Charles Bennett Drive	Mr. Pierce	0.003	1.50
Ms. Mary H. Middleton	4611 Monument Point Drive	Ms. Middleton	0.006	2.04

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Exceeded lead Cobblestone

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PAGE_13_OF_14

May 17, 1996

Ms. Barb Klinger 2671 Moorsfield Lane Jacksonville, FL 32225

Re: Southern States Utilities Lead and Copper Sampling Program

Dear Ms. Klinger:

Thank you for participating in our recent program to determine lead and copper concentrations in the tap water in your home. Samples were collected from a total of 93 homes in the Beacon Hills/Cobblestone service area. Of those tested, nine homes had water samples that are above the 1.3 milligram per liter limit used to calculate the action level for copper, and eight homes had samples that exceeded the 0.015 milligram per liter limit used to calculate the action level for level for level for level for lead. The results of the sample collected from your home are as follows:

Lead	0.025 mg/l
Copper	0.25 mg/l

Because of health concerns related to lead exposure, we recommend that the following precautions be taken:

- 1. Let the water run for up to 60 seconds prior to use for drinking or cooking. This is especialy important when the water has not been used for over 6 hours. This "flushing" will greatly reduce the concentration of lead or copper in the water. We recommend that this water be collected for other uses, such as watering house plants.
- 2. Use only water from the cold water tap for drinking or cooking.

These simple steps will minimize your exposure to lead from your drinking water.

The attached brochure gives additional information regarding the health effects of lead and additional steps you can take to reduce your exposure to lead. The same recommendations should be followed for copper, although there are no acute health effects related to copper.

In accordance with USEPA, Florida Department of Environmental Protection, and HRS Duval County Public Health Unit Requirements, the "action levels" for lead and copper referred to

APPENDIX 256-K PAGE 14 OF 14

Lead and Copper Sampling -- page 2

above are exceeded when the concentration of lead or copper is greater than 0.015 mg/l or 1.3 mg/l, respectively for lead and copper, for more than 10 percent of tap samples collected during any monitoring period. During this monitoring period, the action level was exceeded for lead in the area served by the Beacon Hills Water Treatment Plant, and the action level for copper was exceeded for the area served by the Cobblestone water treatment plant.

When the action level is exceeded for two consecutive monitoring periods, the water supplier (SSU) is required to implement a program of treatment to reduce lead or copper concentrations at the homeowners' tap. SSU installed treatment in January, 1996 to reduce lead and copper corrosion, as required by law. It is expected that the treatment will take several additional months to be fully effective. The last sampling event was conducted to measure the progress of the newly installed treatment. We will keep you apprised of the progress of the treatment.

Thank you again for your assistance with the sampling program.

Sincerely:

Karla Olson Teasley, Vice President Southern States Utilities, Inc.

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PUBLIC EDUCATION MEDIA PACKAGE

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BEACON HILLS/COBBLESTONE LEAD AND COPPER SAMPLING FIRST QUARTER, 1996

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PAGE_____OF__/

May 20, 1996

Ms. Monica Richarson THE FLORIDA TIMES-UNION P. O. Box 1949 Jacksonville, Florida 32231

Dear Ms. Richardson:

Southern States Utilities has completed the third round of lead and copper sampling, as detailed on the enclosed release. We will soon be sending individual notification, including the brochure, to all customers in the area.

As you will recall, SSU had similar results from its 1995 sampling. According to EPA rules, we submitted a plan of action to the regulatory authorities, installed the corrosion control equipment at the water treatment facility, began operation this January, and are now making the appropriate adjustments to achieve maximum results. It is expected that it will take several months before the corrosion control devises will become fully affective.

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 137. Thank you.

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May 20, 1996

News Director WJKS-TV 9117 Hogan Road P. O. Box 17000 Jacksonville, Florida 32216

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 137. Thank you.

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"AGE 4 OF 11

May 20, 1996

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News Director WJXT-TV 4 Broadcast Place Jacksonville, Florida 32247

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 137. Thank you.

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May 20, 1996

News Director WTLV-TV 1070 East Adams Street Jacksonville, Florida 32202

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 137. Thank you.

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May 20, 1996

News Director WAPE-Raido 9090 Hogan Road Jacksonville, Florida 32216

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 137. Thank you.

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	_OF

May 20, 1996

News Director WROO - Radio Suite 107 8386 Baymeadows Road Jacksonville, Florida 32256

Enclosed is a copy of a Public Service Announcement that we are required to submit to local broadcast media. This Lead Advisory is provided in compliance with Section 62-551.840 of the Florida Administrative Code. A copy of a local news release is also attached.

Should you have any questions, please feel free to call me at 1-407-880-0058 ext. 137. Thank you.

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MEDIA RELEASE

Contact: Tracy Smith 407/880-0058, ext. 137

FOR IMMEDIATE USE

Date: May 20, 1996

Southern States Utilities Completes Semi-annual Lead and Copper Sampling LEAD ADVISORY CONTINUES

Southern States Utilities has completed the required semi-annual lead and copper sampling in the Beacon Hills and Cobblestone areas of Duval County. The results of the tests indicate that elevated lead levels continue to be detected in some homes in the area served by the Beacon Hills water treatment plant.

Florida Administrative Code (FAC) 62-551 states that a water system that exceeds the federal lead action level of 15 parts per billion at the 90th percentile based on tap water samples collected in accordance with FAC 62-551 shall deliver public education material to all customers in the areas affected. In adherence to this rule, the customers in the Beacon Hills service area were first advised of elevated levels of lead in May 1995. When the action level for either lead or copper is exceeded, Florida Administrateive Code 62-551 requires a system to initiate a corrosion control treatment program. In January, 1996, Southern States Utilities implemented a program of action to stabilize the drinking water through the installation of chemical feed systems which balance the pH level of the treated water.

The issuance of a lead advisory is based on the laboratory detection of minute levels of lead, compared with standards and requirements of the U. S. Environmental Protection Agency. Because of the health concerns related to lead exposure, sampling is conducted under a "worst case" scenario. Sample locations with the greatest potential for elevated levels are selected for testing. Generally, sample locations are chosen based on the age of area and the construction material used at the time the area was constructed. Water samples are taken only after water

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Lead Advisory Continues

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page 2 of 3

sits undisturbed in plumbing for at least six hours, allowing extended contact of the water with plumbing that possibly contains some lead. Then, the first draw of water is collected and tested.

In the most recent sampling, most of the 50 in-home sampling locations in the Beacon Hills area had no detectable or very low levels of lead. Seven locations measured higher than 15 parts per billion, or 0.015 milligrams of lead per liter of water, which is used to calculate the "action level" set by the federal government.

Sampling of 43 homes in the Cobblestone area, which is connected to the water supply serving Beacon Hills, determined that only one home exceeded the 0.015 milligram per liter limit for lead. However, seven homes showed levels of copper above the 1.3 milligram per liter limit which is used to calculate the action level for copper. Those Cobblestone residents are advised to follow the same recommendations as those established for lead.

The USEPA estimates that drinking water can make up to 20 percent or more of a person's total lead exposure. Lead seldom occurs naturally in drinking water supplies, but enters the drinking water system primarily as a result of contact with materials in the distribution system or household plumbing that contain lead. These materials include lead-based solder used to join copper pipe. In 1986, Congress banned the use of lead-based solder containing greater than 0.2 percent lead and restricted the lead content in pipes and other plumbing material to 0.8 percent. Sampling conducted at the SSU wells, treatment facilities, and within the distribution system at various locations throughout the Beacon Hills and Cobblestone area has not detected the presence of lead.

Aquifer water in the Northeast Florida region is naturally high in elements which, when treated for potable use, become chemically unbalanced. This water attempts to stabilize by bonding with metal plumbing. It is expected that the treatment equipment recently installed by SSU will balance the water and correct this problem within several months. Semi-annual testing . is required to determine the effectiveness of the treatment measures. Federal regulation provides for a three year time frame after the installation of treatment equipment to make necessary adjustments to meet the desired results.

In the meantime, customers in Beacon Hills are advised to continue to take recommended steps to reduce the exposure to lead in the home. Those steps include:

1. Use only the cold water faucet to draw water for drinking and cooking; and

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2. "Flush" the water for up to 60 seconds -- particularly if water has remained undisturbed for several hours -- before use. For conservation, it is suggested that the "flushed" water be collected for watering plants or other households uses.

By merely "flushing" the system -- allowing the water to run for a few seconds -low level lead contaminates are generally removed.

Southern States Utilities, based in Apopka, is Florida's largest privately held water and wastewater utility serving more than 150,000 customers in 113 communities located in 24 counties.

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**Editor's note:

The sampling discussed in this news release was conducted under the EPA prescribed and approved techniques. Prior reports in February 1996 of high lead levels detected through non-approved sampling have been determined to be invalid and meaningless. After conducting repeat sampling in February at the same locations using EPA prescribed methods, the results showed lead to be below action levels.

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PUBLIC SERVICE ANNOUNCEMENT

"Know The Facts About Lead"

Why should everyone want to know the facts about lead and drinking water? Because unhealthy amounts of lead can enter drinking water through the plumbing in your home. That's why you should get your water tested -- and the cost is minimal -- about thirty dollars. Contact Southern States Utilities at 1-800-432-4501 for information on testing and on simple ways to reduce your exposure to lead in drinking water.

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Public Education Materials For The Control Of Lead And Copper

Beacon Hills Water System

SOME HOMES IN THE BEACON HILLS SERVICE AREA HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION. THE BEACON HILLS SERVICE AREA IS SHOWN ON THE ATTACHED MAP.

May, 1996

Department of Environmental Protection Bureau of Drinking Water and Ground Water Resources • 2600 Blair Stone Road Twin Towers Office Building Taliahassee, FL 32399-2400 (904) 487-1762



INTRODUCTION

The United States Environmental Protection Agency (EPA) and Southern States Utilities are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under Federal law, we are required to have a program in place to minimize lead in your drinking water by January 1997.

This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace each lead service line that we control if the line contributes to lead concentration of 15 ppb or more after we have completed the comprehensive treatment program.

If you have any questions about how we are carrying out the requirements of the lead regulation, please give us a call at 1-800-432-4501. This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

HEALTH EFFECTS OF LEAD

Lead is a common, natural and often useful metal found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery, porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body.

Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys.

The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination like dirt and dust that rarely affect an adult.

It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

LEAD IN DRINKING WATER

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing.

These materials include lead-based solder used to join copper pipe made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%.

When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the lirst water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

STEPS YOU CAN TAKE IN THE HOME TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high.

To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water.

Some local laboratories that can provide this service are listed at the end of this booklet.

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