BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for rate increase in Duval, St. Johns and Nassau Counties by United Water Florida Inc.	DOCKET NO. 980214-WS ORDER NO. PSC-99-0513-FOF-WS ISSUED: March 12, 1999

The following Commissioners participated in the disposition of this matter:

JOE GARCIA, Chairman
J. TERRY DEASON
SUSAN F. CLARK
JULIA L. JOHNSON
E. LEON JACOBS, JR.

NOTICE OF PROPOSED AGENCY ACTION
ORDER APPROVING INCREASED WATER AND
WASTEWATER RATES AND CHARGES

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

BACKGROUND

United Water Florida, Inc. (UWF or utility) is a Class A utility providing water and wastewater service to approximately 29,000 customers in Duval, Nassau, and St. Johns Counties. According to its 1997 annual report, the utility's operating revenues were $9,080,002 for its water service and $16,375,517 for its wastewater service, and net operating income was $1,361,740 for water service and $4,117,334 for wastewater service. UWF is located in a critical use area as designated by the St. Johns River Water Management District. Prior to May 1995, UWF was known as Jacksonville Suburban Utilities Corporation, a wholly-owned subsidiary of General Waterworks Corporation (GWC), now known as United Waterworks, Inc. (UWW). Subsequent to a merger in April 1994, UWW became a wholly-owned subsidiary of United Water

Resources, Inc. (UWR), a publicly traded corporation listed on the New York Stock Exchange. We have exclusive jurisdiction over UWF's facilities in all three counties. Section 367.171(7), Florida Statutes, Orders Nos. 24335, PSC-97-0929-FOF-WS, and PSC-97-0618-FOF-WS, issued April 8, 1991, August 8, 1997 and May 30, 1997, respectively.

Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, in Docket No. 960451-WS, addressed the utility's last full rate case proceeding. On December 8, 1997, UWF filed a Petition for Limited Proceeding Regarding Other Postretirement Employee Benefits and Petition for Variance from or Waiver of Rule 25-14.012, Florida Administrative Code. By Order No. PSC-98-1243-FOF-WS, issued September 21, 1998, in Docket No. 971596-WS, the Commission denied the utility's Petition for Limited Proceeding and its Petition for Variance from or Waiver of Rule 25-14.012, Florida Administrative Code. Order No. PSC-98-1243-FOF-WS became final on October 12, 1998, and was appealed by the utility. The appeal is pending.

On February 19, 1997, UWF and Sunray Utilities - Nassau, Inc. (Sunray) filed a joint application to transfer Certificates Nos. 502-W and 436-S from Sunray to UWF. In addition, they asked the Commission to establish rate base balances for Sunray's facilities. By design, the purchase price for Sunray's facilities will be adjusted to conform with the verified net plant balance on Sunray's books. The applicants further asked the Commission to approve, with two exceptions, collection of UWF's rates and charges. The exceptions concern retention of Sunray's plant capacity and guaranteed revenue charges. The applicants further asked the Commission to affirm that Sunray's facilities are part of UWF's single utility system whose service transverses county boundaries. Finally, they proposed canceling Sunray's certificates and amending UWF's operating certificates, Certificates Nos. 236-W and 179-S, to include the additional territory in Nassau County. The Commission approved the transfer of assets and Certificates Nos. 502-W and 436-S, from Sunray Utilities - Nassau, Inc. to UWF. Certificates Nos. 236-W and 179-S held by UWF were amended to include the territory of Sunray Utilities - Nassau, Inc. and Certificates Nos. 502-W and 436-S held by Sunray Utilities - Nassau, Inc. were canceled by Order No. PSC-97-0928-FOF-WS, issued August 4, 1997.

On May 18, 1998, UWF filed this Application for Rate Increase in Duval, St. Johns and Nassau Counties. June 23, 1998 was established as the official filing date. The utility requested that this application be processed using our Proposed Agency Action

(PAA) procedure, and did not request interim rates. The utility's rate case is based on the projected test year ending December 31, 1999. By Order No. PSC-97-0928-FOF-WS, issued August 22, 1998, we suspended the rates pending our final decision.

As part of the PAA process, our staff conducted customer meetings and met with customer groups on September 9-11, 1998, in Jacksonville, Florida.

The utility requested several times that our decision be deferred, and the utility waived the five-month statutory deadline. The utility submitted additional information and met with our staff to address some of the concerns. We have reviewed all of the information provided by the utility and our decision is set forth below.

QUALITY OF SERVICE

In accordance with Rule 25-30.433(1), Florida Administrative Code, our evaluation of the overall quality of service provided by the utility is derived from the evaluation of three separate components of water and wastewater operations: quality of the utility's product, operational conditions of the utility's plant and facilities, and attempts to address customer satisfaction.

Quality of Utility's Product

This evaluation consists of a review of the utility's current compliance with Department of Environmental Protection (DEP) and Health Department standards. The ultimate concern of a water utility is the quality of piped water consumed by customers. The degree to which a utility is able to maintain satisfactory water quality may be reflected by its ability to meet DEP primary and secondary drinking water standards, as well as several unregulated standards set by the Environmental Protection Agency (EPA).

The primary drinking water standards include maximum contaminant levels (MCLs) for harmful contaminants. These MCLs are not to be exceeded, unless specified otherwise by a DEP variance or exemption. Some examples of primary contaminants are arsenic, lead, trihalomethanes, coliform bacteria and radium. Secondary drinking water standards generally contain MCLs which regulate the aesthetic qualities of the water, such as color corrosivity, odor and hardness. Additionally, each utility must periodically test for several unregulated contaminants, which the EPA considers

potentially harmful. These contaminants are still under investigation by the EPA.

The primary concern of a wastewater utility is the quality of the effluent discharged from the plant. Plant effluent has specific limitations, which are dependent on the point of discharge. For example, the limitations imposed on surface water discharges (lakes and rivers) are more stringent than discharges to percolation ponds.

UWF has no current DEP, Health Department or EPA violations with any of its facilities.

Operational Condition of the Utility's Plant and Facilities

The operational conditions of the utility's treatment and distribution/collection systems must also be evaluated to determine the overall quality of service provided by the utility. Evaluation of these systems includes a review of the utility's compliance with DEP standards of operation as well as an analysis of proper system design. For example, among other standards of evaluation, water treatment plants and distribution systems are reviewed for compliance with permit standards and minimum operator requirements as well as standards regarding the location of wells with regard to potential sources of pollution. Wastewater treatment plants and collection systems are reviewed for compliance with permit standards, minimum operator requirements and lift station location and reliability, among other standards. The utility is in compliance with all operational regulations. During a site inspection of all facilities, performed by a staff engineer the week of September 14, 1998, all but one of the facilities were found to be in proper maintenance and operational condition. At that site, the Green Forest Water Treatment Plant (WTP), a chlorine leak in the chlorine room was discovered. The chlorine odor was easily detectable from outside the room. The supervisor immediately dispatched an operator to the site and the leak was repaired.

Customer Satisfaction

The final component of the overall quality of service which must be assessed is the level of customer satisfaction which results from the utility's relations with its customers. A qualitative evaluation of these relations includes a review of proper notification requirements between the utility and its

customers as well as a review of action taken by the utility regarding customer complaints. For example, utility policies are reviewed in order to insure that customers have been properly notified of scheduled service interruptions.

On September 10, 1998, our staff conducted both morning and evening customer meetings. In addition, staff met with representatives of homeowners associations on the afternoon of September 9, 1998, and a customer-requested meeting on the morning of September 11, 1998. Approximately 85 persons attended the four scheduled meetings. Of those, a total of forty-two customers made comments. Twenty-five customers commented on the "poor water quality", 13 commented that the rates were too high and 4 complained about a combination of high rates and poor quality. One customer stated that his sewer system overflowed.

Additionally, we have received 76 letters from customers. Twenty-seven customers registered complaints about high rates, 25 complained about rates and poor quality, 23 complained about quality and one was concerned about a lack of fire hydrants in the South Ponte Vedra Beach area.

In total, there was a total of 77 complaints regarding poor water quality and 69 complaints regarding rates. At least two of the customers were representing multiple families totaling 277 customers. They both complained about rates and quality. Analysis of the written complaints about water quality, when specific problems were mentioned revealed the following numbers: bad taste, 15; poor pressure, 6; odor, 18; corrosivity, 8; service interruption, 1; color, 10; high chlorine, 9; and sediment, 5.

Eight of the customers commenting on odor and corrosivity reside in the Royal Lakes area, six in the San Jose area and three in the Arlington area. The Royal Lakes and San Jose areas are two areas that are receiving new "packed tower" aeration units. Packed towers are new technology designed to replace the older tray aerators. Packed towers have been shown to remove hydrogen sulfide (H_2S) much more effectively than tray aerators, permitting less chlorine and other chemicals to be required in the treatment process. The Arlington area is also scheduled to receive improved corrosion control equipment.

In relation to comments on the utility's lack of responsiveness to customer telephone calls, customers stated that they are frequently not called back when they leave a number. The

comment, "if they would just bother returning my calls" was repeated several times. These complaints were specifically brought to the attention of utility representatives attending the meetings and we received a verbal commitment that they would improve in that area.

Our engineer visited four customers at their homes. One other customer was contacted by telephone regarding her complaints. Their complaint, in general, was poor water pressure and high chlorine. Water pressure, at the time of the visits, was well above DEP's minimum requirement of 20 pounds per square inch. Chlorine levels and H2S odors also, were not a problem on the day of the visits. The packed towers being installed by UWF should alleviate high chlorine, odor and corrosive problems. Because of the efficiency of the towers in removing H2S, less chlorine will be required to control H2S odor leaving less residual chlorine in the water lines, especially those nearer the treatment plants.

A site visit to the reported sewer overflow produced no visual evidence of such an occurrence. The manhole cover appeared not to have been disturbed for a long period. Grass was overgrowing it profusely and there was no evidence of sewer line residues in the area.

Our engineer also visited the service area of South Ponte Vedra, where residents complained of a lack of fire hydrants. Staff met with two of the area representatives who registered their concern regarding the lack of fire hydrants in the area at the September 9, 1998 meeting with homeowners associations. The utility has made a commitment to the residents, in writing, to begin installation of approximately 10,000 feet of 8 inch water mains and sufficient hydrants to meet insurance requirements no later than the year 2000. However, according to the Fire Marshall, St. Johns County has no ordinance requiring retroactive refitting of older systems.

UWF has more than 28,000 customers within its three county service area. The utility is attempting, with a large portion of the increase requested in this proceeding, to alleviate the very problems brought forth by many of the customers attending the customer meetings.

In consideration of the problems we have discovered in the area of customer satisfaction, we find it appropriate to require UWF to develop a program that requires a utility representative to

return customers' telephone calls within a specified time period to be more responsive to customer complaint letters and telephone calls. This program shall be developed within six months of the effective date of this Order. The utility shall provide us with a copy of the program.

Overall, however, we find that the quality of service provided by UWF is satisfactory.

RATE BASE

Our calculation of the appropriate rate base for the purpose of this proceeding is depicted on Schedules Nos. 1-A and 1-B, and our adjustments are itemized on Schedule No. 1-C. Those adjustments which are self-explanatory or which are essentially mechanical in nature are reflected on those schedules without further discussion in the body of this Order. The major adjustments are discussed below.

Plant in Service

Many of the proposed plant in service additions, such as the addition of packed tower aeration equipment, are to improve water quality in several service areas. Other additions involve plant safety items, such as railings at a wastewater treatment plant (Royal Lakes) or replacement of worn or outdated equipment to improve efficiency. The construction of the new wastewater treatment plant at Blacks Ford will permit closing at least one outdated facility and permit growth in an area of St. Johns County that is expected to experience much growth in the near future due to the land being sold by a paper company which has extensive holdings in the area. Accordingly, the projected level of additions to plant in service are appropriate for inclusion in this rate case.

Margin Reserve

Section 367.111(1), Florida Statutes, provides, in part, that "[e]ach utility shall provide service to the area described in its certificate of authorization within a reasonable time." We recognize that, for a utility to meet this statutory responsibility, it must have sufficient capacity and investment to meet existing demands of present customers and the demands of potential customers. The purpose of a margin reserve allowance is to permit a utility to expand prudently beyond its current demands

to enable it to meet reasonable projected short term growth. However, when the plant is 100 percent used and useful, no further growth, or growth beyond present capacity, is contemplated for that facility and a margin reserve, which is specifically granted for growth, is not necessary.

Margin reserve is calculated by including the number of equivalent residential connections (ERCs) from previous years (usually five years) and utilizing the regression analysis method of projection. There is no ERC history for the Blacks Ford plant because it is a new facility in a relatively new and undeveloped area. The utility has provided flow projections based on two components:

1. Immediate flows being transferred to the plant upon going on line, and;

2. Developer requests for capacity (Attachment A) until the year 2001.

Because growth for the margin reserve is usually projected for an 18-month period, absent justification by the utility for a longer time period, we have substituted the utility's flow projections through the year 2001 in lieu of historical growth in ERCs. We have used alternative methods of calculation of growth for margin reserve in the past. For example, in Order No. PSC-94-1042-FOF-SU, issued August 24, 1994, addressing Mid-County Services, Inc.'s rate case, the utility had a negative growth history for the preceding years due to problems with the plant and a consent decree imposed by the DEP forbidding additional connections. In response to a staff request in that case, the utility submitted data revealing developer requests for capacity which we used in the margin reserve calculations.

Relying on the utility's flow projection, margin reserve is not necessary for the UWF facilities except the Blacks Ford wastewater treatment facility and land. A margin reserve equal to 175,840 gallons per day (GPD) is appropriate for the Blacks Ford wastewater treatment facility and land.

Unaccounted for Water

In its MFRs, the utility states that its overall unaccounted for water is 8.5 percent. What the overall percentage tends to mask, however, is that several systems have excessive amounts of

unaccounted for water, with excesses ranging from a low of 0.01 percent to a high of over 37 percent above the normally accepted level of 10 percent.

In Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, in UWF's preceding rate case, we stated:

> in keeping with our policy of reviewing service areas individually for unaccounted for water, a reduction to expenses is appropriate. Accordingly, we have reduced Purchased Water by $18,460; Purchased Power by $2,967; and Chemicals by $617. Additionally, the utility shall continue to take corrective action to reduce the excess unaccounted for water wherever feasible.

In this case, monthly unaccounted for water percentages for individual systems range from minus 398 percent to positive 225 percent. The utility appears to have made positive steps toward an attempt to reduce overall unaccounted for water since the previous rate case. The number of systems exceeding 10 percent of unaccounted for water is 12 in this docket compared to 15 in the preceding docket. However, the total unaccounted for water appears to have increased slightly as indicated by the total increase in reduction to expenses we have made here. We continue to have a concern with the number of systems still reporting excesses and the amounts of unaccounted for water in them.

In order to arrive at our expense reduction for each account, we calculated the excess unaccounted for water on a per system basis for all systems exceeding 10 percent. Systems pumping water were segregated from those purchasing water. Expenses for specific systems, were allocated to each as a percentage of the total expense according to the individual flows reported. Purchased power and chemical expenses were allocated only to the systems pumping water and purchased water expense was allocated only to those systems purchasing water for distribution. The results were then totaled according to the specific accounts nos. 610 (purchased water), 615 (purchased power) and 618 (chemicals).

By Order No. PSC-97-0618-FOF-WS, the utility was ordered to take corrective action to reduce excess unaccounted for water wherever feasible. The facts of this case indicate an urgent need to continue this course of action. We find excessive unaccounted for water in several systems. Expenses for Accounts No. 610

(purchased water), 615 (purchased power) and 618 (chemicals), are therefore reduced by the following amounts:

Account No. 610 (purchased water)	$9,058
Account No. 615 (purchased power)	$9,941
Account No. 618 (chemicals)	$3,533

Moreover, UWF shall study each system having more than 10 percent unaccounted for water, as reported in its MFRs, Schedules F-1, in this docket, to determine the problems causing unaccounted for water and what steps are necessary to reduce the amount to an acceptable level and the cost of doing so on a per system basis. Those systems include:

SYSTEM	% UWF	SYSTEM	% UWF
Arlington	12.36%	Forest Brook	18.88%
Holly Oaks	15.60%	Ortega Hills	15.25%
Ponce De Leon	20.40%	San Jose	10.10%
St. Johns North	10.01%	Milmar	47.33%
Ridgeland	12.57%	Riverview	33.27%
Town & Country	16.50%	Westwood	11.17%

The utility shall report the results of the study to this Commission, within 6 months of the effective date of this Order. Further, the utility shall clarify in that report, why monthly reported unaccounted for water in various systems ranges from as low as minus 398 percent to a positive 225 percent.

Used and Useful

In UWF's previous rate case, we found that all water treatment plants, distribution systems, wastewater treatment plants, and collection systems were 100 percent used and useful. Order No. PSC-97-0618-FOF-WS, issued May 30, 1997. With the exception of the new Blacks Ford wastewater treatment plant, no capacity has been added at any system since that order was issued.

Blacks Ford wastewater treatment plant has a design capacity of 1 million gallons per day (MGD). It will replace the St. Johns Forest plant. St. Johns Forest has a capacity of 0.070 MGD, with average daily maximum month flows of 0.049 MGD. In response to a staff data request, the utility provided developer requests for service with estimated flows to the Blacks Ford wastewater treatment plant through the year 2001. The requests for service,

upon which the utility forecasts are based, are shown on Attachment A. Beginning with initial flows of 312,480 GPD in 1999, the utility has commitments that reveal a steady increase in flows to the year 2001 projected 488,320 GPD figure, which, as discussed earlier, were used for margin reserve flow figures in lieu of the nonexistent historical growth in the used and useful calculation.

The utility has requested that, in the event we determine that any of its facilities are not 100 percent used and useful, it be allowed to charge and collect an Allowance for Funds Prudently Invested (AFPI) charge in an amount sufficient to cover all non-used and useful water and wastewater plant amounts. We have addressed AFPI in a later portion of this Order. Based upon the expected growth projections for the area served by the Blacks Ford plant, we believe that construction of a 1.0 MG plant in lieu of a smaller capacity plant which would require additions in the immediate future, should the projected growth rate continue, is a prudent decision.

We find that all water treatment plants, distribution systems and, with the exception of the new Blacks Ford wastewater treatment plant, all wastewater treatment plants and collection systems, including the Blacks Ford collection system are 100 percent used and useful. The Blacks Ford wastewater treatment plant is 49 percent used and useful.

The cost estimate for the Blacks Ford wastewater treatment plant is $5,803,000. The non-used and useful portion, 51 percent, is $2,969,279. The portion of accumulated depreciation associated with the non-used and useful plant is $587,950 and the depreciation expense, at the average rate for treatment plant, is $165,092. The percentage of non-used and useful plant to total plant is 2.91 percent. We have removed $29,039 for non-used and useful property taxes, or 2.91 percent of the total property taxes of $999,027.

St. Johns Regional Wastewater Treatment Plant (Blacks Ford) Land

The utility purchased approximately 330 acres of land for the new regional wastewater treatment plant for $795,800. Thirty acres of the land is dedicated to the treatment plant site. The remaining land, which is mostly swampland underwater, is to be used for effluent disposal. UWF asserts that it was required to buy the entire parcel as a condition of purchase.

While we recognize that the swamp land cannot be sectioned or partitioned and the entire area will be used, the land was purchased as an effluent disposal site for up to 1 MGD. Further, the utility submitted no supporting documentation or studies showing the actual flow or disposal capacity of the area. Earlier, we found that the Blacks Ford plant is 49 percent used and useful based on expected flows. Consequently, we find the land acquired for the Blacks Ford plant is 49 percent used and useful.

As stated earlier, the cost for the land acquired for the St. Johns Regional wastewater treatment plant is $795,800. The non-used and useful portion, 51 percent, is $407,195 and it shall be removed from rate base.

Imputation of CIAC

Margin reserve reflects the utility's obligation to serve existing and potential customers, and its investment in central plant to meet this service obligation. If margin reserve is included in the used and useful calculations, then, to achieve proper matching, an amount of contributions-in-aid-of-construction (CIAC) equivalent to the number of ERCs represented by the margin reserve should be reflected in rate base. When determining the amount of imputed CIAC, we use the existing or new capacity charges, since this is a forward-looking adjustment. The amount of CIAC recognized in rate base should be no greater that the amount of net plant included in the margin reserve. Our imputation of CIAC on the margin reserve in this case is consistent with our decision in Order No. 20434, issued December 8, 1988 in Docket No. 871134-WS; Order No. 20272, issued November 7, 1988 in Docket No. 880308-SU; Order No. 24735, issued July 1, 1991 in Docket No. 900718-WU; and Order No. PSC-93-0301-FOF-WS, issued February 25, 1993 in Docket No. 911188-WS.

Accordingly, we find it appropriate to impute CIAC on the margin reserve in this case. In the wastewater facilities this equates to $320,205 based on the 628 ERCs included in the margin reserve (1.5 years) multiplied by the current $510 plant capacity charge.

In the most recent rate proceedings of other water and wastewater utilities, we decided to impute only 50 percent of the CIAC estimated to be collected during the margin reserve period. This is based on the premise that all of the CIAC related to the margin reserve will not be collected on day-one of the period, but

evenly over the three-year period. See Order No. PSC-97-0388-FOF-WS, issued April 7, 1997; Order No. PSC-96-1320-FOF-WS, issued October 30, 1996; and Order No. PSC-96-1338-FOF-WS, issued November 7, 1996. Fifty percent of the gross CIAC for the wastewater system, stated above, is $160,102. The amount of net plant included in the margin reserve is $958,283. Accordingly, for the Blacks Ford wastewater plant, it is appropriate to impute additional CIAC of $160,102. We have made corresponding adjustments to increase accumulated amortization of CIAC by $2,690 and increase test year amortization of CIAC by $5,379.

Working Capital

In Audit Disclosure No. 8, our auditors note that minimum filing requirement (MFR) Schedule A-17 reflects working capital to be $2,597,674 for the year ending December 31, 1999. The auditors noted several differences between the MFR and the general ledger. These differences are noted below:

Account	Description	MFR	General Ledger	Difference
174	Miscellaneous Current Assets	$98,430	$0	($98,430)
162	Prepayments	$0	$33,393	$33,393
186.601	Deferred Tank Painting Expense	$1,132,413	$202,646	($929,767)
TOTAL		$1,230,843	$236,039	($994,804)

The utility answered this disclosure by stating that the differences in the Miscellaneous Current Assets (No. 174) and in the Prepayments (162) result from labeling the miscellaneous current assets incorrectly. The $98,430 actually comprises two prepaid general ledger accounts: account numbers 165-000 (Prepayments), $5,378, and 165-200 (Prepaid Taxes), $93,052. These two accounts amount to $98,430, and should be identified as Prepayments on MFR A-17. The balance of the prepayments in the general ledger includes an account for prepaid pension costs which should be included in general ledger account number 263, pensions and benefits reserve, and should not be included in the working capital calculation because it does not require a current expenditure of cash. The utility provided the following reconciliation:

Account No.	Description	General Ledger Amount	MFR A-17 Cash W.C.
165-000	Prepayments	$5,378	
165-200	Prepaid Taxes	93,052	98,430
165-800	Pension (Excluded)	-65,037	
Total		$33,393	$98,430

The Audit Report indicates that there is a $929,767 difference between the general ledger and the MFRs for the Deferred Tank Painting Expense. The general ledger system presents the beginning and ending balances related to the major account classifications, in this case the 186 series of accounts. The general ledger information on sub-accounts belonging to the 186 series, in this case Account 186.601, Deferred Tank Painting Costs, only shows the 12-month activity for that particular sub account. In order to accurately compare the balance in the sub-accounts, the analysis must include the beginning balance; otherwise, it will reflect only the year's activity and not the general ledger balance. In addition, the MFRs reflect a deduction reflecting the elimination of expiring tank painting cost amortizations. The reconciliation including a beginning balance for the general ledger is shown below:

	Tank Painting - MFR	General Ledger
Beginning Balance	$ 945,346	$ 945,346
1997 Activity	202,646	202,646
Ending Balance	$1,147,992	$1,147,992
Deduct Expiring Costs	15,579	0
Adjusted Balance	$1,132,413	$1,147,992

In addition to reviewing matters discussed in the audit report, we analyzed UWF's calculation of working capital on Schedule A-17 of the MFRs. The utility did not provide the methodology for forecasting the balances of the accounts included in the working capital computation in its MFRs. Further analysis disclosed that there was a large unexplained difference between the

working capital projected by the utility for the year ended December 31, 1997 in its last rate case ($1,030,677) and the working capital requirement resulting from historical data for 1997 presented in the MFRs for the present case ($2,946,011 based on a thirteen-month average). We have doubts as to the reliability of the monthly balances because of the problems associated with the utility's new accounting software which was installed in 1997. The historical year end balance at December 31, 1997 ($1,652,134) is the only audited amount available.

We agree that the 1997 year-end balance of working capital is inappropriate to use, because the test year is projected 1999. Also, UWF acquired two new facilities and added other plant subsequent to 1997. In the absence of specific documentation of the forecast methodology for accounts included in the working capital calculation, we believe that an alternative calculation is appropriate. Accordingly, we have calculated test year working capital by increasing the audited working capital allowance at December 31, 1997 by the same percentage as the increase in test year operation and maintenance expense approved in this case over the historic 1997 operation and maintenance expense presented in the MFRs. Our calculation of the appropriate working capital requirement is summarized below.

Approved O & M Expense, 1999 Test Year	$13,761,998
Historic O & M Expense, 1997	12,085,597
Increase	$1,676,401
Percentage Increase	14%
Working Capital at 12/31/97 (audited)	1,652,134
Approved Increase (14%)	229,169
Approved Working Capital	$1,881,303
Allocation to Water (36%)	$677,269
Allocation to Wastewater (64%)	1,204,034
Total	$1,881,303

This results in a decrease of $257,894 for water and $458,477 for wastewater from UWF's requested working capital allowance.

Other Postretirement Employee Benefits (OPEBs)

By Order No. PSC-93-1040-FOF-PU, issued July 16, 1993, in Docket No. 910840-PU, the Commission adopted Rule 25-14.012(3), Florida Administrative Code, with an effective date of August 4, 1993. The rule states:

> (e)ach utility's unfunded accumulated Postretirement benefit obligation shall be treated as a reduction to rate base in rate proceedings. The amount that reduces rate base is limited to that portion of the liability associated with the cost methodology for post retirement [sic] benefits other than pensions.

In its MFRs, UWF calculated an average test year rate base reduction for unfunded OPEB liability of $914,456 ($329,204 for water and $614,930 for wastewater). We note that, due to an apparent error in constructing Schedule G-1 of the MFRs, the two individual amounts do not sum to the total amount presented by the utility. In UWF's last rate case, we ordered a rate base reduction of $1,153,000 ($415,080 for water and $737,920 for wastewater). In re: Application for rate increase in Duval, Nassau, and St. Johns Counties by United Water Florida, Inc., Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, in Docket No. 960451-WS. On December 9, 1997, UWF filed a Petition for Limited Proceeding Regarding Other Postretirement Benefits and Petition for Variance from or Waiver of Rule 25-14.012, Florida Administrative Code. In its petition, the utility requested, among other things, that the rate base reduction ordered by the Commission be decreased by $838,025 ($301,689 for water and $536,336 for wastewater) because UWF had not recovered certain OPEB costs incurred before the effective date of the order. The requested reduction was used by UWF in calculating the rate base adjustment submitted in its MFRs. Subsequent to the filing of the MFRs in the current rate case, the Commission denied the utility's petition and request for variance or waiver. In re: Petition for Limited Proceeding Regarding Other Postretirement Benefits and Petition for Variance from or Waiver of Rule 25-14.012, Florida Administrative Code, by United Water Florida, Inc., Order No. PSC-98-1243-FOF-WS, issued September 21, 1998, in Docket No. 971596-WS. This order became final on October 12, 1998. Accordingly, we have not considered the utility's requested adjustment in calculating the test year rate base reduction for

unfunded OPEB liability. An appeal of Order No. PSC-98-1243-FOF-WS with the First District Court of Appeal is pending.

We have recalculated the rate base reduction as the cumulative OPEB obligation, less amounts funded by UWF. The cumulative OPEB obligation consists of actual OPEB costs incurred from the effective date of UWF's implementation of SFAS 106 through 1997 plus projected OPEB costs for 1998 and 1999. The level of funding consists of the actual funded amounts through 1996 as reported in the previous rate case, plus 22 percent of the additional costs from 1997 through 1999 (as estimated by UWF in its MFRs). Using this methodology, the projected unfunded OPEB liabilities are $1,297,689 at December 31, 1998 and $1,721,665 at December 31, 1999. We have followed the utility's methodology, with the exception of eliminating the utility adjustment denied in the Limited Proceeding, in calculating the appropriate test year rate base reduction as the average of these two amounts, $1,509,677.

During the development of the analysis for Docket No. 971596-WS, our staff discovered that, in the last rate case, the transition obligation was considered for the purpose of determining annual OPEB expense, but was not considered in determining the rate base reduction. We originally believed that this was an error. Research of Commission orders in which the OPEB rate base reduction was considered (issued since the effective date of Rule 25-14.012, Florida Administrative Code) indicates that rate base reduction was required by the rule, but none of the orders specifically addressed the issue of inclusion of the transition obligation in the rate base reduction.[1]

---

[1] In Re: Florida Public Utilities Co., Order No. PSC-94-0983-FOF-EI, issued August 12, 1994, in Docket No. 930720-EI. In Re: Poinciana Utilities, Inc., Order No. PSC-94-1168-FOF-WS, issued September 26, 1994, in Docket No. 930912-WS. In Re: Florida Cities Water Co., Lee County Division, Order No. PSC-96-1133-FOF-SU, issued September 10, 1996, in Docket No. 950387-SU. In Re: Florida Cities Water Co., Barefoot Bay Division, Order No. PSC-96-1147-FOF-WS, issued September 12, 1996, in Docket No. 951258-WS. In Re: Southern States Utilities, Inc., Order No. PSC-96-1320-FOF-WS, issued October 30, 1996, in Docket No. 950495-WS.

In addition to requiring the accrual of current period OPEBs expense, SFAS 106 requires recognition of a "transition obligation," consisting of the difference between the estimated present value of the accumulated OPEB costs not previously charged to expense, and the net fair value of qualifying plan assets when SFAS 106 was implemented. SFAS 106 permits two treatments of the transition obligation: (1) it may be charged to expense in one year; or (2) it may be amortized on a straight-line basis over a period of up to 20 years. Rule 25-14.012, Florida Administrative Code, recognizes that the rules of SFAS 106 would be used in accounting for OPEB costs for ratemaking purposes in Florida.

The utility appropriately included annual amortization of the transition obligation in the amount of $81,974 in its test year OPEB expense in the last rate case and in the current MFRs. In response to a staff request, UWF provided copies of worksheets used by its actuary in calculating the annual amortization amount. The worksheets identify the "transition obligation" as the "Unrecognized Transition Obligation After Recognition of the Plan Amendment Effective January 1, 1995." This amount is $560,801 and it relates solely to UWF employees. The annual amortization of this amount is $31,156. The worksheets also identify an "initial obligation" which is an allocation to UWF of the "initial Transition Obligation of Former GWC under Purchase Accounting Rules." This amount is $1,016,364, resulting in annual amortization expense of $50,818.

UWF has stated that, pursuant to its interpretation of SFAS 106, it had never recorded the total transition obligation on its books. The utility's external CPA firm also submitted a letter supporting the validity of this interpretation. UWF's position has merit. Only the amortized portion of the transition obligation should be included in the rate base reduction required by Rule 25-14.012(3), Florida Administrative Code.

Therefore, rate base has been reduced by $543,484 for water and $966,193 for wastewater, or a total of $1,509,677, to reflect the unfunded liability for OPEBs pursuant to Rule 25-14.012(3), Florida Administrative Code. A summary of our calculation of the appropriate rate base reduction follows:

	OPEB Obligation	Funded	Unfunded
Annual Expense:			
1995	449,121	(97,609)	351,512
1996	480,241	(114,597)	365,644
1997	235,848	(51,887)	183,961
1998 (Projected)	508,426	(111,854)	396,572
Cumulative 12/31/98	1,673,636	(375,947)	1,297,689
1999 (Projected)	543,559	(119,583)	423,976
Cumulative 12/31/99	2,217,195	(495,530)	1,721,665
1999 Average	1,945,416	(435,739)	1,509,677

Rate Base Summary

After considering the adjustments herein, the appropriate projected average rate base for the 1999 test year is $37,451,344 for the water system and $58,889,692 for the wastewater system.

COST OF CAPITAL

Our calculation of the appropriate cost of capital, including our adjustments, is depicted on Schedule No. 2. Those adjustments which are self-explanatory or which are essentially mechanical in nature are reflected on that schedule without further discussion in the body of this Order. The major adjustments are discussed below.

Deferred Income Taxes

The average amount of deferred income taxes included in the utility's MFRs for the base year 1997 is $1,546,433. The utility did not project any additions for the projected years 1998 and 1999 and instead reflected the 1997 year-end balance of $1,799,426 for the test year 1999.

According to Audit Exception No. 4, the $1,799,426 year-end balance of deferred income taxes included in the utility's MFRs is $3,656,646 less than the year-end balance of $5,456,073 shown on the utility's General Ledger. Further, according to the Audit Report, the utility was unable to reconcile the difference.

In responding to the Audit Report, the utility states that the only amount of deferred income taxes properly included in rate base is the year-end amount of $1,799,426 which is due to book-tax depreciation. The utility further states that deferred income taxes attributable to the Statement of Accounting Standards No. 109 (SFAS 109) are to be revenue neutral and, thus, should not be considered. It would appear that the utility considers the year-end difference of $3,656,646 to be completely attributable to SFAS 109. The MFRs and response seem to indicate that the utility misconstrues the SFAS 109 and Rule 25-14.013, Accounting for deferred Income Taxes Under SFAS 109, Florida Administrative Code, (Rule 25-14.013) to mean that only depreciation related deferred taxes are considered for rate making purposes. We disagree.

SFAS 109 had the effect of grossing-up existing deferred tax and investment tax credit balances and the equity portion of the allowance for funds used during construction (AFUDC). The gross-up effectively restated the existing balances at a liability or asset level; that is, the deferred revenue level at which they would be paid or provide benefit in the future. It is the creation of this gross-up that is to be revenue neutral under Rule 25-14.013, Florida Administrative Code. For each addition to, or reduction of, an existing deferred tax balance, there would generally have been an equal and offsetting entry to a regulatory asset or liability. Further, it was contemplated that this offset would appear on the capital structure schedule and that these amounts would be identifiable on a utility's books.

Deferred taxes, from whatever source, are includable in the capital structure if the transaction from which they arose is considered for ratemaking purposes. It is only the related gross-up that must be revenue neutral. Double entry bookkeeping would require that an addition to one side of the balance sheet would elicit an equal and off-setting one to the other side.

It appears that the utility had not previously normalized many items routinely normalized and, as a result of SFAS 109, had to create both the deferred income taxes that would have existed had there been comprehensive interperiod income tax allocation in place

and the gross-up. We do not believe that it is appropriate to exclude deferred income taxes balances that would normally be a part of the capital structure for this reason. The utility's MFR schedules do not break the specific components of the deferred income taxes balances down to this level of detail.

In 1998 and 1999, the utility calculated a deferred tax expense for book-tax depreciation which should have flowed to the balance sheet. This does not appear to have been done since the depreciation deferred income tax balances did not grow between December, 1997 and the 1999 test year. The utility did not provide monthly data for deferred income taxes in 1998 or 1999. Therefore, in order to recognize the additional deferred tax expense calculated by the utility, we have made a simple average calculation to increase the $1,546,433 13-month MFR average balances for 1998 and 1999. These amounts are $606,738 for 1998 and $623,911 for 1999, for approved test year deferred income taxes associated with depreciation of $2,750,082.

Based on information supplied by the utility in January 1999, we were able to calculate the debit amounts that offset the credit amounts related to SFAS 109. The remaining average net amount included in the capital structure at zero cost is $930,988. Based on this adjustment, we find that the total deferred income taxes that should be included in the test year should be $3,708,070. This is a $1,908,644 increase to the utility's requested balance.

Unamortized Investment Tax Credits (ITCs)

In its last rate case proceeding, Docket No. 960451-WS, UWF did not provide a copy of its election (Option 1 vs. Option 2) for the ratemaking treatment of ITCs. During the course of the hearing, the utility's witness proffered a late-filed affidavit as to the election. Based on the contents of the affidavit, our staff recommended that the Commission not rely on the affidavit. Staff further recommended that the Commission assign the ITCs a cost rate of zero with amortization of the ITCs to below the line income and expenses. The Commission's decision, as reflected in Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, was to assign a zero cost rate to the ITCs and amortize the ITCs below the line.

In this proceeding, UWF has again not provided a copy of an election. The MFRs indicate that it will be provided later. It was not provided at the time of the audit nor has it yet been supplied.

The utility has indicated to us that it has been unable to locate a copy of the election form.

The utility states that it filed the election in the early 1970's. The utility also states its ITCs were given the overall rate of return in prior proceedings and that our auditor calculated an overall rate of return for the ITCs in the utility's last rate case. An internal Commission memorandum indicates that this utility is subject to Option 1 treatment of it ITCs. An earlier Commission Audit Report of this utility states that the utility is an Option 1 utility. To our knowledge, the utility did not, at that time, dispute that portion of that audit report.

In any case, UWF stresses that it has been amortizing its ITCs ratably over the lives of the related assets. Moreover, the utility states that in previous UWF rate cases (1980), the Commission relied on an interrogatory response by UWF which stated that UWF is an Option 2 Company with regard to the ITCs. The Commission again relied on an interrogatory response in 1982. In determining the election the utility has made, the best information we have are the interrogatory responses.

Based on representations made by the utility that it remains an Option 2 Company, we do not find the production of an election form necessary. Accordingly, ITCs have been included in the capital structure at the weighted cost of capital as reflected in Schedule No. 2.

Capital Structure

UWF is a wholly-owned subsidiary of United Waterworks, Inc. (UWW), which provides all investor capital to its subsidiaries. UWF has been financed entirely with common equity by its parent utility UWW. Therefore, for ratemaking purposes, the appropriate capital structure for UWF's projected test year ending December 31, 1999 should be based on the relative percentages of investor capital maintained at the parent level as of December 31, 1997. The utility specifically identified the balances for investment tax credits, deferred income taxes, and customer deposits.

UWW's relative percentages of investor capital for the year ending December 31, 1997, are 46.16 percent common equity, 53.69 percent long term debt and 0.15 percent preferred stock. In its MFRs, UWF has proposed a projected 13-month average capital structure using ratios of 46.80 percent common equity, 53.06

percent long term debt and 0.15 percent preferred stock for the year ending December 31, 1999. The utility ratios differ slightly from the parent ratios because the utility projected a retention of earnings at the utility level. However, we disagree with the utility's projection of retaining earnings at the UWF level since the parent, UWW, controls the capital structure. Therefore, we have based UWF's appropriate capital structure for the period ending December 31, 1999, on the relative percentages of investor capital maintained at the parent level. The treatment of investor capital, investment tax credits, deferred income taxes, and customer deposits in this case is consistent with how these balances were treated in UWF's last rate case (Order PSC-97-0618-FOF-WS, issued May 30, 1997).

The cost of common equity as determined by the leverage formula currently in effect is 9.57 percent, with a range of plus or minus 100 basis points. The current leverage formula was established by Order No. PSC-98-0903-FOF-WS, effective October 6, 1998. We have based the cost of long-term debt for UWF upon the cost of long-term debt of its parent, UWW. Based upon the utility's MFR filing, we find that the appropriate weighted average cost of long-term debt is 7.69 percent. The cost rate for customer deposits is 7.00 percent. The utility requested an 8.84 percent cost rate for its ITCs. Based on the weighted cost of capital we find, that ITCs should be included at a rate of 8.55 percent.

Based on the relative amounts of investor capital, investment tax credits, deferred income taxes, customer deposits and the respective cost rates discussed above, the resulting weighted average cost of capital is 8.22 percent. Schedule No. 2 reflects the components, amounts, cost rates and weighted average cost of capital associated with the December 31, 1999, test year capital structure.

NET OPERATING INCOME

Our calculations of net operating income are depicted on Schedules Nos. 3-A and 3-B, and our adjustments are itemized on Schedule No. 3-C. Those adjustments which are self-explanatory or which are essentially mechanical in nature are reflected on those schedules without further discussion in the body of this Order. The major adjustments are discussed below.

Forecasting Methodology and Billing Determinants

Our analysis of this issue included an examination of both the utility's historical year billing determinants as well as its projections and associated methodologies. Our discussion of each topic follows.

Historical Year Billing Determinants

The historic billing determinants, customers, bills and quantity billed, were audited and reflect, in all material respects, actual consumption by customer class.

Projections and Forecasting Methodologies

Our analysis of UWF's forecasts was a multi-step process. First, we examined the utility's selection of averaging techniques to forecast customer growth. Next, we determined whether UWF selected models with reasonable predictive reliability. Third, we developed and examined other models which included independent variables that we believed would have an effect on consumption. Fourth, the predictive reliability of our models were compared to those of the utility. Finally, a comparison of the customer bills and consumption generated by both the utility's model and our model are compared, and conclusions are drawn. The details of our analysis follow.

UWF's forecasts were developed based on a combination of linear regression and averaging methodologies. This analysis included (but was not limited to) an assessment of historical water consumption and wastewater use patterns for UWF, and forecasts of water and wastewater customer growth and consumption for the projected test year ending December 31, 1999. The primary database used to develop the models to forecast water consumption included total billed consumption and related adjustments, total bills rendered and customers served on a monthly basis.

Water System Customer Growth Forecasts

In order to predict customer growth for each customer group (residential, commercial and public sector), the utility assumed that the respective groups' average underlying growth would continue at about the same rate that was exhibited during the 1991 - 1997 period, exclusive of the disturbances caused by the addition of the Ponte Vedra and San Pablo systems. This customer growth was

expected to continue through 1998 and 1999. In addition, the Sunray system was acquired and incorporated into the UWF system during 1997. The projected number of bills for each customer class was derived from the number of customers to be served, assuming that residential customers are billed four times per year and commercial and public sector customers are billed 12 times per year.

Water System Consumption Forecasts

The utility's explanatory data analysis revealed that weather conditions, as expected, had an impact on residential water consumption, particularly during the summer season. Therefore, a methodology that would enable analysis of the variability in water demand was deemed appropriate for the residential forecast. In addition, the utility recognized that the additions of acquired systems (Ponte Vedra, San Pablo and Sunray) would also affect consumption.

To normalize for the variability in water demand the utility decided to use simple regression analysis to assess the long run pattern in water use per bill rendered. The number of customers served was then multiplied by the trended use per customer to derive normalized water consumption for 1991 - 1997. Projected residential and commercial water consumption for 1998 and 1999 was derived by multiplying the trended use per bill by the projected number of bills. For the public sector class, a multiple regression equation that incorporated the number of bills rendered, and the addition of large blocks of public sector customers to the service area proved to be the best model.

Wastewater System Customer Growth Forecasts

The growth in the number of residential wastewater customers paralleled the growth in water customers, so the utility calculated the average underlying growth rate in the same way as for the water sector and projected to 1998 and 1999. The analysis of commercial and public sector wastewater customers followed the analysis for the residential sector.

Wastewater System Consumption Forecasts

Wastewater usage is clearly a function of water consumption. Therefore, to project wastewater usage by customer class, the trend in the ratio of wastewater consumption to water consumption was

assessed, and it was assumed that for the two rate years in this analysis the respective ratios for each customer class would remain constant.

Analysis of UWF's Averaging Methodology to Forecast Customer Growth

As discussed previously, the utility used averaging techniques to forecast customer growth. However, we believe simple linear regression can more accurately quantify a relationship between time and growth and therefore would more reliably reflect positive or negative trends in growth than would simple averaging. To illustrate this concept, Attachment C contains comparisons, both in numerical and graphical forms, of each customer class' customer growth forecast based on averaging versus simple linear regression. In each forecast, not only is the simple linear regression line a better fit to the actual data than the utility's flat average line, but the regression line yielded greater projected growth in customers than did simple averaging. Furthermore, the use of regression to forecast customer growth is consistent with our practice. Finally, as discussed in Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, we found that simple linear regression, rather than averaging, was the appropriate methodology to use when forecasting customer growth for this utility.

Therefore, in the absence of any compelling documentation to the contrary, and consistent with our previous decisions and our finding in the last UWF rate case, we find that simple linear regression is the appropriate methodology to forecast customer growth.

Although the utility began billing the Sunray service area in December 1997, the utility does not believe it is appropriate to include the Sunray information in the historical year analysis. Instead, Sunray was treated as an addition in 1998. The result of this method is that, because of the annualizing adjustment, only one-half of Sunray's bills and gallons are recognized in 1998, with full recognition of Sunray occurring in 1999.

We disagree with the utility's treatment of Sunray. As stated above, the Sunray service area was added to UWF's system during December 1997. The purpose of annualizing growth is to recognize that growth occurs throughout the year -- that the total growth during any given year is not all present for the entire year. We agree that Sunray's growth during 1998 and 1999 should be

annualized. However, the Sunray bills and gallons at December 31, 1997 were rendered throughout each month of 1998, and, therefore, are reflected as such in the projections calculations.

The customer growth forecasts are subsequently used to forecast the number of bills rendered. (For forecasting purposes, residential customers are billed quarterly, while commercial and public sector customers are billed monthly.) The resulting customers, bills and consumption generated by our approved forecasting methodologies are included as Attachment D, and a comparison of the resulting projected bills rendered and consumption, based on both UWF's and our methodologies, is presented on Attachment E. As shown on Attachment E, our method resulted in bills rendered projections for the water and wastewater systems that are approximately 3.30 percent greater and 1.94 percent greater, respectively, than the utility's corresponding projections. Therefore, we find it appropriate to adjust the utility's projections by an additional 4,761 bills for the water system and an additional 2,190 bills for the wastewater system.

Analysis of UWF's Water Consumption Forecast Model

As discussed previously, UWF recognized that weather and the additions of acquired systems as factors that would have an effect on residential water consumption. This is consistent with the utility's analysis of residential consumption in its last rate case. However, in its last rate case, the utility selected multiple (rather than simple) linear regression as the forecasting methodology that would best account for those factors. In that case, the utility stated:

> Explanatory data analysis revealed that weather conditions, as expected, had an impact on water consumption, particularly during the summer season. Therefore, a methodology that would enable analysis of the impact of weather conditions on water was deemed appropriate for the forecast. In addition, two systems ... had been acquired and incorporated into the United Water System....The addition of these systems represent a discontinuity in the historical data record, and therefore suggested that a way would have to be found to explicitly account for the addition of these systems in the analysis. Multiple linear regression is a methodology that can handle such a data history, and therefore was selected as the primary data analysis tool

> for this projection. (Docket No. 960451-WS, EXH 18, p. 2)

This Commission agreed, and as discussed in Order No. PSC-97-0618-FOF-WS, we found multiple regression analysis to be the appropriate methodology to forecast UWF's consumption.

Although the stated factors affecting consumption in the instant case are the same as those stated in the utility's prior rate case with respect to weather and the incorporation of acquired systems, UWF nevertheless used simple regression analysis with one independent variable, rather than multiple independent variables, to forecast residential and commercial consumption. When asked about the change in forecasting methodologies, and how (or if) weather and the acquired systems were accounted for in the forecasting models in this case, the utility responded:

> Based on the understanding about overall system and sector demands in the UWF system gained in the prior case, and an examination of actual results for the intervening period between the last case and this case, it was determined that simpler trending analysis would provide comparably reliable results.... Since the projection methodology implicitly included the number of customers served (i.e., as part of the use per bill trending), coupled with the fact that the customer base added with the acquisition of Ponte Vedra, San Pablo and Sunray was similar in character to the existing customer base, it was decided that there was no need to explicitly take into account the addition of these systems by adding dummy variables to the analysis. The decision to use the trend in the use per bill as the primary predictive variable for water consumption trending was made based on my experience and use of this type of analysis in other systems.... (UWF Response to staff's Data Request No. 5-3)

Furthermore, the utility's consumption models in this case produced poor r^2 scores of 2.09 percent for the residential class and 3.20 percent for the commercial class. (r^2 values are a measure of predictive reliability; that is, how much variation in the dependent variable can be explained by the combination of the independent variables.) Assuming all other things being equal, the higher the r^2 value, the better the model. When asked to assess the r^2 score for the residential class, the utility responded:

> A low r^2 value such as this one does mean that the regression line is a poor fit overall for the data. In deciding to use the results of the regression analysis more emphasis was placed on how the regression line plot looked relative to the actual residential use per bill data.... (UWF Response to staff's Data Request No. 5-6)

When asked about the corresponding r^2 score for the commercial consumption class, the utility replied:

> The same rationale was used in assessing and deciding to use the regression of commercial use per bill as the basis for the demand projection for the commercial sector as was used in the residential analysis.... (UWF Response to staff's Data Request No. 5-10)

Although UWF agreed that the r^2 scores resulting from use per bill trending over time indicate a poor overall fit to the data, UWF nevertheless believed the analyses "produced credible results" so it did not "continue and try alternate methodologies or variables." (UWF Response to staff's Data Request No. 5-3)

We disagree with the utility's reliance on its consumption model for the residential and commercial classes. The low r^2 score of each class indicates that the regression line is a very poor fit, with virtually no correlation between the independent variable and the dependent variable (consumption). Therefore, we believe alternative models should have been explored in an attempt to improve the predictive reliability of the forecasts. Furthermore, consistent with our findings in UWF's last rate case, we find that multiple linear regression, with the inclusion of independent variables other than time, is the appropriate water consumption forecasting methodology.

In developing our forecasting consumption model, we corrected UWF's forecast worksheets to reflect: a) the adjusted (rather than unadjusted) numbers of customers; b) the correction of minor formula errors; and c) monthly pro rata adjustments to 1997 bills and consumption in the forecast worksheets such that, for each system and customer class, the sum of the 1997 bills and gallons equal both the corresponding bills and gallons from the utility's adjusted billing analysis and the historical 1997 test year figures from MFR Schedule E-13. In addition, the worksheets' customer growth figures were revised to reflect simple linear regression as the appropriate methodology to forecast customer growth.

We agree with the utility that weather plays a role in water demand, so we included a weather variable in our analysis. Next, we decided to include dummy variables in our analysis. We believe dummy variables are the best way to account for the discontinuity in the historical data record resulting from the additions of the Ponte Vedra and San Pablo systems. The dummy variables were handled two ways: 1) two dummy variables were added representing the separate additions of the Ponte Vedra and San Pablo systems; and 2) the addition of the Ponte Vedra and San Pablo systems was represented by a single dummy variable.

The next step in developing our approved model was to explore combinations of these (and other) independent variables in an attempt to arrive at a model whose R^2 values for the respective customer classes were greater than those of the utility's model. Based on the analysis and the comparative R^2 scores, we find that a model which includes bills rendered, average temperature and a single dummy variable to account for the combined addition of the Ponte Vedra/San Pablo systems is a more appropriate and reliable model of forecasting residential and commercial consumption than the model used by UWF.

Our water consumption models produce R^2 scores of 74.61 percent for the residential class and 41.88 percent for the commercial class (compared to corresponding scores from UWF's model of 2.09 percent and 3.20 percent, respectively). Our water consumption model for the public sector class produced an R^2 score of 64.05 percent.

Sunray was projected on a stand-alone basis using the same methodology as discussed above. The Sunray results were then added to the corresponding total system (excluding Sunray) models. The corresponding R^2 scores for the Sunray residential and commercial water forecasts are 48.06 percent and 33.27 percent, respectively. Sunray has no public sector customers.

Therefore, based on the foregoing, we find that our model is more appropriate and is hereby approved. As shown on Attachment E, our forecast model resulted in projected consumption that is approximately 4.28 percent greater than the utility's corresponding projections, resulting in our finding that an adjustment of an additional 209,418,000 gallons over the utility's projections is appropriate.

Analysis of UWF's Wastewater Consumption Forecast Model

As discussed previously, UWF assumed that the trend in the ratio of wastewater consumption to water consumption for each customer class would remain constant for the next two rate years. We agree with the utility that wastewater consumption is clearly a function of water use. However, consistent with our finding that simple linear regression can better quantify a relationship between an independent and dependent variable, we regressed wastewater consumption against water use.

Our wastewater consumption forecasting model yielded r^2 scores for the residential and commercial classes of 83.35 percent and 35.15 percent, respectively. The corresponding r^2 scores for Sunray's residential and commercial wastewater classes are 99.79 percent and .82 percent, respectively. As shown on Attachment E, our models result in projected consumption that is approximately 3.90 percent greater than the utility's corresponding projections, resulting in our finding that an adjustment of an additional 141,476,000 gallons over the utility's projections is appropriate.

Conclusions: Forecasting Methodology

As discussed above, we find that simple linear regression can more accurately quantify a relationship between time and growth and therefore would more reliably reflect positive or negative trends in growth than would simple averaging. Furthermore, we find that our multiple regression model to forecast water consumption, using the number of bills rendered, average temperature and a dummy variable to account for the combined addition of the Ponte Vedra/San Pablo systems, is a more appropriate and reliable model of forecasting residential and commercial water consumption than the model used by UWF. Finally, we find that our simple regression model to forecast wastewater consumption, which regressed wastewater consumption against water use, is a better predictive model for wastewater consumption than the model selected by the utility.

The use of simple linear regression to forecast customer growth results in adjustments of an additional 4,761 water bills and 2,190 wastewater bills. The use of our multiple linear regression model to forecast water consumption results in an adjustment of an additional 209,418,000 gallons, while the use of our simple regression model to forecast wastewater consumption results in an adjustment of an additional 141,476,000 gallons.

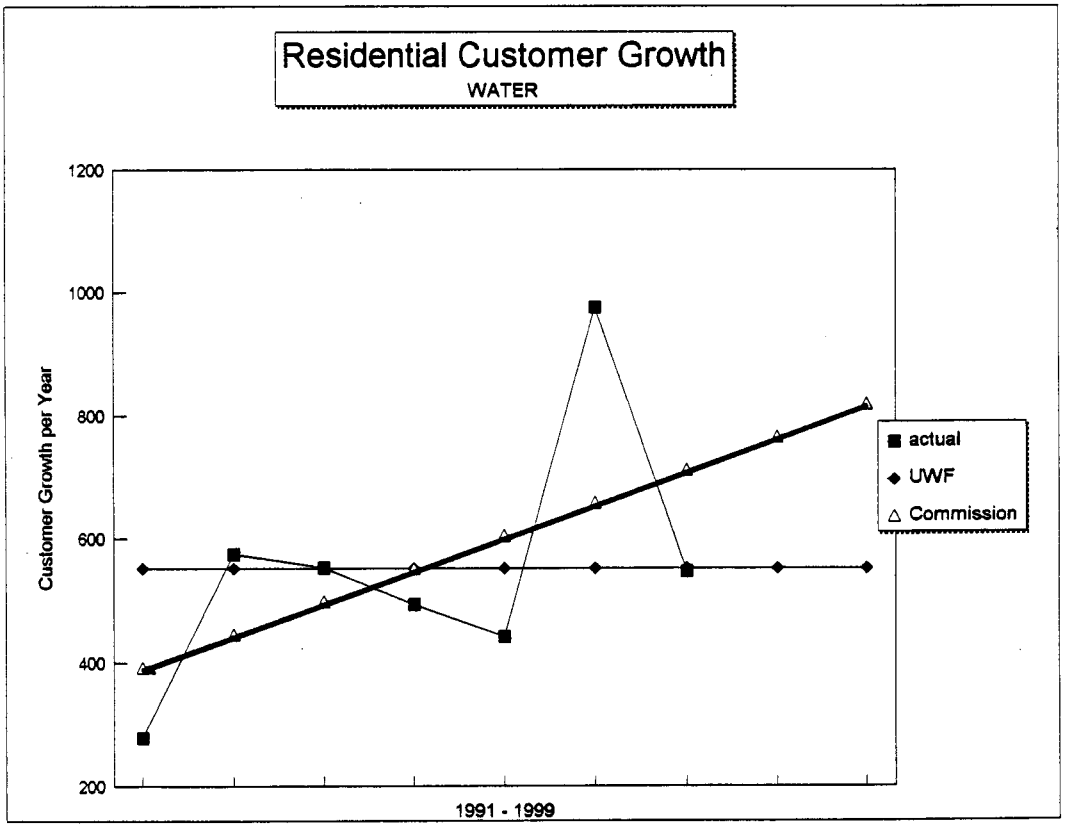
UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT C
Page 1 of 6

CUSTOMER GROWTH FORECASTS BASED ON SIMPLE LINEAR REGRESSION

RESIDENTIAL (RS) CLASS: CUSTOMER GROWTH PROJECTIONS - WATER

	Year = X	Cust Chg per Year = Y	XX	YY	XY	n	sum(XY)	sumX	sumY	sumXX	sumXsumX	avgX	avgY
	1	279	1	77,841	279	7	16,948	28	3,864	140	784	4	552
	2	575	4	330,625	1,150								
	3	553	9	305,809	1,659		slope =	53					
	4	494	16	244,036	1,976								
	5	441	25	194,481	2,205								
	6	975	36	950,625	5,850								
	7	547	49	299,209	3,829		constant =	339					
SUM	28	3,864	140	2,402,626	16,948								
AVG	4	552											
Proj Yr	8	765											
Proj Yr	9	818											



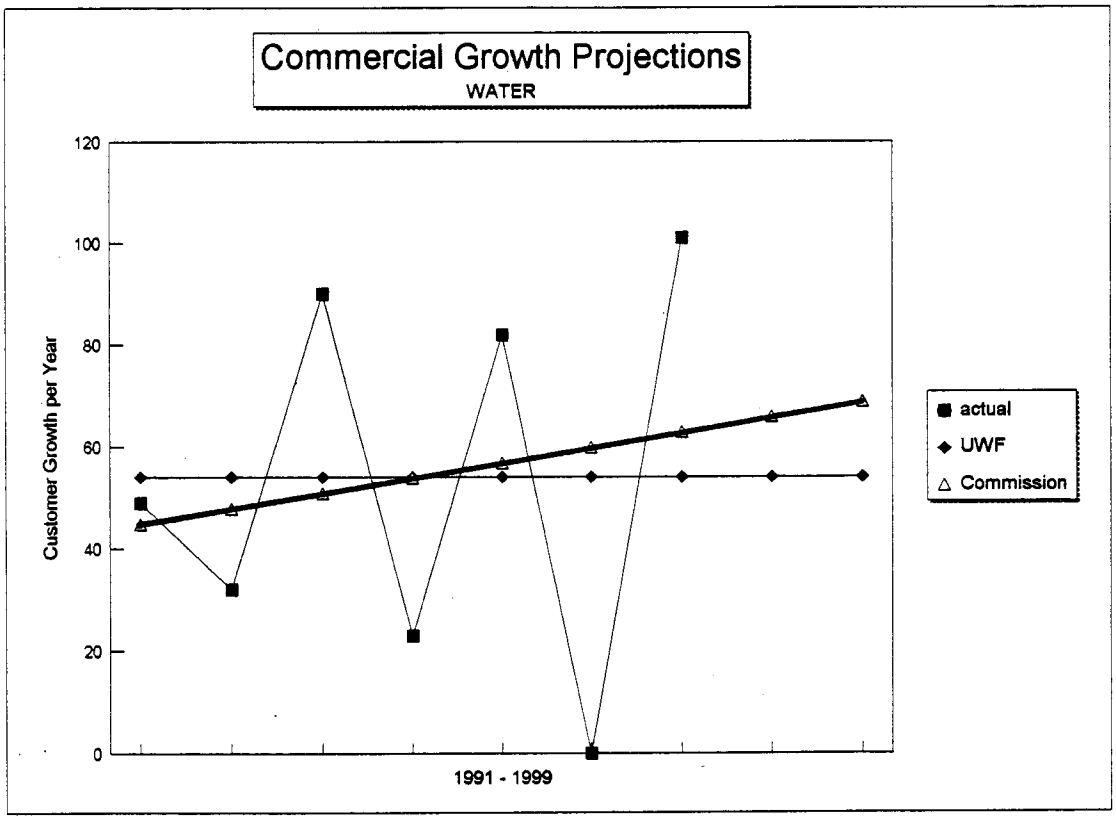
UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT C
Page 2 of 6

CUSTOMER GROWTH FORECASTS BASED ON SIMPLE LINEAR REGRESSION

COMMERCIAL (CS) CLASS: CUSTOMER GROWTH PROJECTIONS - WATER

	X	Cust Chg per Year Y	XX	YY	XY	n	sum(XY)	sumX	sumY	sumXX	sumXsumX	avgX	avgY
	1	49	1	2,401	49	7	1,592	28	377	140	784	4	54
	2	32	4	1,024	64								
	3	90	9	8,100	270		slope =	3					
	4	23	16	529	92								
	5	82	25	6,724	410								
	6	0	36	0	0								
	7	101	49	10,201	707		constant =	42					
SUM	28	377	140	28,979	1,592								
AVG	4	54											
Proj Yr	8	66											
Proj Yr	9	69											



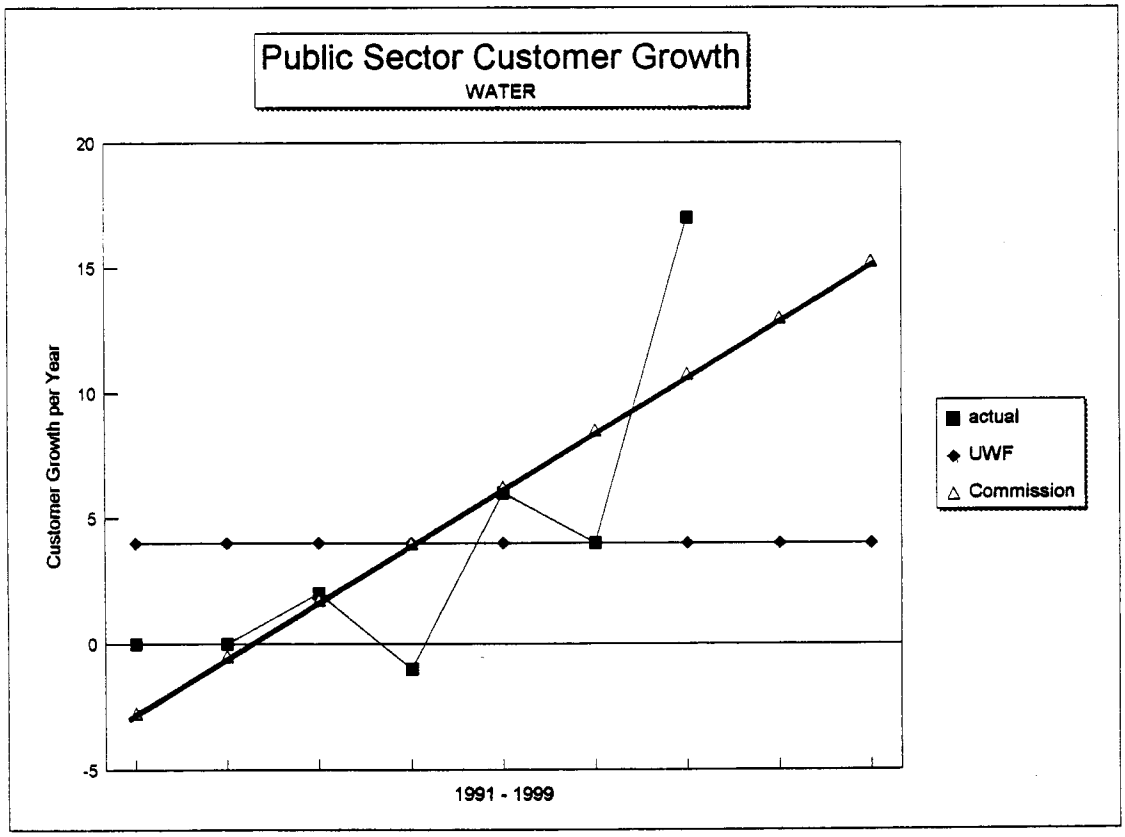
UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT C
Page 3 of 6

CUSTOMER GROWTH FORECASTS BASED ON SIMPLE LINEAR REGRESSION

PUBLIC SECTOR (PS) CLASS: CUSTOMER GROWTH PROJECTIONS - WATER

	X	Cust Chg per Year Y	XX	YY	XY	n	sum(XY)	sumX	sumY	sumXX	sumXsumX	avgX	avgY
	1	0	1	0	0	7	175	28	28	140	784	4	4
	2	0	4	0	0								
	3	2	9	4	6		slope =	2					
	4	(1)	16	1	(4)								
	5	6	25	36	30								
	6	4	36	16	24								
	7	17	49	289	119		constant =	(5)					
SUM	28	28	140	346	175								
AVG	4	4											
Proj Yr	8	13											
Proj Yr	9	15											



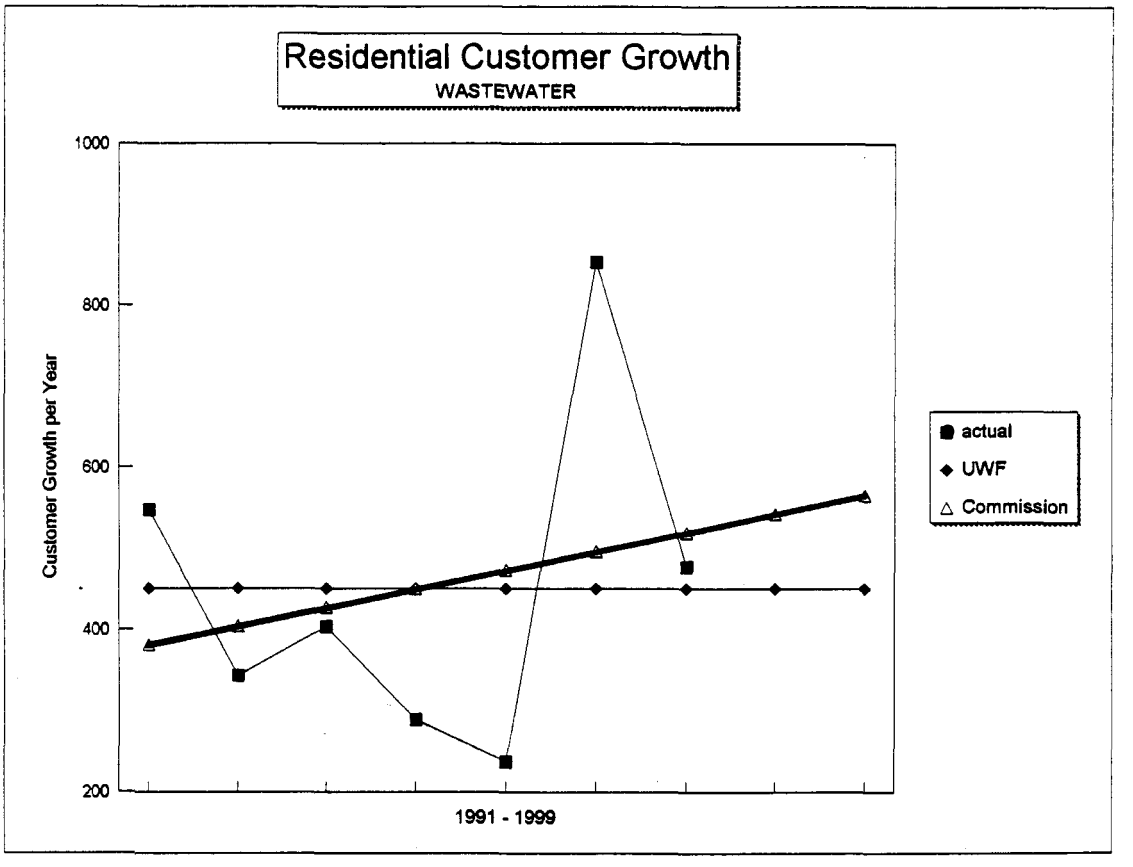
UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT C
Page 4 of 6

CUSTOMER GROWTH FORECASTS BASED ON SIMPLE LINEAR REGRESSION

RESIDENTIAL (RS) CLASS: CUSTOMER GROWTH PROJECTIONS - WASTEWATER

	X	Cust Chg per Year Y	XX	YY	XY	n	sum(XY)	sumX	sumY	sumXX	sumXsumX	avgX	avgY
	1	547	1	299,209	547	7	13,240	28	3,149	140	784	4	450
	2	343	4	117,649	686								
	3	403	9	162,409	1,209		slope =	23					
	4	289	16	83,521	1,156								
	5	237	25	56,169	1,185								
	6	853	36	727,609	5,118								
	7	477	49	227,529	3,339		constant =	358					
SUM	28	3,149	140	1,674,095	13,240								
AVG	4	450											
Proj Yr	8	542											
Proj Yr	9	565											



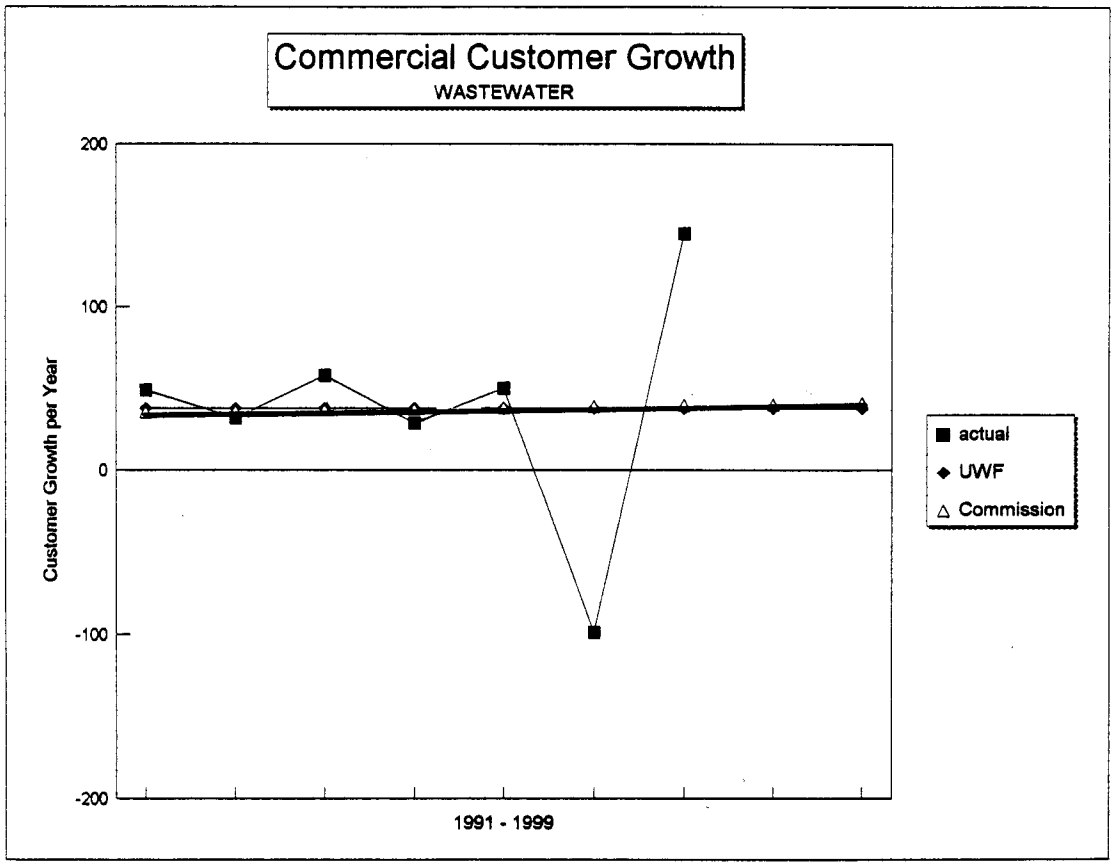
UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT C
Page 5 of 6

CUSTOMER GROWTH FORECASTS BASED ON SIMPLE LINEAR REGRESSION

COMMERCIAL (CS) CLASS: CUSTOMER GROWTH PROJECTIONS - WASTEWATER

	X	Cust Chg per Year Y	XX	YY	XY	n	sum(XY)	sumX	sumY	sumXX	sumXsumX	avgX	avgY
	1	49	1	2,401	49	7	1,074	28	264	140	784	4	38
	2	32	4	1,024	64								
	3	58	9	3,364	174		slope =	1					
	4	29	16	841	116								
	5	50	25	2,500	250								
	6	(99)	36	9,801	(594)								
	7	145	49	21,025	1,015		constant =	35					
SUM	28	264	140	40,956	1,074								
AVG	4	38											
Proj Yr	8	40											
Proj Yr	9	41											



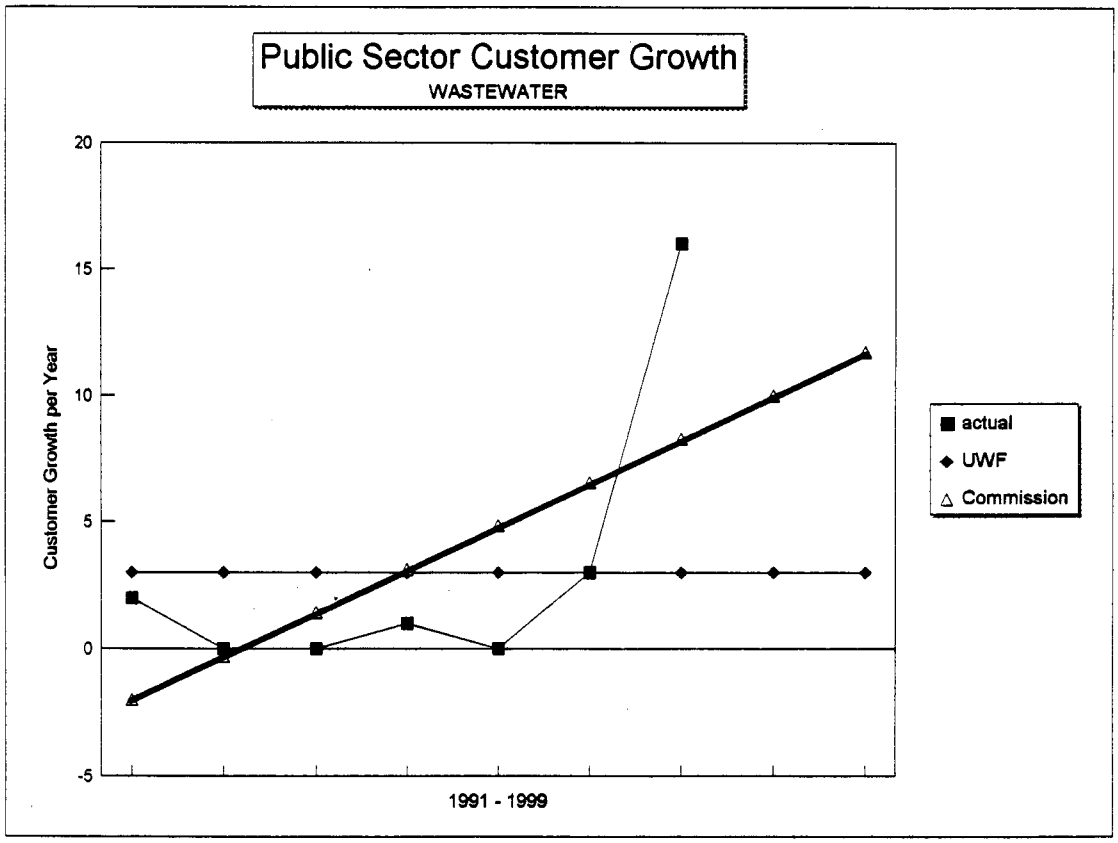
UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT C
Page 6 of 6

CUSTOMER GROWTH FORECASTS BASED ON SIMPLE LINEAR REGRESSION

PUBLIC SECTOR (PS) CLASS: CUSTOMER GROWTH PROJECTIONS - WASTEWATER

	X	Cust Chg per Year Y	XX	YY	XY	n	sum(XY)	sumX	sumY	sumXX	sumXsumX	avgX	avgY
	1	2	1	4	2	7	136	28	22	140	784	4	3
	2	0	4	0	0								
	3	0	9	0	0		slope =	2					
	4	1	16	1	4								
	5	0	25	0	0								
	6	3	36	9	18								
	7	16	49	256	112		constant =	(4)					
SUM	28	22	140	270	136								
AVG	4	3											
Proj Yr	8	10											
Proj Yr	9	12											



Sources: UWF's response to Staff's data request no. 5-1.

UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT D
Page 1 of 2

COMMISSION-APPROVED PROJECTED BILLS AND CONSUMPTION (000) FOR THE PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

		WATER		
PROJECTIONS FOR 1998 (1):		**RESIDENTIAL (RS)**	**COMMERCIAL (CS)**	**PUBLIC SECTOR (PS)**
(1a)	Bills rendered in 1997 excl Sunray	103,187	29,655	706
(1b)	Sunray bills rendered @ 12/31/97 (2)	584	327	0
(1c) = (1a) + (1b)	Beginning bills @ 01/01/98	103,771	29,982	706
(2a)	Customer growth excl Sunray projected for 1998	765	66	13
(2b)	Sunray customer growth 1998	153	9	0
(2c)	Total customer growth projected for 1998	918	75	13
(3) = (2c) x 4 or (2c) x 12	Projected increase in bills rendered in 1998	3,672	900	156
(4) = (1c) + (3)	Projected bills rendered in 1998	107,443	30,882	862
(5) = (3) / 2	Annualized increase in bills rendered 1998	1,836	450	78
(6) = (4) + (5)	Annualized bills rendered 1998	109,279	31,332	940
(7a)	Consumption 1997 excl Sunray	2,254,177	2,014,472	149,583
(7b)	Sunray consumption @ 12/31/97	24,797	51,244	0
(7c) = (7a) + (7b)	Beginning consumption @ 01/01/98	2,278,974	2,065,716	149,583
(8a)	Increase in consump proj for 1998 excl Sunray	201,508	88,233	40,028
(8b)	Sunray increase in consumption 1998	6,538	3,959	0
(8c) = (8a) + (8b)	Total increase in consump proj for 1998	208,046	92,192	40,028
(9) = (7c) + (8c)	Projected consumption 1998	2,487,020	2,157,908	189,611
(10) = (8c) / 2	Annualized increase in consumption 1998	104,023	46,096	20,014
(11) = (9) + (10)	Annualized consumption 1998	2,591,043	2,204,004	209,625
PROJECTIONS FOR 1999:				
(1)	Bills rendered in 1998	107,443	30,882	862
(2a)	Customer growth excl Sunray projected for 1999	818	69	15
(2b)	Sunray customer growth projected for 1999	216	(3)	0
(2c) = (2a) + (2b)	Total customer growth projected for 1999	1,034	66	15
(3) = (2c) x 4 or (2c) x 12	Projected increase in bills rendered in 1999	4,136	792	180
(4) = (1) + (3)	Projected bills rendered in 1999	111,579	31,674	1,042
(5) = (3) / 2	Annualized increase in bills rendered 1999	2,068	396	90
(6) = (4) + (5)	Annualized bills rendered 1999	113,647	32,070	1,132
(7)	Consumption 1998	2,487,020	2,157,908	189,611
(8a)	Increase in consump proj for 1999 excl Sunray	83,823	30,525	39,446
(8b)	Sunray increase in consump proj for 1999	6,374	16,033	0
(8c) = (8a) + (8b)	Total increase in consump proj for 1999	90,197	46,558	39,446
(9) = (7) + (8c)	Projected consumption 1999	2,577,217	2,204,466	229,057
(10) = (8c) / 2	Annualized increase in consumption 1999	45,099	23,279	19,723
(11) = (9) + (10)	Annualized consumption 1999	2,622,316	2,227,745	248,780

UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT D
Page 2 of 2

COMMISSION-APPROVED PROJECTED BILLS AND CONSUMPTION (000) FOR THE PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

WASTEWATER

PROJECTIONS FOR 1998:		RESIDENTIAL (RS)	COMMERCIAL (RS)	PUBLIC SECTOR (PS)
(1a)	Bills rendered in 1997 excl Sunray	78,291	27,403	540
(1b)	Sunray bills rendered @ 12/31/97 (2)	573	226	0
(1c) = (1a) + (1b)	Beginning bills @ 01/01/98	78,864	27,629	540
(2a)	Customer growth excl Sunray projected for 1998	542	40	10
(2b)	Sunray customer growth projected for 1998	90	3	0
(2c)	Total customer growth projected for 1998	632	43	10
(3) = (2c) x 4 or (2c) x 12	Projected increase in bills rendered in 1998	2,528	516	120
(4) = (1c) + (3)	Projected bills rendered in 1998	81,392	28,145	660
(5) = (3) / 2	Annualized increase in bills rendered 1998	1,264	258	60
(6) = (4) + (5)	Annualized bills rendered 1998	82,656	28,403	720
(7a)	Uncapped consumption 1997 excl Sunray	1,658,847	1,871,357	87,064
(7b)	Sunray consumption @ 12/31/97	24,152	13,403	0
(7c) = (7a) + (7b)	Beginning consumption @ 01/01/98	1,682,999	1,884,760	87,064
(8a)	Increase in consump proj for 1998 excl Sunray	84,161	160,356	33,473
(8b)	Sunray increase in consumption1998	6,431	1,397	0
(8c) = (8a) + (8b)	Total increase in consump proj for 1998	90,592	161,753	33,473
(9) = (7c) + (8c)	Projected consumption 1998	1,773,591	2,046,513	120,537
(10) = (8c) / 2	Annualized increase in consumption 1998	45,296	80,877	16,737
(11) = (9) + (10)	Annualized consumption 1998	1,818,887	2,127,390	137,274
PROJECTIONS FOR 1999:				
(1)	Bills rendered in 1998	81,392	28,145	660
(2a)	Customer growth excl Sunray projected for 1999	565	41	13
(2b)	Sunray customer growth 1999	120	0	0
(2c) = (2a) + (2b)	Total customer growth projected for 1999	685	41	13
(3) = (2c) x 4 or (2c) x 12	Projected increase in bills rendered in 1999	2,740	492	156
(4) = (1) + (3)	Projected bills rendered in 1999	84,132	28,637	816
(5) = (3) / 2	Annualized increase in bills rendered 1999	1,370	246	78
(6) = (4) + (5)	Annualized bills rendered 1999	85,502	28,883	894
(7)	Consumption 1998	1,773,591	2,046,513	120,537
(8a)	Increase in consump proj for 1999 excl Sunray	49,979	29,175	33,473
(8b)	Sunray increase in consump proj for 1999	14,773	65	0
(8c) = (8a) + (8b)	Total increase in consump proj for 1999	64,752	29,240	33,473
(9) = (7) + (8c)	Projected consumption 1999	1,838,343	2,075,753	154,010
(10) = (8c) / 2	Annualized increase in consumption 1999	32,376	14,620	16,737
(11) = (9) + (10)	Uncapped annualized consumption 1999	1,870,719	2,090,373	170,747
(12) = RS (11) x 79.35%	Capped annualized consumption 1999	1,484,416	2,090,373	170,747

(1) Actual data used for Sunray for 1998.
(2) Sunray RS bills converted to quarterly billing for comparison purposes.

Source: UWF responses to Staff's data request no. 5-1, Staff's informal data requests 10/02/98 (as corrected by Staff) and 12/17/98, and UWF fax received 02/03/99.

UNITED WATER FLORIDA, INC.
DOCKET NO. 980214-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1999

ATTACHMENT E

COMPARISON OF PROJECTED BILLS AND CONSUMPTION: UWF v. COMMISSION

WATER SYSTEM

		Projections per Utility		Projections per Commission		Difference: Commission in Excess of UWF	
		Bills Rendered	(000) Billed Consump	Bills Rendered	(000) Billed Consump	Bills Rendered	(000) Billed Consump
Metered Sales:	Residential	109,878	2,557,378	113,647	2,622,316	3,769	64,938
	Commercial	31,461	2,179,847	32,070	2,227,745	609	47,898
	Public	749	152,198	1,132	248,780	383	96,582
	Subtotal	142,088	4,889,423	146,849	5,098,841	4,761	209,418
Flat Rate Svcs:	Pvt Fire Protection	2,100		2,100		0	
	Subtotal						
TOTALS FOR MONTHLY SERVICE:		144,188	4,889,423	148,949	5,098,841	4,761	209,418
						3.30%	**4.28%**

WASTEWATER SYSTEM

		Projections per Utility		Projections per Commission		Difference: Commission in Excess of UWF	
		Bills Rendered	(000) Billed Consump	Bills Rendered	(000) Billed Consump	Bills Rendered	(000) Billed Consump
Metered Sales:	Residential	83,453	1,500,025	85,502	1,484,416	2,049	(15,609)
	Commercial	29,026	2,012,807	28,883	2,090,373	(143)	77,566
	Public	610	91,228	894	170,747	284	79,519
	Jacksonville University	12	22,500	12	22,500	0	0
TOTALS FOR MONTHLY SERVICE:		113,101	3,626,560	115,291	3,768,036	2,190	141,476
						1.94%	**3.90%**

Source: UWF response to Staff's informal data request 10/02/98 (as corrected by Staff); Attachment D.

1999 Projections of Revenues and Expenses

In order to show projected test year revenue at the current rates, we first removed the utility's requested increase in revenue calculated at the requested rates, as found on MFR Schedule B-1 for water and B-2 for wastewater. This results in a decrease in revenue of $2,204,773 for water and $3,067,140 for wastewater returning to the utility's test year revenue before rate adjustment of $10,443,674 for water and $18,708,229 for wastewater. When the utility calculated the test year revenue on MFR Schedule E-13, the projected annual increases in bills and consumption from 1997 to the projected test year of 1999, as calculated on MFR Schedule G-41, were applied incorrectly to the historic amounts derived from the billing analysis.

We have revised the projections of the appropriate number of water and wastewater customers, bills and consumption as discussed earlier. Using these projections, taking into account the corrected exclusion of the wastewater consumption for residential customers above the cap, we have recalculated the test year operating revenue. Based on this recalculation, test year revenue has been increased by $408,860 for the water system and $750,461 for the wastewater system. These calculations result in test year projected operating revenue at the current rates of $10,852,534 for the water system and $19,458,690 for the wastewater system.

The projections for sludge hauling expense, chemical expense and power expense are dependent on the projected consumption as shown on MFR Schedule Nos. G-14, G-24 and G-27. Based on our revised projected consumption, sludge hauling expense has been increased by $59,294. Power expense has been increased by $38,862 for water (after application of the unaccounted for water adjustment) and $100,230 for wastewater. Chemical expense has been increased by $13,957 for water (after application of the unaccounted for water adjustment) and $12,780 for wastewater.

The projection of uncollectible accounts is based on the projection of revenue as shown on MFR Schedule No. G-28. Based on our approved increase in revenue, the uncollectible accounts expense, as a percentage of revenue, have been increased by $2,544 for water and $5,253 for wastewater.

The projection of CIAC and the associated accumulated amortization and annual amortization is based on the forecasted number of connections. Earlier, we discussed the increase of test

year factored ERCs by 1,618 for water and 760 for wastewater over that projected by the utility. The average test year CIAC associated with this increase has been increased by $128,611 for water and $119,633 for wastewater. The corresponding accumulated amortization of CIAC over the projected two year period is $4,398 for water and $6,030 for wastewater. The test year amortization of this CIAC is $2,932 for water and $4,020 for wastewater.

Purchased Sewage Treatment Expenses

Our auditors found that in 1997, the utility recorded $222,590 in purchased sewage treatment charges to NARUC Account 710, and charges totaling $14,156 were charged to four other accounts. The total purchased sewage treatment expense recorded was $236,744. The utility projected $476,652 for 1998 and $488,233 for 1999. These projections represent an increase over 1997 of $254,062 for 1998 and $265,643 for 1999. The utility justified its projection to the auditors by stating that sewage flows in St. Johns, Nassau, and Duval counties are increasing.

The staff audit review of these costs presented four areas of concern in Audit Disclosures 1, 2 and 5:

1) The projected amount recorded in the MFR is in error.
2) The flows are actually decreasing.
3) The wrong tariff rate was used in the projections.
4) Rebates of the bills were not recognized by the utility.

Error in the Projected Amount

Our auditors found that, in 1997, total purchased sewage treatment expense was $236,744. Schedule G-20 projects 1998 and 1999 purchased sewage treatment charges using this amount as a starting point and calculates the 1999 projected amount of purchased sewage treatment to be $372,036, not the $476,653 found in the B section of the MFRs. The auditors concluded that the projected purchased sewage treatment, as shown on MFR Schedules B-2, B-3 and B-6 is overstated.

In response, the utility indicates that it recorded $236,744 for purchased sewage treatment, including $25,869 for Account No. 610 and $210,875 for Account 710, as shown on MFR Schedule B-3, page 1 of 3, MFR Schedule G-20, column 1. As shown on MFR Schedule B-3, page 1 of 3, MFR Schedule G-20, columns 2 and 4, respectively, the purchased sewage treatment is projected as $362,930 for 1998

and $372,036 for 1999. There is an error on MFR Schedule B-6 for purchased sewage treatment expense for 1998 ($476,652) and 1999 ($488,233). However, UWF stated that the correct information is set forth in MFR Schedule B-3 and was used to determine the appropriate operating and maintenance costs. Thus, UWF contended that the projections represent an increase over the 1997 amounts of $126,186 for 1998 and $135,292 for 1999, not the increases set forth in the Audit Report.

As part of our analysis, we have examined MFR Schedules B-2, the operating statement; B-3, adjustments; and B-6, detail of operation and maintenance expenses and found that the amounts did match. Therefore, we believe that the error on MFR Schedule B-6 is carried through to the operating statement, MFR Schedule B-2. Accordingly, operating expenses are reduced by $116,197 to remove the error.

Decreasing Flows

The audit review of the historical trends indicates that sewage flows have decreased. In 1996, the flows decreased by 5 percent (7,372,000 gallons) and in 1997, the flows decreased by 10 percent (15,382,000 gallons). Based on this observation, our auditors recommended that projected 1998 and 1999 amounts for Purchased Sewage Treatment should be less than the 1997 recorded costs of $236,744 because the sewage flows have fallen not increased.

The utility claims that, contrary to Disclosure No. 1, UWF's purchased sewage treatment flows are not decreasing in 1998. In fact, the flows are increasing approximately 16 percent in 1998. The utility recalculated these purchased treatment flows and provided them to us. The recalculation uses the actual flows derived from the utility's records for January through September for Hyde Grove, Magnolia Gardens, and Venetia Terrace for 1998 with an estimate for October through December for 1998, based on an average for the particular month being estimated for the prior two years. Accordingly, while flows declined in 1996 and 1997, UWF stated that the flows are increasing in 1998 and will be approximately 21,000,000 gallons more in 1998 than in 1997. The projected level of purchased sewage flows for 1999 is 145,373,000 gallons, which represents the three-year average level of purchased sewage flows for 1996 (148,700,000), 1997 (133,319,000) and 1998 (154,100,000). This is an approximate decrease of 6

percent from the 1998 level of 154,100,000 gallons. UWF prepared a revised Schedule G-20 using flows as recalculated by the utility.

We have reviewed the utility's response and revised MFR Schedule G-20 and we agree with the utility's methodology to average the 1999 projection. This methodology is reasonable as it takes into account the increase in 1998 as well as the decreases in 1996 and 1997.

Incorrect Tariff Rate

MFR Schedule G-20 projects 1998 and 1999 purchased sewage treatment charges using a factor for cost per each thousand gallons of sewage treated of $2.51. The utility derived this cost from an outdated tariff for $1.88 per hundred cubic feet. The audit staff recalculation of several bills shows Jacksonville Electric Authority (JEA) billed the utility in 1997 at the rate of $1.74 per hundred cubic feet. The governing tariff shows $1.74 ($2.33 per thousand gallons) as the current tariff rate. Further, JEA confirmed the current tariff is frozen for 5 years beginning in 1997. In its response to Audit Disclosure No. 5, UWF agreed with the $2.33 per thousand gallons charge.

Bill Rebates

In Audit Disclosure 2, our auditors recommended that purchased sewage treatment expenses were overstated for rebates not recorded or included in test year projections. Our auditors believe that a rebate is a return of a part of a payment. The utility's position was the rebate was a billing adjustment and should not be recorded. In reply, the utility states that UWF clearly disclosed the facts pertaining to the JEA's use of the term "rebates" to the staff auditors.

According to a letter from JEA, the word rebate is used to reference bill corrections, not additional income or discounts. When discounts are shown on a JEA bill, they are shown specifically as savings. Accordingly, UWF states that the purchased sewage treatment expense was already reduced by the amount of the rebates and the total purchased sewage treatment expense recorded was net of such rebates. The utility's position is that the rebates have already been recorded. To record the rebates a second time will understate the expense. We agree that the term "rebate", as used by JEA, is not what is normally considered a rebate and, as such, has no effect on test year expense.

As discussed above, we find it appropriate to reduce operating expenses by $116,197 to remove the error in the MFR balances of purchased sewage treatment expense. Based on the utility's revised MFR Schedule G-20 which uses the utility's recalculation of the projected amount of purchased sewage treatment and the agreed upon rate, we have reduced purchased sewage treatment expense by $33,371 from $372,036 to $338,719. The total adjustment to purchased sewage treatment is $149,514.

OPEBs

In the MFRs, the utility has projected 1999 expenses for OPEBs in the amount of $616,899. Of this amount, $222,084 was allocated to water operations, and $394,815 was allocated to wastewater operations. The test year expense level represents an adjustment of $381,051 over the base year expenses. (Schedule G-23)

In its petition for limited proceeding regarding OPEBs (discussed earlier), the utility requested, among other things, recovery of $1,100,098 of OPEB costs which were incurred from April 1, 1994 through May 30, 1997. These costs had been deferred without obtaining prior Commission approval as required by Rule 25-14.012(2), Florida Administrative Code. UWF proposed to have its rates increased so as to allow recovery of amortization of these costs over a fifteen-year period, at $73,340 per year ($26,402 for water and $46,938 for wastewater). These amounts were included in the OPEB expense calculated by UWF for the intermediate year ending December 31, 1998 and the test year ending December 31, 1999. Subsequent to the filing of the MFRs in the current rate case, we denied the utility's petition and request for variance or waiver. In re: Petition for Limited Proceeding Regarding Other Postretirement Benefits and Petition for Variance from or Waiver of Rule 25-14.012, Florida Administrative Code, by United Water Florida, Inc., Order No. PSC-98-1243-FOF-WS, issued September 21, 1998, in Docket No. 971596-WS. It should be noted that on November 10, 1998, UWF appealed Order No. PSC-98-1243-FOF-WS to the First District Court of Appeal. Accordingly, we have reduced test year OPEB expense by $26,402 and $46,938 for water and wastewater, respectively, for the amount of the disallowed amortization.

Uncollectible Accounts Expense

In Audit Disclosure No. 9, our auditors reported the results of a judgmental sample of entries in the utility's general ledger detail based on transaction descriptions. Transactions with large

dollar amounts were examined and the utility was asked to provide supporting documentation. One of the entries was a write off of uncollectible accounts in the amount of $43,740. The audit report states that, of this amount, $26,000 could not be supported by documentation provided by UWF.

In its response to the audit, the utility described its methodology for calculating uncollectible amounts and stated that it did in fact have documentation for all amounts in this account, but did not submit any additional documentation. "Burden of proof in a commission proceeding is always on a utility seeking a rate change...." Florida Power Corporation v. Cresse, 413 So. 2d 1187, 1191 (Fla. 1982). Accordingly, we have reduced uncollectible expense for water by $26,000, the amount we believe is unsupported.

Lobbying Costs

Our auditors examined selected general ledger transactions along with the supporting documentation and a few discrepancies were noted. See, Audit Disclosure No. 9. Expenditures were made for professional association dues to Florida Waterworks Association (FWWA), $6,875, and the National Association of Water Companies (NAWC), $5,771. Upon further analysis, we found a similar payment of $5,625 to FWWA, allocated to wastewater. The invoices state that "lobbying" accounts for approximately 38 percent and 20 percent of FWWA's and NAWC's activities, respectively. The utility did not make any adjustment to reduce these dues for the estimated cost of lobbying. The utility also made a payment to the American Water Works Association for a "subscription for research". The total payment was $134,749, with $6,950 allocated to the utility. The auditors also questioned a payment of $5,000 to a law firm for representation during the 1997 legislative session. Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, in Docket No. 960451-WS, notes that, at the prehearing conference, and during the technical hearing, the parties reached a number of proposed stipulations, which we accepted as reasonable. We did find that the stipulations will have no precedential value in any subsequent proceeding. One of the stipulations was that "[t]est year O&M expenses shall be reduced by $503 and $895 for lobbying expenses for water and wastewater, respectively."

The utility responded with a description of the activities of FWWA, NAWC and AWWA. Among these are "informing public officials and legislators on issues important to both our customers and NARUC...", and "conduct(ing) research activities relating to water

quality and other water industry concerns." UWF stated that costs incurred for these memberships and subscriptions should be allowed as components of Operations and Maintenance Expense. The utility also stated its belief that the $5,000 paid for representation during the 1997 legislative session should be allowed because the Legislature considered several proposals which could significantly affect UWF's service to its customers, such as the Commission's retention of jurisdiction over multi-county systems.

In previous cases, we have disallowed lobbying costs, unless the utility can clearly demonstrate that such costs should be included above the line. See, for example, In Re: Southern States Utilities, Inc., Order No. PSC-96-1320-FOF-WS, issued October 30, 1996, in Docket No. 950495-WS. Further, the NARUC Uniform System of Accounts requires that expenditures for the purpose of influencing public opinion or the opinions of public officials are to be recorded to Account 426, Miscellaneous Nonutility Expenses. We believe that, based upon available information, UWF has not met its burden of showing that the expenses in question should be included in Operations and Maintenance Expense. Accordingly, we find that reductions of $11,269 and $6,586 for water and wastewater, respectively, are appropriate. The following has been disallowed:

Invoice	Amount	Percentage Disallowed	Amount Disallowed	Water	Wastewater
FWWA	6,875	38%	2,613	2,613	
FWWA	5,625	38%	2,138		2,138
NAWC	5,771	20%	1,154	1,154	
AWWA	6,950	100%	6,950	2,502	4,448
Legis. Rep.	5,000	100%	5,000	5,000	
TOTAL	30,221		17,855	11,269	6,586

Public Services Tax

In Audit Disclosure No. 9, our auditors state that examination of selected transactions revealed an expenditure of $15,487 relating to UWF's remittance of the Public Service Tax recorded as a "Miscellaneous Customer Accounts Expense." The auditors suggested that this amount should be reclassified to "Taxes Other Than Income." Upon subsequent analysis, a similar entry in the amount of $48,480 recorded for wastewater was also found.

In its response, the utility stated that the Public Service Tax is a tax levied by the City of Jacksonville which UWF is required to collect from certain customers and remit to the city. Collections and remissions are normally recorded in the Prepaid Taxes account. The Miscellaneous Customer Accounts expense account is used as a temporary reconciling mechanism. The utility believes that this tax is merely a pass-through item, and should not be treated as either a revenue or expense on the utility's books. We agree. Accordingly, we have removed $15,487 and $48,480 from water and wastewater, respectively. These amounts should not be reclassified to Taxes Other Than Income.

Rate Case Expense

The utility included a $560,000 estimate in the MFRs for current rate case expense. The utility also included additional rate case expense for the reconsideration motion in Docket No. 960451-WS and the expense of the limited proceeding on OPEBs, Docket No. 980112-WS. This resulted in total rate case expense requested of $682,191. The utility allocated rate case expense in the amount of $245,589 to water operations and $436,602 to wastewater operations. This allocation resulted in projected annual rate case amortization expense of $61,397 and $109,151 for water and wastewater, respectively.

As part of our analysis, we requested an update of the actual rate case expense incurred, with supporting documentation, as well as the estimated amount to complete. The revised estimated rate case expense through completion of the PAA process is $552,133. The components of the estimated rate case expenses are as follows:

	MFR	REVISED ESTIMATE		
	ESTIMATED	ACTUAL	ESTIMATED	TOTAL
Miscellaneous Expenses	$ 90,000	$ 48,138	$10,000	$ 58,138
Legal	255,000	96,008	28,992	125,000
MFR Preparation	215,000	210,348	36,456	246,804
Current Expense	$560,000	$354,494	$75,448	$429,942
Prior Case Reconsideration	42,191	42,191	0	42,191
Limited Proceeding	80,000	80,000	0	80,000
Total Expense	$682,191	$476,685	$75,448	$552,133
Annual Amortization	$170,548			$138,033

UWM&S Employee Rate Case Expense

The revised total rate case expense requested in this docket is $552,133, which is an annual expense of $138,033 for four years. We have examined the requested actual expenses, supporting documentation and estimated expenses as listed above for the current rate case and found them to be prudent except for MFR preparation. The term MFR preparation as used by the utility includes the costs incurred by UWM&S employees in not only preparing the MFRs, but also assisting the audit staff and discovery requests. The total expense the utility was allowed in the last case was lower than the revised estimate in this case, even though the last case went directly to hearing and involved the preparation of testimony and exhibits that were not required in this case. OPC was a party in the previous rate case. With the exception of the utility, there are no other parties in this case.

The estimate for UWM&S employee rate case expense in this case should not be greater than the amount allowed in the previous rate case. The purpose in processing this case as a PAA is to save costs. The utility has not reflected any such costs savings in its estimate. We recognize that one source of additional cost was the time spent obtaining information from the new computer system for the staff auditors. However, it was the utility's decision to file its rate case during the time that it chose to install its new software program. The fact that additional employee time was

required (thus increased rate case expense) to address our auditors' requests should have been taken into account when deciding the timing of rate relief. We have addressed the condition and quality of the utility's books and records in a later portion of this Order. We also note that there were numerous utility errors in the MFRs that necessitated additional discovery.

We find that the additional actual rate case costs incurred by the UWM&S employees is excessive. Accordingly, the excess amount should not be recovered from the ratepayers. It is the utility's burden to justify its requested costs, with no exceptions made for rate case expense. Florida Power Corp. v. Cresse, 413 So.2d 1187, 1191 (Fla. 1982). Although it would constitute an abuse of discretion to automatically award rate case expense without reference to the prudence of the costs incurred in the proceeding, the Commission has broad discretion with respect to the allowance of rate case expense. Meadowbrook Util. Sys., Inc. v. FPSC, 518 So.2d 326, 327 (Fla. 1st DCA 1987); Florida Crown Util. Servs., Inc. v. Utility Regulatory Bd. of Jacksonville, 274 So.2d 597, 598 (Fla. 1st DCA 1973). Accordingly, UWM&S employee rate case expense is limited to the utility's original estimate of $215,000.

Prior Rate Case Expense

Order No. PSC-97-1146-FOF-WS, issued September 30, 1997, granted in part and denied in part the motion for reconsideration and the motion to amend Order No. PSC-97-0618-FOF-WS, the final order in UWF's previous rate case. This order amended rate case expense to include the additional costs of the reconsideration. The annual recovery from the previous case, which will continue until September, 2001, already includes these costs and inclusion in the current rate case expense would be inappropriate double counting of these costs.

OPEB Limited Proceeding Costs

The utility also requested inclusion of the limited proceeding costs (Docket No. 980112-WS). By Order No. PSC-98-1243-FOF-WS, issued September 21, 1998, we denied the utility's Petition for Limited Proceeding and its Petition for Variance from or Waiver of Rule 25-14.012, Florida Administrative Code. That Order became final on October 12, 1998. Because we ultimately denied the petition, we find it inappropriate to pass the costs of that proceeding to the customers through rates. Our decision is consistent with our action in Docket No. 971663-WS, Petition of

Florida Cities Water Company For Limited Proceeding to Recover Environmental Litigation Costs for North and South Ft. Myers Divisions in Lee County, and Barefoot Bay Division in Brevard County. By Order No. PSC-98-1583-FOF-WS, issued November 25, 1998, in that docket, we denied the utility any recovery of rate case expense associated with the utility's underlying request, which formed the basis of the proceeding.

Rate Case Expense: Conclusion

We find that the appropriate rate case expense amount is $398,138 as reflected below.

	ACTUAL	ESTIMATED	TOTAL
Miscellaneous	$ 48,138	$10,000	$ 58,138
Legal	96,008	28,992	125,000
MFR Preparation	210,348	4,652	215,000
Total Current Expense	$354,494	$43,644	$398,138
Annual Amortization			$ 99,535
Prior Case			120,306
Total Amortization			$219,841
Water			$ 79,142
Wastewater			$140,698

The total rate case expense amount represents annual amortization expenses of $35,832 and $63,702 for water and wastewater operations, respectively. This will be in addition to the currently approved recovery for Docket No. 960451-WS of $43,310 for water and $76,996 for wastewater. This is a total annual recovery of $79,142 for water and $140,698 for wastewater. Therefore, test year expenses are decreased by $23,616 for water and $41,983 for wastewater.

For informational purposes, the prior rate case expense four-year rate reduction for UWF's last rate case (Order No. PSC-97-1146-FOF-WS, issued September 30, 1997, in Docket No. 960451-WS), will occur on September 30, 2001.

Parent Debt Adjustment

Rule 25-14.004, Florida Administrative Code, anticipates that there will be a parent debt adjustment for each level of ownership, parent and grandparents. Thus, because there is more than one level of parent, an adjustment was made in the previous rate case. However, in this case, we do not have adequate data to make such an adjustment. Accordingly, no parent debt adjustment has been made.

Test Year Income Tax Expense

The effect of our earlier adjustments, including the removal of the requested revenues, on the utility's requested income taxes is a reduction of $610,388 for water income taxes and $656,747 for wastewater income taxes.

Test Year Operating Income

Based on our adjustments herein, we find that the test year operating income before any provision for increased revenues is $2,274,513 and $4,217,548 for water and wastewater operations, respectively.

REVENUE REQUIREMENT

Based upon our review of the utility's books and records and the adjustments made herein, we find that the appropriate annual revenue requirements for UWF are $12,212,784 and $20,515,227 for water and wastewater, respectively. These revenues exceed test year revenues by $1,360,250 (12.53 percent) for the water operations and $1,056,537 (5.43 percent) for the wastewater operations. These revenues were derived by adding the approved expenses to the return on rate base, at 8.22 percent, and expanding for regulatory assessment fees, uncollectible accounts and state and federal income taxes. In its application, UWF grossed-up its revenue requirement by uncollectible accounts, as well as the regulatory assessment fees, income taxes. A gross-up for uncollectible accounts is not normally done in water and wastewater cases, although it is standard practice in the electric, gas and telephone industries. This factor was requested and approved in UWF's last rate case, Docket No. 960451-WS, as shown in Order No. PSC-97-0618-FOF-WS. It is also appropriate in this case, as it is a common assumption that uncollectible accounts will change proportionately with revenue.

RATES AND RATE STRUCTURE

Conservation Program Efforts

On September 9, 1996, the entire St. Johns River Water Management district (SJRWMD) was designated as a Water Use Caution Area. Therefore, all of UWF's water systems located in Duval, Nassau and St. Johns County are in a Water Use Caution Area. The SJRWMD has imposed a year round restriction on irrigation; irrigating is not permitted between the hours of 10:00 a.m. and 4:00 p.m.

UWF has implemented a conservation program that has been approved by the SJRWMD. The utility submitted a copy of its Water Use Management Plan (the Plan). UWF strongly encourages water use management and has implemented several procedures to achieve this goal, including monthly unaccounted for water reporting, corrosion control studies, on-site reuse at wastewater treatment plants, intended provision of reuse at a golf course, leak detection surveys, public education, annual replacement of old water mains and old meters, annual testing of all large meters (3 inches and above), and annual testing of water treatment plant production and city inter-tie meters. City inter-tie meters are used to measure the bulk water and wastewater treatment services purchased from the City of Jacksonville.

Specifically, in the areas of unaccounted for water losses, public education, reuse, and conservation rate structure, UWF is doing the following to achieve its conservation goals:

Unaccounted for Water

UWF conducts a comprehensive water audit for each system on a monthly basis. The utility annually tests the water treatment plant production meters, the city inter-tie meters, and customer meters 3 inches and above and recalibrates as necessary. UWF replaces approximately 2,500 customer meters each year. The utility's computerized billing system includes a built-in check for water usage. If the usage is above or below the range, the meter is checked, a field accuracy test is performed, and the meter is changed out when necessary. UWF replaces old water mains and water services with Ponte Vedra Corporation. The utility reports monthly fire flow usage. UWF also implemented a leak location survey on all of its systems. The survey covered approximately 122 miles of water

mains and 41 leaks totaling an estimated 94,492 GPD of leakage was detected.

We are told by SJRWMD that the Arlington and San Jose systems are the only two systems that have exceeded their permitted water allocations. The SJRWMD will be acquiring data on these systems for about a year and then will determine if the problem is due to meter inaccuracies or high consumption. If it is determined that these systems are exceeding because of high usage, UWF will be required to modify their permits, accordingly.

Public Education

UWF is active in instilling water conservation ethics through its participation in various school programs. UWF plans to increase the frequency of classroom presentations. The utility provides water conservation kits to its customers. Different water conservation kits are available, and commonly include such items as flow-conserving showerheads, toilet displacement bags, leak dye tablets, faucet aerators, and information on other household conservation measures. UWF plans to increase the frequency of its conservation literature mailings and it intends to increase the frequency of bill-stuffers containing conservation tips.

Reuse

UWF has implemented reuse for in-plant use at five of its wastewater treatment plants. Moreover, the utility intends to provide reuse to the Ponte Vedra Golf Course. A more detailed discussion regarding the utility's reuse efforts is included in a later portion of this Order.

Conservation Rate Structure

UWF's current rate structure is defined as a base facility uniform volume rate, in which customers are charged a base rate according to meter size and a usage rate according to consumption. As of July, 1998, the current gallons per day per capita (gpdc) calculated for each system is based on 3.5 persons per connection. The gpdc for UWF systems vary; Magnolia Gardens has the lowest, with a gpdc of 70 and Royal Lakes has the highest, with a gpdc of 446. On an overall basis, under the current rate structure, the total average consumption per bill is 9,289 gallons which is below the 10,000 gallon threshold that usually determines whether a more aggressive conservation-oriented rate structure is appropriate.

Further, the residential customers with a 5/8 inch meter use an average of 8,868 gallons, which is 91 percent of all of the consumption used by the residential customers.

In consideration of the foregoing, we find that the appropriate conservation rate structure for this utility is the current base facility and quantity charge rate structure.

Repression of Consumption

At the overall average consumption level of 7,124 gallons per month, the preliminary monthly price increase to a typical residential water customer, before any repression adjustment, is $0.51 (approximately 2.9 percent). A residential customer using an average of 5,787 gallons per month of wastewater would experience a monthly increase, based on preliminary rates before repression considerations, of $2.26, or a change of 7.4 percent.

Based on the analysis above, we do not believe that these nominal price increases will result in customers repressing consumption for the respective systems. Therefore, we find that repression adjustments are not appropriate in this instance. The consumption to be used to calculate consumption charges are the water and wastewater gallons approved earlier. However, in order to monitor the effects of this rate proceeding on consumption, the utility shall file monthly reports detailing the number of bills rendered, the consumption billed and the revenue billed. These reports shall be provided, by customer class and meter size, on a quarterly basis for a period of two years, beginning with the first billing period after the increased rates go into effect.

Reuse

Upon consideration of our staff's recommendation and their discussions with representatives of the Ponte Vedra Inn & Club Golf Course (Ponte Vedra Golf Course or Golf Course), UWF, SJRWMD, and DEP, we find that the recovery of the utility's reuse costs are appropriate through the wastewater rates. A discussion of the requirements for this reuse project and the factors that we have considered is provided below.

Reuse Project

The utility plans to provide reclaimed water service to the Ponte Vedra Inn & Club Golf Course. The utility has requested that

it be authorized to provide the reclaimed water service at a zero rate. Ponte Vedra Golf Course is located in Northeast St. Johns County and is in UWF's authorized service territory. Ponte Vedra Golf Course currently receives its potable water and wastewater service for its buildings from UWF. However, irrigation water for the golf course is not purchased from UWF. The golf course currently obtains its irrigation water from an on-site potable well for which Ponte Vedra Corporation holds the Consumptive Use Permit.

On November 19, 1993, UWF (under its former name Jacksonville Suburban Utilities Corporation) entered into a Spray Irrigation Agreement (Agreement) with Ponte Vedra Corporation for the provision of reclaimed water service to the Ponte Vedra Golf Course. We became aware of the Agreement during the utility's previous rate case (Docket No. 960451-WS). At the prehearing conference held on January 17, 1997 in that docket, the utility informed the Commission that although the parties had entered into an agreement for reclaimed water service, the utility had not yet begun providing that service. The utility was advised that it must file an application for approval to provide reclaimed water service prior to providing service. Consequently, the utility has included a request for approval for the reclaimed water service in its current rate case application. The utility plans to begin providing the reclaimed water service to the Ponte Vedra Golf Course by early 1999.

According to the Agreement, Ponte Vedra Corporation has agreed to allow the utility to dispose of its treated effluent on golf course property. The utility will construct, own, operate and maintain all of the pumps, mains, lines and other facilities necessary to transport treated effluent from its treatment plant to the ponds at the golf course. The golf course will be responsible for the ownership, construction, operation and maintenance of the ponds, pumping station, lines, and the irrigation systems on the golf course property.

The utility has agreed not to request approval of a rate for the reclaimed water service. However, the Agreement specifies that Ponte Vedra Corporation shall abide by and pay for the treated effluent in accordance with the provisions of the utility's tariff regarding payment for treated effluent as required by applicable regulatory authority. The Golf Course is opposed to paying a rate for the reuse service and has the ability to obtain irrigation water from other sources if a rate is imposed. Ponte Vedra Golf

Course's objection to the reuse rate will be discussed in more detail later.

Requirement for Effluent Reuse

Effluent reuse is required by both UWF's and Ponte Vedra's consumption use permits issued by the SJRWMD. Additionally, effluent reuse will enable the utility to comply with the DEP's effluent disposal requirements.

Regarding the SJRWMD's requirements, we were informed by the SJRWMD that many utilities in its district are experiencing water quality problems such as high levels of chlorides and sulfites in their wells. Additionally, they are experiencing loading/nutrient problems in the Intracoastal Waterway and some rivers due to disposal of treated effluent into those waterways. Consequently, the SJRWMD is very interested in implementing effluent reuse within its District.

Joint Agreement

In response to the SJRWMD's increasing interest in effluent reuse, in February of 1997, the City of Jacksonville (City) and UWF entered into a Joint Agreement concerning reuse of reclaimed water. As stated in the Joint Agreement, the two parties believe that implementation of a reclaimed water system is in the public interest in order to preserve the ground waters of the County for use in the potable water supply and to reduce wastewater discharges into the St. Johns River and its tributaries. The parties agreed that where it is found to be technically, economically, and environmentally feasible to do so, wholesale reclaimed water service may be provided to one another. This allows the City and UWF to construct reclaimed water transmission mains through each other's service territory. However, provision of reclaimed water service to customers within each utility's service area will be limited to the utility in control of the service area and will be reviewed on a case-by-case basis.

This agreement allows the City to provide reclaimed water to potential sites located within UWF's service areas. These sites are existing golf courses which are presently using ground water for irrigation. By allowing the City to provide reuse within its territory, UWF averted potentially costly reuse requirements which were placed upon it by the SJRWMD. Prior to the implementation of the Joint Agreement, the SJRWMD slated five golf courses as

potential users for reclaimed water from UWF. If UWF had not entered into the Joint Agreement, reuse to four of those five golf courses would now be necessary. Based on information received from the utility and the SJRWMD, it now appears that the utility must provide reuse to only one of those golf courses, which is the Ponte Vedra Golf Course discussed above.

Subsequent to UWF and the City entering into the Joint Agreement, JEA took over operation of the City's water and wastewater systems. There is some uncertainty regarding whether or not the Joint Agreement still applies now that JEA has taken over the water and wastewater systems. However, a JEA representative has indicated that it is still interested in pursuing this option and has been discussing these issues with UWF. JEA has targeted a number of golf courses and other large users as potential reuse customers, some of which may be in UWF's service territory. As part of its reuse program, JEA is currently constructing a reuse transmission line that will run through UWF's service territory. There is at least one golf course within UWF's territory that could be served by that line. JEA and UWF are in the process of determining if JEA should serve the golf course directly or if UWF should purchase the reclaimed water from JEA and then resell it to the golf course. If UWF elects to purchase the reclaimed water and resell it, JEA plans to charge UWF the same rate that it would charge the golf course if it was served directly by JEA.

UWF's Consumptive Use Permit

As stated above, UWF's consumptive use permit requires effluent reuse. The utility's consumptive use permit for its Ponte Vedra water treatment plant requires that treated effluent must be used as irrigation water when the utility's Ponte Vedra wastewater treatment facility reaches an average daily flow of .300 million gallons per day (MGD.) Flows from this plant are now at approximately .430 MGD. Further, the consumptive use permit specifically states that the utility must dispose of all treated effluent on the Ponte Vedra Golf Course.

Ponte Vedra Corporation's Consumptive Use Permit

Effluent reuse is also required by Ponte Vedra Corporation's consumptive use permit issued by the SJRWMD. The golf course needs 216 million gallons per year. The golf course occasionally uses as much as one million gallons on a peak day. The consumptive use permit states that as of April 1, 2000, Ponte Vedra Corporation

must use reclaimed water to meet 100 percent of the irrigation needs of the golf course unless the amount of reclaimed water available is not sufficient to meet the 216 million gallons per year need. Ponte Vedra Corporation is currently permitted to withdraw the full 216 million gallons from its potable water wells. However, the consumptive use permit requires that the annual ground water withdrawals be reduced, not to exceed 50 million gallons per year from April 1, 2000 through the duration of the permit, which expires November 12, 2011. In other words, the golf course may continue to obtain some of its irrigation water from its potable water wells even after implementation of the reclaimed water service.

The consumptive use permit also provides that in the event the SJRWMD or UWF identifies other potential reclaimed water customers, the golf course is limited to using only the amount of reclaimed water from UWF necessary to meet the 216 million gallons per year allocation. Also, Ponte Vedra Corporation is required to submit a plan to the SJRWMD by June 1, 1999, which will discuss the use of reclaimed water storage in order to minimize the overuse of reclaimed water and overuse of ground water as a back-up water source.

The golf course was originally permitted to obtain water from six Floridan wells. The consumptive use permit states that within one year of receipt of reclaimed water, Ponte Vedra Corporation must abandon five of the six Floridan wells. The SJRWMD has indicated to us that the golf course has installed one new backup well and has abandoned all of the six wells previously used for irrigation. The golf course is currently obtaining all of its irrigation water from the new well pending availability of the reclaimed water service from UWF. Prior to abandoning the wells, the golf course was experiencing high chlorides in those wells due to salt water intrusion.

Presently, UWF is not able to meet the total irrigation needs of the golf course. Consequently, the golf course is in negotiation with another utility, St. Johns Service Corporation (SJSC), to accept excess effluent from that utility's facilities. SJSC currently provides reclaimed water service to another golf course, but may have excess effluent available for the Ponte Vedra Golf Course. Ponte Vedra Golf Course is uncertain as to if and when the service will begin. It is anticipated that there will not be a charge for the service.

DEP Effluent Disposal Requirements

In addition to the SJRWMD's reuse requirements, the utility has had effluent disposal compliance problems with DEP. The percolation ponds currently being used for effluent disposal are overloaded and partially discharge to nearby surface waters. This condition has existed for quite some time, and DEP wants the utility to find alternative sources for effluent disposal. DEP fully supports the utility's efforts to change its method of effluent disposal from percolation ponds to golf course irrigation.

Presently, the utility is in the process of modifying its treatment plant operating permit to upgrade its existing treatment plant at Ponte Vedra to meet compliance requirements to provide reuse water to the golf course. Soon to be made treatment plant improvements include the installation of high level ultra violet disinfection, filtration units, an effluent pumping station, and other plant modifications, at a cost of approximately $1,357,100. In addition to the plant improvements, a $150,000 reuse force main to a holding pond located at the golf course has been constructed. The current plan is that all of the treated effluent produced by the Ponte Vedra wastewater treatment plant will be discharged to a pond at the Ponte Vedra Golf Course and subsequently used for golf course irrigation.

Other Possible Reuse Sites

Currently, the utility is not required by either the SJRWMD or DEP to implement reuse for any of its systems other than Ponte Vedra. The utility does not intend to provide reuse to any other sites in the near future. There are two potential areas which may someday have reuse provided. They are the San Jose area, and the area to be served by the soon to be constructed Blacks Ford Regional Wastewater Treatment Plant. For San Jose, the utility and the San Jose Golf Course are exploring the possibility of providing reuse sometime in the future. The utility reports that many issues are still to be resolved. At a current estimated capital cost of approximately $750,000, the utility has concluded that it is not feasible to provide such service at this time.

Regarding Blacks Ford, the construction of this facility will combine the flows of two older inefficient plants which are slated to be decommissioned. When operational, the effluent leaving the new regional facility will be at advanced wastewater treatment (AWT) levels and will be discharging to a receiving wetland.

Although the effluent will be suitable for reuse purposes, the utility contends that there are no regulations or ordinances which require golf courses in the area to use reuse water for irrigation purposes. Without the regulatory incentive, the utility believes that it is not feasible at this time to pursue reuse for this area. As a result, reuse for this area is presently not under consideration by the utility.

Allocation of Reuse Costs

Section 367.0817(3), Florida Statutes, states that:

> All prudent costs of a reuse project shall be recovered in rates. The Legislature finds that reuse benefits water, wastewater, and reuse customers. The Commission shall allow a utility to recover the costs of a reuse project from the utility's water, wastewater, or reuse customers or any combination thereof as deemed appropriate by the Commission.

In its application, the utility has proposed allocating all of the costs related to the reuse project to the wastewater customers. UWF considers this project to be a means for disposal of treated effluent, similar to effluent disposal at wastewater treatment facilities that do not provide reuse.

According to UWF, if it does not dispose of its treated effluent through the Ponte Vedra Golf Course, it will have to provide advanced wastewater treatment at a cost of several million dollars, and then dispose of the treated effluent to the waters of the state, specifically the Intracoastal Waterway. Disposal of effluent to the Intracoastal Waterway would require expensive and time consuming anti-degradation studies. UWF believes that it avoided such costs by arranging to dispose of its treated effluent on the Ponte Vedra Golf Course. Also, because Ponte Vedra Golf Course has agreed to pay for the irrigation system, UWF has significantly reduced its cost of effluent disposal by entering into the Agreement with the golf course.

The Legislature has allocated funds to the SJRWMD to be used for reuse projects. The SJRWMD provides funds to both public and private utilities, therefore, there is a possibility that UWF could obtain funding for future reuse projects. UWF did not apply for funding in 1998. The funds for fiscal year 1998 have already been allocated. However, it is UWF's intent to apply for possible

funding during fiscal year 1999. Although it appears that funds are not available for the immediate reuse project, we strongly encourage the utility to apply for SJRWMD funding for any future reuse projects.

As stated above, Section 367.0817(3), Florida Statutes, allows a utility to recover the costs of a reuse project from its water, wastewater, or reuse customers or any combination thereof as deemed appropriate by the Commission. When determining the most appropriate allocation of the reuse costs, one of the factors we evaluate is who benefits from the reuse service. In this case, all water, wastewater, and reuse customers benefit from the reuse project. It is unquestionable that reducing withdrawals of potable water from the aquifer will benefit the water customers by helping to protect the potable water supply, especially in consideration of the current water quality problems being experienced in that region. The wastewater customers benefit because the reuse project provides a means of effluent disposal which will bring the utility into compliance with DEP at a lower cost than some other methods of effluent disposal. Finally, the golf course benefits from the project because it enables the golf course to meet the requirements of its consumptive use permit, and provides a reliable source of water for irrigation.

Considering that all of the parties involved will receive some benefit from the reuse project, an argument could be made in favor of dividing the cost among the water, wastewater, and reuse customers. However, there are no compelling reasons to allocate any of the reuse costs to water customers at this time.

As indicated earlier, the Ponte Vedra Golf Course is opposed to a reclaimed water rate and was considering not using the reclaimed water for irrigation if a rate is imposed. By letter dated January 11, 1998, the Ponte Vedra Golf Course stated its reasons for opposing a reclaimed water rate. First, the Agreement between UWF and Ponte Vedra Corporation does not require the golf course to use the treated effluent as irrigation. They believe the golf course is required to accept the treated effluent into the lagoons on the golf course property, but it is at the sole discretion of Ponte Vedra Golf Course whether or not to use the effluent for irrigation of the golf course. Second, the Ponte Vedra Golf Course believes that the golf course can obtain sufficient quantities of water for irrigation from surface waters from the renovated lagoon system, SJSC, and the new backup well. The SJRWMD and UWF have confirmed that it is possible that the

Ponte Vedra Golf Course may be able to obtain adequate supplies from those sources. As discussed above, it is anticipated that SJSC will not charge for the reclaimed water service. Therefore, from a financial feasibility standpoint there is more incentive for Ponte Vedra Golf Course to obtain reclaimed water from SJSC than UWF if we establish a reclaimed water charge for UWF.

Although the Golf Course's consumptive use permit specifically cites UWF as a source for reclaimed water, the SJRWMD indicates that the Golf Course is not limited to using reclaimed water from UWF. If the Golf Course can demonstrate that they have a more feasible source of irrigation water which will still reduce their potable water withdrawals from the aquifer, it is likely that the SJRWMD would allow them to use the other sources rather than purchase reclaimed water from UWF.

Another factor that was cited by Ponte Vedra Golf Course in opposition to the reclaimed water rate is that they believe that UWF will experience significant cost savings as a result of the Golf Course's decision to use the treated effluent for irrigation of the golf course. As stated above, they believe they must accept UWF's reclaimed water into the lagoons on their property but are not required to use the reclaimed water for irrigation of the golf course. Although the distinction between accepting the reclaimed water in the lagoons and actually using it for irrigation seems to be very small, it in fact produces a very significant chain reaction of events.

Based upon conversations with representatives from Ponte Vedra Golf Course, UWF, the SJRWMD, and DEP, our staff has learned that the result of Ponte Vedra Golf Course not irrigating with the reclaimed water which is discharged to the golf course lagoons will be that the treated effluent may flow from the lagoons into a river system which is considered waters of the state. Effluent which is discharged into the waters of the state requires a higher level of treatment than effluent used for irrigation purposes. If the effluent produced by UWF's Ponte Vedra treatment plant discharges into the waters of the state, UWF will be required to upgrade its facilities to AWT. As discussed above, the cost of the reuse project is approximately $1.5 million. The cost to upgrade the facilities to discharge to the waters of the state is approximately $6 to $7 million. Further, under that scenario the upgrade would be viewed strictly as an effluent disposal project and the full cost would be borne by UWF's wastewater customers. Therefore, the

planned reuse project is clearly a less expensive alternative to correct UWF's effluent disposal problems.

Ponte Vedra Golf Course was required to reconstruct and enlarge the lake into which the effluent will be discharged, at a cost exceeding $260,000. Additionally, the Golf Course's previous irrigation system was comprised of six wells and three pumps spread across the golf course. The Golf Course was required to replace that system with a centralized system which has one pump at the lake which is able to use the treated effluent, at a cost exceeding $930,000. The Golf Course will be required to monitor water discharging from the lake to assure compliance with water quality standards and water quality limits. The monitoring costs will be an on-going obligation.

Further, Ponte Vedra Golf Course stated in its January 11, 1998 letter that, as a result of replacing the irrigation system, the Golf Course determined that is was necessary to reconstruct its entire golf course at a total cost of $3.7 million. According to representatives of Ponte Vedra Golf Course, the golf course renovation was not planned prior to implementation of the proposed reuse project. Also, a new sprinkler system was installed which exceeded $1.2 million. Additionally, the Golf Course was closed for six and one-half months during the renovation, which resulted in lost revenues in excess of $650,000.

Ponte Vedra Golf Course believes that in consideration of the costs they have borne voluntarily for this project, it should not be required to pay twice through a separate reuse rate. We agree that Ponte Vedra Golf Course has expended significant time and funds towards implementation of this project. Additionally, in its letter, Ponte Vedra Golf Course points out that the Golf Course owns and operates six restaurants and 288 hotel rooms, all of which receive water and wastewater service from UWF. Therefore, the portion of the reuse costs that are recovered through the wastewater rates will apply to Ponte Vedra Golf Course, as well.

We believe from a policy standpoint that reclaimed water should be regarded as a valuable resource for which a charge should apply when possible. The Ponte Vedra Golf Course disagrees. In its letter, Ponte Vedra Golf Course cites three neighboring golf courses which receive treated effluent at no charge. We are aware there are utilities in that region that are providing reclaimed water service at no charge.

Cost avoidance and the need for an alternative means of wastewater effluent disposal are the driving forces behind this reuse project. Thus, it is the wastewater customers who will be harmed the most if the Golf Course does not use the effluent for irrigation. As discussed above, if the effluent is not used for irrigation by Ponte Vedra Golf Course, UWF will be required to make additional upgrades to its facilities at a cost of $6 to $7 million. Because the project would strictly be related to effluent disposal at that point, all of the costs would be passed on to the wastewater customers. It is clear from a financial standpoint that the reuse project is the best alternative for the wastewater customers.

Although the cost of the two alternatives is a significant factor in our analysis, it is important to recognize the other benefits that result from implementation of the reuse project. Implementation of the reuse project will help reduce potable water withdrawals from the aquifer, as well as help achieve the SJRWMD's goal of eliminating effluent discharges into the waters of the state. If the effluent is not used for irrigation by the Golf Course, it will not only result in a higher cost to UWF's customers, it will result in a loss of the other valuable benefits provided by the reuse project. For these reasons, we believe that the reuse project is in the public interest, is consistent with our Memorandum of Understanding with the various water management districts, and that we should take the steps necessary to help promote the success of the project.

Accordingly, the reuse costs shall be recovered through the wastewater rates pursuant to Section 367.0817, Florida Statutes. In a later portion of this Order, we authorize UWF to provide the reclaimed water service to Ponte Vedra Inn & Club Golf Course at a zero rate. Our decision in that regard follows the traditional methodology we used for allocating reuse costs prior to implementation of Section 367.0817, Florida Statues.

Reuse Rate

Historically, reclaimed water service has been viewed solely as a means of effluent disposal, and as such was not viewed as a service for which a charge should apply. However, with increasing concerns over water conservation, the trend is shifting towards viewing reclaimed water as a valuable resource, as it is a more desirable source of irrigation, from a conservation stand-point, than ground water. As such, we believe that a charge should apply

for reclaimed water service whenever possible. The difficulty comes in determining what that rate should be.

In most, if not all, cases, a cost-based reuse rate would be cost prohibitive and would prevent acceptance of reclaimed water by customers. Because the ultimate goal is to encourage the use of reclaimed water for irrigation in order to reduce potable water withdrawals from the aquifer, we have turned to alternative methods to establish reuse rates. In some cases, we have considered factors such as whether or not the utility and reuse customer have a contract including a negotiated rate, the reuse rates that are charged by other utilities in the region, and cost avoidance such as a reduction in pumping costs by the golf course after converting to reclaimed water irrigation. By considering these various factors, we have been able to establish reuse rates which we believed would encourage the use of reclaimed water.

In the immediate case, we have determined that a cost-based reuse rate would exceed the utility's potable water rate, and thus would not promote the use of reclaimed water. Further, we have determined that the use of market based rates and avoided pumping costs will result in rates which will not promote the use of reclaimed water in this case. As discussed previously, JEA plans to provide reuse service near UWF's service territory. Although JEA's proposed reuse rates provide a reasonable estimate of a market rate in that area, Ponte Vedra Golf Course is opposed to paying a rate for the reuse service and has the ability to obtain irrigation water from other sources if a rate is imposed. Consequently, implementation of a reclaimed water rate higher than zero at this time may jeopardize the utility's ability to proceed with the reuse project.

We find that implementation of the reuse project is in the public interest because it provides a less costly alternative for effluent disposal, it helps to reduce potable water withdrawals from the aquifer thereby preserving the state's valuable water resources, and also helps to promote the SJRWMD's goal of eliminating effluent discharge into the waters of the state which in turn improves the quality of those waterways for the citizens of Florida. Accordingly, we find that the negotiated contract reuse rate of zero is appropriate in this case. However, it should be noted that use of this methodology in this case does not preclude us from establishing a different rate in future rate proceedings if the circumstances change, or for other reuse customers who connect at a later date.

Billing Period

Currently, UWF bills its residential customers on a quarterly basis and bills its general service customers on a monthly basis for both water and wastewater. The utility has included $156,894 as the anticipated costs to switch from quarterly to monthly billing for its residential customers. The utility believes that switching to monthly billing for all its customers is primarily a customer service issue in that a monthly bill for water and wastewater services would be smaller and thus easier for customers to budget for and pay than a quarterly bill. For example, in 1997 the average quarterly residential water bill was approximately $45; the average quarterly wastewater bill amounted to $90. With monthly billing, the customer's average water and wastewater bull would be reduced to approximately $15 and $30, respectively. A smaller monthly bill will enable lower income customers to more readily pay for the services they use. In addition, a smaller monthly bill should enable customers to more adequately budget for their water and wastewater service needs. Monthly billing also gives more current price signals in regard to conservation issues. Through monthly billing, the customers then can use this information to adjust their consumption levels for the following month. In the quarterly billing cycle, this consumption data is not received until three months after the fact. By receiving the data monthly, customers are better able to adjust their consumption patterns.

Monthly meter reading and billing creates a more useful water usage history since there are twelve reading periods instead of four. This history can enable a more accurate estimated monthly bill whenever an actual meter reading cannot be obtained. In addition, meter readers will have the ability to find customer leaks, spot high water usage, and stopped meters more readily because they will visit customer sites three times as often. This allows for the potential reduction in the number and severity of these kinds of customer problems. Additionally, monthly billing provides greater and more frequent customer communication with the utility.

Switching UWF to a monthly billing cycle could possibly reduce UWF's bad debt expense by allowing customers to pay their bills more timely. Moreover, considering the increase in the amount of the charges, we agree that it would be easier for the residential customers to budget for monthly bills. Accordingly, the utility shall convert all current quarterly-billed customers to a monthly

billing cycle. The utility shall include information regarding this billing change in its notice to customers.

Water and Wastewater Rates

The utility's requested water rates are designed to produce annual operating revenues of $12,648,447. The requested revenues represent an increase of $2,204,773 (21.11 percent) for water based on the projected test year ending December 31, 1999. The utility's requested wastewater rates are designed to produce annual operating revenues of $21,775,369. The requested revenues represent an increase of $3,067,140 (16.39 percent) for wastewater based on the projected test year ending December 31, 1999.

After making all of the adjustments discussed herein, we find it appropriate to approve final water rates designed to produce annual operating revenues of $12,047,093, which is the $12,212,784 revenue requirement less $165,691 in miscellaneous revenue. Final wastewater rates designed to produce annual operating revenues of $20,451,634, which is the $20,515,227 revenue requirement less $63,593 in miscellaneous revenue, are appropriate. The utility's rates prior to this filing are based on this base facility rate design, including a base facility and quantity charge. Residential rates are currently billed quarterly. Earlier, we approved a change in UWF's billing cycle to monthly billing. For wastewater service, the utility currently has a quarterly cap of 27,000 gallons or 3,600 cubic feet for residential customers. There is no cap for general service customers. We find that this cap is reasonable, but it shall be converted to a monthly amount of 9,000 gallons or 1,200 cubic feet for residential wastewater service.

Pursuant to Rule 25-30.437, Florida Administrative Code, in proposing rates, the utility should use the base facility and usage charge rate structure unless an alternative source is supported by the applicant. The base facility charge structure for setting rates because of its ability to track costs and to give the customers some control over their water and wastewater bills. Each customer pays his pro rata share of the related costs necessary to provide service through the base facility charge and only the actual usage is paid for through the quantity charge.

The approved wastewater rates include a base charge for all residential customers regardless of meter size with a cap of 9,000 gallons or 1,200 cubic feet of usage monthly on which the quantity charge may be billed. There is no cap on usage for general service

bills. The differential in the quantity charge for residential and general service wastewater customers is designed to recognize that a portion of a residential customer's water usage will not be returned to the wastewater system.

The utility's proposed rates are based on the existing rate structure and were increased pro rata by the percent of the revenue increase requested. We have recalculated the rates using the approved projection of billing and usage information. In Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, in Docket No. 960451-WS, a stipulation was reached in which the current revenue allocation between the base facility charge and the quantity charge was set so that 37 percent of the total water revenue is collected from the base facility charge and 27 percent of the total wastewater revenue is collected from the base facility charge. This remained unchanged for both water and wastewater from previous rate cases. The previous case also recognized a 1.2 differential in the quantity charge between general service and residential wastewater customers and a 1.03 differential between Jacksonville University and general service wastewater customers. We have used these allocations and differentials in our calculations of the rates.

The rates currently in effect also include a 1.39 differential in the water base facility charge and 1.14 in the wastewater base facility charge between general service and residential customers. This means that the general service customers pay a higher base facility charge than the residential customers. These differentials were in place when UWF bought the system from Jacksonville Suburban. These differentials have been continued in the previous two rate cases by pro rata increases to the existing rate structure. These differentiated base facility charges are not found in standard base facility charge rate design and staff was unable to find justification for these differentials in the previous case nor the prior 1980 rate case. The base facility charge is designed to recover fixed costs of the utility based on the potential demand that a customer places on the system based on water meter size. Without justification of unusual circumstances for this differential, we do not believe it appropriate to continue use of differentiated charges, and we have not used these differentials in calculating the rates. The base facility charges were based on meter size irrespective of customer class.

The approved rates shall be effective for service rendered on or after the stamped approval date of the revised tariff sheets, pursuant to Rule 25-30.475, Florida Administrative Code, provided

that the customers have received notice. The revised tariff sheets shall be approved upon staff's verification that the tariff is consistent with our decision, that the protest period has expired, and the proposed customer notice is adequate. The utility shall provide notice of the date notice was given within ten days after the date of the notice.

The comparison of the utility's original rates, requested rates, expressed as monthly rates, and our approved rates is shown on Schedules Nos. 4-A and 4-B.

Guaranteed Revenue Charges

Guaranteed revenue charges are designed to cover the utility's costs including, but not limited to the cost of operation, maintenance, depreciation, and any taxes, and to provide a reasonable return to the utility for facilities, a portion of which may not be used and useful to the utility or its existing customers. See, Rule 25-30.515(9), Florida Administrative Code. Guaranteed revenues are designed to help the utility recover its costs from the time capacity is reserved until a customer begins to pay monthly service rates. Further, guaranteed revenues are collected after service availability charges and allowance for funds prudently invested charges have been paid, until actual connection to the system is made.

In its application, the utility proposed no change in its existing guaranteed revenue charges. (MFRs, Schedule E-10). Guaranteed revenue charges were approved for the Nassau County Area (Base Facility Charge Basis) and Ponce de Leon Area ($37.50 per ERC per month, combined water and wastewater) by Order No. PSC-95-0604-FOF-WS, issued May 16, 1995, in Docket No. 950386-WS. Guaranteed revenue charges were approved for Sunray - St. Johns County Area (residential water: $14.08 per ERC per month; all others: $0.04 per gallon per month; residential wastewater: $18.19 per ERC per month; all others: $0.07 per gallon per month) by Order No. PSC-97-0929-FOF-WS, issued August 4, 1997 in Docket No. 970210-WS. Guaranteed revenue charges were approved for Sunray - Nassau County Area (residential water: $10.84 per ERC per month; residential wastewater: $13.99 per ERC per month) by Order No. PSC-97-0928-FOF-WS, issued August 4, 1997, in Docket No. 970209-WS.

Earlier, we found that all of UWF's facilities, with the exception of the Blacks Ford wastewater treatment plant, are 100 percent used and useful. Further, we have approved AFPI charges

for the Blacks Ford wastewater treatment plant. Accordingly, all of the facilities for which guaranteed revenue charges are in effect will be considered 100 percent used and useful. UWF will earn a fair rate of return on these facilities without the guaranteed revenue charges. Accordingly, UWF's request to continue guaranteed revenue charges for the Nassau County Area, Ponce de Leon Area, Sunray - St. Johns County Area, and Sunray - Nassau County Area, is denied. Guaranteed revenue charges for the Blacks Ford wastewater treatment plant are approved as reflected on Schedule No. 6. Guaranteed revenues are equal to the base facility charges for each size water meter. The charges shall only be collected from the customers that connect to the Blacks Ford wastewater treatment plant. The approved charges shall be effective for connections on or after the stamped approval date of the tariff sheets. The tariff sheets shall be approved upon staff's verification that the tariff is consistent with our decision and that the protest period has expired. The tariffs will remain in effect until the St. Johns Regional wastewater treatment plant (Blacks Ford) has reached capacity, estimated at an additional 1,827 ERCs. At that time, the charge will cease and the tariff will be canceled. All of UWF's prior tariff charges for guaranteed revenue shall be canceled as of the date the new guaranteed revenue tariffs are effective.

Allowance for Funds Prudently Invested (AFPI) Charges

UWF requested AFPI charges for any property found non-used and useful. We have found, earlier, that some portion of the Blacks Ford plant is non-used and useful. Therefore, consistent with past Commission practice we find that AFPI is appropriate for the Blacks Ford wastewater treatment plant. AFPI charges are the product of mechanical calculations using the formula in Rule 25-30.434, Florida Administrative Code. The cost of qualifying assets are the amounts of non-used and useful investment less accumulated depreciation. The net investment was divided by the number of ERCs remaining until build-out. The per ERC allowances for rate of return, income taxes, property taxes, and depreciation expense were calculated to arrive at a per ERC carrying cost for the non-used and useful investment. Our approved charges are shown on Schedule No. 5.

The approved charges shall be effective for only connections served by the St. Johns Regional wastewater treatment plant (Blacks Ford) on or after the stamped approval date of the tariff sheets. The tariff sheets shall be approved upon staff's verification that

the tariff is consistent with our decision and that the protest period has expired. The tariffs will remain in effect until the St. Johns Regional wastewater treatment plant (Blacks Ford) has reached capacity, estimated at an additional 1,827 ERCs. At that time, the charge will cease and the tariff will be canceled. All of Sunray's prior tariff charges for AFPI shall be canceled as of that date. Rule 25-30.434(4), Florida Administrative Code, states that if any connections have been made between the beginning date and the effective date of the charge, no AFPI will be collected from those connections.

Statutory Rate Reduction

Section 367.0816, Florida Statutes, requires that the rates be reduced immediately following the expiration of the four-year period by the amount of the rate case expense previously included in the rates. The reduction will reflect the removal of revenues associated with the amortization of rate case expense and the gross-up for regulatory assessment fees. The reduction in revenues will result in the rates indicated on Schedules Nos. 6-A and 6-B.

The utility shall file revised tariff sheets no later than one month prior to the actual date of the required rate reduction. The utility shall also file a proposed customer notice 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.

BOOKS AND RECORDS

Worksheets and other data supporting the MFR schedules were not provided in a systematic and rational manner as required by Rule 25-30.450, Florida Administrative Code. See, Audit Exception No. 1. In addition, our auditors were unable to verify the MFR schedules in an expedient manner because the utility insufficiently answered audit document requests or was late responding or failed to answer document requests until after the end of audit field work. It appears that many of the problems were a result of a recent implementation of a new computer system. It appeared that utility personnel experienced difficulties in extracting information, in hard copy form, from the computer. The utility was

late responding to approximately 25 percent of the audit document requests. As a result, the auditors believed that the effectiveness of the audit was reduced. However, the auditors stated an overall opinion in the audit report that the MFRs present fairly, in all material respects, the books and records of UWF.

In its response to the Audit, the utility states that it has supported its MFR schedules as required by Rule 25-30.450, Florida Administrative Code. Furthermore, UWF stated that its supporting information is organized in a systematic and rational manner. During the course of this rate case proceeding, UWF claimed to have provided numerous worksheets, responded to extensive audit requests, generated customized reports, and organized and participated in meetings designed to aid the audit staff as well as customized reports from its computer system for the audit staff's use.

United Water Management and Services Company (UWM&S) greatly improved its computer system in 1997 by installing an Integrated Financial Management System (IFM System). UWM&S previously used technologically antiquated mainframe computer systems which were primarily batch systems with little or no on-line capability to query data bases or develop ad hoc queries. The previous systems were lacking integration and required manual manipulation of data. The replacement of the old systems dramatically reduced the risk of disruption due to Year 2000 problems. Companies are increasingly needing to rely on the use of electronic media for their record keeping and the use of such electronic media record keeping leads to improved decision making.

In Order No. PSC-97-0618-FOF-WS, issued May 30, 1997, Docket No. 960451-WS, we found that UWF's records did not comply with the NARUC USOA Class A Water and Wastewater instructions 2.A. and 24.C. The utility was directed to comply with the NARUC USOA by maintaining continuing property records. UWF believed that the utility's investment in the new computer system improved record keeping by replacing hand summarized plant records in the 300 series accounts. UWF now has an electronic sub-ledger that maintains detailed records of plant by 300 accounts.

UWF and UWM&S claim to have devoted a great deal of time and effort to aid the audit staff. They made their onsite personnel available for consultation by the audit staff during the field audit of UWF. UWM&S also sent several representatives to the local office in order to aid the audit staff. Also, the utility prepared

and made several presentations to demonstrate the computer system's capabilities and the means for obtaining useful reports. The utility does not believe that there were any specific audit document requests which were insufficiently answered, nor does Exception No. 1 of the Audit Report identify any such request.

The utility believed that one source of difficulty for the audit staff was that, because the transition to the new computer system occurred in the base year, additional work was required to track information from the old computer system through the new computer system. However, UWF believed that this difficulty had been addressed by both the audit staff and the utility by their agreement to focus on the reconciliation of 1997 year end balances instead of monthly balances.

Another primary problem in connection with the audit was a question of documentation format. The information sought to be reviewed by the audit staff is contained in the computer data base which provides information in a format consistent with the use of such information today. However, UWF believed that the audit staff is accustomed to reviewing data provided in a different format. In order to convert the information to the format requested by the audit staff, the utility had to query the data base for information and create new reports, which took additional time. UWF believed that despite the large number of requests, the extensive analysis required to answer many of the requests, and the short turnaround time for responding (e.g., two days), the information was provided in a timely manner.

Order No. PSC-97-0618-FOF-WS required the utility to:

> comply with Rule 25-30.115(1), Florida Administrative Code, by either keeping its accounts in accordance with the National Association of Regulatory Commissioners' (NARUC) Uniform System of Accounts, or by providing a reliable conversion chart which will map its own accounts to those prescribed by NARUC.

Rule 25-30.115(1), Florida Administrative Code requires:

> Each utility shall keep its books of account, and all other books, records, and memoranda which support the entries in such books of accounts so as to be able to furnish readily full information as to any item included in any account. Each entry shall be supported by such

> detailed information as will permit a ready identification, analysis, and verification of all facts relevant thereto. (Instruction 2)
>
> Each ... account shall be subdivided as shown in the plant account matrix (i.e., use NARUC Accounts 301-348 to subdivide the 101 plant account) (Instruction 32)

Our auditors were provided with a report in the plant account matrix format. This report contained ending balances for NARUC Accounts 301-348. For the test year ended December 31, 1997, the audit staff was able to agree the ending balances reflected in the utility report to the utility's plant Account 101, reflected in the general ledger. However, the audit staff had an extremely difficult time reconciling the books and records to the MFRs because of the different balances for plant in service and plant additions which were reflected in the various reports received from the utility.

UWF acknowledged that the transition from one computer system to another created some difficulties because of the audit staff's unfamiliarity with the new system. The utility asserts that it made every effort to familiarize the audit staff with the new system and to provide access to and assistance from utility personnel who were trained in its uses. UWF asserts that the "different balances ... in the various reports" were the direct result of the utility providing revised reports to comply with the auditors requests for different information in different formats.

We find the utility's explanations adequate. Further, despite the Audit Exceptions 1 and 2, the audit staff stated an overall opinion that UWF's MFRs present fairly in all material respects the utility's books and records. We do not expect that these types of reconciling problems will recur in the future. However, if these reconciling problems recur, the utility is on notice that a show cause proceeding will be initiated. Accordingly, we find that the books and records are in compliance with our rules.

CLOSING DOCKET

If no protest of this Order is received within the 21-day protest period, this Order shall become final. This docket shall be closed at the conclusion of the protest period, if no protest is timely filed, and upon our staff's approval of revised tariff sheets and the customer notice.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that United Water Florida Inc.'s application for increased water and wastewater rates is granted to the extent set forth in the body of this Order. It is further

ORDERED that the reuse rate for Ponte Vedra Golf Course is zero. It is further

ORDERED that United Water Florida Inc.'s request to change its billing cycle from quarterly to monthly is granted. It is further

ORDERED that United Water Florida Inc.'s request to continue guaranteed revenue charges for the Nassau County Area, Ponce de Leon Area, Sunray - St. Johns County Area, and Sunray - Nassau County Area, is denied. It is further

ORDERED that guaranteed revenue charges for the Blacks Ford wastewater treatment plant are approved as reflected on Schedule No. 6. It is further

ORDERED that the guaranteed revenue charges shall only be collected from the customers that connect to the Blacks Ford wastewater treatment plant. It is further

ORDERED that the guaranteed revenue charges shall be effective for connections on or after the stamped approval date of the tariff sheets. The tariff sheets shall be approved upon staff's verification that the tariff is consistent with our decision and that the protest period has expired. The tariffs will remain in effect until the St. Johns Regional wastewater treatment plant (Blacks Ford) has reached capacity, estimated at an additional 1,827 ERCs. At that time, the charge will cease and the tariff will be canceled. All of United Water Florida Inc.'s prior tariff charges for guaranteed revenue shall be canceled as of the date the new guaranteed revenue tariffs are effective. It is further

ORDERED that the allowance for funds prudently invested charge approved herein shall be effective for only connections served by the St. Johns Regional wastewater treatment plant (Blacks Ford) on or after the stamped approval date of the tariff sheets. It is further

ORDERED that the allowance for funds prudently invested charge tariff sheets shall be approved upon staff's verification that the tariff is consistent with our decision and that the protest period has expired. The tariffs will remain in effect until the St. Johns Regional wastewater treatment plant (Blacks Ford) has reached capacity. At that time, the charge will cease and the tariff will be canceled. All of Sunray's prior tariff charges for allowance for funds prudently invested shall be canceled as of that date. It is further

ORDERED that each of the findings made in the body of this Order is hereby approved in every respect. It is further

ORDERED that all matters contained herein, whether set forth in the body of this Order or in the attachments and schedules attached hereto, are incorporated herein by reference. It is further

ORDERED that the increased rates and charges approved herein shall be effective for service rendered on or after the stamped approval date on the revised tariff sheets, in accordance with Rule 25-30.475, Florida Administrative Code, provided the customers have received notice. It is further

ORDERED that, prior to its implementation of the rates and charges approved herein, United Water Florida Inc. shall submit and have approved a proposed customer notice of the increased rates and charges and the reasons therefor. The notice will be approved upon our staff's verification that it is consistent with our decision herein. It is further

ORDERED that the rates and charges approved herein shall not be implemented until our staff has approved the proposed customer notice, and the notice has been received by the customers. Consistent with our decision herein, the utility shall provide proof of the date notice was given within ten days after the date of the notice. It is further

ORDERED that, prior to its implementation of the rates and charges approved herein, United Water Florida Inc. shall submit and have approved revised tariff pages. The revised tariff pages will be approved upon our staff's verification that the pages are consistent with our decision herein, that the protest period has expired, and that the customer notice is adequate. It is further

ORDERED that the rates shall be reduced at the end of the four-year rate case expense amortization period, consistent with our decision herein. The utility shall file revised tariff sheets no later than one month prior to the actual date of the reduction and shall file a customer notice of the rate decrease and the reason therefor. It is further

ORDERED that all provisions of this Order are issued as proposed agency action and shall become final, unless an appropriate petition in the form provided by Rule 25-22.029, Florida Administrative Code, is received by the Director of the Division of Records and Reporting at 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the date set forth in the Notice of Further Proceedings below. It is further

ORDERED that this docket shall be closed if no timely protest is received from a substantially affected person, and upon the utility's filing and staff's approval of the revised tariff sheets and the customer notice, as set forth herein.

By ORDER of the Florida Public Service Commission this 12th day of March, 1999.

Blanca S. Bayó

BLANCA S. BAYÓ, Director
Division of Records and Reporting

(S E A L)

LAJ

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on April 2, 1999.

In the absence of such a petition, this order shall become effective on the day subsequent to the above date.

Any objection or protest filed in this docket before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

If this order becomes final and effective on the date described above, any party substantially affected may request judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or by the First District Court of Appeal in the case of a water or wastewater utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days of the effective date of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

ATTACHMENT A
Page 1 of 2
St. Johns Regional Wastewater Treatment Plant

State of Florida
Public Service Commission
Docket No. 980214-WS
Information Request via FAX

Question:

Referring to a memorandum from Pasquale J. Radice, dated June 2, 1998.

In paragraph two under "discussion", it states "currently in the St. Johns Service area UWFL has committed a flow of 488,00 gpd or approximately 1,700 Equivalent Residential Customers (ERC's) to existing development projects. UWFL anticipates immediate flow of 200,000 gpd from the existing treatment facilities and is projecting a flow of 1 mgd by the year 2002.

Where are the flows of 488,000 gpd in excess of the "immediate flow of 200,000 gpd" expected to come from?

What is the expected time period for the additional 288,000 gpd to develop?

Has the utility received any requests to date from developers reserving capacity from the Blacks Ford facility? If yes, please provide copies.

Has the utility received any contributions to date from developers reserving capacity? If yes, please provide amounts and names of the developers and time frames for expected connections.

Response:

The projected flow of 488,000 gpd is a combination of existing flows and committed developer projects. The anticipated flows are summarized in the following table:

ATTACHMENT A
Page 2 of 2

Project Name	# ERCs	Proj/Permitted Flow (280 gpd/ERC)
Existing Commitments/Flow	1116	312480
Cimmarone - Phase 1	113	31640
Cimarone - Arrowhead Point	31	8680
St. Johns County - Fire Station	5	1400
Cim. Prop. Owners Assoc. Pool	2	560
Southern Grove S/D - Phase 1	52	14560
Nat. Auto/Truckstops Inc.	41	11480
Cimarone Clubhouse	21	5880
Southern Grove S/D - Phase II	38	10640
Johns Glen - Phase I	49	13720
Indian Creek	69	19320
Emro Marketing Co. (Marathon)	13	3640
Southlake - Unit One (Panitz)	65	18200
Commanche Trail at Cimarone	78	21840
Johns Glen - Phase 2	51	14280
Totals	**1744**	**488,320**

Based upon the information available at this time, it is anticipated that the total wastewater flow in the St. Johns Service Area will be 488,000 gallons per day in the years 2000-2001.

Currently there are two projects whose flows been assigned to the Blacks Ford Regional wastewater treatment plant as a result of the DEP permitting process. Those projects are Bridgestone at Cunningham Creek Plantation, Unit One and Lake Cunningham at Cunningham Creek Plantation, Unit One. A copy of the DEP permit showing this assignment is attached.

The utility has received $102,750 in contributions from the two projects mentioned above. Appropriate pages from the developer agreement has been attached which shows the breakdown of the contributions collected.

UNITED WATER FLORIDA, INC.
SCHEDULE OF WATER RATE BASE
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 1-A
DOCKET 980214-WS

	DESCRIPTION	TEST YEAR PER UTILITY	UTILITY ADJUSTMENT	ADJUSTED TEST YEAR PER UTILITY	COMMISSION ADJUSTMENT	COMMISSION ADJUSTED TEST YEAR
1	UTILITY PLANT IN SERVICE	$69,607,255	$0	$69,607,255	$0	$69,607,255
2	LAND & LAND RIGHTS	922,868	0	922,868	0	922,868
3	NON-USED & USEFUL COMPONENTS	0	0	$0	0	0
4	ACCUMULATED DEPRECIATION	(12,922,828)	0	(12,922,828)	0	(12,922,828)
5	CIAC	(26,888,792)	0	(26,888,792)	(128,611)	(27,017,403)
6	AMORTIZATION OF CIAC	6,616,037	0	6,616,037	4,398	6,620,435
7	CWIP	0	0	0	0	0
8	ACQUISITION ADJUSTMENTS - NET	366,947	0	366,947	0	366,947
9	ADVANCES FOR CONSTRUCTION	(259,716)	0	(259,716)	0	(259,716)
10	UNFUNDED POST-RETIRE. BENEFITS	(329,204)	0	(329,204)	(214,280)	(543,484)
11	WORKING CAPITAL ALLOWANCE	935,163	0	935,163	(257,984)	677,269
	RATE BASE	$38,047,730	$0	$38,047,730	($596,386)	$37,451,344

UNITED WATER FLORIDA, INC.
SCHEDULE OF WASTEWATER RATE BASE
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 1-B
DOCKET 980214-WS

	DESCRIPTION	TEST YEAR PER UTILITY	UTILITY ADJUSTMENT	ADJUSTED TEST YEAR PER UTILITY	COMMISSION ADJUSTMENT	COMMISSION ADJUSTED TEST YEAR
1	UTILITY PLANT IN SERVICE	$111,996,158	$0	$111,996,158	$0	$111,996,158
2	LAND & LAND RIGHTS	4,163,244	0	4,163,244	0	4,163,244
3	NON-USED & USEFUL COMPONENTS	0	0	0	(2,945,936)	(2,945,936)
4	ACCUMULATED DEPRECIATION	(27,616,719)	0	27,616,719)	0	(27,616,719)
5	CIAC	(40,849,312)	0	(40,849,312)	(119,633)	(40,968,945)
6	AMORTIZATION OF CIAC	13,609,392	0	13,609,392	6,030	13,615,422
7	CWIP	0	0	0	0	0
8	ACQUISITION ADJUSTMENTS - NET	475,777	0	475,777	0	475,777
9	ADVANCES FOR CONSTRUCTION	(67,149)	0	(67,149)	0	(67,149)
10	UNFUNDED POST-RETIRE. BENEFITS	(614,930)	0	(614,930)	(351,263)	(966,193)
11	WORKING CAPITAL ALLOWANCE	1,662,511	0	$1,662,511	(458,477)	$1,204,034
	RATE BASE	$62,758,972	$0	$62,758,972	($3,869,280)	$58,889,692

UNITED WATER FLORIDA, INC.
ADJUSTMENTS TO RATE BASE
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 1-C
DOCKET 980214-WS

EXPLANATION	WATER	WASTEWATER
UTILITY PLANT IN SERVICE	$0	$0
LAND & LAND RIGHTS	$0	$0
NON-USED & USEFUL COMPONENTS		
1 Non-Used and Useful Treatment Plant	$0	($2,969,279)
2 Non-Used and Useful Land	0	(407,195)
3 Non-Used and Useful Accumulated Depreciation	0	587,950
4 Imputed CIAC on Margin Reserve	0	(160,102)
5 Accum. Amort. of CIAC on Margin Reserve	0	2,690
Total	$0	($2,945,936)
CIAC		
Revised Growth Projections	($128,611)	($119,633)
AMORTIZATION OF CIAC		
Revised Growth Projections	$4,398	$6,030
UNFUNDED POST-RETIRE. BENEFITS		
Unfunded liability for Other Postretirement Employee Benefits	($214,280)	($351,263)
WORKING CAPITAL ALLOWANCE		
Allowance for working capital	($257,894)	($458,477)

UNITED WATER FLORIDA, INC.
CAPITAL STRUCTURE
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 2
DOCKET 980214-WS

DESCRIPTION	TOTAL CAPITAL	SPECIFIC ADJUSTMENTS	PRO RATA ADJUSTMENTS	CAPITAL RECONCILED TO RATE BASE	RATIO	COST RATE	WEIGHTED COST
PER UTILITY 1999 - 13-MONTH AVERAGE							
1 LONG TERM DEBT	$0	$51,921,823	$0	$51,921,823	51.51%	7.69%	3.96%
2 SHORT-TERM DEBT	0	0	0	0	0.00%	0.00%	0.00%
3 PREFERRED STOCK	0	141,837	0	141,837	0.14%	5.00%	0.01%
4 COMMON EQUITY	101,555,266	(55,759,312)	0	45,795,954	45.43%	10.18%	4.62%
5 CUSTOMER DEPOSITS	6,000	0	0	6,000	0.01%	7.00%	0.00%
6 DEFERRED INCOME TAXES	1,799,426	0	0	1,799,426	1.79%	0.00%	0.00%
7 DEFERRED ITC'S-ZERO COST	0	0	0	0	0.00%	0.00%	0.00%
8 DEFERRED ITC'S-WTD. COST	1,141,663	0	0	1,141,663	1.13%	8.84%	0.10%
9 OTHER	0	0	0	0	0.00%	0.00%	0.00%
10 TOTAL CAPITAL	$104,502,355	($3,695,652)	$0	$100,806,703	100%		8.69%
PER COMMISSION 1999 - 13-MONTH AVERAGE							
11 LONG TERM DEBT	$0	$51,516,076	($2,397,689)	$49,118,459	50.98%	7.69%	3.92%
12 SHORT-TERM DEBT	0	0	0	0	0.00%	0.00%	0.00%
13 PREFERRED STOCK	0	143,926	(6,699)	137,227	0.14%	5.00%	0.01%
14 COMMON EQUITY	101,555,266	(57,264,298)	(2,061,415)	42,229,615	43.83%	9.57%	4.19%
15 CUSTOMER DEPOSITS	6,000	0	0	6,000	0.01%	7.00%	0.00%
16 DEFERRED INCOME TAXES	1,799,426	1,908,644	0	3,708,070	3.85%	0.00%	0.00%
17 DEFERRED ITC'S-ZERO COST	0	0	0	0	0.00%	0.00%	0.00%
18 DEFERRED ITC'S-WTD. COST	1,141,663	0	0	1,141,663	1.19%	8.55%	0.10%
19 OTHER	0	0	0	0	0.00%	0.00%	0.00%
17 TOTAL CAPITAL	$104,502,355	($3,695,652)	($4,465,801)	$96,341,034	100%		8.22%

	LOW	HIGH
RETURN ON EQUITY	8.57%	10.57%
OVERALL RATE OF RETURN	7.78%	8.66%

UNITED WATER FLORIDA, INC.
STATEMENT OF WATER OPERATIONS
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 3-A
DOCKET 980214-WS

	DESCRIPTION	TEST YEAR PER UTILITY	UTILITY ADJUSTMENTS	ADJUSTED TEST YEAR PER UTILITY	COMMISSION ADJUSTMENTS	COMMISSION ADJUSTED TEST YEAR	REVENUE INCREASE	REVENUE REQUIREMENT
1	OPERATING REVENUES	$10,443,674	$2,204,773 21.11%	$12,648,447	($1,795,913)	$10,852,534	$1,360,250 12.53%	$12,212,784
	OPERATING EXPENSES:							
2	OPERATION AND MAINTENANCE	$5,032,685	$13,721	$5,046,406	($69,943)	$4,976,463	$8,465	$4,984,928
3	DEPRECIATION	1,830,458	0	1,830,458	(2,932)	1,827,526		1,827,526
4	AMORTIZATION	29,717	0	29,717	0	29,717		29,717
5	TAXES OTHER THAN INCOME	1,267,618	99,215	1,366,833	(80,816)	1,286,017	61,211	1,347,228
6	INCOME TAXES	281,528	787,158	1,068,686	(610,388)	458,298	485,626	943,924
7	**TOTAL OPERATING EXPENSES**	$8,442,006	$900,094	$9,342,100	($764,079)	$8,578,021	$555,302	$9,133,323
8	**OPERATING INCOME**	$2,001,668	$1,304,679	$3,306,347	($1,031,834)	$2,274,513	$804,948	$3,079,460
9	**RATE BASE**	$38,047,730		$38,047,730		$37,451,344		$37,451,344
10	**RATE OF RETURN**	5.26%		8.69%		6.07%		8.22%

UNITED WATER FLORIDA, INC.
STATEMENT OF WASTEWATER OPERATIONS
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 3-B
DOCKET 980214-WS

	DESCRIPTION	TEST YEAR PER UTILITY	UTILITY ADJUSTMENTS	ADJUSTED TEST YEAR PER UTILITY	COMMISSION ADJUSTMENTS	COMMISSION ADJUSTED TEST YEAR	REVENUE INCREASE	REVENUE REQUIREMENT
1	OPERATING REVENUES	$18,708,229	$3,067,140 16.39%	$21,775,369	($2,316,679)	$19,458,690	$1,056,537 5.43%	$20,515,227
	OPERATING EXPENSES							
2	OPERATION AND MAINTENANCE	$8,882,392	$19,087	$8,901,479	($115,944)	$8,785,535	$7,396	$8,792,931
3	DEPRECIATION	3,411,342	0	3,411,342	(174,491)	3,236,851		3,236,851
4	AMORTIZATION	43,399	0	43,399	0	43,399		43,399
5	TAXES OTHER THAN INCOME	2,076,125	138,021	2,214,146	(133,290)	2,080,856	47,544	2,128,400
6	INCOME TAXES	656,203	1,095,045	1,751,248	(656,747)	1,094,501	376,919	1,471,420
7	**TOTAL OPERATING EXPENSES**	15,069,461	1,252,153	$16,321,614	($1,080,472)	$15,241,142	$431,859	$15,673,001
8	**OPERATING INCOME**	$3,638,768	$1,814,987	$5,453,755	($1,236,207)	$4,217,548	$624,678	$4,842,226
9	**RATE BASE**	$62,758,972		$62,758,972		$58,889,692		$58,889,692
10	**RATE OF RETURN**	5.80%		8.69%		7.16%		8.22%

UNITED WATER FLORIDA, INC.
ADJUSTMENTS TO OPERATING INCOME
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 3-C
DOCKET 980214-WS

	EXPLANATION	WATER	WASTEWATER
	OPERATING REVENUES		
	Revised Growth Projections		
1	Remove Requested Final Revenue Increase	($2,204,773)	($3,067,140)
2	Revised Growth Projections	408,860	750,461
	Total	($1,795,913)	($2,316,679)
	OPERATION & MAINTENANCE EXPENSE		
1	Unaccounted For Water		
	Purchased Water	($9,058)	$0
	Purchased Power	(9,941)	0
	Chemicals	(3,533)	0
	Revised Growth Projections		
2	Sludge Hauling	0	59,294
3	Purchased Power	38,862	100,230
4	Chemicals	13,957	12,780
5	Uncollectibles	2,544	5,253
	Purchased Sewage Treatment		
6	Correct MFR Error	0	(116,197)
7	Forecasted Quantity and Rates	0	(33,317)
8	Other Postretirement Employee Benefits	(26,402)	(46,938)
9	Uncollectible Accounts	(26,000)	0
10	Lobbying	(11,269)	(6,586)
11	Public Service Tax	(15,487)	(48,480)
12	Rate Case Expense	(23,616)	(41,983)
	Total	($69,943)	($115,944)
	DEPRECIATION EXPENSE-NET		
	Depreciation on Non-Used and Useful Plant	$0	($165,092)
	Amortization Imputed CIAC	0	(5,379)
	Revised Growth Projections CIAC Amortization	(2,932)	(4,020)
	Total	($2,932)	($174,491)
	TAXES OTHER THAN INCOME		
1	RAFs on Revenue Adjustments Above	($80,816)	($104,251)
2	Property Tax on Non-Used and Useful Property	0	(29,039)
	Total	($80,816)	($133,290)
	INCOME TAXES		
	Adjust to Test Year Income Tax Expense	($610,388)	($656,747)

UNITED WATER FLORIDA, INC. **SCHEDULE NO. 4-A**
MONTHLY WATER SERVICE RATES **DOCKET 980214-WS**
TEST YEAR ENDED 12/31/99

Class	Rates Prior to Filing	Utility Requested Final	Commission Approved Final
Residential, General Service and Multi-Family			
Base Facility Charge:			
Meter Size:			
5/8"	$8.08	$9.66	$7.76
3/4"	$11.69	$14.04	$11.25
1"	$20.74	$25.01	$19.94
1-1/2"	$46.66	$56.45	$44.78
2"	$82.94	$100.45	$79.62
3"	$186.68	$226.29	$179.26
4"	$331.78	$402.27	$318.63
6"	$746.60	$905.39	$716.95
8"	$1,327.01	$1,609.53	$1,274.27
Quantity Charge:			
per 1,000 Gallons	$1.36	$1.65	$1.49
per 100 Cu Ft	$1.01	$1.23	$1.11
Private Fire Protection			
Base Facility Charge:			
Meter Size:			
2"	$6.91	$8.38	$6.63
3"	$15.56	$18.86	$14.94
4"	$27.65	$33.51	$26.55
6"	$62.22	$75.42	$59.75
8"	$110.58	$134.05	$106.19
10"	$172.84	$209.52	$165.98
12"	$248.87	$301.67	$238.98
Typical Monthly Residential Costs			
5/8" Meter Size			
3,000 Gallons	$12.16	$14.61	$12.23
5,000 Gallons	$14.88	$17.91	$15.21
10,000 Gallons	$21.68	$26.16	$22.66

UNITED WATER FLORIDA, INC. **SCHEDULE NO. 4-B**
MONTHLY WASTEWATER SERVICE RATES **DOCKET 980214-WS**
TEST YEAR ENDED 12/31/99

Class	Rates Prior to Filing	Utility Requested Final	Commission Approved Final
Residential			
Base Facility Charge:			
All Water Meter Sizes:	$11.34	$13.23	$12.59
Quantity Charge:			
per 1,000 Gallons (9,000 gallon per month cap)	$3.34	$3.89	$3.53
per 100 Cu Ft (1,200 cu ft per month cap)	$2.50	$2.91	$2.64
General Service			
Base Facility Charge:			
Water Meter Size:			
5/8"	$12.92	$15.13	$12.59
3/4"	$18.69	$21.85	$18.26
1"	$33.16	$38.71	$32.36
1-1/2"	$74.61	$87.01	$72.64
2"	$132.64	$154.62	$129.17
3"	$298.53	$347.91	$290.83
4"	$530.57	$618.18	$516.95
6"	$1,193.95	$1,391.03	$1,163.19
8"	$2,122.13	$2,472.36	$2,054.53
Quantity Charge:			
per 1,000 Gallons	$4.01	$4.67	$4.24
per 100 Cu Ft	$3.00	$3.49	$3.17
Jacksonville University			
Base Facility Charge:			
Water Meter Size:			
3"	$298.53	$347.91	$290.83
4"	$530.57	$618.18	$516.95
6"	$1,193.95	$1,391.03	$1,163.19
Quantity Charge:			
per 1,000 Gallons	$4.13	$4.81	$4.41
Unmetered Accounts			
Residential Accounts	$36.21	$42.21	$38.88
Non-residential Accounts	$37.76	$43.99	$38.85
Typical Monthly Residential Costs			
5/8" water meter:			
3,000 Gallons	$21.36	$24.90	$23.18
5,000 Gallons	$28.04	$32.68	$30.24
9,000 Gallons	$41.40	$48.24	$44.36
(Wastewater Gallonage Cap - 9,000 Gallons per Month)			

UNITED WATER FLORIDA, INC. **SCHEDULE NO. 5**
ALLOWANCE FOR FUNDS PRUDENTLY INVESTED **DOCKET 980214-WS**
TEST YEAR ENDED 12/31/99

MONTH	1999	2000	2001	2002	2003
WASTEWATER TREATMENT AND DISPOSAL					
January	$0	$313	$608	$919	$1,248
February	$24	$338	$633	$946	$1,277
March	$48	$362	$659	$973	$1,306
April	$72	$387	$685	$1,000	$1,335
May	$96	$411	$711	$1,028	$1,363
June	$120	$435	$737	$1,055	$1,392
July	$145	$460	$762	$1,082	$1,421
August	$169	$484	$788	$1,110	$1,450
September	$193	$509	$814	$1,137	$1,479
October	$217	$533	$840	$1,164	$1,508
November	$241	$557	$866	$1,192	$1,537
December	$265	$582	$891	$1,219	$1,566

NOTES:

1. The amounts indicated above are per ERC. (ERC = 280 gpd)

2. The number of remaining ERCs is 1,827.

3. If the number of remaining ERCs has not connected by December 31, 2003, the maximum charge of $1,566 remains in effect after December 31, 2003.

4. When the number of remaining ERCs have connected, the charge will cease.

UNITED WATER FLORIDA, INC. **SCHEDULE NO. 6**
MONTHLY WASTEWATER GUARANTEED REVENUE CHARGES **DOCKET 980214-WS**
TEST YEAR ENDED 12/31/99

Class	Commission Approved Final

Applicable Only To Those Customers Added to the
St. Johns Regional Wastewater Treatment Plant (Blacks Ford)

Residential, General Service and Multi-Family

Guaranteed Revenue Charge (Same as Base Facility Charge):

Water Meter Size:	
5/8"	$12.59
3/4"	$18.26
1"	$32.36
1-1/2"	$72.64
2"	$129.17
3"	$290.83
4"	$516.95
6"	$1,163.19
8"	$2,054.53

Note: Guaranteed revenues are monthly charges collected after payment of service availability and AFPI charges up to the point that utility service is rendered.

UNITED WATER FLORIDA, INC.
WATER SERVICE RATES
4 YEAR RATE REDUCTION
TEST YEAR ENDED 12/31/99

SCHEDULE NO. 7-A
DOCKET 980214-WS

Class	Approved Final Rates	Decrease
Residential, General Service and Multi-Family		
Base Facility Charge:		
Meter Size:		
5/8"	$7.76	($0.05)
3/4"	$11.25	($0.07)
1"	$19.94	($0.13)
1-1/2"	$44.78	($0.29)
2"	$79.62	($0.52)
3"	$179.26	($1.16)
4"	$318.63	($2.06)
6"	$716.95	($4.62)
8"	$1,274.27	($8.21)
Quantity Charge:		
per 1,000 Gallons	$1.49	($0.01)
per 100 Cu Ft	$1.11	$0.00
Private Fire Protection		
Base Facility Charge:		
Meter Size:		
2"	$6.63	($0.04)
3"	$14.94	($0.10)
4"	$26.55	($0.17)
6"	$59.75	($0.39)
8"	$106.19	($0.69)
10"	$165.98	($1.07)
12"	$238.98	($1.54)
Typical Residential Bills		
5/8" Meter Size:		
3,000 Gallons	$12.23	($0.08)
5,000 Gallons	$15.21	($0.10)
10,000 Gallons	$22.66	($0.15)

UNITED WATER FLORIDA, INC. **SCHEDULE NO. 7-B**
WASTEWATER SERVICE RATES **DOCKET 980214-WS**
4 YEAR RATE REDUCTION
TEST YEAR ENDED 12/31/99

Class	Approved Final Rates	Decrease
Residential		
Base Facility Charge:		
All Water Meter Sizes:	$12.59	($0.08)
Quantity Charge:		
per 1,000 Gallons (9,000 gallon per month cap)	$3.53	($0.03)
per 100 Cu Ft (1,200 cu ft per month cap)	$2.64	($0.02)
General Service		
Base Facility Charge:		
Water Meter Size:		
5/8"	$12.59	($0.08)
3/4"	$18.26	($0.12)
1"	$32.36	($0.21)
1-1/2"	$72.64	($0.46)
2"	$129.17	($0.82)
3"	$290.83	($1.85)
4"	$516.95	($3.29)
6"	$1,163.19	($7.39)
8"	$2,054.53	($13.05)
Quantity Charge:		
per 1,000 Gallons	$4.24	($0.03)
per 100 Cu Ft	$3.17	($0.02)
Jacksonville University		
Base Facility Charge:		
Water Meter Size:		
3"	$290.83	($1.85)
4"	$516.95	($3.29)
6"	$1,163.19	($7.39)
Quantity Charge:		
per 1,000 Gallons	$4.41	($0.20)
Unmetered Accounts		
Residential Accounts	$38.88	($0.31)
Non-residential Accounts	$38.85	($0.26)
Typical Residential Bills		
5/8" water meter:		
3,000 Gallons	$23.18	($0.17)
5,000 Gallons	$30.24	($0.23)
10,000 Gallons	$47.89	($0.38)

(Wastewater Gallonage Cap - 9,000 Gallons per Month)

RECEIVED-FPSC

99 MAR 12 AM 10:45

RECORDS AND REPORTING

M E M O R A N D U M

March 12, 1999

TO: DIVISION OF RECORDS AND REPORTING

FROM: DIVISION OF LEGAL SERVICES (JABER)

RE: DOCKET NO. 980214-WS - APPLICATION FOR RATE INCREASE IN DUVAL, ST. JOHNS AND NASSAU COUNTIES BY UNITED WATER FLORIDA INC.

99-0513-FOF-WS

Attached is a NOTICE OF PROPOSED AGENCY ACTION ORDER APPROVING INCREASED WATER AND WASTEWATER RATES AND CHARGES, to be issued in the above-referenced docket.

(Number of pages in order - 94)

* * * **NOTE: THIS ORDER MUST BE ~~FILED~~ ISSUED TODAY - 03/12/99** * * *

ATTACHMENT(S) NOT ON-LINE

LAJ/dr

Attachment

cc: Division of Water and Wastewater
(Willis, Bethea, Crouch, B. Davis, Gilchrist, Kyle, Lingo, Merchant)
Division of Auditing and Financial Analysis
(Hicks, Lester, Vandiver)
Division of Legal Services (Brubaker)

I:\980214-O.LAJ

Sent to M.R. 11:10 3/12/99 · Clerk. St Johns. NASSAU.

FLORIDA PUBLIC SERVICE COMMISSION - RECORDS AND REPORTING

Requisition for Photocopying and Mailing

Date 3 / 12 / 99

Number of Originals 94

Copies Per Original 58

Requested By

Item Presented

_____ Agenda For (Date) _____ Order No. 99-513 in Docket No. 980214

_____ Notice of _____ For (Date) _____ in Docket No. _____

_____ Other _____

Special Handling Instructions

Distribution/Mailing

Number	Distributed/Mailed To	Number	Distribution/Mailed To
16	Commission Offices	2	[illegible]
40	Docket Mailing List - Mailed		[illegible]
	Docket Mailing List - Faxed		

Note: Items must be mailed and/or returned within one working day after issue unless specified here:

Print Shop Verification

Job Number 120 Verified By W.S.

Date and Time Completed 3-12 Job Checked For Correctness and Quality (Initial) _____

Mail Room Verification

Date Mailed _____ Verified By _____

PSC/RAR 12(2/91)