BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for rate increase in Duval, Nassau, and St. Johns Counties by United Water Florida Inc.	DOCKET NO. 960451-WS ORDER NO. PSC-97-0618-FOF-WS ISSUED: MAY 30, 1997

The following Commissioners participated in the disposition of this matter:

JULIA L. JOHNSON, Chairman
SUSAN F. CLARK
J. TERRY DEASON
JOE GARCIA
DIANE K. KIESLING

APPEARANCES: James L. Ade and Scott G. Schildberg, Esquires, Martin, Ade, Birchfield & Mickler, P.A., Post Office Box 59, Jacksonville, Florida 32201
On behalf of United Water Florida Inc.

Harold McLean, Esquire, Office of Public Counsel, c/o The Florida Legislature, 111 West Madison Street, Suite 812, Tallahassee, Florida 32399-1400
On behalf of the Citizens of Florida.

Rosanne G. Capeless and Bobbie L. Reyes, Esquires, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0863
On behalf of the Commission Staff.

TABLE OF CONTENTS

FINAL ORDER APPROVING RATES AND CHARGES

BY THE COMMISSION:

BACKGROUND

United Water Florida Inc. (UWF or utility), is a Class A utility providing water and wastewater service to approximately 27,000 customers in Duval, Nassau, and St. Johns Counties. 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).

On July 30, 1996, the utility filed an application for approval of interim and permanent rate increases pursuant to Sections 367.081, 367.0816 and 367.082, Florida Statutes. The utility satisfied the minimum filing requirements (MFRs) for a rate increase on September 3, 1996. The utility requested that the case be scheduled for a formal hearing and not processed under our proposed agency action procedure as provided for by Section 367.081(8), Florida Statutes.

On October 29, 1996, the Office of Public Counsel (OPC) filed a Notice of Intervention in this proceeding. We acknowledged the intervention of OPC by Order No. PSC-96-1341-FOF-WS, issued November 8, 1996, in this docket.

UWF's request for interim rate relief was designed to increase annual water revenues by $1,148,966 (16.77%), and annual wastewater revenues by $1,073,950 (7.87%). By Order No. PSC-96-1388-FOF WS, issued November 19, 1996, in this docket, we, among other things, suspended the proposed permanent rates and approved interim increases in annual revenues of $725,015 (10.47%) for water, and $238,030 (1.69%) for wastewater, subject to refund with interest.

The utility's last rate proceeding was based on a test year ending December 31, 1980, and was decided by Proposed Agency Action Order No. 10531, issued January 20, 1982, in Docket No. 810071-WS. The utility has implemented price index and pass-through rate increases every year since 1981.

UWF's request for permanent water and wastewater rates is based on a projected test year ended December 31, 1997, utilizing an intermediate test year ended December 31, 1996, and a base year ended December 31, 1995. The utility requests to increase its annual water revenues by $3.3 million and its annual wastewater

revenues by $5.1 million. The request is projected to increase the utility's annual water and wastewater revenues by approximately 46% and 33%, respectively. The utility indicates in its filing that the requested rate increases are primarily due to capital investments that are being required to meet more stringent environmental regulations, rehabilitation of its distribution and collection systems, major enhancements to its water and wastewater treatment processes, and information technology initiatives.

On January 26 and 27, 1997, the technical and customer hearings were held at the Prime Osborne Convention Center in Jacksonville, Florida. Three customer hearings were held during three different times which lasted a total of approximately three and one-half hours. Approximately 100 customers attended, and 27 customers testified in opposition to the rate increase.

On February 20, 1997, the utility informed us, by letter, that it would waive the eight month limitation contained in Section 367.081(6), Florida Statutes, in order to allow us to take final action at our Agenda Conference on May 6, 1997. The eight month limitation was originally set for May 3, 1997. Post hearing briefs were filed on February 26, 1997.

Abbreviations

The following abbreviations used herein are listed below for reference purposes:

ADIT	Accumulated Deferred Income Taxes
AFPI	Allowance for Funds Prudently Invested
AFUDC	Allowance for Funds Used During Construction
AWWA	American Water Works Association
BFC	Base Facility Charge
CIAC	Contributions in Aid of Construction
CWIP	Construction Work in Progress
DEP	Department of Environmental Protection
ERCs	Equivalent Residential Connections
FAC	Florida Administrative Code
FASB	Financial Accounting Standards Board
FPSC	Florida Public Service Commission
GPD	Gallons per Day
ITCs	Investment Tax Credits
JSUC	Jacksonville Suburban Utilities Corporation
JU	Jacksonville University
MFRs	Minimum Filing Requirements
MGD	Million Gallons per Day
NARUC	National Association of Regulatory Utility Commissioners
OPC	Office of Public Counsel

PDA	Parent Debt Adjustment
PHFU	Plant Held for Future Use
PS&I	Preliminary Survey and Investigations
ROE	Return on Equity
SFAS	Statements of Financial Accounting Standards
TDS	Total Dissolved Solids
UFW	Unaccounted for Water
UPIS	Utility Plant In Service
USOA	Uniform System of Accounts
UWW	United Waterworks Inc.
UWF	United Water Florida Inc.
UWMS	United Water Management and Services Inc.
WRCA	Water Resource Caution Area
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

Stipulations

At the prehearing conference, and during the technical hearing, the parties reached a number of proposed stipulations. At the hearing, we found the stipulations listed below to be reasonable and we thereby accepted them. We also found that these stipulations shall have no precedential value in any subsequent proceeding.

1. The costs incurred related to the merger and resulting name change shall not be allocated to the customers in the current rate proceeding. If the utility discovers that any such costs have been allocated to the customers, it shall so disclose at the hearing so that the appropriate adjustment(s) can be made. (OPC took no position on this issue.)

2. The appropriate AFUDC rate for 1995 and 1996 is 11.12%. (OPC took no position on this issue.)

3. There is no excessive inflow and infiltration in the utility's wastewater system. (OPC took no position on this issue.)

4. The cost of common equity capital shall be determined using the leverage formula in effect at the time of the Commission decision in this case. (OPC took no position on this issue.)

5. Wastewater O&M expenses shall be increased by $53,876 and water O&M expenses shall be decreased by the same to reallocate rent expense appropriately between water and wastewater. This adjustment has been updated to reflect the company's inflation factors used to project 1996 and 1997 expense levels. (OPC took no position on this issue.)

6. Wastewater O&M expenses shall be increased by $57,390 and water O&M expenses shall be decreased by the same to appropriately reallocate expenses related to investor relations between water and wastewater. This adjustment has been updated to reflect the company's inflation factors used to project 1996 and 1997 expense levels.

7. Test year O&M expenses shall be reduced by $503 and $895 for lobbying expenses for water and wastewater, respectively.

8. The utility's private fire protection rates shall be calculated in accordance with Rule 25-30.465, Florida Administrative Code.

9. Based on the rate structure that was approved in the utility's last rate case, by Order No. 10531, UWF's appropriate number of water and wastewater ERCs and consumption for the historical test year ending 12/31/95 are as follow:

	ERCs	Consumption
Water:	302,288	4,288,322
Wastewater:	247,027	3,437,789

10. The current revenue allocation between the base facility charge and the gallonage charge, where 37% of the total water revenue is collected from the base facility charge and 27% of the total wastewater revenue is collected from the base facility charge, shall remain unchanged for both water and wastewater. (OPC took no position on this issue.)

11. UWF's methodology of calculating its residential and general service base facility charges shall be continued, as defined in An Approach to Rate Design, authored by witnesses Sambamurthi and Heil. (OPC took no position on this issue.)

12. UWF's service availability charges shall not be made uniform at this time. However, the utility shall file a service availability application within three years after the final rate case Order is issued in this docket. (OPC took no position on this issue.)

13. The utility may enter into evidence its responses to the staff audit reports without objection by the parties.

14. The evidence shows that UWF's facilities and land used or useful in providing service are functionally related such that they form a single system within the meaning of Section 367.021(11), Florida Statutes. (OPC took no position on this issue.)

15. UWF's single system provides service that transverses county boundaries such that the Commission has exclusive jurisdiction over UWF in St. Johns County, in addition to Duval and Nassau Counties, pursuant to Section 367.171(7), Florida Statutes. (OPC took no position on this issue.)

16. A 13-month average balance shall be utilized in determining test year rate base.

Rulings

At the hearing, UWF's Motion to File Supplemental Direct Testimony of Philip Heil, filed January 10, 1997, was granted; UWF's Motion for Reconsideration of Order No. PSC-97-0022-FOF-WS, filed January 16, 1997, was denied; and OPC's Motion to Strike Testimony, filed January 22, 1996, was withdrawn.

QUALITY OF SERVICE

As required by Rule 25-30.433(1), Florida Administrative Code, in evaluating quality of service, we must consider the quality of the product, operational conditions, and customer satisfaction. We have taken and considered testimony and evidence from environmental and health department personnel, utility witnesses, and customers.

Quality of the Product

The record shows that the utility has worked to remain in compliance with DEP standards for all of its plants and service areas. The utility addressed the quality of the product and cited the testimony of the DEP and health official witnesses. UWF explains that the water characteristics include high levels of hardness and dissolved hydrogen sulfide. The hydrogen sulfide concentration is diminished and expelled through aeration, and additional treatment is chlorination. Sometimes a taste or odor of chlorine will be present when customers open their tap. Water pressure meets the pressure requirements imposed by state regulations. Improvements are planned which will continue to enhance the utility's ability to provide water at appropriate pressure. Improvements are also planned for copper corrosion control.

Operational Conditions

In addressing operational conditions at the facilities, UWF notes that the DEP witnesses found the operational conditions to be satisfactory. The few problems addressed by DEP have already been resolved, or are being addressed and solved.

Concerning the Jacksonville Heights wastewater facility, DEP witness Bolam stated that toxicity violations have occurred in the past and that a consent order would be issued which will require UWF to monitor and collect data to determine whether a mixing zone is needed. Witness Bolam also noted that the Holly Oaks wastewater plant has some corrosion and needs repair. The Ortega Hills wastewater plant has a self-imposed improvement schedule which includes the connection of this facility to the Ortega Blanding regional wastewater treatment plant. The Ponte Vedra plant has overloaded percolation ponds and needs an alternate effluent disposal method. A proposal has been made by UWF, and the DEP agrees with this proposal. Similarly, the St. Johns North facility needs an alternative effluent disposal method due to overloading of its percolation ponds. The Amoco Yulee plant has had continued nitrate violations, and the DEP has made suggestions for correction of the problem. None of the operational deficiencies has caused problems with odors or noise.

HRS witness Hamilton testified that retention time to control hydrogen sulfide was deficient at the San Jose and San Pablo ground storage tanks. He also noted that additional treatment was needed for reducing copper levels at service areas where corrosion control measures were planned.

For the facilities in St. Johns County, DEP witness Rodriguez testified that no cross-connection control programs are on file, and also pointed out that each water plant was meeting current DEP criteria for compliance in other areas. The Nassau County facilities meet all DEP criteria for compliance.

Concerning wastewater service, the utility notes that DEP witness Bolam testified that the treatment plants do not have problems with odors, noise, aerosol drift, or lighting. Lift stations meet all DEP requirements. The cause of a sewer back-up was identified and the problem was corrected.

Witness Hamilton noted that there were some problems with hydrogen sulfide control and corrosion, noting that facilities were planned to be installed for corrosion. We find it appropriate to require the utility to provide us with data to update us on the effectiveness of the corrosion control and hydrogen sulfide

treatment programs after the equipment has been in place for several months. The utility shall specifically address the concerns of customers Bee, Goller, and Emans, who testified about corrosiveness of the water. The utility shall provide this report within six months from the issuance date of this Order.

Customer Satisfaction

UWF asserts that it provides good quality service to its customers. Only 27 of the utility's 28,500 customers testified at the hearing. This small showing of customers demonstrates the good quality of service provided, in the opinion of the utility.

The utility performed an analysis of each customer's testimony and explained the efforts made or being made to alleviate the concerns of each customer. Witness Thomas testified that her water was lousy and did not taste good. The utility noted in its response that the water for that service area is purchased from the City of Jacksonville.

In the area of customer satisfaction, the utility references Exhibit No. 59 and the improvements planned to its facilities. It also recites its leak adjustment policy, availability of irrigation only meters, and the gallonage cap on wastewater service. The utility believes it responds effectively to customer complaints and conducts repairs in an efficient manner.

Customers attended the hearing and testified concerning a variety of dislikes, including opposition to the rate increase, imprudent management, chlorine and sulphur odor, unsavory water characteristics, low pressure, and the utility's response to inquiries. Some customers purchase bottled water or filter their water. Others have had problems with corrosion of plumbing fixtures and plumbing. There were two complaints of wastewater odors or back-ups.

We believe that many areas of customer satisfaction are subjective and difficult to measure. Water in the Jacksonville area is known to have hydrogen sulfide. Many customers filter their water to remove taste, odor, and particulates. An area of particular concern to us is corrosion. We note that another utility in the area has also had problems with corrosion. See Order No. PSC-96-1320-FOF-WS at 24-25, issued October 30, 1996, in Docket No. 950495-WS, which Order we officially recognized in this proceeding.

The remainder of the problems brought to light at the hearing by the customers regarding their service have been addressed in Exhibit No. 59. We are satisfied that these responses by the utility adequately resolve these points. Overall, we find that the quality of service is satisfactory. However, to follow-up on corrosion and odor, the utility is ordered to provide data showing the results of treatment for hydrogen sulfide control and corrosive tendencies of the water, as discussed previously.

RATE BASE

Our calculation of the appropriate rate base for the purpose of this proceeding is shown on Schedule No. 1, and our adjustments are itemized on Schedule No. 1-A. 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.

Projected Capital Additions

The utility has made significant revisions to the projected capital additions included in its original filing. In response to OPC Interrogatory No. 78, the utility made the first revisions to the projected capital additions. Based on this response, actual additions through September 1996 were considerably less than budgeted. OPC witness DeRonne testified that these revisions should be reflected in UPIS. Utility witness Cleveland enumerated further changes in his rebuttal testimony. The projected 1997 additions have increased from the $17,883,000 provided by UWF in response to OPC Interrogatory No. 78, dated December 5, 1996, to $21,137,100 indicated in Exhibit No. No. 41, provided with UWF's rebuttal testimonies and preliminarily marked as Exhibit No. TFC-5. UWF's projected 1997 plant additions increased by $3.25 million between December 5, 1996, and the rebuttal filing.

The newly projected 1997 additions included with UWF's rebuttal include several projects that were not included in the original filing. In its brief, OPC argues that the validity of UWF's increase in projected 1997 plant additions, an increase of over $3 million, is highly questionable considering that actual 1996 additions were considerably below the budgeted amounts included in the utility's filing. On rebuttal, witness Cleveland testified that the actual 1996 plant additions were $2.9 million less than originally budgeted. If the 1996 Yulee WWTP land addition of $1,175,700, which was included in the actual but not the budgeted additions, is removed, the actual 1996 plant additions would be $4 million less than what was budgeted in the filing. OPC believes that this fact should be given significant consideration

when evaluating the reasonableness of the budgeted 1997 plant additions. The 1996 Yulee WWTP land addition is addressed later in this Order.

UWF witness Cleveland testified that OPC witness DeRonne has overstated the effects of slippage on the utility's proposed projects in that she relied on the response to OPC Interrogatory 78 which only addressed projects scheduled at the time of the original filing and did not include the additional projects undertaken by the utility since then. The utility provided the rate base effect calculations of these changes in late-filed Exhibit No. 46. The total effect of these changes show decreases in the 1996 projections for the water plant and a slight increase for the wastewater plant. This is offset by the reverse in 1997 for a net decrease from the utility's original budget of $2.9 million.

We agree, in concept, with witness DeRonne that projections based on more current information should be used when available. We also agree with witness Cleveland that the revised projections from his rebuttal testimony should be used, since they are based on almost one year of actual experience and that witness DeRonne's revised projections overstate the effects of slippage on the utility's proposed projects. Witness DeRonne relied on the response to OPC Interrogatory 78 which only addressed projects scheduled at the time of the original filing and did not include the additional projects undertaken by the utility since then. We have reviewed late-filed Exhibit No. 46, which incorporates witness Cleveland's revised projections and the adjustments to show the rate base as an average in accordance with Stipulation No. 16. We find it appropriate to use these revised projections in developing rate base.

Late-filed Exhibit No. 46 adjusts rate base to show witness Cleveland's revised projections at average as follows:

Rate Base Component	Water	Wastewater
Utility Plant-In-Service	$ (5,866,880)	$ (10,654,178)
Land	245,324	1,445,656
Accumulated Depreciation	876,658	1,151,891
CIAC	1,753,885	(782,648)
Accumulated Amort. CIAC	(391,361)	(369,489)

In addition to the above adjustments incorporated by the utility in late-filed Exhibit No. 46, we have recalculated the average balances for accumulated depreciation and accumulated amortization of CIAC, which appear to be estimates on late-filed Exhibit No. 46. Water treatment plant land and wastewater treatment plant land has been included in plant-in-service as proposed by the utility and has been reclassified as land. This reclassification is internal to plant-in-service and does not effect the total. Based on this recalculation and reclassification, the total adjustments which we have made are as follow:

Rate Base Component	Water	Wastewater
Utility Plant-In-Service	$ (5,951,658)	$ (10,685,901)
Land	330,102	1,487,379
Accumulated Depreciation	2,092,929	1,831,144
CIAC	1,753,885	(782,648)
Accumulated Amort. CIAC	(410,735)	(275,456)
Net Depreciation Expense	(270,063)	(616,629)
Property Tax	(50,053)	(80,637)

Plant-in-Service/Allowance for Funds Used During Construction

According to staff witness Buckley, Rate Case Audit Exception No. 4 states that Rule 25-30.116(5), Florida Administrative Code, directs that "[n]o utility may charge or change its AFUDC rate without prior Commission approval." By Order No. 21492, issued June 30, 1989, in Docket No. 890466-WS, we ordered the establishment of an 11.12% AFUDC rate for Jacksonville Suburban Utilities Corporation. Witness Buckley found, in the audit, that the utility did not use the approved AFUDC rate of 11.12% as of January 1, 1995, but instead used an AFUDC rate of 14.83%.

UWF witness McGuire explained that the utility grossed-up the equity portion of the authorized AFUDC charge, in accordance with SFAS 109, to show the deferred taxes associated with the recognition of AFUDC income. The utility applied the full 14.83% grossed-up rate to CWIP instead of applying the gross-up portion to deferred taxes. Witness McGuire agreed with witness Buckley that the excess AFUDC should be removed from rate base and recommended that the 1996 UPIS should be reduced by $187,651 and average 1997 UPIS should be reduced by $27,041.

Based on witness Buckley's testimony and the utility's agreement as evidenced by witness McGuire, we find it appropriate to require that UPIS, associated depreciation expense, and accumulated depreciation shall be reduced to remove AFUDC recorded in excess of the authorized rate. This adjustment reduces total rate base by $214,692. Based on our averages for construction closed to plant, we have reduced water UPIS by $40,986 and wastewater UPIS by $173,706. Based on these same estimates, we have reduced water accumulated depreciation by $1,502; wastewater accumulated depreciation by $7,770; water depreciation expense by $1,334; and wastewater depreciation expense by $6,901.

Property Held For Future Use

Staff witness Buckley testified that $23,776 was improperly recorded in water UPIS as property held for future use. According to UWF witness McGuire, $15,000 of this amount should be excluded from water rate base as it represents land that is held for future use. Witness McGuire further testified that the remaining $8,776, an easement which is needed for a force main providing effluent disposal in the Ponte Vedra service area, should be reclassified as UPIS, treatment and disposal land. As this is land, there is no impact on accumulated depreciation or depreciation expense.

According to the rebuttal testimony of witness Cleveland, in 1995 the utility purchased 365 acres of wetlands and 65 acres of uplands, costing $1,175,700, for construction of a wastewater treatment plant. Since the purchase of the land, the utility has entered into an agreement to purchase water and wastewater facilities that are currently operated by Sunray Utilities. When the acquisition is completed, excess wastewater treatment capacity will be available to serve the Yulee sub-area. As a result, the utility will be able to postpone construction of the new treatment plant on the Yulee land for several years. Witness Cleveland confirmed that the utility contemplates no construction on the Yulee land during the next five years. The utility expects to use the property to meet additional capacity in seven years.

In its brief, OPC argues that the Yulee purchase of $1,175,700 is shown with the subsequent agreement to purchase the Sunray facility. UWF witness Cleveland confirmed that the utility contemplates no construction on the Yulee land during the next five years, nor has the utility entered into any contracts for any construction. The utility expects to use the property to meet additional capacity in seven years. Further, Mr. Cleveland testified that the land in question enjoys development potential,

and presumably, an attending tendency to appreciate. OPC argues that UWF would have the Commission charge current customers for a return on investment which, according to the utility's own estimates, will not be used for seven years.

We agree with OPC's position that the land that was purchased is not used and useful and will not be used and useful for at least seven years into the future. Therefore, we find it appropriate to exclude the Yulee WWTP land, totaling $1,175,700, from UPIS when determining rate base in this filing, as it is land acquired but not used by UWF in utility service. Rather, it is held for utility service in the future under a definite plan. Accordingly, this land shall be reclassified as plant held for future use and removed from rate base.

We note that by Order No. PSC-93-1113-FOF-WS, issued July 30, 1993, in Docket No. 920734-WS, the Commission concluded that:

> [i]n some cases, the cost for land required for future use may be recognized. However, Section 367.081(2)(a), Florida Statutes, requires this Commission to consider within a reasonable time in the future, not to exceed, unless extended by the Commission, 24 months from the end of the historical test period used to set final rates, whether the investment of the utility in land acquired or facilities constructed or to be constructed is in the public interest. Based on the foregoing, we find that the utility has failed to show that it will have any use for the 274 acres of land within the next five years, if then. Further, we find that although the purchase of the Perry Property may be in the customers' long-term best interests, it is unreasonable to require the current wastewater customers to pay for this extra land which will not be needed in the foreseeable future.

The utility has requested that these parcels of land be either included in rate base, or, failing that, a return on this property should be recovered from customers through an AFPI charge. We have determined that no return on the land shall be recovered from present customers by excluding it from rate base. We further find that a return on the land shall not be recovered from immediate future customers through an AFPI charge. As defined in Rule 25-30.434(1), Florida Administrative Code, AFPI "is a mechanism which

allows a utility the opportunity to earn a fair rate of return on prudently constructed plant held for future use from the future customers to be served by that plant in the form of a charge paid by those customers."

Rule 25-30.434(5), Florida Administrative Code, further states that it is prudent for a utility to have an investment in future use plant for a period of no longer than five years beyond the test year. Since the utility does not contemplate using this land for utility service for at least seven years, we do not find it appropriate for the utility to recover a return on investment for this land from customers who will be connecting within the next five years. Therefore, we do not approve any recovery through an AFPI charge. Of the $23,776 recorded in water UPIS as property held for future use, we have excluded $15,000 from water rate base. We have reclassified the remaining $8,776, an easement in the Ponte Vedra service area, as UPIS. The $1,175,700 added to wastewater UPIS during 1996 for the purchase of Yulee WWTP Land has been excluded from wastewater rate base and reclassified as plant held for future use.

Unaccounted-For Water

UWF asserts that because its facilities are functionally related, form a single system, and are operated as a single system, the overall 9.9% unaccounted-for water is within Commission guidelines and should therefore be accepted as reasonable.

The utility further points out that to focus on an individual service area would be to place form over substance. An emphasis such as this might cause the utility to invest money in repairs that do not significantly diminish the amount of unaccounted-for water. The utility notes that for the individual facilities that have an elevated amount of unaccounted-for water, the total amount lost is still a very small percentage when compared to total water pumped and purchased.

OPC argued that the unaccounted-for water amounts should be reviewed on a service area by service area basis, and when that amount is found excessive, reductions to purchased power and chemicals should be made. The utility should not be allowed to ignore the level of unaccounted-for water in its smaller service areas.

We agree with the utility that the system-wide amount of unaccounted-for water is 9.9%, and this amount of lost water is acceptable, if considered on a system-wide basis. What the overall percentage tends to mask, however, is the point that OPC makes.

Some service areas have excessive amounts of unaccounted-for water, with percentages as high as 45.9%. If the individual service areas are examined for excessive unaccounted-for water, as they should be, a reduction to expenses for unaccounted-for water should be made.

We find that fifteen of UWF's service areas have more than 10% unaccounted-for water. The largest water loss percentages tend to be the six older facilities that are interconnected to the City of Jacksonville supply. These six facilities have water losses above ten percent, and those excesses are 16% of the total water purchased. On Schedule No. B-5 of the MFRs, which shows expenses, the total cost of purchased water is $115,374. The MFRs are contained in Composite Exhibit No. 4. A 16% reduction equals $18,460, which is not a large adjustment to expenses, but will affect both the base facility charge and the gallonage charge.

We further find that the remaining nine facilities with greater than 10% unaccounted-for water essentially produce all of the water pumped to each service area from the utility's wells, and the amount of reduction to expenses is extremely small due to the low cost of production. The total amount of excess unaccounted-for water for all nine facilities is 0.7% of the total pumped. Costs for electricity and chemicals for the water facilities are $423,990 and $88,133, respectively. Due to this low percentage and the small water production cost, the reduction of power and chemical cost equals $3,584, which is an insignificant amount alone, but shall be coupled with the reduction to purchased water, as explained above.

Under the circumstances, we find that 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 $2967; and Chemicals by $617. Additionally, the utility shall continue to take corrective action to reduce the excess unaccounted-for water wherever feasible.

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." In past orders, we have recognized that for a utility to meet this statutory responsibility, it must have sufficient capacity and investment to meet the existing and changing demands of present

customers and the demands of potential customers. We have consistently recognized margin reserve as an element in used and useful plant calculations. See, e.g., Order No. PSC-96-1320-FOF-WS at 48-49, issued October 30, 1996, in Docket No. 950495-WS.

Utility witness Guastella recommended that the water system is 100% used and useful without any allowances for margin reserve. UWF's position is that, if used and useful adjustments are made, it would be appropriate to allow an eighteen-month margin reserve for water mains and three years for water source of supply and treatment facilities. UWF also notes that no party introduced evidence or contended that if a margin reserve is appropriate, it should not be allowed.

OPC noted that UWF witness Sambamurthi testified that margin reserve is for future customers. Therefore, current customers should not pay any return whatsoever on assets which are clearly held by the utility for the benefit of future customers.

Witness Guastella testified that the wastewater system is 100% used and useful without any margin reserve allowances. Mr. Guastella did, however, apply a five year margin reserve when he calculated used and useful for the Ponce de Leon wastewater treatment plant since this is the only service area for which the used and useful percentage is less than 100%, if treated strictly on an individual basis.

As to the margin reserve for the wastewater system, both OPC and UWF reference their analyses for the water system's margin reserve with only one change. UWF recommends that wastewater treatment should have a five year margin reserve if used and useful adjustments are made.

We have determined in this case that the water and wastewater systems are all 100% used and useful without any allowances for a margin reserve. Therefore, we find that no provision for margin reserve is needed for UWF's water or wastewater system.

Used and Useful

Water Treatment Plants

UWF provides water to nineteen separate service areas within Duval, Nassau, and St. John's counties. Witness Guastella examined the capacity and operational data of these facilities and determined that each of the WTPs was 100% used and useful. Mr. Guastella was the only expert witness who provided any testimony regarding used and useful.

Even though OPC did not provide any expert testimony about the appropriate used and useful percentages for the WTPs, OPC did question Mr. Guastella about the probability of a fire occurring on the maximum day when the largest well is out of service. Mr. Guastella agreed that fires are extremely unlikely, but when they happen, utilities that are providing fire protection service must meet the challenge. Mr. Guastella added that engineers have, for many years, designed water systems to meet maximum day plus fire flow demands with the largest well out of service and that it is appropriate for the utility to earn a return on its investment in facilities which are needed to meet these requirements.

OPC argued that utility customers should not be required to pay a return on assets which are in place to meet contingencies which will nearly certainly never occur. We believe that although the probability of each of these events occurring at the same time may be negligible, a utility must have adequate capacity to serve the demand. Failure to supply the potential demand could result in a depressurization of the system.

Mr. Guastella testified that in UWF's last rate case, all of UWF's WTPs were considered to be 100% used and useful. Mr. Guastella testified that no capacity has been added at seven of the WTPs (Arlington, Jacksonville Heights, Forest Brook, Venetia Terrace, Magnolia Gardens, Lake Forest, and Hyde Grove) since the last rate case and that these facilities should still be considered 100% used and useful. Only two of the seven areas (Arlington and Jacksonville Heights) have added any customers during the past five years. However, the 20 ERC per year growth rate at Arlington is only 0.25% of the 8,015 ERCs connected during 1995, and the 29 ERC per year growth rate at Jacksonville Heights is only 0.69% of the 4,198 ERCs connected during 1995. Based upon these facts, we find that the Arlington, Jacksonville Heights, Forest Brook, Venetia Terrace, Magnolia Gardens, Lake Forest, and Hyde Grove WTPs are 100% used and useful.

Mr. Guastella testified that the Yulee West, NCCI, and Amoco Yulee WTPs are small, single-well facilities which UWF acquired since its last rate case. Mr. Guastella testified that small, single-well systems should be considered 100% used and useful since they would be no less costly if constructed to serve only existing customers. We agree. We therefore find that Yulee West, NCCI, and Amoco Yulee WTPs are 100% used and useful.

Mr. Guastella testified that the Holly Oaks, San Jose, and Royal Lakes WTPs were considered 100% used and useful in the last case, but that UWF has installed additional capacity since then. Mr. Guastella testified that the maximum day demands at Holly Oaks

and San Jose exceed the plant capacity with the largest well out of service and are 100% used and useful. Mr. Guastella also testified that the maximum day at Royal Lakes does not exceed plant capacity with the largest well out of service, but that this plant should also be considered 100% used and useful in order to meet peak flows as well as fire demands. We have reviewed the flow information provided by Mr. Guastella for each of these plants and have confirmed that the maximum day demand plus fire flow exceed the plant capacity, with the largest well out of service, for the Holly Oaks, San Jose, and Royal Lakes service areas. Therefore, we find that the Holly Oaks, San Jose, and Royal Lakes WTPs are 100% used and useful without any allowance for a margin reserve.

Mr. Guastella testified that since its last rate case, UWF acquired the Ortega Hills, Ponce de Leon, Ponte Vedra, St. John's North, San Pablo, and Lofton Oaks WTPs and that each of these plants has multiple wells. Mr. Guastella testified that each of these plants should be considered 100% used and useful. We have reviewed the flow information and have confirmed that the maximum day demand plus fire flow or the peak hour demand exceeds the plant capacity at each one of these facilities. Therefore, we find that each of these WTPs is also 100% used and useful without any allowance for a margin reserve.

In consideration of the foregoing, we hereby find that all of the utility's WTPs are 100% used and useful.

Wastewater Treatment Plants

UWF treats wastewater for twelve separate service areas within Nassau, Duval, and St. John's counties. Witness Guastella examined the capacity and operational data of these facilities and determined that all of the WWTPs are 100% used and useful. As was the case for the WTPs, Mr. Guastella was the only expert witness who provided any testimony regarding used and useful for the twelve WWTPs.

In UWF's last rate case, a used and useful adjustment was applied only for the Holly Oaks and Monterey WWTPs. All other WWTP investment was considered 100% used and useful.

OPC argued that Mr. Guastella has been extraordinarily generous in allowing a 100% used and useful percentage for all of the WWTPs and that we should make further used and useful adjustments. As support for this position, OPC pointed out that Mr. Guastella determined that the Ponce de Leon WWTP is 100% used and useful even though the 1997 flows were projected to be 30,000 gpd, while the plant has a design capacity of 400,000 gpd.

Mr. Guastella did prepare a separate calculation for the Ponce de Leon WWTP because it was the only service area for which the used and useful percentage would be less than 100% if treated strictly on an individual basis. Witness Guastella testified that he considered the Ponce de Leon WWTP to be 100% used and useful. According to Mr. Guastella, UWF is a "pure" utility in the sense that it is not affiliated with a real estate developer for which special rate setting considerations are necessary. UWF does not have extensive areas for which relatively large quantities of capacity have been constructed to meet long term growth of an affiliated real estate project. UWF adds plant and facilities to comply with regulatory requirements, improve service to customers, replace facilities in need of retirement and meet localized, incremental growth which is generally short term. Mr. Guastella also pointed out that the cost of the Ponce de Leon WWTP is $281,000, or less than 0.4% of UWF's $75,000,000 of plant-in-service as of December 31, 1995.

Utility witness Sambamurthi testified that the $281,000 price for the 400,000 gpd plant is much lower than the estimated $1.6 million cost for a newly constructed plant. Typically, the cost of a plant is $3 to $4 per gallon of treatment capacity but the contractor, during the time of construction, would have access to a used plant which he was dismantling.

We have reviewed Mr. Guastella's WWTP used and useful calculations and agree that all of the WWTPs are 100% used and useful without any allowance for a margin reserve. Although it is clear that excess capacity exists at the Ponce de Leon WWTP, we find that used and useful adjustments are not necessary for this facility because, as discussed below, the used and useful adjustment which we believe is appropriate would have no material impact on UWF's uniform rates.

We have calculated that for Ponce de Leon, the ratio of customer demand (including a five year margin reserve) to plant capacity (using the plant's 400,000 gpd design capacity) results in a 12.29% used and useful percentage. Application of the 12.29% used and useful percentage would only result in the inclusion of $34,535 of UWF's investment at Ponce de Leon as used and useful.

As discussed earlier, Mr. Sambamurthi testified that the typical cost of WWTP ranges from $3 to $4 per gallon of capacity. Therefore, the estimated cost of a WWTP which was sized to serve only the current 1997 customer demand would range from $90,000 to $120,000. We agree with Mr. Guastella's opinion that, at a minimum, the amount of used and useful investment for any facility should reflect the cost of a plant which is sized to serve the

current customers. The Ponce de Leon WWTP is clearly an example of where the practice of taking the ratio of customer demand (plus a margin reserve allowance) to capacity results in a used and useful investment which is less than the minimum cost of a plant which was sized to serve only current customers.

We have calculated that the minimum cost of plant to serve current customer demands using a plant cost of $3 per gallon plus a five year margin reserve is $147,445 or a used and useful percentage of 52.47%. We have also calculated that a 52.47% used and useful adjustment for Ponce de Leon would not decrease UWF's uniform base facility charge at all and would decrease UWF's uniform gallonage rate by less than one-half of one cent per thousand gallons. Because the effect of this used and useful adjustment on the wastewater final rates is immaterial, we find that no used and useful adjustments are appropriate for the Ponce de Leon WWTP.

In consideration of the foregoing, we hereby find that all of the WWTPs are 100% used and useful.

Water Distribution Systems

Witness Sambamurthi testified that in UWF's last rate case, all of the water distribution systems were considered 100% used and useful. Mr. Sambamurthi also testified that, for the most part, UWF's water distribution systems are entirely contributed, except for replacement mains and certain small quantities of water distribution mains which are considered 100% used and useful. Mr. Guastella testified that UWF's service area does not contain any significant number of scattered lots or relatively large vacant areas for which mains have been installed. OPC did not present any evidence on the water mains.

Based on the foregoing, we find that the water distribution systems are 100% used and useful. No evidence has been presented which contradicts UWF's position that most of the lines have been contributed.

Wastewater Collection Systems

Witness Sambamurthi testified that in UWF's last rate case, all of the wastewater collection systems were considered 100% used and useful. Mr. Sambamurthi also testified that, for the most part, UWF's wastewater collection systems are entirely contributed, except for replacement mains and certain small quantities of water distribution mains which are considered 100% used and useful. Mr. Guastella testified that UWF's service area does not contain any

significant number of scattered lots or relatively large vacant areas for which mains have been installed. OPC did not present any evidence on the wastewater collection system.

Based on the foregoing, we find that the wastewater collection systems are 100% used and useful. No evidence has been presented which contradicts UWF's position that most of the lines have been contributed.

Imputation of CIAC to Offset Margin Reserve

We have determined that both the water and wastewater facilities are 100% used and useful with no margin reserve. Therefore, a determination on the imputation of CIAC is not necessary.

Depreciation Rate Change

In Exhibit No. 56, staff's Audit Report for the Fourteen Years Ended December 31, 1994, Audit Control #93-216-1-1, Audit Exception No. 8, staff witness Grayson recommended an adjustment to UWF's accumulated depreciation balance. In 1986, UWF changed its depreciation rates. The auditors believed that the change was not in compliance with the Commission's specific guidelines for the determination of depreciation for water and wastewater companies, as specified in Rule 25-30.140, Florida Administrative Code, because the utility had received an order to use a certain set of depreciation rates. In accordance with the Rule, those depreciation rates from the latest Commission action remain in effect until the first Commission action under the new depreciation rule, which was effective March 22, 1984.

In response to the auditors' request to justify the depreciation rates being used and the change in depreciation rates in year 1986, UWF stated that it had been using these rates since its last rate case, which was prior to the effective date of the guideline rates prescribed by the Rule, and that it was waiting until its next rate case before changing them.

In response to the change in depreciation rates in 1986, UWF stated that in 1986, the utility went to individual rates by plant account number, keeping the aggregate effect consistent with the previous composite rate, and that the change was made to conform as much as possible with Order No. 16285, issued June 26, 1986, in Docket No. 850287-WS.

The audit staff recalculated the accumulated depreciation by account for years 1986 through 1994 utilizing an approximation of those rates approved in the utility's last rate case. This recalculation determined that the utility should increase accumulated depreciation for water plant accounts by $1,262,048 and decrease accumulated depreciation for wastewater plant accounts by $173,981. OPC witness DeRonne supported this recalculation and the resulting adjustments without further examination and recommended that these adjustments should be reflected in rate base. However, after further examination of this matter, staff witness Grayson, who was the audit supervisor, testified that the recalculation and the resulting adjustments were not appropriate after all.

We believe that the problem with this recalculation is that it significantly over-depreciated the general plant accounts. The short service lives of general plant was a problem to this Commission in the last rate case when, in Order No. 10531, issued January 20, 1982, in Docket No. 810071-WS, the service life of transportation equipment was increased from three to five years, lowering the depreciation rate from 33% to 20%. When the utility realigned its depreciation rates in 1986, the service lives of several general plant accounts were increased. We have been concerned that some general plant items were remaining in service longer than the service lives used in the last rate case. We believe that the utility action to increase these service lives was appropriate to prevent over-depreciation which, if the depreciation of the asset is not stopped, severely overstates current and future depreciation expense and understates rate base. OPC witness DeRonne agreed with the assessment of the problem.

We are mindful that, as noted by witness DeRonne, Staff Advisory Bulletin No. 17 advised utilities to continue using depreciation rates set in their last rate proceeding and to not revise these rates without a general rate filing or depreciation study. Rule 25-30.140, Florida Administrative Code, actually recommends that the guideline rates contained in the rule be used. The rule requires a general rate filing or depreciation study be used to justify rates other than those in the rule. Because the utility, in this case, has maintained its existing rates and has only realigned the individual accounts, and based on witness Grayson's testimony that no recalculation or adjustments were appropriate, we find that no violation of the rule has taken place, and no adjustment is necessary. The utility is requesting implementation of the guideline rates from Rule 25-30.140, Florida Administrative Code, in this case, which conforms with the requirements of the Rule.

Based on the foregoing, we find that the utility's decision to change its depreciation rates without our approval was appropriate because it was a realignment rather than an actual rate change. The rates implemented were appropriate, and no additional adjustments are necessary.

Accumulated Depreciation

Our determination on accumulated depreciation is dependent upon the utility's projected capital additions. As discussed earlier, we have approved certain adjustments to the utility's projected plant additions. The parties agree that the effect of these adjustments should be reflected in accumulated depreciation. We also agree, and we have made those adjustments, as illustrated earlier.

We note that Rate Case Audit Exception No. 7 from Exhibit No. 54 calls attention to a reserve for depreciation prior to 1982 which was reclassified by UWF, suggesting an adjustment. However, based on representations by the utility, staff witness Buckley changed his opinion and testified that no further adjustment is necessary. We also note that witness Larkin proposed specific adjustments to accumulated depreciation in Exhibit No. 29 to account for projected plant additions. Nevertheless, no party proposed any additional adjustments, and we hereby find that no further adjustments to accumulated depreciation are necessary.

Amortization of Acquisition Adjustments

According to UWF witness McGuire, the utility is requesting recovery of six acquisition adjustments, representing six water facilities and five wastewater facilities, in rate base. Witness McGuire testified that "[t]his is the first general rate case that the utility has filed since these properties were acquired. As a result, the utility does not have an approved amortization period from this Commission."

OPC witness Larkin pointed out that the utility has not been amortizing these acquisition adjustments for this reason. Witness Larkin stated that the utility is relying on the NARUC USOA, Section 114 C, which directs the utility to record amortization of the acquisition adjustments "as the Commission may approve or direct," claiming that we have not approved amortization of these acquisition adjustments. He further testified that the utility should have begun amortizing the acquisition adjustments from the date that they were recorded on the books, and has proposed adjustments based on the utility's representation of this recording as found in Exhibit No. 49. Assuming that we were to allow the

utility's proposed 20-year amortization period, witness Larkin recommended that water and wastewater rate base should be reduced by an additional $145,660 and $284,547, respectively, in order to reflect an appropriate level of accumulated amortization on the acquisition adjustments, with amortization beginning when the acquisition adjustments were booked.

We reject the utility's argument that no amortization rate has been authorized by this Commission. Witness McGuire admitted that an amortization period of 20 years (5%) has been in effect since the utility's last general rate filing. The NARUC USOA states, in the definition of amortization, that amortization is the gradual extinguishment of the asset over the period during which it is anticipated the benefit will be realized. This would be the date that this Commission approved the acquisition of the system and its related acquisition adjustment. We have calculated accumulated amortization of the seven active acquisition adjustments from their dates of approval, as shown by Order No. 16517, issued August 25, 1986, in Docket No. 850288-WS (Lucina); Order No. 22342, issued December 26, 1989, in Docket No. 891110-WS (St. John's North); Order No. 22794, issued April 10, 1990, in Docket No. 890759-WS (Ponce De Leon); Order No. 23834, issued December 4, 1990, in Docket No. 881584-WS (Yulee); Order No. PSC-92-0895-FOF-WS, issued August 27, 1992, in Docket No. 920177-WS (Atlantic); and Order No. PSC-93-1819-FOF-WS, issued December 22, 1993, in Docket No. 930204-WS (Ponte Vedra). We have calculated accumulated amortization of the acquisition adjustments to be $209,982 for water and $413,503 for wastewater. Since the utility shows no accumulated amortization of the existing acquisition adjustments, our calculated accumulated amortization of the acquisition adjustments will reduce water and wastewater rate base by these amounts.

On rebuttal, witness McGuire testified that the utility is requesting a 20-year amortization period (5% rate) in this case for the current approved acquisition adjustments, but upon cross-examination, he indicated that the utility is requesting an amortization period of 15 years (6.66% rate). There is no support in the record for a change in the amortization period, other than a statement by witness McGuire that "15 years seems to be a reasonable amount which would not create undue burden on the customers or the company." We do not agree with witness McGuire's proposed 15-year amortization period. We agree with OPC that "it is not appropriate for the utility to change its position regarding the proposed length of amortization at such a late date, particularly when it has presented no evidence to substantiate its proposed change." The acquisition adjustment should be amortized over the period during which it is anticipated the benefit will be realized, as stated in the NARUC USOA. The average depreciation

rates for plant-in-service have been near the 20-year period, and we do not find it appropriate to approve a change in the previously approved amortization period.

Test year amortization of the acquisition adjustments, as presented by the utility in MFR Schedule No. G-35 of Composite Exhibit No. 4, is inconsistent with the utility's position and with the rate base schedules. The utility shall reflect amortization of the acquisition adjustments accumulated from the date the acquisition adjustments were authorized over the utility's previously authorized amortization period of 20 years. Based on our calculations, the appropriate amount for total accumulated amortization of the acquisition adjustments for the test year is $623,485: $209,982 for the water operation and $413,503 for the wastewater operation. We have increased test year amortization by $6,918 for water and $13,789 for wastewater.

Unamortized Tank Painting Expense

The amount of deferred tank painting expense included in the utility's original filing was $685,477 in 1985 and a projection of $724,816 for 1997. Witness McGuire admitted that the utility failed to include $71,246 of deferred tank painting expense when developing a total to be included in working capital. The inclusion of the omitted amounts increases the allowance for working capital by $71,246 in 1995 to 756,723. Witness McGuire has calculated the amount for 1996 as $862,626 and the amount for the end of 1997 is $872,818. The average amortization for the test year is $99,854, and the average test year additions are $4,950, making the average unamortized tank painting expense for the test year $767,722, a total increase to working capital of $42,906 for the test year. Based on the utility's allocations in its MFR, 34% of this amount, $14,588, is allocated to water and 66%, $28,318, to wastewater. We agree with this analysis and find that the appropriate average amount of unamortized tank painting expense to be included in the test year rate base is $767,722. Based on the utility's allocations in its MFRs, 34% of this amount, $14,588, is allocated to water and 66%, $28,318, to wastewater.

Working Capital

We find that an appropriate allowance for working capital, based on the balance sheet method in accordance with Rule 25-30.433(2), Florida Administrative Code, as adjusted to include the appropriate unamortized tank painting expense as described earlier, is $1,030,677. Of this total, $350,430 is allocated to water and $680,427 is allocated to wastewater based on the utility's allocations in its MFRs.

Unfunded Liability for Other Postretirement Employee Benefits

In the current rate proceeding, the utility has requested recovery of operating expenses representing other postretirement employee benefits (OPEBs), resulting from the implementation of SFAS 106. SFAS 106 refers to the accounting standard that describes the practice of recognizing OPEBs other than pensions.

This issue concerns the appropriate regulatory treatment of the unfunded OPEB liability associated with the implementation of SFAS 106. Utility witness Jost testified that funding of the OPEB liability is currently being made to a Voluntary Employees's Beneficiary Association (VEBA) Trust. However, UWF is currently funding only a portion of the liability, resulting in the existence of an unfunded OPEB obligation. According to Rule 25-14.012(3), Florida Administrative Code, "[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 postretirement benefits other than pensions."

On rebuttal, utility witness McGuire testified that the utility began funding its OPEB liability in 1995, prior to receiving rate recovery for its costs. Therefore, he stated that the utility would agree to include the prepayment and the unfunded portion of its expense in the calculation of rate base.

In its brief, OPC argued that the 1997 rate base should be reduced by $426,764 to reflect the test year unfunded liability. Since the utility is requesting rate recovery of the entire projected 1997 OPEB expenses, while only funding a portion of that cost, OPC argued that the unfunded portion represents a cost free source of capital to the utility.

Exhibit No. 15 indicates the annual expenses and contributions related to the utility's OPEB costs to be as follows:

UWF - OPEB Funding

	1995	1996	1997
Net Periodic OPEB Cost	449,121	480,241	515,745
VEBA Contribution	97,609	114,597	88,981
Unfunded Portion	351,512	365,644	426,764

In its brief, the utility argued that test year rate base should be reduced by a total of $474,574. This was calculated by adding together the unfunded portion for 1997 and an amortized portion of the unfunded amounts for the prior years, with the amortized portion representing the unfunded amounts for 1995 and 1996 amortized over a 15-year period. As an alternative, the utility argued that if the Commission does not allow the 1995 and 1996 costs to be amortized, then the rate base reduction should only be $214,558. This adjustment reflects the 1997 unfunded amount less the utility's contributions for 1995 and 1996.

With respect to UWF's arguments presented in its brief, we find that the record does not support the utility's request for amortization of the prior period unfunded amounts. Likewise, we also find that the record does not support the utility's alternative adjustment which recognizes the unfunded portion of the 1997 costs offset by the prior year contributions. On the other hand, as indicated above, Rule 25-14.012(3), Florida Administrative Code, requires that the unfunded accumulated liability be treated as a reduction to rate base. As such, we calculated the accumulated liability by adding together the annual unfunded expense amounts from Exhibit No. 15 and incorporated our approved test year OPEB expense of $524,825, which is discussed subsequently in this Order. Therefore, we find that rate base should be reduced by $415,080 and $737,920 for water and wastewater, respectively, to reflect the unfunded accumulated OPEB obligation.

Test Year Rate Base

The utility originally filed a projected 1997 year end rate base. As previously noted, at the hearing, the parties stipulated that a 13-month average balance should be utilized in determining test year rate base. We approved the stipulation, Stipulation No. 16, without objection. We find that the appropriate average rate base for the 1997 test year is $27,194,751 for the water system and $49,217,880 for the wastewater system, as adjusted for Stipulation No. 16 and the resolution of all corresponding rate base issues as shown on Schedules Nos. 1-A, 1-B, and 1-C, attached to this Order.

COST OF CAPITAL

Our calculation of the appropriate cost of capital, including our adjustments, is shown 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.

Appropriate Capital Structure

UWW is the source of investor capital for UWF. For this reason, the utility has proposed a 13-month average capital structure using the ratios of investor sources of capital adjusted to reflect UWW's capital structure as of December 31, 1995.

Witness McGuire testified that the utility is a wholly-owned subsidiary of UWW, which provides all capital to its subsidiaries. Since UWF has been financed entirely with common equity by its parent company, UWF will adopt the capital structure and attendant costs of its parent. Furthermore, witness McGuire testified that there will be no significant changes in the proportions of its capital structure in 1996 or 1997 relative to 1995. Therefore, he argues that the utility's use of its 1995 capital structure for 1996 and 1997 will not introduce any distortions into the calculation of its revenue requirements for those years.

OPC witness Larkin recommended two adjustments to the capital structure as filed by the utility. First, witness Larkin recommended that the balance of accumulated deferred income taxes be increased commensurate with the increase in plant-in-service projected by the utility and to correct the calculation of the utility's 13-month average deferred income taxes included in the capital structure. These adjustments are discussed subsequently in this Order. The second adjustment recommended by witness Larkin involves increasing the utility's debt component to reflect the full amount of the $20 million tax-exempt bond issue, issued through the City of Jacksonville, Florida. As discussed later, we agree that the $20 million tax-exempt bond issue should be reflected in the calculation of the cost rate for long-term debt. However, for reasons explained later in this analysis, we do not agree with witness Larkin's proposal to use the $20 million bond issue to reconcile the capital structure to rate base.

In August 1995, UWW issued $20 million of 6.35% tax-exempt Water and Sewer Revenue Bonds, due 2025, through the City of Jacksonville, Florida, of which the proceeds are being used to fund capital improvements of UWF. However, of this $20 million, only $2.6 million of these bonds are reflected in the parent company's capital structure as filed in UWF's MFRs. In order to correct for this inequity in the assignment of capital, witness Larkin proposed an adjustment to reflect the entire debt issuance in the determination of the cost of debt. Further, since the proceeds from these bonds are being used to fund capital improvements of UWF, witness Larkin testified that this issue should be specifically reflected in the utility's capital structure.

Witness McGuire argued that the latter adjustment proposed by witness Larkin is inappropriate by stating that if the Florida tax-exempt bonds are allocated fully to the utility, then none of the other tax-exempt bonds issued by UWW in other states should be imputed to the utility at all. The debt component and the attendant cost rate as filed by the utility reflects the weighted average cost of long-term debt of UWW as of December 31, 1995. This balance and cost rate includes the proceeds of several tax-exempt bond issues issued in Delaware, Idaho, New York, and Pennsylvania. Witness McGuire's point is that it would be unfair for the Florida operations to be assigned the lower cost resulting from the allocation of tax-exempt debt issued in other states but not to allocate any of the benefit of tax-exempt Florida issues to operations in other states. He further testified that witness Larkin's adjustment fails to recognize that it is only because UWW has a strong standing in the financial community that it can go into the capital markets and negotiate more favorable terms than UWF could on a stand-alone basis. UWW incurs debt for the benefit of all its subsidiaries, which is included in its capital structure and then imputed to the 100% equity subsidiaries for ratemaking purposes. Finally, witness McGuire testified that the utility and all other regulatory jurisdictions believe that witness Larkin's approach is inappropriate and that all UWW debt should be imputed pro rata to all of its subsidiaries.

As discussed later in this Order, we agree with the adjustments to the balance of accumulated deferred income taxes proposed by witness Larkin. However, we agree with the testimony of witness McGuire that it would be inappropriate to use the debt component to reconcile the capital structure to rate base as proposed by witness Larkin.

We agree with the balance of customer deposits as filed in the utility's MFRs. As stated earlier, the appropriate balance of accumulated deferred income taxes will be discussed later in this Order, as well as the appropriate balance of investment tax credits. Finally, we find it appropriate to reconcile the capital structure to rate base by a pro rata adjustment over investor sources based on the relative ratios maintained at the parent level.

Accordingly, the appropriate capital structure for ratemaking purposes has been based on a combination of the utility's parent company's capital structure and the utility's actual capital structure. The balances of investor sources of capital have been allocated based upon the relative percentages of investor capital

maintained at the parent level, and the balances of investment tax credits, deferred income taxes, and customer deposits have been specifically identified at the utility level.

Cost of Debt

Witness McGuire testified that the utility's cost of long-term debt is 8.72%. This rate is the weighted average cost of debt of UWW as of December 31, 1995. However, in analyzing the utility's filing, we uncovered an error in the calculation of the weighted cost of debt as filed by the utility. The utility inadvertently did not add the amortization of issuing expense in the calculation of the total interest cost. By operation of math, the cost of debt becomes 8.81% after correcting for this error.

Witness Larkin initially recommended a cost of long-term debt of 8.57%. He arrived at this cost rate by adjusting the relevant amounts on Schedule No. D-5 of the utility's filing to recognize the full issuance of the $20 million, 6.35% tax exempt bonds issued through the City of Jacksonville. In its filing, the utility only reflected $2.6 million of the tax exempt bond issue in the calculation of the cost of long-term debt. However, in preparing late-filed Exhibit No. 30, witness Larkin also became aware of the error in the utility's calculation of its cost of long-term debt. After correcting for the error, the revised weighted average cost of debt increased to 8.65%. It is this corrected weighted average cost of long-term debt of 8.65% that witness Larkin finally recommended that we recognize for ratemaking purposes in this proceeding.

We agree with witness McGuire that the cost of long-term debt for UWF should be based upon the cost of long-term debt of its parent, UWW. However, we find it appropriate to make certain adjustments to this cost rate to reflect known changes which have occurred between the December 31, 1995, base year and the December 31, 1997, projected test year.

First, we find it appropriate to correct the error in the utility's filing discussed above. After correcting this error, the cost rate for long-term debt increases from 8.72% as originally filed by the utility, to 8.81%.

Second, we agree with witness Larkin that the full issuance of the $20 million, 6.35% tax exempt bonds should be reflected in the determination of the cost rate of long-term debt. Although only $2.6 million of this bond issue was reflected in the utility's MFR filing, witness McGuire admitted that the full $20 million would be available to UWW to fund the plant expansion projected in the

December 31, 1997, rate base requested by the utility. We relied upon witness McGuire's testimony that the amount of unamortized issuance expense reflected on Schedule No. D-5 applied to the entire $20 million bond issue. We relied upon the testimony of witness Larkin for the determination of the appropriate amount of unamortized discount associated with the entire $20 million bond issue. After making these adjustments, we find that the appropriate cost of long-term debt is 8.66%.

Finally, witness McGuire admitted that certain debt issues reflected on Schedule No. D-5 will mature during or prior to the December 31, 1997 test year, and that therefore these bond issues will no longer be outstanding obligations of UWW. After removing these two bond issues from the calculation of the cost of debt, we find that the appropriate rate is 8.55%.

Based upon the record in this proceeding, we find that the appropriate weighted average cost of long-term debt is 8.55%.

Deferred Income Taxes

In its Statement of Issues and Positions, UWF stated that the amount of deferred income taxes is that shown in the MFRs. On rebuttal, witness McGuire testified that he believed the amounts shown in the MFRs were adequate since the effect of the plant additions would be immaterial. He further testified that it would be improper to increase the deferred income taxes without increasing other capital sources.

Under cross-examination, witness McGuire agreed that implementation of SFAS 109 was not revenue neutral without the $82,798 adjustment. He further testified that he would adjust rate base by that amount, but that the amount could be included in cost of capital and that would achieve the same result.

OPC witness Larkin testified that the 13-month average balance of deferred income taxes should be increased by $52,777 to correct an error made in calculating the 13-month average balance. Witness Larkin also calculated a $139,398 increase to deferred income taxes related to the 1996 and 1997 plant additions. Witness Larkin testified that the plant additions will increase the amount of credit balance deferred taxes due to the increase in the amount of book tax differences due to depreciation.

Staff witness Buckley testified that the 13-month average balance should be corrected by an increase of $52,779 to correct a UWF error.

We agree with OPC witness Larkin and UWF witness McGuire that there will be an effect on deferred income taxes due to the 1996 and 1997 plant additions. We have examined witness Larkin's calculation of the amount attributable to the plant additions and find that it is reasonable. UWF witness McGuire did not take issue with the amount of witness Larkin's proposed adjustment. Further, Mr. McGuire did not dispute the fact that there will be an effect on deferred income taxes. He merely stated that he considered it immaterial. Mr. McGuire only took issue with the fact that Mr. Larkin had not adjusted other capital components, as well. We believe that the capital structure will be more accurate if the effect is recognized. Thus, we find it appropriate to increase the capital structure to reflect the additional $139,398 required to reflect the deferred taxes related to 1996 and 1997 plant additions.

We agree that the implementation of SFAS 109 should be revenue neutral, as required by Rule 25-14.013, Florida Administrative Code. Witness McGuire testified that either rate base or capital structure treatment was appropriate. We therefore find that the adjustment should be made to the capital structure since the utility has combined both the debit and credit deferred taxes in the capital structure in this case.

We agree with witnesses Buckley and Larkin that an error occurred in the utility's calculation of the 13-month average balance of deferred income taxes. Therefore, we find it appropriate to increase the balance of deferred income taxes by $52,779 to correct this error. Mr. McGuire included the effect of this adjustment in late-filed Exhibit No. 45. The total of our adjustments results in a net 13-month average credit deferred tax balance of $1,202,950.

Investment Tax Credits (ITCs)

The record in this proceeding contains the following information in relation to the appropriate cost rate for the ITCs to be included in UWF's capital structure:

1. The MFRs
2. Witness McGuire's testimony
3. Late-filed Exhibits Nos. 45 and 51
4. Composite Exhibits Nos. 29 and 54
5. Witness Buckley's testimony
6. The Audit Report

The MFRs filed by UWF in this proceeding state, on Schedule No. C-1, Page 2 of 2, of Composite Exhibit No. 4, that the ITC election will be provided later. It has not been provided. In Composite Exhibit No. 4, UWF uses a cost rate of 10.04% for the ITCs. Witness McGuire's testimony, supporting Composite Exhibit No. 4, did not address the rationale behind the cost rate. On rebuttal, witness McGuire testified that the utility elected Option 2 treatment, but stated that a copy of the election could not be found. Under cross-examination, witness McGuire again stated that an Option 2 election was made, admitted that it could not be found, maintained that it must be correct or the Internal Revenue Service (IRS) would have found a violation on audit, and offered a late filed affidavit attesting to the Option 2 election.

In Composite Exhibit No. 29, OPC witness Larkin used a 10.04% rate without explaining the rationale for its use. This rate was also used in OPC's pre- and post-hearing statements. However, OPC took no position on the issue in the Prehearing Order and did not address the issue in its post-hearing statement.

Staff witness Buckley corrected the cost rate used by the utility in its MFRs without commenting on its merits. Mr. Buckley also reduced the ITC balance by $853,846 to correct an error made by UWF.

We hereby find that late-filed Exhibit No. 51, the affidavit, and witness McGuire's testimony are less than persuasive. The election that cannot be found was a written document which would have been located with the utility's tax returns for the year in which it were made, if it were made. Witness McGuire testified that that is where the utility looked for a copy and did not find one, but that he nevertheless believes that the returns support the election.

Both witness McGuire and the affidavit indicate that the IRS did not take issue with the cost rate on audit. However, we note that the IRS audit has not been made a part of the record by the utility. Thus, the record does not indicate what the IRS actually found in regard to the ITC cost rate, if anything. Since the IRS audit was not provided, the record does not indicate whether the IRS did, in fact, take issue with the cost rate. Nor does the affidavit indicate what cost rate was used at the time of the 1990 IRS audit. Further, the affidavit does not address the effect, if any, of the change in ownership that occurred since the election was made in 1972.

The affidavit states that UWF made an Option 2 election in 1972 as part of the General Waterworks Corporation. The affidavit does not mention any subsequent elections. Further, the affidavit states that the election is ratable amortization over the life of the qualifying property. However, the affidavit does not state whether the amortization is above or below the line. Thus, the affidavit does not, in fact, indicate which election was made.

The affidavit indicates that a copy of the election was not found. The affiant merely asserts that the IRS did not cite a deficiency in its audit related to the ITCs and contends that ratable amortization would have been a normalization violation without the election. As stated before, the audit was not provided. Thus, we cannot determine from the record whose return was audited, what ITC treatment existed at the time of the audit, whose election, or failure to elect, controlled that treatment, and whether the IRS did cite a deficiency related to the ITC cost rate.

We find that the record in this proceeding does not support the use of a weighted cost rate for the ITCs. Absent a copy of the Option 2 election; faced with witness McGuire's statement that the election could not be found and the affidavit confirming that fact; absent a showing by UWF that the IRS did, in fact, audit what is alleged; and absent a showing that the election, if any was made, is applicable to UWF; we find that only one conclusion is possible from the record in this proceeding, and that is that the appropriate cost rate is zero. This conclusion is reflected in our finding that the cost rate is zero and amortization is below the line.

Overall Cost of Capital

Based upon the proper components, amounts, and cost rates associated with the capital structure for the projected test year ending December 31, 1997, we find that the weighted average cost of capital is 9.57%.

The 13-month average per book amounts are derived from the utility's MFR filing, as modified by witness McGuire's testimony on rebuttal. In its original filing, the utility requested a year-end capital structure. However, as noted previously, during the hearing, the utility stipulated to a 13-month average rate base. Therefore, because of the matching principle, the capital structure and rate base shall be calculated on a consistent basis. Based on witness McGuire's testimony, the appropriate capital structure for ratemaking purposes will reflect the relative ratio of investor sources of capital at the UWW level. Based upon the utility's MFR filing, the balance of customer deposits was $9,133 on a 13-month

average basis as of December 31, 1995. On Schedule No. D-7, the utility projects that its balance of customer deposits will be $7,900 on a 13-month average basis as of December 31, 1997. This adjustment is reflected on Schedule No. 2. Based upon the testimonies of witnesses Larkin and Buckley, we have made specific adjustments to the balance of ITCs and accumulated deferred income taxes. Our adjustments to accumulated deferred income taxes and ITCs were discussed earlier. After making these specific adjustments, we made a pro rata adjustment over the investor sources of capital to reconcile capital structure with rate base.

The appropriate capital structure for ratemaking purposes was discussed earlier and outlined in Schedule No. 2. With the exception of the cost rates for preferred stock and accumulated deferred income taxes, we find it appropriate to use different rates for every component in the capital structure from those requested in the utility's filing. The appropriate cost rate for long-term debt of 8.55% is discussed previously. The appropriate cost rate for short-term debt of 6.41% is based upon the results of the staff audit and the testimony of witness Buckley. The appropriate cost rate for preferred stock is 5.00%. The appropriate cost rate for common equity is 11.57% based upon the application of the leverage formula, approved by Order No. PSC-96-0729-FOF-WS, as set forth in Stipulation No. 4. The cost rate for customer deposits of 7.00% is based upon the results of the staff audit and is discussed in the testimony of witness Buckley. All parties agreed that the balance of accumulated deferred income taxes should have a zero cost rate. Finally, as discussed previously, the balance of investment tax credits has been assigned a zero cost rate.

The net effect of these adjustments is a reduction in the overall cost of capital from the 9.83% return requested by the utility in its post-hearing brief to a return of 9.57%. The cost of common equity is 11.57% with a range of plus or minus 100 basis points. Schedule No. No. 2 shows the components, amounts, cost rates, and weighted average cost of capital associated with the test year capital structure.

NET OPERATING INCOME

Our calculation of net operating income is shown on Schedule No. 3, and our adjustments are itemized on Schedules Nos. 3-A and 3-B. 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.

Projected Water and Wastewater Bills and Consumption

UWF witness Gradilone was the only witness who testified on the utility's water and wastewater forecasts of consumption and revenues. A discussion of his testimony and our analysis follows.

Witness Gradilone testified that 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 consumption and revenues for the projected test year ending December 31, 1997. The primary database used to develop the models to forecast water consumption included total billed consumption and adjustments, total bills rendered and customers served on a monthly basis.

Water System Consumption Forecasts

Witness Gradilone testified that his explanatory data analysis revealed that weather conditions had an impact on water consumption, particularly during the summer season. In addition, two facilities, Ponte Vedra and San Pablo, had been acquired and incorporated into the UWF system during the 1991 - 1995 period. The addition of these two facilities clearly had an impact on water demand, and therefore represent a discontinuity in the historical data record. Multiple linear regression is sensitive to one-time events and shifts in the underlying pattern of relationships between variables and was selected as the primary data analysis tool because of its ability to explicitly account for the Ponte Vedra and San Pablo facilities in the analysis. This was accomplished by the addition of dummy variables to the database. The number zero represents the months before the addition of the particular facility occurred, and the number one represents the months after the addition of the particular facility.

In this case, residential water consumption is the dependent variable; that is, the variable to be predicted, and the number of residential bills rendered, average monthly temperature and the addition of other water service areas to the service territory represent explanatory (independent) variables. Consumption forecasts for the commercial and public sector classes were derived in a similar fashion.

Water System Customer Growth Forecasts

In order to predict customer growth for each customer group (residential, commercial and public sector), witness Gradilone assumed that the respective groups' growth would continue at about

the same rate that was exhibited during the 1991 - 1995 period, exclusive of the disturbances caused by the addition of the Ponte Vedra and San Pablo facilities. This customer growth was expected to continue through 1996 and 1997.

Wastewater System Forecasts

Wastewater usage is clearly a function of water consumption. Therefore, to project wastewater usage by customer class, Mr. Gradilone regressed water consumption against wastewater use. Since the additions of the Ponte Vedra and San Pablo service areas had the same type of effect on the wastewater customer service base as on the water service base, dummy variables were added to the regression analysis for the residential and commercial models to take this into account. The addition of the Ponte Vedra and San Pablo service areas had no discernible impact on the public sector class. Therefore, the dummy variable was not added to that analysis. The growth in the number of residential wastewater customers paralleled the growth in water customers, and the underlying growth rate was calculated in the same way as for the water sector. The analysis of commercial and public sector wastewater consumption followed the analysis for the residential sector. The utility based its wastewater customer growth forecasts on the percentage of water customers it projected for 1997.

The extent of UWF's brief on this issue was to state that the projected number of water customers and ERCs for the test year ending December 31, 1997, are 27,207 customers and 315,523 ERCs. The projected number of wastewater customers and ERCs for the test year ending December 31, 1997, are 21,371 customers and 255,172 ERCs. The projected consumption for the test year ending December 31, 1997, is 4,402,181 gallons of water and 3,503,205 gallons of wastewater. We note, however, that a review of Exhibit No. 20 indicates 1997 projections of 27,642 customers and 4,445,919 gallons for the water system, and 21,563 customers and 3,522,367 gallons for the wastewater system. For the purposes of our analysis, we relied on the figures in Exhibit No. 20.

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 for the water and wastewater systems. Next, we determined whether UWF, based on the different models it examined, selected the water consumption forecast model with the best predictive ability. Third, we developed and examined three other models which were based in part on the model selected by the utility. Fourth, the predictive ability of our models was compared to that of the utility. Fifth, we examined the utility's selection of its wastewater consumption forecast model, and subsequently made

modifications to that model. Finally, a comparison of the customer bills and consumption generated by the utility's models and our models are compared, and conclusions are drawn. The details of our analysis follow.

UWF's Selection of Averaging Techniques to Forecast Customer Growth

Witness Gradilone testified that averaging techniques were used to forecast customer growth. He stated that when forecasting customer or ERC growth, if the appropriate variables could be identified, then regression analysis is a useful tool. However, Mr. Gradilone stated that in this case, no such variables were identified, there was not a lot of change over time, and there was not enough historical data to do a good regression analysis. For these reasons, he used an averaging technique to forecast customer growth.

However, UWF witness Guastella performed a simple least square regression analysis on the customer growth data for the years 1991-1995 to forecast margin reserve. According to Mr. Guastella, there are many factors which affect growth, and the regression analysis takes into effect whatever factors produce the growth during the observed periods. R^2 is a measure of predictive ability; that is, how much variation in the dependent variable can be explained by the combination of the independent variables. Based on the results of Mr. Guastella's analysis, the entire customer growth regression model has an r^2 of about 80%.

We agree with witness Guastella. We believe that 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. Further, the r^2 value cited by Mr. Guastella of approximately 80% indicates a relatively high degree of predictive ability. Therefore, in the absence of any compelling evidence to the contrary, and consistent with the utility's use of linear regression to forecast customer growth for margin reserve purposes, we find that linear regression is the appropriate method to use to forecast customer growth for the water and wastewater systems. However, since the utility's forecasts for its respective systems yielded results within 1.5% of the results based on our approach, we do not find it appropriate to make an adjustment to the utility's forecasted number of bills.

UWF's Selection of a Water Consumption Forecast Model

Weather conditions have been shown to affect water consumption patterns in other studies of water demand behavior. UWF conducted

a series of regression analyses during the course of this proceeding. Three weather variables were tried in the analyses for the water system: average monthly temperature, total monthly rainfall, and the number of days with rainfall events over 0.1 inches.

The variables associated with total monthly rainfall and the number of days with rainfall each produced counterintuitive results; that is, a positive relationship between those variables and consumption was indicated. Ultimately the average monthly temperature variable was the only one which proved to be useful in explaining residential water demand behavior. In addition, dummy variables were added to the analysis to account for the separate additions of the Ponte Vedra and San Pablo facilities to the service area. These events were handled two ways: 1) two dummy variables were added, representing the addition of the Ponte Vedra and San Pablo facilities separately; and 2) the addition of the facilities was handled with a single dummy variable.

There were twelve combinations of variables which were used in the regression models for each customer class. Assuming all other things being equal, the higher the r^2 value, the better the model. Based on a comparison of the r^2 values of the respective models, the UWF model which uses the number of bills, a single dummy variable for the system additions and average temperature as variables was the only model whose variable(s) did not result in an illogical result for one or more of the customer classes. Therefore, we find that, based on what the utility considered in its twelve models, UWF appropriately selected that model for its water consumption forecasting purposes.

Adjustments to UWF's Water Consumption Forecasting Model

However, there were several areas which we explored 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. As discussed above, we developed three additional models by making a series of adjustments to UWF's model.

First, witness Gradilone admitted that the forecast worksheets contained anomalies and errors and that all errors should be corrected. Therefore, the first of our models corrected UWF's forecast worksheets to reflect: a) the adjusted (rather than unadjusted) numbers of customers; and b) the inclusion of the stipulated 1995 values for ERCs and consumption. In addition, we revised the worksheets' customer growth figures to be consistent with our finding that simple linear regression is the appropriate methodology to forecast customer growth.

We also examined the possibility that a weather variable other than average temperature may result in a model with greater r^2 values. Since temperature influences the extent that rainfall decreases consumption, a single variable that incorporates the effects of both temperature and rainfall may also be relevant in a regression model for consumption. If a combination temperature/rainfall variable were to be included in the regression model, producing an intuitive result, it would make sense to use it.

The moisture deficit variable incorporates average daily temperature for the month and actual precipitation for the month. The moisture deficit variable is virtually identical to the net irrigation requirement (NIR) variable, which we recognized by Order No. PSC-96-1320-FOF-WS, issued October 30, 1996, in Docket No. 950495-WS, as having a positive correlation to consumption in the majority of months during the 1991 - 1994 period. In order to determine whether the moisture deficit variable should be used in the approved forecast models, we calculated two moisture deficit variables for each month from January 1991 through December 1995; the results of which are shown on Attachment A, attached to this Order.

The next step in our analysis was to perform three different regression analyses based on UWF's model. Our first model corrects the mistakes in the forecast worksheets and uses simple linear regression to forecast customer growth. In our second model, we not only used our approved customer growth methodology and corrected mistakes in the utility's forecasts, but also substituted the actual moisture deficit variable from column (f) of Attachment A in place of the average temperature variable. Our third model is the same analysis as in our second model, but a different moisture deficit variable, from column (g) of Attachment A, was used. The model that produced the best results was our first model.

Based on these results, a comparison of the resulting bills rendered and consumption figures generated by both UWF's model and our model is presented as Attachment B. As shown on Attachment B, our model resulted in overall water system projections for both the number of bills rendered and water consumption that are within 1% of the utility's respective projections. Therefore, we find that no adjustment to the utility's forecasts is necessary.

UWF's Selection of a Wastewater Consumption Forecast Model

As discussed above, witness Gradilone regressed water consumption, the independent variable, against wastewater use. However, the dummy variables for the Ponte Vedra and San Pablo

facilities indicate a positive correlation pre-acquisition, rather than post-acquisition, of those facilities for the residential customer class and a positive correlation pre-acquisition of the San Pablo facility for the commercial class. These results are illogical. Therefore, the utility's wastewater consumption forecast model is flawed.

Adjustments to UWF's Wastewater Consumption Forecast Model

Our first step was to make adjustments to UWF's wastewater model that were consistent with our adjustments to UWF's water consumption forecast model. Next, although the dummy variables for the Ponte Vedra and San Pablo facilities produced illogical results, we agree with witness Gradilone's statement that wastewater use is a function of water consumption. As such, we believe that an appropriate wastewater consumption forecast model is one that regresses water consumption against wastewater use. Therefore, our model regresses water consumption against wastewater use, without consideration of the addition of the Ponte Vedra and San Pablo facilities. A comparison of the resulting bills rendered and consumption figures generated by UWF's wastewater model and our model is presented on Attachment B. As shown on that attachment, our overall projection for the number of bills rendered is within approximately 1.5% of the utility's projection, and our overall forecast for wastewater gallons is within approximately 2.3% of the utility's forecasted consumption. Therefore, we find that no adjustment to the utility's forecasts is necessary.

Conclusions

As discussed above, r^2 is a measure of 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. Witness Gradilone testified regarding the water consumption forecasts that temperature was the strongest variable and seems to be the one weather variable that is useful in determining water use patterns. Mr. Gradilone stated that he believes he used the appropriate variables in this case.

We agree with witness Gradilone. The r^2 values of our water consumption models were all close to the r^2 values from UWF's Model 7. A comparison of the r^2 values from our models indicates that our first model has greater predictive ability than do our second and third models. Further, as shown on Attachment B, our model resulted in projections for bills and consumption that were within 1% of the utility's respective projections.

As discussed above, we believe that the appropriate model for projecting wastewater consumption is one that merely regresses water consumption against wastewater use. As shown on Attachment B, our overall projection for wastewater bills are within 1.5% of the utility's projection, and our overall projection for wastewater consumption is within 2.3% of the utility's corresponding projection.

Therefore, based on the foregoing, we find that the appropriate method of forecasting customer growth is simple linear regression and that the utility's multiple linear regression methodology of forecasting consumption is appropriate. Finally, because the utility's customer and consumption forecasts yielded results that were very close to the results based on our approved approach, we find that no adjustment to the utility's forecasted number of bills or consumption is necessary.

Test Year Revenues

As discussed previously, we agree with the methodology and results chosen by UWF to project 1997 ERCs and consumption for water and wastewater. Therefore, we find that no revenue adjustments are necessary.

Late Payment Charge

UWF proposed in its filing that it be allowed to implement a late payment charge of $3. UWF believes this late charge would create an incentive for customers to pay on time and cause those customers who do not pay on time to incur the additional costs of collecting their payments. Witness Heil testified that approximately forty percent of UWF customer payments are delinquent on the twenty-first day after the bill has been mailed.

OPC argued that if such a late fee is implemented, then it is only fair that revenues collected from this late fee be included in the revenue requirement calculations. UWF estimated a theoretical maximum of $162,000 for potential late payment fee revenues. Therefore, OPC believes that this $162,000 should be added to test year revenues.

We believe that if a late payment fee is approved in the test year, the associated revenues should be included in test year revenues. However, UWF has indicated that it will not have the capability to bill the late payment fee until its new billing system is in service, which is projected for early 1998. Therefore, UWF does not have the capabilities to implement this late payment fee in the 1997 test year.

We believe that a late payment charge is an appropriate tool for utilities to employ to assure that cost causers incur the additional costs of collecting their payments. However, we do not believe that it would be appropriate to approve UWF's request for a $3 late charge at this time for two reasons. First, witness Gradilone testified that UWF will not have the capabilities to implement this late charge until the first part of 1998, which is outside the 1997 test year. Second, there was testimony at the technical hearing regarding when the customers are credited for their payment. UWF has a lock box service provided by Wilmington Trust and Wilmington Delaware. UWF witness DeNagy testified that if a customer mails a payment on the last day that the bill is due, it will take up to five days to get to the Delaware bank, and there is a good chance that the customer will receive an urgent late notice. Therefore, if we were to grant UWF's request to charge a late fee, we would have some concern regarding customers who pay on time yet still receive a late notice due to the time it takes for mailing and processing by the Delaware bank. Furthermore, witness DeNagy testified that he was not sure exactly what day that late payment fees would be assessed to customers. Based on these two reasons, we do not find it appropriate to approve UWF's late payment fee request of $3 at this time.

We note that the utility may submit a tariff filing pursuant to Section 367.091, Florida Statutes, in order to appropriately pursue this request once it has the capabilities to implement this charge. However, the utility is put on notice that additional information regarding the concerns that were addressed at the hearing on UWF's check clearing process should also be filed with its request. Based on the foregoing, UWF's request for approval of a $3 late charge is denied at this time, and no revenue from this late payment fee shall be included in the test year revenues.

Salary and Wage Expenses

In the MFRs, UWF projected salary and wage expenses for 1997 of $1,349,553 and $2,399,205 for water and wastewater, respectively. As indicated on Schedule No. G-20 of the MFRs, contained in Composite Exhibit No. 4, salaries and wages were increased by $328,155 over the base year amount to reflect annualized rates which were in effect at the time of the filing and a projected increase of 3.23% for the 1997 test year. The utility's initial projection included four new positions, which were to be added in 1996, and the test year expense was based on a total of 106 employees.

In response to a discovery request, UWF provided an updated calculation of its test year salary and wage expenses. In this update, the utility indicated that the four new positions that were projected for 1997 in the initial filing had been eliminated from the total number of 106 employees. However, the updated payroll information provided by the utility indicated a total employee count for 1997 of 104 employees. Although the revised payroll numbers eliminated the four new positions from its originally filed payroll amount, UWF has added two additional positions projected to be filled in the test year.

OPC witness DeRonne discussed several proposed adjustments to the utility's projected salary and wage expense. Ms. DeRonre testified that six of the 104 positions included in UWF's revised payroll projections were vacant, representing a 5.8% vacancy rate. In addition, Ms. DeRonne testified that at least one of those positions will not be filled, as indicated by the utility in its revised payroll information.

One adjustment recommended by Ms. DeRonne is an adjustment to remove UWF's vacant positions, due to the uncertainty concerning whether the positions will actually be filled. In addition, Ms. DeRonne testified that it would be inappropriate to allow a zero vacancy rate as this would not be reflective of normal operating conditions. According to Ms. DeRonne, it is normal for a company to have some vacant positions at any given time. As an example, she stated that as new employees are hired, past employees may retire or resign from employment.

In addition to her adjustment to remove UWF's vacant positions, Ms. DeRonne proposed to adjust base year salary and wage expense to reflect the correction of an error. In response to a discovery request, UWF acknowledged that some operation and maintenance (O&M) expenses were incorrectly allocated to salary and wage accounts in the base year, resulting in an overstatement of $53,925. Ms. DeRonne testified that this overstatement is reflected in future test year salary and wage expenses. On the other hand, O&M expenses for the base year are understated by the same amount, inflated by the 1996 and 1997 price indexes.

Based on the adjustments discussed above, Ms. DeRonne testified that UWF's proposed salary and wage expense adjustment should be reduced by $88,878 for water and $103,953 for wastewater, as indicated on Schedule No. 11 of Exhibit No. 29. This adjustment allows for total payroll costs of $4,088,735 for the test year and represents an 8.53% increase over base year costs. In addition, Ms. DeRonne proposed adjustments to non-payroll O&M expenses to decrease water operations by $47 and increase wastewater by

$56,648. Ms. DeRonne also proposed corresponding adjustments to reduce payroll tax expense by $6,769 and $12,035 for water and wastewater, respectively.

In response to Ms. DeRonne's proposed adjustments, utility witness Jost provided some additional information. Mr. Jost testified that three additional positions should be removed from test year payroll costs. First, the utility agreed to remove the Commercial Manager position, which will not be filled by UWF. Moreover, the utility has agreed to remove two Customer Service Representative positions, as a result of savings anticipated to be realized from the Information Technology (I.T.) project. On the other hand, Mr. Jost testified that the third Customer Service Representative position is currently filled by temporary personnel and will be needed through 1997. Mr. Jost added that this position may be eliminated in 1998 due to additional enhancements to the Customer Information System project. However, he testified that it would be inappropriate to reflect these additional savings since the utility has not requested recovery of the enhancements necessary to eliminate the position.

As stated above, in the utility's revised payroll calculations, UWF included two projected positions for the 1997 test year. These positions were for a Service Person and a Utility Person II. Mr. Jost testified that the Service Person position is needed as a result of growth in the utility's service territory and in order for the utility to continue in its efforts to provide responsive customer service. With respect to the Utility Person II, Mr. Jost testified that this position was needed due to more stringent regulations relating to traffic control and the growth in the territory. On cross-examination, utility witness Sambamurthi was requested to provide further amplification of what was meant by "traffic control." Mr. Sambamurthi testified that as a requirement by the city and state, when the utility works in public rights-of-way, as a safety requirement, the utility is required to have a person directing traffic on the roadway.

In response to Mr. Sambamurthi's characterization of the job functions of the Utility Person position, Ms. DeRonne testified that this function could be accomplished by an entry level position, or by a temporary position during periods of time when such a function would be needed. Also on cross-examination, Ms. DeRonne added that if the Commission determines it to be appropriate to include the Utility Person in the test year, a salary level of $55,963 would be excessive for the activities related to this position.

In its brief, OPC argued that it is unrealistic that the utility will reach its initial projected level of employees of 106, nor its revised level of 104, and, therefore, the proposed adjustments to remove the vacant employees should be approved. In support of this, OPC pointed out that at the time of the hearing, UWF's regular full-time employee count had decreased from 98 to 96.

In the utility's brief, UWF argued that the correct number of employees to include in the 1997 test year salaries is 102, resulting in salary expenses of $3,619,204. To arrive at this number, the utility began with the 104 employees listed on Exhibit No. 13 and removed the wages for three employees, the Commercial Manager position and two of the Customer Service Representatives. Then UWF added back one Customer Service Representative, in effect only removing one customer service position. In support of this, the utility argued that based on the testimony of Mr. Jost, since one of the Customer Service positions will be needed throughout 1997, this employee should be included in the total 1997 projection.

Although we agree that Mr. Jost testified to this statement, we disagree with the utility's characterization of the evidence in the record. As evidenced by Exhibit No. 13, the utility's revised payroll projection included three Customer Service positions which were occupied by temporary employees. As summarized above, and as indicated by Exhibit No. 9, Mr. Jost testified that two of the positions should be removed as a result of savings from the I.T. project. On the other hand, Mr. Jost testified that the third position should remain in test year expenses because in order to eliminate that position, additional enhancements would have to be made. We agree with Mr. Jost's testimony that the third Customer Service position should remain in the test year payroll expenses. Because the utility has not included the additional enhancements necessary for elimination of that position in the test year, we find that it would be inappropriate to remove the associated salaries and benefits. However, we disagree with the utility's proposal to add back an additional Customer Service position, as the payroll costs for this third position were already included in the utility's payroll projection subsequent to the removal of the two employees related to the I.T. project.

In response to Ms. DeRonne's proposed 5.8% vacancy rate (or removal of six employees), in its brief, UWF argued that this treatment would be inappropriate. First, UWF argued that the utility only has two vacancies and is in the process of filling those vacancies to reach the projected level of 102 employees. Next, UWF argued that, contrary to Ms. DeRonne's statement that new employees are hired as past employees retire or resign, it does not

leave vacancies open. Rather, as openings arise, new employees are hired. Regardless of how it is viewed, we believe that there will be a period of time between a position opening and it being filled during which that position will be vacant. However, we are not convinced that OPC's proposed adjustment is appropriate.

With respect to Ms. DeRonne's adjustment to remove six positions because they are vacant, since the utility has agreed that three of the positions should be permanently removed, we find that those positions should not be included in a "vacancy rate" calculation. In addition, we find that the utility has adequately proven that the remaining three positions will be needed, with one adjustment. First, although the third Customer Service position is currently filled by a temporary employee, the utility indicated that it will need this position at least until sometime in 1998. Based on the foregoing, we find it appropriate to include this position in the test year. Second, as Mr. Jost testified, the Service Person position is needed as a result of growth in the service territory. Next, although the salary related to the Utility Person II position appears to be excessive, we find it appropriate to include this position because it will be necessary due to regulations related to traffic control. However, the record indicates that this position could be filled by an entry level or temporary employee. As such, we have reduced the projected salary of this position from $55,963 to $22,803, resulting in a reduction of $33,160, to reflect the wages of an entry level Utility Person I position.

Based on the above analysis, we approve test year salary and wages expenses as follow:

$4,304,823	Adjusted 1997 salaries per UWF
(42,407)	Commercial Manager position
(31,715)	Customer Service Rep. - I.T. Project
(27,144)	Customer Service Rep. - I.T. Project
(33,160)	Reduction of Utility Person II salary
$4,170,397	Commission approved 1997 salaries
85.65%	Percent to expense per MFR Schedule No. G-20
$3,571,945	Commission approved 1997 salaries expenses

Based on the utility's percentages, we find that the appropriate test year salaries expenses allocated to water and wastewater are $1,285,900 and $2,286,045, respectively. This results in a reduction to UWF's salaries as reflected in the original MFR filing of $63,653 and $113,160 for water and wastewater, respectively. We have also made corresponding adjustments to reduce test year payroll tax expenses by $5,970 for water and $10,614 for wastewater. Based on the removal of three employee positions, in addition to our decision to remove the salaries and related benefits of an employee related to public relations/acquisitions activities discussed later in this Order, our adjusted employee complement for the test year reflects 100 employees (104 employees minus 4 positions).

In addition to the adjustment to test year salaries, OPC also proposed an adjustment to the 1995 base year salaries in order to correct a classification error which overstated salaries expenses by $53,925 and understated other O&M expenses by the same amount. As stated above, Ms. DeRonne testified that the overstatement in salary expenses is reflected in the future test year. However, the record is unclear as to whether this overstatement actually carried forward into the 1997 salaries. According to MFR Schedule No. G-20, contained in Composite Exhibit No. 4, only the non-exempt employee salaries were projected based on 1995 wages escalated by 3.23%. On the other hand, the salaries of the exempt employees were projected by using the "latest known wages." Since the exempt employees' test year salaries were projected based on something other than a simple percentage increase over the base year, we find that it would be inappropriate to adjust test year salaries based on a misclassification error that occurred in 1995. However, we find it appropriate to make adjustments to the other O&M expense accounts which were understated, as the projected amounts were based on the base year amounts escalated by indexes of 2.4% and 2.5% for 1996 and 1997, respectively. Therefore, we have reduced water expenses by $48 and increased wastewater expenses by $56,647.

O&M Expenses

MFR Schedule No. G-27 of Composite Exhibit No. 4 indicates projected test year expenses for purchased power of $445,468 and $883,319 for water and wastewater operations, respectively. Likewise, MFR Schedule No. G-28 indicated projected test year expenses for chemicals of $96,816 and $120,587 for water and wastewater operations, respectively. Utility witness Egan-Long testified that test year expenses for purchased power and chemicals were calculated using the base year unit costs applied to the projected water and wastewater sales levels.

On cross-examination, Ms. Egan-Long agreed that the test year expenses which were calculated based on consumption should be adjusted if any adjustments were made to the level of test year consumption. However, we have determined that there are no adjustments necessary to the projected test year billing determinants. Accordingly, we find that no adjustments are necessary to the expenses which were projected based on the projected level of sales.

Inflation Rate for Medical and Dental Costs

In the MFRs, the utility reflected a total of $561,207 for test year expenses associated with medical, dental, and life insurance costs. As indicated on MFR Schedule No. G-21 of Composite Exhibit No. 4, the medical and dental expenses were calculated using the latest known premiums and applying those amounts to the 1996 and 1997 levels of coverage. The 1997 test year amount was calculated by applying a 9% escalator to the 1996 expenses. The utility indicated that the rate of 9% was developed by UWF's actuary, and used in the calculation to forecast the expenses for OPEBs.

OPC witness DeRonne testified that the utility has not provided any evidence substantiating the reasonableness of a 9% inflation rate for medical and dental costs. Ms. DeRonne pointed out that the utility did not provide any quotes or estimates from its insurers validating its requested increase. Further, the utility did not provide its historic cost levels to be used to evaluate the reasonableness of the 9% increase. Absent any corroborating evidence, Ms. DeRonne proposed that test year medical and dental expenses should be calculated by applying the Gross Domestic Implicit Price Deflator of 2.5% to the 1996 expenses and contributions.

As further support for her proposed adjustment, Ms. DeRonne provided a comparison of the utility's 1995 medical and dental costs to a revised projection for 1996. The 1996 amounts used in the comparison were based on UWF's actual 1996 premiums applied to her proposed employee count of 98. Based on this comparison, Ms. DeRonne argued that the costs for medical and dental insurance decreased from 1995 to the projected 1996 amounts by approximately 3.76%.

In response to Ms. DeRonne's adjustment to reduce the medical and dental inflation rate from 9% to 2.5%, utility witness Jost provided an excerpt of UWF's actuarial report presenting the

medical trend array which indicated a 9% rate for 1997. Mr. Jost further stated that this medical trend was based on historical claims records for UWF which were calculated separately for Pre and Post 65.

In its brief, OPC argued that the only support provided by the utility was a statement that UWF's actuaries utilized a 9% inflation rate for 1997 in the actuarial report used to project the utility's future OPEB and pension costs. Therefore, OPC maintained that this rate should not be used to estimate short term costs.

In the utility's brief, UWF argued against OPC's assertion that no substantiating evidence was provided in support of its proposed 9% increase. The utility stated that an outside consultant performed an actuarial valuation for UWF, and provided copies of the study to OPC and to the staff. However, only one page of that report, a medical trend array, was actually entered as part of the record. We question the reliability of this evidence, given that it was submitted by a utility witness rather than by the consultant hired to create the report. Moreover, we note that Exhibit No. 10 provides annual percentages only, with no explanations or supporting documentation.

We find that the utility has failed to meet its burden of proof with regard to the requested 9% inflation rate for medical, dental, and life insurance expenses. The utility merely stated that an actuary developed the requested rate, and provided a one-page excerpt from an actuarial report indicating yearly percentages, without record support to validate those percentages. In light of OPC's arguments, we believe this is not sufficient evidence to substantiate UWF's requested 9% inflation rate. Accordingly, we find that a 9% increase for medical, dental, and insurance expenses in the test year is unreasonable.

Likewise, we find OPC's proposed 2.5% increase to be unreasonably low. The utility's 1996 expenses were projected using a 10.1% inflation rate. Since Ms. DeRonne did not propose to make any adjustments to this rate, in effect she accepted that the 1996 medical and dental inflation rate should be much higher than the 1996 index of 2.4%. Therefore, we find that it would be unreasonable to use the 1997 index to escalate the utility's medical and dental insurance expenses.

Because, as noted above, it is our belief that the utility has failed to meet its burden of proof with regard to the requested 9% inflation rate, and that OPC's proposed 2.5% increase is unreasonably low, we find a rate of 5% to be a reasonable alternative rate by which to calculate the test year expenses. We

note that it is within our prerogative to evaluate the testimony of competing experts and accord whatever weight to the conflicting opinions we deem necessary. Gulf Power Co. v. FPSC, 453 So. 2d 799, 805 (Fla. 1984) (approving Commission decision involving competing testimony from utility and staff regarding coal inventory value, by which decision Commission reduced utility's proposed value by one-half of the difference between it and staff's proposed value, thereby reducing inventory to a level that it believed to be reasonable). Accordingly, we find that UWF's test year medical, dental, and insurance costs shall be based on a 5% increase between 1996 and 1997.

Projected Medical, Dental, and Life Insurance Expenses

In the MFRs, the utility reflected medical, dental, and life insurance expenses of $202,035 and $359,173 for water and wastewater operations, respectively, for the 1997 test year. These amounts represent a total increase of $55,583 over the base year expense level. As indicated on Schedule No. G-21 of the MFRs, the medical and dental expenses were calculated using the latest known premiums and applying those amounts to the 1996 and 1997 levels of coverage. The 1997 test year amount was calculated by applying a 9% escalator to the 1996 expenses.

OPC witness DeRonne proposed several adjustments to UWF's test year medical, dental, and life insurance expenses. First, the utility's original filing included payroll and related benefits expenses calculated based on a total of 106 employees. As previously discussed, Ms. DeRonne proposed removing UWF's vacant positions for a total of 98 employees. Accordingly, Ms. DeRonne testified that test year medical, dental, and life insurance expenses should be adjusted to reflect the costs associated with the 98 employees.

Next, Ms. DeRonne testified that the utility included $17,698 in the 1997 costs which was identified as "retirees." The utility's 9% inflation rate was applied to the 1996 amount of $16,237 in order to calculate the 1997 cost. Ms. DeRonne stated that the utility did not provide any explanation for this amount, or any support for the determination of the 1996 amount. Further, she testified that the utility's filing includes a separate expense calculation for OPEBs which would include the medical insurance costs for UWF's retired employees. Therefore, Ms. DeRonne proposed an adjustment to reduce the test year medical insurance by $17,698 to avoid double-counting medical costs for retired employees.

In addition to her proposed adjustments to medical and dental costs, Ms. DeRonne testified that since the utility's projected amount of life insurance costs were based on test year salaries and wages, an adjustment should be made to reflect the impact of her reduction to salaries and wages. Based on her proposed 2.5% inflation factor and the adjustments addressed above, Ms. DeRonne proposed to reduce water and wastewater expenses by $25,393 and $45,142, respectively, to reflect adjustments to medical, dental, and life insurance expenses.

On cross-examination, utility witness Jost agreed that test year medical, dental, and life insurance expenses should be determined based on the employee compliment reflected in the salary and wage expenses included in the final revenue requirement calculation. In its brief, UWF argued that the test year expenses should be adjusted to reflect 102 employees for 1997.

In its brief, OPC argued that adjustments should be made to reflect a 2.5% increase in expenses from 1996 to 1997. As discussed above, because we find that a 5% increase is more reasonable, it shall be applied to escalate the 1996 expenses to the test year amounts. OPC also argued that an adjustment should be made to remove the "retiree" costs from the test year. Since UWF did not rebut this adjustment or provide any basis for including these costs, we agree with OPC's adjustment to remove $17,698 from test year expenses. Finally, OPC argued that test year expenses should be calculated based on 98 employees. However, as discussed above, we find it appropriate to calculate these expenses based on a total of 100 employees for the test year.

Based on the foregoing, we find it appropriate to reduce test year water and wastewater operations by $19,532 and $34,724, respectively. These adjustments take into account our approved 5% increase in medical, dental, and life insurance expenses, an employee count of 100, and removal of the costs of retirees' insurance.

Projected Expenses for OPEBs

In the MFRs, the utility has projected 1997 expenses for OPEBs in the amount of $539,663. Of this amount, $194,279 was allocated to water operations and $345,384 was allocated to wastewater operations. The test year expense level represents an adjustment of $524,056 over the base year expenses. Utility witness Jost testified that this adjustment established an annual expense level which did not exist prior to the base year.

Historically, the cost of providing medical and life insurance coverage to retired employees was accounted for on a cash basis. However, as of January 1, 1993, Statement of Financial Accounting Standards (SFAS) No. 106 required that these costs be accounted for on the accrual basis. Therefore, the retirement benefits shall be recognized as they are earned over the working lives of the eligible employees.

On rebuttal, Mr. Jost testified that the projected OPEB expenses should be reduced by $3,045 and $5,414 for water and wastewater, respectively, to reflect the four positions eliminated from the utility's 1997 payroll costs. On cross-examination, Mr. Jost agreed that test year OPEB expenses should also be adjusted to reflect the three additional positions removed from the 1997 payroll costs which were identified on Exhibit No. 9, as well as any other positions which we may find appropriate to remove.

In its brief, OPC argued that the test year OPEB expenses should be reduced to reflect Ms. DeRonne's proposed employee count of 98, which results in a reduction of $17,900.

In its brief, UWF argued that rate recovery should be allowed for the 1997 test year expenses, as well as the costs incurred in 1995 and 1996, amortized over a fifteen-year period. In support thereof, the utility argued that since this is the first opportunity for the Commission to address its OPEB expenses, rate recovery of these past expenses should be allowed. UWF argued that total OPEB expenses of $577,702 should be allowed in the test year, which represents the 1997 expenses plus the amortized amount of expenses for 1995 and 1996. However, we find that the record evidence does not support the utility's request for amortization of prior year expenses.

The utility's original filing included OPEB expenses of $539,663, based on 106 employees. As noted above, Mr. Jost agreed that test year expenses should be adjusted to remove costs related to the total number of employees removed from the 1997 payroll costs. We hereby find that the test year OPEB expenses should be calculated based on 100 employees. The record indicates that the estimated service cost per employee for 1997 is $2,473. Therefore, we find it appropriate to reduce test year expenses by a total of $14,836 ($2,473 x 6 employees), allocated to water and wastewater by reductions of $5,342 and $9,496, respectively. This results in total projected test year OPEB expenses of $524,825. Further, we find it appropriate to reject the utility's request for recovery of expenses from prior years as unsupported by the record.

Employee Savings Program (401k)

In the MFRs, the utility requested a level of $91,690 for test year employee savings expenses (401k). UWF allocated $33,008 to water operations and $58,682 to wastewater operations. These test year amounts represent a total increase of $22,077 over the base year amount. The test year expenses represent the employer matching contributions for the employees participating in the 401k plan. According to utility witness Jost, the utility matches an employee's contribution by 50%, up to a maximum of 2% for hourly employees and 3% for all other employees.

OPC witness DeRonne testified that the utility's projected increase in 401k expenses represents a 27.6% increase between the base year and the interim test year, and a total increase of 31.7% between the base year and the projected 1997 expense level. In comparison, the utility's salaries and wages reflect an increase of 10.77% from the base year to the interim year. Factoring in Ms. DeRonne's adjustments to salary and wage expense, an increase of 5.13% results. Comparing these percentage increases for salaries and wages, Ms. DeRonne testified that the utility's increase to its 401k expenses is inconsistent. Further, Ms. DeRonne provided a comparison of the percentage change in 401k expenses beginning with 1992 through projected 1997. This comparison indicated that the 27.6% increase is also inconsistent with historical cost level increases.

In addition to the identified inconsistencies, in response to a discovery request, UWF indicated that the projected 401k expenses are based on 100% employee participation, while the actual participation level was only 86%. With respect to this information, Ms. DeRonne testified that it is unreasonable to assume 100% participation in UWF's 401k plan, as well as to consistently contribute at the maximum level allowed by the plan.

As a result of the inconsistencies between the increase in salaries and wages and the increase in 401k expenses, Ms. DeRonne proposed an adjustment to the test year level of employee savings plan expenses. She testified that there is a direct correlation between the level of salary and wage expenses and the employee savings plan costs. Therefore, Ms. DeRonne proposed to reduce 401k expenses by $4,665 and $8,292 for water and wastewater, respectively, which reflect her proposed increase in test year salaries and wages over the base year level.

In response to Ms. DeRonne's adjustments, Mr. Jost provided an updated calculation for test year 1997 401k expenses. Mr. Jost testified that the revised expense levels were based on the

contribution levels of the current participants, applied to the corresponding 1997 test year wages. Exhibit No. 11 indicates revised test year expenses of $28,990 and $51,538 for water and wastewater operations, respectively. The utility's revisions reflect a reduction to expenses of $4,018 and $7,144 for water and wastewater, respectively.

Based on the evidence of record, it appears that the utility has overstated its projection of the 1997 level of employee savings expenses. According to Ms. DeRonne, there is a direct correlation between salaries and employee savings. Although we agree with her assessment to some degree, such as within a specific pay period, we believe that when looking at a two-year time frame, the correlation may not be as clear. Over a period of time, it is possible that employees' contribution levels may change, or that employees who previously did not contribute to the plan would decide to participate. Therefore, we disagree with Ms. DeRonne's proposal to calculate test year 401k expenses based on the increase in salaries from the base year forward. However, we find that based on the evidence of record, an adjustment to test year expenses is warranted. We find that it is reasonable to calculate the 1997 401k expense projection based on the current level of participating employees. Accordingly, we hereby reduce test year expenses by $4,018 and $7,144 for water and wastewater, respectively.

Legal Costs for Defense of EPA or DEP Violations

OPC witness Larkin identified expenses included in the base year related to legal fees incurred to defend EPA and DEP violations. He testified that the utility's ratepayers should not be required to finance such violations, as these expenses are unrelated to the provision of water and wastewater service. As such, Mr. Larkin proposed adjustments to remove these expenses from the test year. By applying the 1996 and 1997 inflation factors to the base year amount of $431, he proposed to reduce water operations by $163 and wastewater operations by $290.

In its brief, UWF argued that the utility has a good record of compliance with environmental rules and regulations. In support of this statement, the utility referred to the testimony of an employee of the Department of Health and Rehabilitative Services (HRS) and two employees of DEP, who appeared on behalf of staff in this proceeding. In further support of UWF's position that these legal expenses should be allowed, in its brief, the utility referenced Order No. PSC-93-0301-FOF-WS. By that Order, the Commission determined that it was appropriate to allow legal

expenses incurred for defense of DER (now DEP) and EPA fines, as these costs could serve to avoid or reduce fines, or eliminate or postpone large system improvements.

Although we find that fines associated with violations of DEP and EPA should be borne by the shareholders of the utility, we believe it is reasonable for UWF to recover the costs of defending such fines. As the Commission previously concluded, the legal expenses incurred for defending fines from DEP and EPA could facilitate avoided or a reduced amount of fines. Therefore, we find that no such adjustments are necessary to test year expenses.

Information Technology (I.T.) Project

As UWF witness Cleveland testified, and as reflected in the MFRs, UWF's Information Technology (I.T.) project provided for the development and implementation of new systems for Integrated Financial Management, Customer Service Information, and associated Technical Architecture projects. On rebuttal, utility witness Jost identified cost savings of $71,074 which represented anticipated cost savings for 1997 related to the new Customer Service Information system.

The evidence of record indicates that the savings were related to the removal of salaries and associated benefits of two customer service representative positions. Since we have found it appropriate to remove the salaries and associated benefits as addressed above, no further adjustments are necessary related to this issue.

Vehicle Leasing Expense

In the MFRs, the utility's test year level of transportation expense is indicated as $514,031. This amount represents an increase of $174,861 over the base year expense level. Utility witness Jost testified that UWF recently initiated a program of leasing vehicles. Mr. Jost indicated that the increase in transportation expenses is a reflection of the lease program being fully implemented in the test year.

On rebuttal, utility witness Sambamurthi testified that a wide variety of vehicles are required for UWF in order to operate its system. Vehicles such as dump trucks, heavy and light duty pick-up trucks, sedans, and vans are needed for the utility's various employees in order to oversee the facilities and to provide service throughout UWF's service area, which is located in three counties.

While OPC did not provide any testimony on this issue, in its brief, OPC questioned the prudence and necessity of the number of leased vehicles compared to the number of full-time employees. In support of this assertion, OPC relies on Schedule No. G-29 workpapers. However, this schedule was not included in the record.

Although the workpapers on which OPC relied in support of its brief were not admitted into evidence, Composite Exhibit No. 4, Schedule No. H-10, indicates there are 56 vehicles owned or leased by the utility. OPC argued that this amount may not be necessary or prudent, compared to the 96 full-time employees. However, the evidence in the record does not indicate that this is an excessive number of vehicles. We find that the record reflects the necessity of a variety of vehicle types, for numerous employees to provide service to UWF's customers over an area spanning three counties. Accordingly, we find that the utility's requested expense for vehicle leasing is reasonable. Therefore, no adjustments are necessary.

Miscellaneous Other Deferred Debits

UWF identified $86,450 in deferred debits related to legal costs associated with the Sunray acquisitions, and appraisal fees for water and wastewater facilities. The utility indicated that the costs were being amortized over five years in accordance with Rule 25-30.433(8), Florida Administrative Code. In the MFRs, the utility included test year expenses in the amount of $7,726 for water operations.

OPC witness Larkin testified that if we allow the utility to recover the expenses related to the Sunray acquisition and appraisal fees, the costs should be amortized over the remaining life of the associated assets. On the other hand, according to Mr. Larkin, since the utility does not yet own the Sunray facilities, it should not be allowed to recover the associated acquisition costs from the current customers and the costs should be disallowed as a test year operating expense. Mr. Larkin proposed an adjustment to reduce expenses by $7,726 for the water operations.

In its brief, UWF argued that the acquisition of the Sunray facility will benefit the utility's existing customers and therefore, the costs should be allowed through either an acquisition adjustment or through the proposed amortization expenses. UWF further argued that because the Commission has previously concluded that acquisition costs are not to be recovered through the acquisition proceeding, the utility's only relief for these costs is through amortization expenses in the current proceeding.

Regardless of whether the current customers will benefit from the acquisition of the Sunray facility, the record indicates that the acquisition is still pending. Since UWF does not yet own the facility, we agree with Mr. Larkin and OPC that the associated acquisition costs should not be included within the rates charged to the current customers. We find that it would be inappropriate to include any expenses related to Sunray without simultaneously including associated revenues in order to avoid causing a mismatch which would be inequitable to the utility's existing customers. Accordingly, test year expenses for the water operations shall be reduced by $7,726 to remove the associated amortization expenses.

Vision 2000 Costs

In the MFRs, the utility included test year expenses in the amount of $9,347 for water operations and $16,618 for wastewater operations related to deferred Vision 2000 expenses. UWF indicated that these costs were being amortized over five years in accordance with Rule 25-30.433(8), Florida Administrative Code.

OPC witness Larkin testified that these costs result in an unreasonable burden to ratepayers because UWF should have exercised longer amortization periods and failed to recognize associated cost savings. UWF indicated that the Vision 2000 program produced intangible benefits such as process improvements and paperwork reductions. The utility also indicated that as of May, 1995, the program has generated savings of $3,540 per month related to purchased power, resulting in annual savings of $42,480.

Mr. Larkin testified that the utility failed to reflect sufficient savings in the test year, since the test year expenses were based on the 1995 unit costs, and only eight months of savings, or $28,320, were actually reflected in the base year costs. Accordingly, he stated that the utility has not reflected $14,160 of annualized 1995 savings. Further, Mr. Larkin added that the utility would experience a similar amount of savings in 1996, and two months of savings in 1997, prior to the beginning of the amortization period in March of 1997. Since the utility failed to defer and amortize the savings for 1996 and 1997, Mr. Larkin testified that it is inequitable to the ratepayers to allow the amortized expenses without offsetting the associated savings. Additionally, he stated that other intangible savings could be occurring which the utility cannot quantify, and therefore, are not reflected in the filing.

The utility described the Vision 2000 program as costs incurred to guide UWF between UWR and GWC. Mr. Larkin testified that since these costs appeared to be related to the merger, they

should be treated similar to an intangible asset. Since the utility does not depreciate or amortize Miscellaneous Intangible Plant or Organization costs, recorded in Account 301, Mr. Larkin suggested that the costs associated with Vision 2000 be treated in a similar manner. He proposed an adjustment to reduce test year expenses by $9,347 and $16,618 for water and wastewater operations, respectively, in order to disallow the utility's requested amortization expenses.

Utility witness Heil refuted Mr. Larkin's statement that these costs were merger related, and instead described Vision 2000 as a continuous improvement program aimed at improving customer satisfaction and reducing costs related to operations, maintenance, and capital. The program is made up of process-based teams which address issues such as quality of service, community involvement, and reduction of purchased power and accounts receivable. In response to Mr. Larkin's arguments, Mr. Heil agreed that the utility failed to account for all of the purchased power savings. However, he testified that only $4,720 of additional purchased power savings should be reflected in the 1997 test year.

In its brief, the utility reiterated Mr. Heil's position that cost savings of $4,720 should be reduced from purchased power expenses to reflect all of the cost savings for the test year. Additionally, UWF argued that if any further costs are removed, this would result in removing cost savings that have already been reflected in the expense amounts. However, we find that the record does not support how the $4,720 adjustment was calculated. Therefore, we do not have the ability to determine the validity of the utility's proposed adjustment. On the other hand, the record does indicate that the Vision 2000 program resulted in annual savings of $42,480, and that only $28,320 were actually reflected in the base year. Therefore, we find it appropriate to reflect an additional $14,160 of cost savings in the 1995 base year purchased power expenses. We have inflated this amount by 1.6% and 2.0% for 1996 and 1997, respectively, to reflect the test year reduction of $14,674. The percentage increases are based on the annual increases in purchased power expenses for 1996 and 1997.

With regard to the amortization of the costs associated with the Vision 2000 program, since the costs are not related to merger activities, we disagree with Mr. Larkin's proposal to treat the costs as an intangible asset. In addition, we do not believe it would be appropriate to defer and amortize any additional savings from 1996 and 1997, since the cost savings related to purchased power are annual savings. Because the test year expenses were based on the 1995 base year amounts, we find that the annual savings are already reflected in the 1997 expenses. On the other

hand, the costs incurred by the utility to initiate the Vision 2000 program are non-recurring in nature. We find that it would be inappropriate to offset savings that will be annually recurring against costs that are non-recurring. Further the annual savings of $42,480 exceed the annual amortization expenses of $25,965. Based on the foregoing, we find that it is appropriate to include the utility's requested amortization expenses. However, Purchased Power expenses shall be reduced by $5,283 and $9,392 for water and wastewater operations, respectively, to reflect additional cost savings not factored into the test year.

Moving Expenses

In the MFRs, the utility included test year expenses in the amount of $4,489 for water operations and $7,981 for wastewater operations related to deferred moving expenses. UWF indicated that these costs were being amortized over five years in accordance with Rule 25-30.433(8), Florida Administrative Code.

UWF indicated that there were no employee moving expenses for the years 1990-1993 and none were projected for the 1997 test year. OPC witness Larkin testified that this information suggested that UWF's proposed five-year amortization period is inappropriate. Moreover, Mr. Larkin asserted that his proposed adjustment to disallow these expenses was further supported by the fact that UWF did not include moving expenses in its projected 1997 test year.

According to utility witness Jost, the utility incurred moving expenses of $59,531 in 1995 and $46,897 in 1996. These expenses were associated with two employees hired from subsidiaries of UWF, an accounting supervisor and an assistant manager. He added that a third employee, a manager of engineering, was also hired from a subsidiary which would result in moving expenses being incurred in 1997. In response to Mr. Larkin's proposed adjustment, Mr. Jost testified that the requested employee relocation expenses were prudent and reasonable, and were incurred in the normal conduct of business. He stated that the reason the utility amortized these expenses was to avoid burdening a particular period.

On cross-examination, Mr. Larkin testified that employee moving expenses should be considered period expenses, as opposed to non-recurring in nature. As such, he stated that it is not appropriate for moving expenses to be accumulated over a period of years and then amortized. Further, Mr. Larkin testified that in order for costs to be amortizable, the expense item would either have to be something beyond the company's control, or, due to the nature of the item, there would have to be no opportunity for the company to avoid or mitigate the expense.

In its brief, UWF argued that moving expenses are a non-recurring expense, and should therefore be amortized. Alternatively, UWF argued that if the amortized costs for 1995 and 1996 are not allowed, the average of the two years, or $53,214, should be allowed as a test year expense.

We find that, as Mr. Jost testified, the moving expenses were incurred in the normal conduct of business. Therefore, we agree with Mr. Larkin and OPC in its brief that the costs incurred by the utility for moving its employees were controllable expenses. As such, based on the evidence of record, we find that UWF's moving expenses should have been expensed as incurred, not deferred and amortized. Accordingly, we find it appropriate to reduce test year amortization expenses by $4,489 and $7,981 for water and wastewater, respectively, to remove employee relocation costs from test year expenses.

Although the original filing did not request moving expenses for the test year, the utility indicated that some level of moving expenses will be incurred during 1997. As stated above, the utility argued in its brief that test year expenses of $53,214 should be allowed for 1997. However, since the utility did not provide evidence of any estimates for moving expenses, the record does not support this expense level for 1997. In addition, there is no indication in the record that the same level of moving expenses will occur in the test year, as evidenced by the fact that no moving expenses were incurred from 1990 to 1993, and only a small amount was incurred for 1994. Further, the utility did not provide any supporting documentation or calculations for the expenses incurred in 1995 and 1996. As such, we find that it is not possible to verify the reasonableness or prudence of the actual expenses recorded in these years. Accordingly, we hereby reject the utility's suggestion to allow test year expenses equal to the average of the 1995 and 1996 levels as unsupported by the record.

Charitable Contributions and Membership Dues

Staff Audit Disclosure No. 1 identified several items in the utility's O&M expenses which are normally disallowed for rate case proceedings. Exhibit No. 54 presents a list of these items including charitable contributions, membership association dues, and golf cart fees. Accordingly, staff witness Buckley proposed an adjustment to reduce water and wastewater expenses by $3,662 and $5,941, respectively, for the 1995 base year.

OPC witness Larkin testified that these expenses are inappropriate to be recovered from ratepayers as they do not relate to the provision of water and wastewater service. With respect to

charitable contributions and donations, he stated that although such contributions produce a benefit to society, the utility's ratepayers should not be forced to indirectly contribute to organizations which are chosen by UWF. Utility witness Jost agreed that the ratepayers have no remedy available to them if they do not support the organization to which the utility contributes. Mr. Larkin proposed to reduce test year expenses by $722 and $1,283 for water and wastewater operations, respectively, to remove the expenses associated with contributions and donations.

Mr. Larkin also disagreed with the utility's inclusion of membership dues to chambers of commerce in test year expenses. He testified that, due to the nature of the organization, these costs are related to public relations activities. Accordingly, Mr. Larkin proposed adjustments to reduce test year expenses by $486 and $863 for water and wastewater operations, respectively.

In response to the adjustments proposed by Mr. Buckley and Mr. Larkin, witness Jost testified that the contributions and membership dues were prudently incurred and appropriately reflected in rates. Mr. Jost explained that these expenses are important because UWF must function as a member of, and form relationships with, other companies within the Jacksonville metropolitan community. With respect to memberships in local business societies, UWF derives benefits in that it helps to keep the Company informed about changes in the area, provides the Company with a forum to inform the business community of upcoming changes, and cultivates personal relationships which are useful for the Company in solving or avoiding disputes. Through its memberships in professional societies, the utility keeps informed about issues within the industry. In its response to the rate case audit, UWF argued that these costs are appropriately included in test year expenses because the memberships aid the utility in serving its customers. UWF further argued that the USOA provides for these types of expenses.

In its brief, UWF argued that contributions and dues are part of the cost of doing business, and that the associated expenses should be allowed in the test year because relationships with community and business leaders can aid in resolving disputes in a more effective and less costly manner.

We acknowledge that some benefits may be accrued as a result of these expenses. However, we agree with OPC that costs related to contributions and membership dues, which are public relations oriented, should be disallowed. These costs serve to improve the image of the company, resulting in a direct benefit to the utility's shareholders, not to the customers. This treatment has

been consistently applied by the Commission, as evidenced by Orders Nos. PSC-93-0301-FOF-WS at 19-20 and PSC 96-1320-FOF-WS at 151-153, which Orders were officially recognized in this proceeding.

We recognize that there are some differences between the adjustments proposed by Mr. Buckley and those proposed by Mr. Larkin. Mr. Larkin did not object to some of the items identified in the staff audit. However, as Mr. Buckley testified, these items are normally disallowed in rate case proceedings. Further, we are not convinced that UWF adequately demonstrated that these costs are appropriate to be recovered from the customers of the utility rather than from the shareholders. Accordingly, we find it appropriate to reduce test year expenses by $3,844 and $6,236 for water and wastewater operations, respectively. These adjustments reflect the miscellaneous expenses identified in the staff audit by Mr. Buckley, inflated by index percentages of 2.4% and 2.5% for 1996 and 1997, respectively.

Public Relations Expenditures

OPC witness Larkin identified test year expenses which are related to public relations activities. Expenses such as these assist the utility in promoting its name as a good corporate citizen, and therefore should be funded by the shareholders, not the ratepayers. As such, Mr. Larkin proposed to reduce test year expenses by $1,525 and $2,711 for water and wastewater operations, respectively, in order to remove public relations advertising costs.

Likewise, UWF identified an employee position entitled "Manager of External Affairs Business Development." Since the job functions of this position are associated with public relations activities, Mr. Larkin proposed to remove the payroll expenses for this position from the test year operating expenses. Accordingly, he proposed adjustments to reduce test year water and wastewater expenses by $15,326 and $27,247, respectively.

In its brief, UWF argued that expenses related to public relations activities are a cost of doing business, and that these costs help to inform customers and lead to improvements related to conservation and similar benefits. In support thereof, UWF refers to the testimony of utility witness Heil with regard to Small Change Theaters. Mr. Heil testified that UWF co-sponsored a presentation on water conservation to school children. On cross-examination, Mr. Heil could not identify the total cost related to this endeavor, but provided an estimate of $5,000.

We acknowledge that UWF is correct that the utility's customers yield benefits from public relations activities associated with educating the public on water conservation issues. However, the record does not indicate whether the costs identified by OPC were incurred in relation to allowable activities. As such, we find that the utility has not met its burden of proof with respect to the test year public relations advertising costs. Further, we agree with OPC's assessment that these costs aid in promoting the utility's corporate name, and should therefore be disallowed as test year expenses. This treatment has been consistently applied by the Commission, as evidenced by Orders Nos. PSC-93-0301-FOF-WS at 19-20 and PSC-96-1320-FOF-WS at 151-153, which Orders were officially recognized in this proceeding. Based on the foregoing, we find it appropriate to reduce test year expenses by $1,525 and $2,711 for water and wastewater operations, respectively, to remove the public relations advertising costs.

With respect to the payroll costs associated with the position entitled "Manager of External Affairs Business Development," the utility did not dispute that the job duties associated with this position were related to public relations activities. In further support of this adjustment, on cross-examination, utility witness deNagy testified that the employee in this position spends 100% of his time related to acquisition efforts. Nevertheless, we agree with OPC's adjustment to remove the salaries and related benefits associated with this position for the same reasons set forth above related to the removal of advertising costs. We find that it would be inappropriate for UWF to recover these payroll costs from its customers. Rather, the burden should remain with the shareholders of the utility. This finding is consistent with Order No. PSC-96-1320-FOF-WS at 153-155, wherein we reduced expenses in order to remove salaries and related expenses associated with acquisition efforts. For the foregoing reasons, we find it appropriate to reduce test year expenses by $15,326 and $27,247 for water and wastewater operations, respectively, in order to remove payroll costs associated with public relations/acquisitions-related expenses.

Rate Case Expense

In the MFRs, the utility projected an original estimate of $430,000 for rate case expense related to the current proceeding. The utility's projection consisted of estimates for outside legal services, consulting services related to used and useful testimony, services performed by UWM&S personnel, and an estimate for miscellaneous expenses such as filing fees, mailings, printing, supplies, and travel. The utility allocated rate case expense in the amount of $154,800 to water operations and $275,200 to

wastewater operations. This allocation resulted in projected annual rate case amortization expense of $38,700 and $68,800 for water and wastewater, respectively.

In Exhibit No. 12, UWF updated its actual rate case expense figures as of December 31, 1996, with a revised estimate to complete. That exhibit indicates total rate case expense (actual expenses and estimates to complete from January 1, 1997) to be $555,057 for the current rate proceeding. Exhibit No. 12 also contains supporting information for UWF's consultants, counsel, related party services, and miscellaneous costs to complete the case. The components of total rate case expense is summarized as follows:

	PER MFRS	EXH 12
UWM&S-Legal and Technical	190,000	179,505
Guastella Associates	25,000	33,848
Outside Legal Services	200,000	238,280
Miscellaneous Costs	15,000	103,424
Total	$430,000	$555,057

UWM&S

Schedule No. 1 of Exhibit No. 12 indicated total projected costs of $151,215 for rate case expense services rendered from the employees of UWM&S. This total consisted of actual costs through December 31, 1996, of $54,054 and an estimate of $97,161 through the completion of the case.

According to Exhibit No. 12, UWF estimated a total of 205.67 hours for preparation of rebuttal testimony by UWM&S employees. Included in this estimate is 40 hours related to utility witness Egan-Long. As evidenced by Order No. PSC-97-0073-PHO-WS, Ms. Egan-Long's proposed prefiled rebuttal testimony was stricken. Therefore, we find that the associated rate case expense should be disallowed. Based on the utility's estimated composite rate of $69.50, we find it appropriate to reduce rate case expense by $2,780.

Exhibit No. 12 indicated an estimate of 205.67 hours spent in relation to attendance at the hearing. Since the hearing did not last as long as anticipated, in its brief, the utility agreed to remove half of the estimated hours. This results in a decrease of $7,147 in rate case expense.

We agree with the utility's adjustment to the hours estimated for the hearing. However, we find that it is also reasonable to reduce the hours estimated for technical assistance related to preparation of the briefs. Due to the length of the hearing, the hearing transcripts were shorter than anticipated, and therefore required less time to review for brief preparation. As indicated in Exhibit No. 12, the utility estimated 276.67 hours for UWM&S employees associated with brief preparation. We find it reasonable to reduce this estimate by half, or 138 hours, based on the above discussion. Accordingly, rate case expense shall be reduced by $9,614.

Also on Schedule No. 1 of Exhibit No. 12, the utility estimated 135 hours related to "updates." Utility witness Jost testified that these costs related to the assumption that some information may need to be updated for later known numbers, after the hearing. He stated that these costs could include information provided in the form of late-filed hearing exhibits. However, Mr. Jost agreed that the costs for updates would not be necessary if the Commission did not grant a second hearing related to the utility's phase-in rate request.

In its brief, the utility argued that the costs estimated for "updates" should be allowed since no costs were estimated for late-filed exhibits requested at the hearing. However, we find that the evidence of record contradicts this argument. On cross-examination, Mr. Jost testified that the estimated hours for the category labeled "late-filed exhibits" included costs for the exhibits requested during depositions, as well as late-filed exhibits anticipated at the hearing. Based on the above discussion, and the fact that the utility withdrew its phase-in rate request, we find that the evidence of record does not support the inclusion of the estimated costs for updated information. For the foregoing reasons, we find it appropriate to reduce rate case expense by $9,383.

Exhibit No. 12 also indicated an estimate of 90 hours labeled as "Other Administrative." Mr. Jost testified that these costs were included as a "catchall" for anything the utility may have forgotten to calculate. We are not convinced that the costs included in rate case expense for this category are prudent. Accordingly, we find it appropriate to reduce rate case expense by $6,255.

As mentioned above, UWF used a composite rate of $69.50 per hour for UWM&S employees to project the cost estimates from January 1, 1997, through the completion of the case. However, the actual costs incurred as of December 31, 1996, reflected an average rate

of only $59 per hour. In defense of this hourly rate increase, Mr. Jost testified that because of difficulty in projecting which employees would be working on the rate case, the utility used the most recent composite rate available. However, on cross-examination, he agreed that it would be reasonable to assume that the projected costs would include the same employees who have worked on the case to date.

In the utility's brief, UWF explained that the lower cost employees within the rate department performed a majority of the work prior to the hearing in this case. However, the utility argued that the hours estimated for 1997 were expected to be more evenly spread throughout the rate department employees, and therefore the estimated composite rate of $69.50 should be approved. In support of this argument, UWF referred to Exhibits Nos. 16 and 17 which provided a breakdown by employee of the hours estimated through the completion of the case.

Using the hourly breakdown by employee from Exhibits Nos. 16 and 17, and the hourly rates provided in Exhibit No. 12, we calculate the weighted average hourly rate to be $61 per hour for the estimate to complete. Since there is no evidence in the record to indicate what hourly rates were charged for either Mr. Jost or witness McGuire, we used the rate of $56 per hour charged for witness Egan-Long in order to calculate the weighted average rate. Based on our calculations, we do not believe it would be appropriate to use the higher composite rate requested by the utility. As such, we have recalculated the estimated costs of the non-legal UWM&S employees based on the actual average rate of $59 per hour. Based on all of the adjustments discussed above for services provided from UWM&S's non-legal employees, we find it appropriate to reduce rate case expense by a total of $44,543.

With respect to services provided by UWM&S's legal services, the utility included a total of $28,290 in rate case expense for actual costs and an estimate to complete. By Exhibit No. 12, UWF identified certain legal services related to a "fee cap agreement." Mr. Jost testified that these services related to negotiations with regard to legal fees to be charged to the utility from the law firm of Martin, Ade, Birchfield and Mickler, P.A. In response to concerns surrounding the terms of the agreement, the utility filed Late Filed Exhibit No. 54, which consisted of correspondence between Mr. Walton Hill, the utility's in-house legal counsel, and Mr. James Ade, of Martin, Ade, Birchfield and Mickler, P.A., outside counsel for UWF. Based on our review of the documents, it appears that the substance of the correspondence leans more towards budget negotiations and cost substantiation rather than discussions concerning a fee cap. In its brief, the utility argued that what

was labeled a "fee cap agreement" was a mischaracterization of the process of budget discussions. Accordingly, we find that the costs incurred for these legal services should remain in rate case expense, as this process served as a means of verification of the services charged to the utility by its outside legal counsel.

In its brief, the utility argued that an additional $2,760 should be included in rate case expense for in-house legal services. Although UWF's rate case expense exhibit did not include estimated hours for Mr. Hill to attend the hearing, the utility argued that 20 hours should be included for his participation and assistance. However, the record does not support the inclusion of these costs in total rate case expense. Therefore, the utility's request to include these additional charges is denied.

Outside Legal Services

Schedule No. 3 of Exhibit No. 12 indicated total projected costs of $238,280 for rate case expense services rendered by Martin, Ade, Birchfield and Mickler, P.A. This total consisted of actual costs through December 31, 1996, of $136,180 and an estimate of $102,100 through the completion of the case. This estimate included 200 hours for preparation and attendance at the hearing. In its brief, the utility argued that although the hearing did not last as long as anticipated, the estimate for outside counsel should not be reduced due to the number of late filed exhibits requested at the hearing.

Although we acknowledge that there were requests for late filed exhibits at the hearing, we note that the estimated charges included in Exhibit No. 12 for outside counsel includes 30.5 hours for "conferences, telephone conversations and correspondence with representatives of the Commission, Public Counsel and Client." With respect to these charges, we are not clear as to what specific activities are associated with this estimate. However, we find it reasonable to conclude that the late filed exhibits could be considered such correspondence. Therefore, we disagree with the utility that any reduction for the length of the hearing should be offset against services in connection with the late filed exhibits. In accordance with the utility's reduction to the estimated hearing costs for UWM&S employees, we find it reasonable to remove 20 hours each for Mr. Ade and Mr. Scott Schildberg, resulting in a reduction to rate case expense of $8,000.

The utility also estimated 200 hours for outside legal counsel in relation to post-hearing statement and brief preparation. For

the same reasons that we reduced the estimate for employees of UWM&S, we believe it would also be reasonable to remove half of the estimated hours for legal counsel. This results in a reduction of $10,000 to rate case expense associated with brief preparation.

Schedule No. 3 of Exhibit No. 12 also included an estimate of 35 hours for "preparation and attendance at Commission agenda conference." Although we believe it is reasonable to include services related to attendance, since the utility cannot participate at the agenda conference, we believe that the utility's estimate should be reduced to 15 hours, for a reduction to rate case expense of $4,000. This adjustment allows for 6 hours of travel between Tallahassee and Jacksonville, and 8 hours for attendance at the conference.

Based on the above adjustments, we find it appropriate to reduce rate case expense by a total of $22,000 for legal fees associated with the utility's outside counsel.

Miscellaneous Fees and Costs

Schedule No. 4 of Exhibit No. 12 indicated total projected costs of $103,424 for miscellaneous rate case expenses. This total consisted of actual costs through December 31, 1996, of $60,667 and an estimate of $42,757 through the completion of the case.

Exhibit No. 12 included an invoice from Southland Recycling for services related to shredding documents. On cross-examination, Mr. Jost could not explain how these charges related to the current rate proceeding. Therefore, we find it appropriate to reduce rate case expense by $95.

Included in Exhibit No. 12 is an invoice from Alexander & Alexander Consulting Group in the amount of $18,500. The utility included a portion of these costs in its current rate case expense. Mr. Jost testified that these costs related to the actuarial study for OPEBs which was provided in response to a document request in this proceeding. On cross-examination, Mr. Jost agreed that it would be more appropriate to consider these expenses as normal and recurring in nature, as the information provided by the actuary is also used for accounting and reporting purposes. However, Mr. Jost did not know whether similar costs were also included in the test year O&M expenses.

In response to utility counsel, Mr. Jost testified that the actuarial study was performed specifically for this rate case, and was therefore appropriate to include in rate case expense. He added that if we find it appropriate to remove these costs from rate case expense, the costs should alternatively be charged to UWF as an operating expense.

Although we agree that it would be reasonable to include the actuarial costs as test year operating expenses, it is not clear whether the costs are already included in test year O&M expenses either as a direct charge or through management fees allocated from UWF's affiliates. Nevertheless, we believe it is inappropriate to include these costs in rate case expense, as they relate to information necessary for financial and accounting purposes. Therefore, we find it appropriate to reduce rate case expense by $6,167 for the portion of the actuarial services allocated to UWF.

Included in the utility's rate case expense is a request to recover costs incurred for travel expenses related to a Commission employee in order to audit the utility's books and records which were located out-of-state. Pursuant to Rule 25-30.110(1)(b), Florida Administrative Code, unless otherwise authorized by the Commission, the utility is required to maintain its books and records in Florida. On cross-examination, Mr. Jost agreed that it was a management decision on the part of the utility to maintain its books and records out-of-state. He stated that it is more cost effective to maintain the utility's books out-of-state, and that the costs would likely be higher if each subsidiary maintained its own books.

Nevertheless, we note that the evidence of record does not indicate whether any costs savings actually exist as a result of UWF's decision to maintain the books and records out-of-state. Further, the Commission has consistently disallowed these expenses, as evidenced by Orders Nos. PSC-93-1713-FOF-SU, issued November 30, 1993, and 25821, issued February 27, 1992, which Orders were officially recognized in this proceeding. Therefore, we find it appropriate to reduce rate case expense by $1,681 for travel costs of a Commission auditor.

Schedule No. 4 of Exhibit No. 12 included an estimate of $20,000 for airfare and lodging costs. Mr. Jost testified that this estimate was determined based on one week of hotel charges and airfare for all employees of UWM&S required to travel to the hearing. In its brief, the utility agreed to reduce its projection by $6,667 to remove the hotel charges for two nights.

We agree with the utility that an adjustment should be made to reduce the estimated hotel charges. However, since the utility did not provide any documentation supporting the rates being charged for airfare and hotel accommodations, it is not clear whether the adjustment proposed by the utility is appropriate. Therefore, we find it reasonable to remove half of the utility's estimate for airfare and lodging. Therefore, rate case expense shall be reduced by $10,000.

Finally, the utility estimated $10,000 for Jacksonville Legal Copies and $12,000 for Other Miscellaneous Costs. With respect to the estimate for Jacksonville Legal Copies, Mr. Jost testified that this projection included the costs for two separate mailings due to the requested phase-in rates. On cross-examination, he agreed that if the phase-in rates were not approved, the cost for the second mailing should be removed from rate case expense. As for the $12,000 estimated for miscellaneous costs, Mr. Jost testified that this category was included as a "catchall" for unforeseen expenses. In response to staff counsel on cross-examination, the only example given by Mr. Jost was the costs for transcripts. Further, he admitted that the utility did not have any support for this estimate, other than that the amount was based on experience with other rate cases.

In response to utility counsel, Mr. Jost agreed that the miscellaneous $12,000 could include the cost of mailing the notice of hearing, as well as the notice for the final rates. Further, he testified that the costs of mailing these two notices were not included anywhere else in the projection. He added that the miscellaneous amount could include anything that the utility could not categorize. With respect to the $10,000 estimate from Jacksonville Legal Copies, Mr. Jost testified that this amount would include the cost of producing the notices for the hearing and for notices issued subsequent to the hearing.

In response to questions by a Commissioner, Mr. Jost testified that the cost for mailing the notice of final rates was included in the estimate for Other Miscellaneous costs. He also agreed that the costs for this notice would be similar in amount to the cost for sending the notice of interim rates, which was $3,239 for Jacksonville Legal copies and $2,059 for Alexander's Direct Mail Service. However, Mr. Jost testified that the costs estimated for miscellaneous was a "catchall" category, and that the cost of the mailing should not be included within this category because the $10,000 estimated for Jacksonville Legal Copies was based on the actual costs of $9,354 incurred for the first two notices.

In its brief, the utility argued that the rate case expense exhibit included the actual costs for mailing the notices of application and interim rates, and projected costs for notices of the hearing and final rates. The utility explained that each mailing is accomplished in two steps, consisting of (1) producing copies of the notice and printing envelopes performed by Jacksonville Legal Copies; and (2) stuffing envelopes, affixing the postage, and mailing the notices performed by Alexander's Direct Mailing. Further, the utility argued that the estimated $22,000 estimated for the first two notices is consistent with the total costs of the first two notices of $9,354 for Jacksonville Legal and $16,209 for Alexander's Direct Mail. In addition, the utility explained that the large price difference between the first two notices is attributed to the number of pages included in the notice of application and that the postage for both notices was paid at the time the first notice was mailed.

Based on the above, we find that the record is not clear as to what costs should be included in rate case expense for mailing the notices of hearing and final rates. Moreover, the witness sponsoring this exhibit repeatedly contradicted his own testimony with regard to the amounts estimated by the utility for these two mailings, and could not provide definitive answers as to what costs were actually included in the $12,000 for Other Miscellaneous. With respect to the $10,000 estimated for Jacksonville Legal Copies, the witness testified that in addition to the mailings for the hearing and for final rates, these costs could also include the mailing for the requested phase-in rates. Therefore, we find it reasonable to remove half of the estimated costs for both Jacksonville Legal Copies and Other Miscellaneous, resulting in a total reduction of $11,000 from rate case expense.

Except as identified above, we find that UWF's requested rate case expense is prudent and reasonable. Based on all of our adjustments discussed above, we hereby approve a total rate case expense of $459,571. This amount represents annual amortization expenses of $41,361 and $73,531 for water and wastewater operations, respectively. Therefore, based on the foregoing, we find it appropriate to increase test year expenses by $2,661 for water and $4,731 for wastewater.

Depreciation Expense

At the hearing, the parties stipulated that a 13-month average balance should be utilized in determining test year rate base. We approved the stipulation without objection. Therefore, depreciation shall be calculated using the thirteen-month average plant in service and CIAC to be consistent with the rate base.

Depreciation Transposition Error

According to OPC, UWF made a transposition error in its filing. Based on Composite Exhibit No. 4, MFR Schedules Nos. B-13, A-3 and A-14, the combined depreciation expense and amortization of CIAC for water operations should have been $1,232,173. However, Schedules Nos. B-3 and G-41 reflected $1,323,173 as the combined amount. The utility did not rebut this OPC position. In fact, UWF witness McGuire agreed during the hearing that the utility had made the transposition error. Nevertheless, as noted above, the parties stipulated that depreciation should be recalculated based on thirteen month average plant, and we approved the stipulation. Therefore, because this error has been rendered irrelevant, we find that no additional adjustment is necessary.

Impact of Revisions to Plant Additions

Depreciation expense shall be calculated based upon appropriate depreciation rates applied to adjusted average test year plant in service. Moreover, we find it appropriate to approve the guideline depreciation rates from Rule 25-30.140, Florida Administrative Code. Based on the amounts of plant-in-service and CIAC approved herein, we find it appropriate to decrease depreciation expense from the filed year-end amount by $270,063 for the water system and $616,628 for the wastewater system to reflect the impact of UWF's revisions to its projected plant additions on depreciation expense. Depreciation expense shall also be decreased by $1,334 for the water system and $6,901 for the wastewater system to remove the excess AFUDC. Stipulation No. 1 calls for the removal of merger costs which further reduce depreciation expense by $639 for the water system and $64 for the wastewater system. We find that the total of these reductions to depreciation expense is $272,036 for the water system and $623,594 for the wastewater system.

ITC Amortization

UWF maintains that the ITC balance should have a cost rate of 10.04%. Above the line amortization is consistent with that position. We have found above that the ITCs shall be given a cost rate of zero. Below the line amortization is consistent with that treatment. The total amount of amortization to remove is $30,040. Accordingly, we find that there shall be no ITC amortization above the line.

Parent Debt Adjustment

With regard to the parent debt adjustment, the utility's MFRs provide the information of UWF's immediate parent and not that of its grandparent. Witness McGuire testified that it is very important to note that the Company is a wholly owned subsidiary of UWW, and that it is a policy of UWW to structure its subsidiaries on a 100 percent common equity basis. Mr. McGuire further states that there is no debt flowing from UWW's parent, UWR, to either the equity of UWW, or to the equity of UWF.

On cross-examination, witness McGuire maintained that the provisions of Rule 25-14.004, Florida Administrative Code, do not apply to UWF. He stated that UWW has always supplied all of the capital to its subsidiaries, and that this was true in the last rate case when there was a parent whose capital structure was not representative of a utility's capital structure. Witness McGuire testified that the approach used in the last rate case was accepted by the Commission, and he maintains that nothing has changed except the names of the participants. Mr. McGuire testified that, to his knowledge, UWR had no ability to control the debt of UWF.

Witness McGuire provided a capital structure for UWR in late filed Exhibit No. 52. However, that capital structure does not give cost rates for any of the classes of capital contained therein. On later cross-examination, witness McGuire stated that UWR files a consolidated tax return. However, he did not know if the interest on the tax return was reported on the basis of both UWR and UWW. He did provide a late filed exhibit that shows that $4,302,584 of interest was reported on URW's 1995 tax return.

In its brief, OPC agreed with our staff that a parent debt adjustment is appropriate. Rule 25-14.004(2), Florida Administrative Code, Effect of Parent Debt On Federal Corporate Income Tax, provides that "[w]here the regulated utility is a subsidiary of tiered parents, the adjusted income tax effect of the debt of all parents invested in the equity of the subsidiary shall reduce the income tax expense of the utility."

We find that witness McGuire's indication that UWW funds its subsidiaries at 100% equity clearly shows that UWW controls the equity dollars of UWF. Although witness McGuire maintains that no debt of UWR supports UWW or UWF and thus could not support the equity of UWF, UWR clearly invests equity in UWW, which maintains a 100% equity position in UWF. Witness McGuire did not indicate that the funds invested in UWW as equity come only from internally generated sources of funds to UWR or only from the equity funds of UWR. Thus, it appears that UWR's equity investment in UWW is not

traceable to any specific source and can be supported by all sources available to UWR. Therefore, we find that it is reasonable to assume this is a case of tiered parents, as addressed by Rule 25-14.004, Florida Administrative Code, and that a parent debt adjustment is warranted.

We have based the adjustment on Late filed Exhibits Nos. 52 and 53, prepared by the utility, and have applied this information to our reconciled capital structure which contains a debt component based on the capital structure of UWW. Thus, we find that only one level of parent adjustment is required, that based on the debt of UWR. Based on the foregoing, the amount of the adjustment approved herein is $108,392.

Income Tax Expense

Our decisions on rate base, net operating income, capital structure and cost of capital affect the income tax expense. Reconciliation of the interest inherent in the capital structure with the interest used in the tax calculation is a fall-out of the rate base capital structure reconciliation. Based on previous findings, the appropriate income tax expense is $117,986 for water and $371,106 for wastewater. This is a reduction to the income tax expense as filed of $842,161 for water and $1,543,280 for wastewater.

TEST YEAR OPERATING INCOME

Based on the adjustments discussed herein, we hereby find that the test year operating income before any provision for increased revenues is $7,286,448 for water and $15,673,782 for wastewater. The schedules for water and wastewater operating income are attached as Schedules Nos. 3-A and 3-B, and the adjustments are shown on Schedule No. 3-C.

REVENUE REQUIREMENT

The revenue requirement is a summary computation that is dependent upon previously approved provisions for rate base, cost of capital, and operating expenses. UWF requested final rates designed to generate annual revenues of $10,631,396 and $20,786,382 for water and wastewater, respectively. These revenues exceed test year revenues by $3,344,948 (45.91%) for the water operations and $5,112,600 (32.62%) for the wastewater operations. Based upon our findings set forth herein concerning the underlying rate base, cost of capital, and operating income, we hereby approve rates that are

designed to generate a revenue requirement of $9,648,188 and $17,963,539 for water and wastewater, respectively. These amounts represent revenue increases of $2,361,740 (32.41%) and $2,289,757 (14.61%) for water and wastewater, respectively.

RATES AND RATE STRUCTURE

Monthly Billing - Residential Customers

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. An issue arose in this proceeding as to whether UWF should switch from billing its residential customers on a quarterly basis to a monthly basis in order to possibly reduce its bad debt expense by allowing customers to pay their bills on a more timely basis.

UWF stated that it would not oppose a change from billing residential customers on a quarterly basis to billing on a monthly basis provided that the additional costs of this change are included in the utility's revenue requirement. Witness Gradilone testified that UWF would want to conduct a study to determine the full cost and benefits of switching to a monthly billing and that the minimum cost to do such a study would be $50,000. Furthermore, witness Gradilone testified that the primary disadvantages of billing residential customers on a monthly basis are the added expenses for processing, mailing of bills, and possibly extra meter readings. In addition, witness Gradilone testified that UWF would want to conduct market research on the customers' opinions and whether they believe monthly billing is necessary.

Two customers testified that UWF should switch to monthly billing, while fourteen customers testified that they prefer their current quarterly billing cycle. Given that the vast majority of the testifying customers were in favor of quarterly billing over monthly billing and the added cost that UWF would need to implement a monthly billing cycle, we find it appropriate to permit UWF to continue billing its residential customers on a quarterly cycle for both water and wastewater.

Wastewater Gallonage Cap

In its brief, UWF states that the existing wastewater gallonage cap of 30,000 gallons per quarter or 10,000 gallons per month for single family residential customers is reasonable and should be maintained. UWF's current wastewater gallonage was approved in its last rate case by Order No. 9533. In addition, UWF states that the current cap is reasonable because the standard

level of water consumption of 350 GPD/ERC would equate to consumption for a single family residence of more than 10,000 gallons per month and more than 30,000 gallons per quarter. Therefore, UWF believes that consumption of water above that level would be attributed to water which did not return to the wastewater system. In addition, UWF states that customers could choose to install irrigation meters to assure that the water which they use to water their lawns will not be subject to wastewater charges. UWF also states that the current gallonage cap will promote conservation by not penalizing customers who do not use as much water as others.

We agree with UWF that its customers have an option of installing irrigation meters in an attempt to assure that the water which they use to water their lawns will not be subject to wastewater charges. However, the added cost of installing an irrigation meter and its ongoing monthly base facility charge may outweigh the savings realized by having a lower wastewater gallonage charge. Regarding UWF's calculated average usage of 350 GPD/ERC, we believe that this average is used as a general rule. In this case, however, there is more accurate and detailed usage data available which is specific to UWF. Therefore, we find it appropriate to use the usage data supplied in UWF's filing to determine the appropriate wastewater gallonage cap. We agree with UWF that reducing the gallonage cap by itself may reduce the customers' incentive to conserve. However, if the gallonage cap is reduced, an added conservation measure will be in place due to the increase in the wastewater gallonage charge. Thus, we find that the effect on conservation by lowering the gallonage cap will be insignificant.

The purpose for implementing a residential wastewater cap is to recognize that all water used by residential customers is not returned to the wastewater collection system. Therefore, recognizing that most of the water used by general service customers is returned to the wastewater system, a cap is not imposed on general service customers. Order No. PSC-96-0910-FOF-WS at 10, issued July 15, 1996, in Docket No. 951027-WS. Additionally, the residential wastewater cap affects rate design because it creates the maximum amount that customers will pay on their wastewater bill. We find it appropriate to set the residential wastewater cap at a level that appropriately reflects the amount of water returned to the wastewater system. Our goal in setting a wastewater gallonage cap is to recognize the general usage level of the utility's customers. Water used beyond that general usage level is probably used for irrigation purposes and

will not be returned to the wastewater system. Additionally, we endeavor to eliminate cross-subsidization while maintaining conservation when designing the appropriate wastewater gallonage cap.

This issue was identified in this case to determine if cross-subsidization occurs within the wastewater residential class of customers. In this case, we believe that residential customers who consume more than the average amount of water are subsidizing the lower end users by keeping the wastewater gallonage rate lower than it otherwise should be. In other words, residential customers who choose to wash their cars and water their lawns are being charged for wastewater that will not be returned for treatment. Witness Gradilone agreed that in designing rates, it is preferable to have a wastewater gallonage cap set somewhat, but not substantially, higher than the average usage. Given that wastewater usage is derived from water usage, UWF's average residential water usage per customer is 22,027 gallons per quarter or 7,340 gallons per month for 1995. UWF is forecasting that 1997 water consumption for its residential customer class will be 21,950 gallons per quarter or 7,316 gallons per month. In addition, UWF's average residential water usage for the months of November, December, January, and February for the years 1991 through 1995 is 6,670. We find this average usage to be significant because of the likelihood that it is closer to the actual amount of water being returned to the wastewater treatment facility for treatment. Therefore, we find that the current cap of 30,000 gallons per quarter or 10,000 gallons per month is too high when compared to the general usage level of UWF's residential customers.

Witness Gradilone agreed during cross-examination that residential customers irrigate their lawns and wash their cars less frequently during the months of November, December, January, and February. Therefore, he agreed, in theory, that a wastewater gallonage cap could be designed with the average residential usage during the months of November, December, January, and February as the general usage level because the average amount of water a residential customer uses during those months is more likely to represent the actual amount of wastewater returned to the wastewater plant for treatment. However, Mr. Gradilone questioned the accuracy of that average since it likely included some of the usage from the other months due to the fact that residential customers are being billed quarterly. In addition, Mr. Gradilone testified that he would prefer to do a more detailed analysis rather than to take the average usage of the months specified above. However, UWF did not perform any type of detailed analysis on the wastewater gallonage cap for this case.

The current Commission standard in setting residential wastewater gallonage rates is that only 80 percent of residential water usage is returned to the wastewater system. The remaining 20 percent is attributed to outside uses such as lawn irrigation and washing automobiles. Additionally, when determining the appropriate cap, a comparison of the consolidated factors at the various levels should be performed. Order No. PSC-94-1234-FOF-SU, issued October 11, 1994, in Docket No. 931052-SU.

The utility's 1995 billing analysis revealed that at the current cap, 82.9 percent of total residential wastewater usage is being charged for wastewater treatment. Generally, we set monthly caps of 6,000 gallons, 8,000 gallons or 10,000 gallons per month. However, we find that it is appropriate to approve a 9,000 gallon monthly or 27,000 gallon quarterly cap for UWF in order to reduce the consolidated factor down to 80.2 percent of UWF's residential water usage being charged for wastewater treatment. We find that reducing the wastewater cap by 3,000 gallons per quarter or 1,000 gallons per month will reduce the consolidated factor down to approximately 80.2 percent and will reduce cross-subsidization between the residential wastewater customer class. Therefore, we find it appropriate to decrease the gallonage cap from the current level of 30,000 gallons per quarter or 4,000 cubic feet per quarter to 27,000 gallons per quarter or 3,600 cubic feet per quarter.

Decreasing the gallonage cap has the effect of lowering the maximum bill and increasing the cost per 1,000 gallons. Witness Gradilone agreed that if the gallonage cap is reduced, the effect should be revenue neutral. Thus, we find it appropriate to increase the approved wastewater gallonage charges accordingly to offset the revenue reduction resulting from a reduced gallonage cap. The effect of the approved gallonage cap on the rates approved herein is an increase of 3 cents on residential and 4 cents on all general service gallonage charges.

In consideration of the foregoing, the appropriate wastewater gallonage cap shall be set at 27,000 gallons or 3,600 cubic feet per quarter for UWF's single family residential customers. Therefore, we find it appropriate to reduce the current residential wastewater gallonage cap by 3,000 gallons or 400 cubic feet per quarter.

Differentiation of Wastewater Gallonage Charge by Customer Class

Witness Gradilone believes that wastewater gallonage charges should not be differentiated by class of customer since the cost to treat a gallon of wastewater once it reaches the treatment facilities is the same regardless of the source. Witness Gradilone

believes that for both residential and general service customers, only a portion of the water entering the premise through the water meter reaches the wastewater system. Therefore, he believes that imputing this proportion for one class of customers, and not another, is inherently unfair.

Although we agree with witness Gradilone that the cost to treat a gallon of wastewater once it reaches the treatment facilities is the same regardless of the source, we disagree with the assumption that both residential and general service customers return, on average, the same amount of water for treatment. Our past practice has been to routinely approve a rate differential between the residential and general service wastewater gallonage rate where it is assumed that approximately 80 percent of the residential water and approximately 97 percent of the general service water is returned to the wastewater plant for treatment. By Orders Nos. PSC-94-1234-FOF-SU, PSC-95-0574-FOF-WS, PSC-95-1399-FOF-WS, PSC-96-0910-FOF-WS and PSC-96-1229-FOF-WS, issued October 11, 1994, May 9, 1995, November 15, 1995, July 15, 1996 and September 30, 1996, respectively, the Commission voted to approve a wastewater rate differential between general service and residential customers.

Witness Gradilone testified that in designing UWF's rates for all other general service customers besides Jacksonville University, the wastewater flow is imputed from meter usage under the assumption that approximately 80 percent of the potable water used by general service customers flows back into the wastewater system. Therefore, UWF believes that both residential and general service customers return, on average, approximately 80 percent of their water used for treatment. We disagree with this assumption. We believe that, because of different usage patterns between residential and general service customers, on average, residential customers return approximately 80 percent, while general service customers return approximately 97 percent of their water for treatment. Witness Gradilone agrees that on average, residential customers wash their automobiles and water their lawns more often than general service customers and, therefore, return less water for treatment. We find it appropriate to recognize this difference in the gallonage rate since it cannot be accurately calculated without the use of wastewater meters. The wastewater differential shall therefore be calculated in accordance with past Commission practice as follows:

Factored Percentage: Total Actual Wastewater Gallons divided by Res. Gallons+(Com. Gallons X 1.2 + JU Gallons X 1.23)

Basic Wastewater Gallonage Rate:	Gallonage Revenue Requirement Allocation divided by Actual Total Wastewater Gallons
Residential Gallonage Rate:	Basic Wastewater Gallonage multiplied by the factored percentage
Commercial Gallonage Rate:	1.2 multiplied by the residential gallonage rate
Jacksonville University Gallonage Rate:	1.03 multiplied by the general service gallonage rate

In consideration of the foregoing, we find that the wastewater gallonage charge shall be differentiated between residential and general service to recognize the variance in usage patterns. The appropriate wastewater gallonage rates are shown on Schedule No. 4B. The appropriate gallonage charge for Jacksonville University is discussed below.

Jacksonville University Wastewater Rates

UWF meters the wastewater flow directly from Jacksonville University, and its gallonage rate is based upon those wastewater flows. Witness Gradilone testified that when designing rates for all general service wastewater customers, except Jacksonville University, the wastewater flow is imputed from metered water use under the assumption that 80 percent of the potable water by these customers flows into the wastewater system. Therefore, UWF believes the 25 percent differential between the general service gallonage rate and the gallonage for Jacksonville University is necessary to insure equitable treatment of all wastewater customers in the system. In addition, UWF is requesting that the base facility charge for Jacksonville University's meter sizes be the corresponding general service rates.

As discussed above, we have found it appropriate to approve a rate differential between the residential and general service wastewater gallonage rate where it is assumed that 80 percent of the residential water is returned and 97 percent of the general service water is returned to the wastewater plant for treatment. Since UWF meters Jacksonville University's wastewater flows, we find that a gallonage rate which is three percent higher than the general service rate will insure equitable treatment of all wastewater customers in the system. In addition, Jacksonville

University's base facility charges shall be approved, as requested by the utility, by the corresponding general service base facility rates.

In consideration of the foregoing, we find that the appropriate gallonage charge for Jacksonville University shall be $4.13 per 1,000 gallons or $3.09 per 100 cubic feet and the base facility charge shall be the corresponding general service rates.

Water and Wastewater Rates

The permanent rates requested by the utility are designed to produce revenues of $10,631,396 for the water service and $20,786,382 for the wastewater service. The requested revenues represent an increase of $3,344,948 or 45.9% for water service and $5,112,600 or 32.6% for wastewater service.

The final rates approved for the utility are designed to produce annual revenues of $9,561,288 for water service, which is an increase of $2,274,840 or 31.22% and $17,963,539 for wastewater service, which is an increase of $2,289,757 or 14.61%. These approved increases exclude miscellaneous service revenues.

Consistent with the utility's request and Stipulation No. 12, the base facility charges for residential and general service 5/8 inch meters and the unmetered accounts for both water and wastewater shall be increased on an equal percentage basis from the current rates in effect as of December 31, 1995. Also, consistent with the utility's request, the general service base facility charges for meters larger than the 5/8 inch meter for both water and wastewater shall be based on hydraulic factors in the Clow Pipe Economy as contained in Exhibit No. 18.

Furthermore, based upon evidence in the record, the residential water base facility charges for meters larger than the 5/8 inch meter shall be based on hydraulic factors in the Clow Pipe Economy as contained in Exhibit No. 18. UWF requested that the residential base facility charge for all meter sizes be increased on an equal percentage basis. However, we find no evidence in the record to support UWF's request. Our approved methodology is consistent with the manner in which the general service base facility charges for meter sizes larger than 5/8 inch are based. Consistent with Stipulation No. 8, the private fire protection rates shall be recalculated and set equivalent to one-twelfth of the general service base facility charges in accordance with Rule 25-30.465, Florida Administrative Code. In addition, a water base

facility charge shall be set for both the 10 inch and 12 inch general service meter size. We find this to be necessary to determine the appropriate private fire protection charges regarding those meter sizes on a going forward basis.

Based on Stipulation No. 10, the current revenue requirement allocation between the base facility charge and the gallonage charge (where 37 percent of the total water revenue requirement is collected from the base facility charge and 27 percent of the total wastewater revenue requirement is collected from the base facility charge) shall remain unchanged for both water and wastewater. Therefore, the gallonage charge for both water and wastewater shall be calculated consistent with this stipulation where 63 percent of the revenue requirement for water and 73 percent of the revenue requirement for wastewater will be collected from the gallonage charge. The appropriate number of water and wastewater gallons that will be used to calculate the appropriate water and wastewater gallonage charge is addressed above.

The wastewater gallonage cap shall be reduced to 27,000 gallons or 3,600 cubic feet per quarter. This reduction in the wastewater gallonage cap will have the effect of lowering the maximum bill and increasing the cost per 1,000 gallons. In addition, we have hereby approved a rate differential between the residential and general service gallonage charge. This wastewater rate differential will lower the residential gallonage charge while increasing the general service gallonage charge. As discussed above, this differential in the gallonage charge for residential and general service wastewater customers recognizes that a portion of a residential customer's water usage will not be returned to the wastewater system. In addition, the appropriate wastewater rates for Jacksonville University is addressed above.

The utility shall file revised tariff sheets consistent with the decision herein. A proposed customer notice to reflect the appropriate rates shall also be filed pursuant to Rule 25-22.0407(10), Florida Administrative Code. The approved rates shall be effective for service rendered on or after the stamped approval date on the tariff sheets pursuant to Rule 25-30.475(1), Florida Administrative Code, provided the customers have received notice. The rates shall not be implemented until proper notice has been received by the customers. The utility shall provide proof of the date notice was given within 10 days after the date of the notice.

A comparison of the utility's rates as of December 31, 1995, current rates, our approved interim rates, UWF's requested rates, and our approved final rates are shown on Schedule No. 4.

Statutory Rate Reduction and Recovery Period

Section 367.0816, Florida Statutes, requires that rates be reduced immediately following the expiration of the four year period by the amount of rate case expense previously authorized in the rates. The reduction reflects the removal of revenues associated with the amortization of rate case expense and the gross-up for regulatory assessment fees which is $43,310 for water and $76,996 for wastewater. The removal of rate case expense grossed-up for regulatory assessment fees will result in the reduction of rates as shown on Schedule No. 5.

The utility shall file revised tariffs no later than one month prior to the actual date of the required rate reduction. The utility shall also file proposed customer notices setting forth the lower rates and the reason for the reductions no later than one month prior to the actual date of the required rate 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 for the reduction in the rates due to the removal of amortized rate case expense.

No Refund of Interim Rates Required

By Order No. PSC-96-1388-FOF-WS, issued November 19, 1996, in this docket, the utility's proposed rates were suspended and interim water and wastewater rates were approved subject to refund, pursuant to Sections 367.082, Florida Statutes. The interim revenues are shown below:

	Revenues	Increase	Percentage
Water:	$7,648,249	$725,015	10.47%
Wastewater:	$14,282,680	$238,030	1.69%

According to Section 367.082, Florida Statutes, any refund shall be calculated to reduce the rate of return of the utility during the pendency of the proceeding to the same level within the range of the newly authorized rate of return. Adjustments made in the rate case test period that do not relate to the period interim rates are in effect shall be removed. Examples of these adjustments would be an attrition allowance or rate case expense, plant additions after June 30, 1997, and their associated depreciation, which amounts are recovered only after final rates are established.

In this proceeding, the test period for establishment of interim rates was the historical twelve months ended December 31, 1995. The approved interim rates did not include any provisions for pro forma consideration of increased operating expenses or increased plant. The interim increase was designed to allow recovery of actual interest costs, and the floor of the last authorized range for equity earnings.

To establish the proper refund amount, we calculated a revised interim water and wastewater revenue requirement utilizing the same data used to establish final rates. Rate case expense, plant additions after June 30, 1997, and their associated depreciation were all excluded because they were not actual expenses during the interim collection period.

Using the principles discussed above, we have calculated the revenue requirement for the interim collection period to be $9,389,141 for water and $17,708,196 for wastewater. These revenue levels exceed the interim revenues which were granted by Order No. PSC-96-1388-FOF-WS. Therefore, we find that no refund of interim rates is warranted and the corporate undertaking shall be released.

Allowance For Funds Used During Construction (AFUDC)

In its application, the utility used an 11.12% AFUDC rate, previously approved by this Commission for Jacksonville Suburban Utilities Corporation by Order No. 21492, issued June 30, 1989, in Docket No. 890466-WS. The monthly discounted rate is 0.882543%. UWF witness McGuire testified that the utility has requested no change in its AFUDC rate.

We have reviewed the utility's requested capital structure and, on our own motion, we find it appropriate, in accordance with Rule 25-30.116(7), Florida Administrative Code, to approve an AFUDC rate of 9.57%. The monthly discounted rate is 0.79704%. The effective date of the rates shall be January 1, 1998, in accordance with Rule 25-30.116(5), Florida Administrative Code, which states that the new AFUDC rate shall be effective the month following the end of the 12-month period used to establish that rate. Subsequently in this Order, we approve a ROE of 11.57% for the utility, which is 443 basis points lower than the ROE in effect when the annual AFUDC rate was last authorized in 1980. Our calculations are in accordance with Rule 25-30.116(2), Florida Administrative Code, based upon the capital structure for the twelve months ending December 31, 1997 as follows:

COMPONENT	AMOUNT	COST RATE	WEIGHTED COST
Long Term Debt	$ 40,177,770	8.55%	4.50%
Short Term Debt	362,293	6.41%	0.03%
Preferred Stock	147,877	5.00%	0.01%
Common Equity	33,249,803	11.57%	5.03%
Customer Deposits	7,900	7.00%	0.00%
Deferred Income Taxes	1,202,950	0.00%	0.00%
Deferred ITC	1,264,038	0.00%	0.00%
Total Capital	$ 76,412,631		9.57%

AFPI Charges

Based on our findings herein that the plant is 100% used and useful, we find that AFPI charges are not necessary.

LEGAL ISSUES

Noncompliance with NARUC USOA

According to staff witness Buckley, the utility uses its own chart of accounts for its record keeping and cross-references these accounts to the NARUC USOA. Rule 25-30.115, Florida Administrative Code, states that "[w]ater and wastewater utilities shall, effective January 1, 1986, maintain its accounts and records in conformity with the 1984 NARUC USOA adopted by the National Association of Regulatory Utility Commissioners."

The utility does not use this set of accounts. Part 15 of the NARUC USOA directs that:

> [e]ach utility may adopt such scheme of account numbers as it deems appropriate; provided, however, that it shall keep readily available a list of the account numbers and subdivisions of accounts which it uses and a

> reconciliation of such account numbers and subdivisions with the account numbers and titles provided herein.

UWF witness McGuire testified that the utility maintains that UWF's books and records are kept in substantial compliance with the NARUC USOA. As allowed by the USOA, UWF uses the United Water family of utility companies' standard accounting system, together with a cross-reference table. Witness Buckley testified that the table provided to the staff auditors by the utility to translate their accounts to "new account numbers" also does not conform to the Rule. He further maintained that because many of these cross-references are incorrect, the utility should be considered to be out of compliance with the NARUC USOA.

NARUC, Class A, Water Utility, Accounting Instruction 2.A., General - Records, states that "[e]ach utility shall keep its books of accounts, and all other books, records, and memoranda which support the entries in such books of account so as to furnish readily full information as to any item included in any account."

According to witness Buckley, utility policy directs that each utility maintain separate Continuing Property Records. The utility records do not comply with NARUC USOA Class A Water and Wastewater instructions 2.A. The utility also does not follow its own policy for Continuing Property Records.

NARUC USOA, Class A, Water Utility, Accounting Instruction 24.C., Utility Plant - Land and Land Rights, states that:

> [a] record shall be maintained showing the nature of ownership, full legal description, area, map reference, purpose for which used, city, county and tax district in which situated, from whom purchased or to whom sold, payment given or received, other cost, contract date and number, date of recording of deed, and book and page of record.

In the response to the fourteen-year rate base audit, witness McGuire stated that Audit Document/Record Request numbered DJD-6 requested the continuing property records for land transactions. The request contained the items required in NARUC instruction 24 paragraph C. The utility responded that the following items are not readily accessible and might require excessive research.

1. Full legal description, area, and map reference.
2. From whom purchased or whom sold.

3. Payment given or received.
4. Contract data and number (work order no.).
5. Date of recording deed, book and page number.
6. Copies of deeds and document stamp.

Based on the testimony of staff witness Buckley, we find that the utility records do not comply with Rule 25-30.115(1), Florida Administrative Code, and that the utility records do not comply with NARUC USOA Class A Water and Wastewater instructions 2.A. and 24.C. This is cause for concern because the utility is not able to account for its plant by specific facility. There is also the possibility that, absent continuing property records, plant retirements may not be made on a timely basis.

The utility is directed to comply with this Rule by either keeping its accounts in accordance with the NARUC USOA, or by being able to provide a reliable conversion chart which will map its own accounts to those prescribed by NARUC. Also, as noted above, the utility records do not comply with NARUC USOA Class A Water and Wastewater instructions 2.A. and 24.C. The utility is directed to comply with NARUC Accounting Instructions by maintaining continuing property records.

1990 and 1991 Accounts Payable Files

In its brief, UWF argues that it did not willfully violate any provision of Chapter 367, Florida Statutes, or any rule or order of the Commission by having lost or destroyed its 1990 and 1991 Accounts Payable files, and that it should therefore not be fined under Section 367.161. UWF admits to having inadvertently and unintentionally lost these records. UWF points out that according to witness deNagy, these records consisted of invoices for amounts of less than $2,000 per invoice. The utility did not lose or destroy invoices in amounts greater than $2,000.

Rule 25-30.110(1)(a), Florida Administrative Code, requires utilities to preserve their records in accordance with the NARUC "Regulations to Govern the Preservation of Records of Electric, Gas and Water Utilities," as revised in May, 1995. According to witness Grayson, the NARUC regulations require the utility to retain records related to plant for a minimum of 25 years. The missing invoices represented total amounts of $182,030 and $241,839, for 1990 and 1991, respectively.

Section 367.161(1), Florida Statutes, authorizes us to assess a penalty of not more than $5,000 for each offense, if a utility is found to have knowingly refused to comply with, or to have

willfully violated, any provision of Chapter 367, Florida Statutes, or any lawful rule or order of the Commission.

Utilities are charged with the knowledge of the Commission's rules and statutes. Additionally, "[i]t is a common maxim, familiar to all minds that 'ignorance of the law' will not excuse any person, either civilly or criminally." Barlow v. United States, 32 U.S. 404, 411 (1833). By Order No. 24306, issued April 1, 1991, in Docket No. 890216-TL, titled In Re: Investigation Into The Proper Application of Rule 25-14.003, F.A.C., Relating To Tax Savings Refund for 1988 and 1989 For GTE Florida, Inc., the Commission, having found that the company had not intended to violate the rule, nevertheless found it appropriate to order it to show cause why it should not be fined, stating that "'willful' implies an intent to do an act, and this is distinct from an intent to violate a statute or rule." Id. at 6.

We note that in the GTE case, the Commission found that the company implemented a policy of destroying records which were required to be retained, and that the company's action was thereby willful. Id. We find that the loss of records at issue here is distinguishable in that there is no evidence to show that UWF implemented any such policy. Rather, the record reflects that the files containing the missing records were apparently discarded inadvertently along with other files that exceeded the required record retention date. UWF evidently did not intend to destroy the records at issue. Moreover, as the utility points out, it followed NARUC notification rules upon discovering the loss of records, has provided other information to verify the accounts, and has taken steps to remedy the problem. For the foregoing reasons, we find that although UWF's failure to maintain its 1990 and 1991 accounts payable files is an apparent violation of Rule 25-30.110(1), Florida Administrative Code, it shall not be fined therefor because the record reflects that the destruction or loss of the records was due to inadvertence and was not intentional.

DOCKET CLOSURE

This docket shall be closed thirty-two days after the issuance of this Order, after the time for filing an appeal has run, and upon our staff's verification that the proper revised tariff sheets and customer notice have been filed by the utility and approved by staff.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the application by United Water Florida Inc., for increased rates and charges for water and wastewater service is hereby approved to the extent set forth in this Order. It is further

ORDERED that each of the findings contained 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 schedules attached hereto are, by reference, expressly incorporated herein. It is further

ORDERED that United Water Florida Inc.'s request for approval of a $3 late charge is denied. It is further

ORDERED that the increased rates approved herein shall be effective for service rendered on or after the stamped approval date of 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 United Water Florida Inc., shall provide proof of the date notice was given within 10 days after the date of the notice. It is further

ORDERED that, prior to the implementation of the rates and charges approved herein, United Water Florida Inc., shall submit a proposed customer notice explaining the increased rates and charges and the reasons therefor. It is further

ORDERED that, prior to the implementation of the rates and charges approved herein, United Water Florida Inc., shall submit, and have approved, revised tariff sheets. The revised tariff sheets will be approved upon staff's verification that they are consistent with this Commission's decision and that the proposed customer notice is adequate. It is further

ORDERED that the rates approved herein shall be reduced at the end of the four-year rate case expense amortization period. United Water Florida Inc., shall file revised tariff sheets no later than one month prior to the actual date of the reduction and shall also file a customer notice. It is further

ORDERED that United Water Florida Inc., shall file a report showing the effectiveness of its corrosion control and hydrogen sulfide treatment programs as required within the body of this Order within six months from the issuance date of this Order. It is further

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

ORDERED that United Water Florida Inc., shall comply with NARUC Accounting Instructions by maintaining continuing property records, as set forth in the body of this Order. It is further

ORDERED that United Water Florida Inc., shall file a service availability application within three years of the date of issuance of this Order. It is further

ORDERED that this docket shall be closed after the time for filing an appeal has run, after the approval of revised tariff sheets, and our staff's verification that the required refund has been made.

By ORDER of the Florida Public Service Commission, this 30th day of May, 1997.

BLANCA S. BAYO, Director
Division of Records and Reporting

(S E A L)

RGC/BLR

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.

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this Order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/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 after the issuance of this Order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900 (a), Florida Rules of Appellate Procedure.

UNITED WATER FLORIDA, INC.
SCHEDULE OF WATER RATE BASE
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 1-A
DOCKET NO. 960451-WS

	COMPONENT	TEST YEAR PER UTILITY	UTILITY ADJUSTMENTS	UTILITY ADJUSTED TEST YEAR	COMMISSION ADJUSTMENTS	COMMISSION ADJUSTED TEST YEAR
1	UTILITY PLANT IN SERVICE	$ 58,804,319	$ 0	$ 58,804,319	$ (6,037,517)	$ 52,766,802
2	LAND & LAND RIGHTS	592,766	0	592,766	338,878	931,644
3	NON-USED & USEFUL COMPONENTS	0	0	0	0	0
4	ACCUMULATED DEPRECIATION	(11,134,009)	0	(11,134,009)	2,095,173	(9,038,836)
5	CIAC	(24,872,010)	0	(24,872,010)	1,753,885	(23,118,125)
6	AMORTIZATION OF CIAC	5,896,677	0	5,896,677	(410,735)	5,485,942
7	ACQUISITION ADJUSTMENTS	594,326	0	594,326	0	594,326
8	ACQUISITION ADJUSTMENTS-AMORTIZATION	(22,287)	0	(22,287)	(187,695)	(209,982)
9	ADVANCES FOR CONSTRUCTION	(152,370)	0	(152,370)	0	(152,370)
10	UNFUNDED POST-RETIRE. BENEFITS	0	0	0	(415,080)	(415,080)
11	WORKING CAPITAL ALLOWANCE	335,842	0	335,842	14,588	350,430
12	CONSTRUCTION WORK IN PROGRESS	0	0	0	0	0
	RATE BASE	$ 30,043,254	$ 0	$ 30,043,254	$ (2,848,503)	$ 27,194,751

UNITED WATER FLORIDA, INC.
SCHEDULE OF WASTEWATER RATE BASE
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 1-B
DOCKET NO. 960451-WS

	COMPONENT	TEST YEAR PER UTILITY	UTILITY ADJUSTMENTS	UTILITY ADJUSTED TEST YEAR	COMMISSION ADJUSTMENTS	COMMISSION ADJUSTED TEST YEAR
1	UTILITY PLANT IN SERVICE	$104,093,544	$ 0	$104,093,544	$(10,862,156)	$ 93,231,388
2	LAND	1,018,304	0	1,018,304	311,679	1,329,983
3	NON-USED & USEFUL COMPONENTS	0	0	0	0	0
4	ACCUMULATED DEPRECIATION	(21,915,180)	0	(21,915,180)	1,839,010	(20,076,170)
5	CIAC	(36,007,229)	0	(36,007,229)	(782,417)	(36,789,646)
6	AMORTIZATION OF CIAC	11,400,971	0	11,400,971	(275,456)	11,125,515
7	ACQUISITION ADJUSTMENTS	867,986	0	867,986	0	867,986
8	ACQUISITION ADJUSTMENTS-AMORTIZATION	(32,549)	0	(32,549)	(380,954)	(413,503)
9	ADVANCES FOR CONSTRUCTION	0	0	0	0	0
10	UNFUNDED POST-RETIRE. BENEFITS	0	0	0	(737,920)	(737,920)
11	WORKING CAPITAL ALLOWANCE	651,929	0	651,929	28,318	680,247
12	CONSTRUCTION WORK IN PROGRESS	0	0	0	0	0
	RATE BASE	$ 60,077,776	$ 0	$ 60,077,776	$(10,859,896)	$ 49,217,880

UNITED WATER FLORIDA, INC.
ADJUSTMENTS TO RATE BASE
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 1-C

EXPLANATION	WATER	WASTEWATER
COMMISSION ADJUSTMENTS:		
UTILITY PLANT IN SERVICE		
(1) I 5: Revised capital additions	$ (5,951,658)	$ (10,685,901)
(2) I 7: Excess AFUDC	(40,986)	(173,706)
(3) I 8: Property held for future use	(23,776)	0
(4) S 1: Removal of merger costs	(21,097)	(2,549)
Total Adjustment	$ (6,037,517)	$ (10,862,156)
LAND & LAND RIGHTS		
(1) I 5: Revised capital additions	$ 330,102	$ 1,487,379
(2) I 8: Property held for future use	8,776	(1,175,700)
Total Adjustment	$ 338,878	$ 311,679
ACCUMULATED DEPRECIATION		
(1) I 5: Revised capital additions	$ 2,092,929	$ 1,831,144
(2) I 7: Excess AFUDC	1,502	7,770
(3) S 1: Removal of merger costs	742	96
Total Adjustment	$ 2,095,173	$ 1,839,010
CIAC		
I 5: Revised capital additions	$ 1,753,885	$ (782,417)
AMORTIZATION OF CIAC		
I 5: Revised capital additions	$ (410,735)	$ (275,456)
ACQUISITION ADJUSTMENTS-AMORTIZATION		
I 22 Accumulated amortization from date of authorization	$ (187,695)	$ (380,954)
UNFUNDED POST-RETIREMENT BENEFITS		
I 25: To reflect accumulated unfunded OPEB liability	$ (415,080)	$ (737,920)
ALLOWANCE FOR WORKING CAPITAL		
I 23: Unamortized Tank Painting Expense	$ 14,588	$ 28,318

UNITED WATER FLORIDA, INC.
CAPITAL STRUCTURE
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 2
DOCKET NO. 960451-WS

	COMPONENT	TOTAL CAPITAL	UTILITY UPDATE	SPECIFIC ADJUSTMENTS	PRO RATA ADJUSTMENTS	CAPITAL RECONCILED TO RATE BASE	RATIO	COST RATE	WEIGHTED COST
PER UTILITY PROJECTED YEAR END 1997									
1	LONG TERM DEBT	$ 0	$ 0	$ 0	$ 47,756,413	$ 47,756,413	52.99%	8.72%	4.62%
2	SHORT-TERM DEBT	0	0	0	575,384	575,384	0.64%	6.55%	0.04%
3	PREFERRED STOCK	0	0	0	178,925	178,925	0.20%	5.00%	0.01%
4	COMMON EQUITY	91,785,632	0	0	(52,268,372)	39,517,260	43.85%	11.70%	5.13%
5	CUSTOMER DEPOSITS	7,900	0	0	(323)	7,577	0.01%	6.00%	0.00%
6	DEFERRED INCOME TAXES	1,246,518	0	0	(51,032)	1,195,486	1.33%	0.00%	0.00%
7	DEFERRED ITC'S-WTD COS	927,976	0	0	(37,991)	889,985	0.99%	10.04%	0.09%
8		$ 93,968,026	$ 0	$ 0	$ (3,846,996)	$ 90,121,030	100.00%		9.89%
PER COMMISSION PROJECTED AVERAGE 1997									
9	LONG TERM DEBT	$ 47,756,413	$ (15,487,598)	$ 0	$ 7,908,955	$ 40,177,770	52.58%	8.55%	4.50%
10	SHORT-TERM DEBT	575,384	(284,331)	0	71,240	362,293	0.47%	6.41%	0.03%
11	PREFERRED STOCK	178,925	(58,026)	0	26,978	147,877	0.19%	5.00%	0.01%
12	COMMON EQUITY	39,517,260	(12,815,565)	0	6,548,108	33,249,803	43.51%	11.57%	5.03%
13	CUSTOMER DEPOSITS	7,577	1,556	(1,233)	0	7,900	0.01%	7.00%	0.00%
14	DEFERRED INCOME TAXES	1,195,486	(214,731)	222,195	0	1,202,950	1.57%	0.00%	0.00%
15	DEFERRED ITC	889,985	374,053	0	0	1,264,038	1.65%	0.00%	0.00%
16		$ 90,121,030	$ (28,484,642)	$ 220,962	$ 14,555,281	$ 76,412,631	100.00%		9.57%

RANGE OF REASONABLENESS	LOW	MID	HIGH
RETURN ON EQUITY	10.57%	11.57%	12.57%
OVERALL RATE OF RETURN	9.14%	9.57%	10.01%

UNITED WATER FLORIDA, INC.
STATEMENT OF WATER OPERATIONS
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 3-A
DOCKET NO. 960451-WS

	DESCRIPTION	TEST YEAR PER UTILITY	UTILITY ADJUSTMENTS	UTILITY ADJUSTED TEST YEAR	COMMISSION ADJUSTMENTS	COMMISSION ADJUSTED TEST YEAR	REVENUE INCREASE	REVENUE REQUIREMENT
1	OPERATING REVENUES	7,286,448	$ 3,344,948	$ 10,631,396	$ (3,344,948)	$ 7,286,448	$ 2,361,740	$ 9,648,188
	OPERATING EXPENSES:						32.41%	
2	OPERATION AND MAINTENANCE	4,227,097	$ 21,256	$ 4,248,353	$ (265,079)	$ 3,983,274	$ 15,115	$ 3,998,389
3	DEPRECIATION	1,323,173	0	1,323,173	(272,036)	1,051,137		1,051,137
4	AMORTIZATION	22,799	0	22,799	6,918	29,717		29,717
5	TAXES OTHER THAN INCOME	955,123	150,523	1,105,646	(206,546)	899,100	106,278	1,005,378
6	INCOME TAXES	(233,917)	1,194,064	960,147	(842,161)	117,986	843,044	961,030
7	TOTAL OPERATING EXPENSES	6,294,275	$ 1,365,843	$ 7,660,118	$ (1,578,904)	$ 6,081,214	$ 964,437	$ 7,045,651
8	OPERATING INCOME	992,173	$ 1,979,105	$ 2,971,278	$ (1,766,044)	$ 1,205,234	$ 1,397,303	$ 2,602,537
9	RATE BASE	30,043,254		$ 30,043,254		$ 27,194,751		$ 27,194,751
10	RATE OF RETURN	3.30%		9.89%		4.43%		9.57%

UNITED WATER FLORIDA, INC.
STATEMENT OF WASTEWATER OPERATIONS
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 3-B
DOCKET NO. 960451-WS

	DESCRIPTION	TEST YEAR PER UTILITY	UTILITY ADJUSTMENTS	UTILITY ADJUSTED TEST YEAR	COMMISSION ADJUSTMENTS	COMMISSION ADJUSTED TEST YEAR	REVENUE INCREASE	REVENUE REQUIREMENT
1	OPERATING REVENUES	15,673,782	$ 5,112,600	$ 20,786,382	$ (5,112,600)	$ 15,673,782	$ 2,289,757	$ 17,963,539
	OPERATING EXPENSES:						14.61%	
2	OPERATION AND MAINTENANCE	7,955,590	$ 32,489	$ 7,988,079	$ (51,939)	$ 7,936,140	$ 14,654	$ 7,950,794
3	DEPRECIATION	2,955,113	0	2,955,113	(623,594)	2,331,519		2,331,519
4	AMORTIZATION	29,610	0	29,610	13,789	43,399		43,399
5	TAXES OTHER THAN INCOME	1,727,434	230,067	1,957,501	(321,318)	1,636,183	103,039	1,739,222
6	INCOME TAXES	89,315	1,825,071	1,914,386	(1,543,280)	371,106	817,348	1,188,454
7	TOTAL OPERATING EXPENSES	12,757,062	$ 2,087,627	$ 14,844,689	$ (2,526,342)	$ 12,318,347	$ 935,041	$ 13,253,388
8	OPERATING INCOME	2,916,720	$ 3,024,973	$ 5,941,693	$ (2,586,258)	$ 3,355,435	$ 1,354,716	$ 4,710,151
9	RATE BASE	60,077,776		$ 60,077,776		$ 49,217,880		$ 49,217,880
10	RATE OF RETURN	4.85%		9.89%		6.82%		9.57%

UNITED WATER FLORIDA, INC.
ADJUSTMENTS TO OPERATING STATEMENTS
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 3-C
PAGE 1 OF 2

EXPLANATION	WATER	WASTEWATER
COMMISSION ADJUSTMENTS:		
OPERATING REVENUES		
Projected revenue increase	$ (3,344,948)	$ (5,112,600)
OPERATION AND MAINTENANCE		
(1) I 9: Reduction due to unaccounted for water	$ (22,044)	$ 0
(2) I 35: Removal of salaries and wages	(63,653)	(113,160)
(3) I 35: Reclassification of expenses to various O&M accounts incorrectly recorded in salaries	(48)	56,647
(4) I 38: Adjustments to insurance expenses associated with removal of test year salaries	(19,532)	(34,724)
(5) I 39: Adjustments to OPEB expenses associated with removal of test year salaries	(5,342)	(9,496)
(6) I 40: To reflect level of participants for test year	(4,018)	(7,144)
(7) I 46: To remove deferred debits associated with the Sunray acquisition	(7,726)	0
(8) I 47: To reflect additional purchased power savings associated with Vision 2000	(5,283)	(9,392)
(9) I 48: To remove deferred moving expenses	(4,489)	(7,981)
(10) I 49: To remove contributions & dues	(3,844)	(6,236)
(11) I 52: To remove public relations expenses	(16,851)	(29,958)
(12) I 53: To reflect current rate case expenses	2,661	4,731
(13) S 1: Removal of merger costs	(3,141)	(5,597)
(14) S 5: Reallocation of rent expense	(53,876)	53,876
(15) S 6: Reallocation of investor relations expenses	(57,390)	57,390
(16) S 7: Removal of lobbying expenses	(503)	(895)
Total Adjustment	$ (265,079)	$ (51,939)
DEPRECIATION		
(1) I 7: Excess AFUDC	$ (1,334)	$ (6,901)
(2) I 56: Revised capital additions.	(270,063)	(616,629)
(3) S 1: Removal of merger costs	(639)	(64)
Total Adjustment	$ (272,036)	$ (623,594)

UNITED WATER FLORIDA, INC.
ADJUSTMENTS TO OPERATING STATEMENTS
TEST YEAR ENDED 12/31/97

SCHEDULE NO. 3-C
PAGE 2 OF 2

EXPLANATION	WATER	WASTEWATER
COMMISSION ADJUSTMENTS:		
AMORTIZATION		
I 22: Test year amortization of Acquisition Adjustments	$ 6,918	$ 13,789
TAXES OTHER THAN INCOME TAXES		
(1) Projected revenue increase	$ (150,523)	$ (230,067)
(2) I 5: Revised capital additions.	(50,053)	(80,637)
(3) I 35: Remove taxes associated with payroll adjustments	(5,970)	(10,614)
Total Adjustment	$ (206,546)	$ (321,318)
INCOME TAXES		
(1) I 60: Income taxes calculated based on Commission adjusted test year	$ (803,585)	$ (1,473,464)
(2) I 59: Parent Debt Adjustment	(38,576)	(69,816)
Total Adjustment	$ (842,161)	$ (1,543,280)
ADJUSTMENTS FOR REVENUE INCREASE (DECREASE):		
OPERATING REVENUES	$ 2,361,740	$ 2,289,757
BAD DEBT EXPENSE	$ 15,115	$ 14,654
TAXES OTHER THAN INCOME TAXES	$ 106,278	$ 103,039
INCOME TAXES	$ 843,044	$ 817,348

UNITED WATER FLORIDA, INC.
COUNTIES: DUVAL, NASSAU AND ST. JOHNS
DOCKET NO. 960451-WS
TEST YEAR ENDED: DECEMBER 31, 1997

Schedule 4A

Rate Schedule

Water Rates

	Test Year Rates as of December 31, 1995	Current	Commission Approved Interim	Utility Requested Final	Commission Approved Final
Residential Service - Billed Quarterly					
Base Facility Charge:					
Meter Size:					
5/8"	$14.40	$14.62	$15.93	$20.52	$17.38
3/4"	$20.19	$20.50	$22.33	$28.78	$25.15
1"	$31.73	$32.22	$35.10	$45.23	$44.61
1-1/2"	$72.15	$73.26	$79.81	$102.85	$100.37
2"	$141.50	$143.68	$156.51	$201.71	$178.43
Gallonage Charge, per 1,000 Gallons	$1.00	$1.03	$1.11	$1.45	$1.35
Gallonage Charge, per 100 cubic feet	$0.75	$0.77	$0.83	$1.08	$1.01
General Service - Billed Monthly					
Base Facility Charge:					
Meter Size:					
5/8"	$6.69	$6.79	$7.40	$9.53	$8.08
3/4"	$8.62	$8.75	$9.53	$13.79	$11.68
1"	$12.46	$12.65	$13.78	$24.46	$20.72
1-1/2"	$25.96	$26.36	$28.71	$55.03	$46.63
2"	$49.06	$49.82	$54.27	$97.88	$82.89
3"	$129.93	$131.93	$143.72	$220.19	$186.56
4"	$334.10	$339.26	$369.55	$391.35	$331.58
6"	$376.46	$382.27	$416.40	$880.75	$746.15
8"	$4,193.60	$4,258.31	$4,638.54	$1,565.40	$1,326.20
10"	n/a	n/a	n/a	n/a	$2,072.86
12"	n/a	n/a	n/a	n/a	$2,984.59
Gallonage Charge, per 1,000 Gallons	$1.00	$1.03	$1.11	$1.45	$1.35
Gallonage Charge, per 100 cubic feet	$0.75	$0.77	$0.83	$1.08	$1.01
Private Fire Protection - Billed Monthly					
Base Facility Charge:					
Meter Size:					
2"	$13.11	$13.31	$14.50	$6.87	$6.91
3"	$23.38	$23.74	$25.86	$15.45	$15.55
4"	$34.88	$35.42	$38.58	$27.47	$27.63
6"	$66.96	$67.99	$74.06	$61.84	$62.18
8"	$105.46	$107.09	$116.65	$109.91	$110.52
10"	$150.32	$152.64	$166.27	$171.79	$172.74
12"	$214.26	$217.57	$236.99	$247.35	$248.72

Typical Residential Bills - Billed Quarterly

5/8" meter					
10,000 Gallons	$24.40	$24.92	$26.99	$35.02	$30.93
20,000 Gallons	$34.40	$35.22	$38.05	$49.52	$44.48
30,000 Gallons	$44.40	$45.52	$49.11	$64.02	$58.03

UNITED WATER FLORIDA, INC.
COUNTIES: DUVAL, NASSAU AND ST. JOHNS
DOCKET NO. 960451-WS
TEST YEAR ENDED: DECEMBER 31, 1997

Schedule 4B

Rate Schedule

Wastewater Rates

	Test Year Rates as of December 31, 1995	Current	Commission Approved Interim	Utility Requested Final	Commission Approved Final
Residential Service - Billed Quarterly					
Base Facility Charge:					
Meter Size:					
Per Single Family Residential Structure	$27.29	$27.57	$27.75	$36.62	$33.98
Unmetered Accounts	$87.17	$88.07	$88.64	$116.99	$108.55
Gallonage Charge, per 1,000 Gallons	$2.97	$3.00	$3.02	$3.98	$3.34
Gallonage Charge, per 100 cubic feet	$2.22	$2.24	$2.26	$2.98	$2.50
General Service - Billed Monthly					
Base Facility Charge:					
Meter Size:					
5/8"	$10.37	$10.48	$10.55	$13.92	$12.91
3/4"	$14.35	$14.50	$14.59	$20.14	$18.68
1"	$23.05	$23.29	$23.44	$35.72	$33.14
1-1/2"	$52.65	$53.19	$53.54	$80.38	$74.56
2"	$103.39	$104.45	$105.14	$142.89	$132.55
3"	$281.05	$283.94	$285.80	$321.58	$298.32
4"	$729.33	$736.83	$741.66	$571.54	$530.20
6"	$822.38	$830.84	$836.28	$1,286.16	$1,193.12
8"	$9,204.79	$9,299.45	$9,360.35	$2,286.01	$2,120.65
Unmetered Accounts	$30.30	$30.61	$30.81	$40.25	$37.73
Gallonage Charge, per 1,000 Gallons	$2.97	$3.00	$3.02	$3.98	$4.01
Gallonage Charge, per 100 cubic feet	$2.22	$2.24	$2.26	$2.98	$3.00
Jacksonville University - Billed Monthly					
Base Facility Charge:					
Meter Size:					
3"	$281.05	$283.94	$285.80	$377.17	$298.32
4"	$729.33	$736.83	$741.66	$978.76	$530.20
6"	$822.38	$830.84	$836.28	$1,103.64	$1,193.12
Gallonage Charge, per 1,000 Gallons	$3.69	$3.73	$3.75	$4.95	$4.13
Gallonage Charge, per 100 cubic feet	$2.77	$2.80	$2.82	$3.72	$3.09
Typical Residential Bills - Billed Quarterly					
5/8" meter					
10,000 Gallons	$56.99	$57.57	$57.95	$76.42	$67.38
20,000 Gallons	$86.69	$87.57	$88.16	$116.22	$100.78
27,000 Gallons (Gallonage Cap)	$116.39	$117.57	$118.36	$156.02	$124.16
(Previous Gallonage Cap - 30,000)					

UNITED WATER FLORIDA, INC.
COUNTIES: DUVAL, NASSAU AND ST. JOHNS
DOCKET NO. 960451-WS
TEST YEAR ENDED: DECEMBER 31, 1997

Schedule No. 5A

RATE SCHEDULE

Schedule of Rate Decrease After Expiration of Amortization Period for Rate Case Expense

WATER

Monthly Rates

	Commission Approved Final Rates	Commission Approved Rate Decrease
Residential Service - Billed Quarterly		
Base Facility Charge:		
Meter Size:		
5/8"	$17.38	$0.08
3/4"	$25.15	$0.11
1"	$44.61	$0.20
1-1/2"	$100.37	$0.45
2"	$178.43	$0.81
Gallonage Charge, per 1,000 Gallons	$1.35	$0.01
Gallonage Charge, per 100 cubic feet	$1.01	$0.00
General Service - Billed Monthly		
Base Facility Charge:		
Meter Size:		
5/8"	$8.08	$0.04
3/4"	$11.68	$0.05
1"	$20.72	$0.09
1-1/2"	$46.63	$0.21
2"	$82.89	$0.38
3"	$186.56	$0.85
4"	$331.58	$1.50
6"	$746.15	$3.38
8"	$1,326.20	$6.01
10"	$2,072.86	$9.39
12"	$2,984.59	$13.52
Gallonage Charge, per 1,000 Gallons	$1.35	$0.01
Gallonage Charge, per 100 cubic feet	$1.01	$0.00
Private Fire Protection - Billed Monthly		
Base Facility Charge:		
Meter Size:		
2"	$6.91	$0.03
3"	$15.55	$0.07
4"	$27.63	$0.13
6"	$62.18	$0.28
8"	$110.52	$0.50
10"	$172.74	$0.78
12"	$248.72	$1.13

UNITED WATER FLORIDA, INC.
COUNTIES: DUVAL, NASSAU AND ST. JOHNS
DOCKET NO. 960451-WS
TEST YEAR ENDED: DECEMBER 31, 1997

Schedule No. 5B

RATE SCHEDULE

Schedule of Rate Decrease After Expiration of Amortization Period for Rate Case Expense

WASTEWATER

Monthly Rates

	Commission Approved Final Rates	Commission Approved Rate Decrease
Residential Service - Billed Quarterly		
Base Facility Charge		
Meter Size		
Per Single Family Residential Structure	$33.98	$0.15
Unmetered Accounts	$108.55	$0.47
Gallonage Charge, per 1,000 Gallons	$3.34	$0.01
Gallonage Charge, per 100 cubic feet	$2.50	$0.01
General Service - Billed Monthly		
Base Facility Charge		
Meter Size		
5/8"	$12.91	$0.06
3/4"	$18.68	$0.08
1"	$33.14	$0.14
1-1/2"	$74.56	$0.32
2"	$132.55	$0.57
3"	$298.32	$1.28
4"	$530.20	$2.27
6"	$1,193.12	$5.11
8"	$2,120.65	$9.09
Unmetered Accounts	$37.73	$0.16
Gallonage Charge, per 1,000 Gallons	$4.01	$0.02
Gallonage Charge, per 100 cubic feet	$3.00	$0.01
Jacksonville University - Billed Monthly		
Base Facility Charge:		
Meter Size:		
3"	$298.32	$1.28
4"	$530.20	$2.27
6"	$1,193.12	$5.11
Gallonage Charge, per 1,000 Gallons	$4.13	$0.02
Gallonage Charge, per 100 cubic feet	$3.09	$0.01

UNITED WATER FLORIDA, INC.
DOCKET NO. 960451-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1997

ATTACHMENT A

MOISTURE DEFICIT VARIABLES

YEAR	MONTH	(a) AVG TEMP	(b) TOTAL RAINFALL	(c) MOISTURE DEFICIT VARIABLE FACTOR	(d) EFP= EFFECTIVE PRECIPITATION	(e) PET = POTENTIAL EVAPO-TRANSPIRATION	(f) = (e) - (d) ACTUAL MOISTURE DEFICIT VARIABLE	(g) = 0 IF (f) <= 0, else (f) MOISTURE DEFICIT VARIABLE ALL >= 0
1991	January	61	8.3	25.5	3.5	2.2	-1.3	0.0
	February	62	1.5	25.2	1.5	2.3	0.8	0.8
	March	64	10.5	30.9	3.5	3.1	-0.4	0.0
	April	75	7.5	33.3	3.5	5.1	1.6	1.6
	May	81	12.5	36.9	3.5	6.8	3.3	3.3
	June	85	13.2	37.2	3.5	7.6	4.1	4.1
	July	87	14.7	37.8	3.5	8.2	4.7	4.7
	August	87	4.8	35.4	3.4	7.7	4.3	4.3
	September	82	11.3	31.2	3.5	5.9	2.4	2.4
	October	73	8.6	28.8	3.5	4.1	0.6	0.6
	November	63	0.4	25.2	0.4	2.4	2.0	2.0
	December	62	0.8	24.6	0.8	2.2	1.4	1.4
1992	January	55	5.3	25.5	3.5	1.6	-1.9	0.0
	February	62	1.8	25.2	1.7	2.3	0.5	0.5
	March	62	4.1	30.9	3.1	2.8	-0.3	0.0
	April	69	0.8	33.3	0.8	4.1	3.3	3.3
	May	76	3.9	36.9	3.1	5.8	2.7	2.7
	June	84	9.3	37.2	3.5	7.4	3.9	3.9
	July	87	5.7	37.8	3.5	8.2	4.7	4.7
	August	85	10.6	35.4	3.5	7.3	3.8	3.8
	September	82	12.5	31.2	3.5	5.9	2.4	2.4
	October	71	6.8	28.8	3.5	3.8	0.3	0.3
	November	68	2.2	25.2	2.1	3.0	0.9	0.9
	December	62	0.5	24.6	0.5	2.2	1.7	1.7
1993	January	63	7.5	25.5	3.5	2.4	-1.1	0.0
	February	62	5.3	25.2	3.5	2.3	-1.2	0.0
	March	63	5.5	30.9	3.5	2.9	-0.5	0.0
	April	69	0.8	33.3	0.8	4.1	3.3	3.3
	May	77	3.0	36.9	2.6	6.0	3.4	3.4
	June	80	8.4	37.2	3.5	6.6	3.1	3.1
	July	87	7.5	37.8	3.5	8.2	4.7	4.7
	August	84	5.0	35.4	3.4	7.1	3.7	3.7
	September	81	5.0	31.2	3.4	5.7	2.3	2.3
	October	72	14.1	28.8	3.5	3.9	0.4	0.4
	November	64	3.2	25.2	2.7	2.5	-0.2	0.0
	December	55	2.2	24.6	2.1	1.5	-0.5	0.0
1994	January	53	9.8	25.5	3.5	1.4	-2.1	0.0
	February	62	0.7	25.2	0.7	2.3	1.6	1.6
	March	66	2.3	30.9	2.1	3.3	1.2	1.2
	April	72	1.7	33.3	1.7	4.6	2.9	2.9
	May	76	3.9	36.9	3.1	5.8	2.7	2.7
	June	82	13.1	37.2	3.5	7.0	3.5	3.5
	July	83	11.7	37.8	3.5	7.3	3.8	3.8
	August	82	9.0	35.4	3.5	6.7	3.2	3.2
	September	79	8.4	31.2	3.5	5.4	1.9	1.9
	October	72	12.3	28.8	3.5	3.9	0.4	0.4
	November	68	7.3	25.2	3.5	3.0	-0.5	0.0
	December	60	4.1	24.6	3.1	2.0	-1.1	0.0
1995	January	56	2.7	25.5	2.4	1.7	-0.7	0.0
	February	62	2.3	25.2	2.1	2.3	0.1	0.1
	March	62	4.2	30.9	3.2	5.8	2.7	2.7
	April	70	4.4	33.3	3.2	4.2	1.0	1.0
	May	78	1.8	36.9	1.7	6.2	4.4	4.4
	June	80	12.5	37.2	3.5	6.6	3.1	3.1
	July	84	10.2	37.8	3.5	7.5	4.0	4.0
	August	82	22.9	35.4	3.5	6.7	3.2	3.2
	September	78	17.6	31.2	3.5	5.2	1.7	1.7
	October	71	8.6	28.8	3.5	3.8	0.3	0.3
	November	61	2.4	25.2	2.2	2.2	-0.0	0.0
	December	56	3.5	24.6	2.9	1.8	-1.3	0.0

SOURCES: a), b) EXH 34, p. 5.
c) EXH 33, p. 32.
d) EXH 33, p. 32. EFFECTIVE PRECIPITATION (IN INCHES)
If AP <= 1": EFP = AP
If 1" < AP < 6": EFP = (-0.1 x (AP=AP)) + (1.2 x AP) -0.1
If AP => 6": EFP = 3.5
AP = the actual precipitation for the month in inches
e) EXH 33, p. 32. POTENTIAL EVAPOTRANSPIRATION (IN INCHES)
PET = (0.0209974 x ((0.0918425 x (degrees F - 32))*1.44)) x (Fm)
degrees F = average daily temperature for the month (see column (a) above)
Fm = a factor specific to each calendar month (see column (c) above)
f), g) EXH 33, p. 32. Moisture deficit is equal to potential evapotranspiration (PET) minus effective precipitation (EFP). In order to calculate monthly moisture deficit, PET is calculated according to the method of Thornthwaite and Mather, and EFP is calculated according to the method of Linsley and Franzini.

UNITED WATER FLORIDA, INC.
DOCKET NO. 960451-WS
PROJECTED TEST YEAR ENDING DECEMBER 31, 1997

ATTACHMENT B

COMPARISON OF PROJECTED BILLS AND CONSUMPTION: UWF v. COMMISSION

WATER SYSTEM		UWF Model Projected TY 12/31/97 per EXH 20		Commission Model Projected TY 12/31/97		Difference: Commission in Excess of UWF	
		Bills Rendered	Billed Consump	Bills Rendered	Billed Consump	Bills Rendered	Billed Consump
Metered Sales:	Residential	100,941	2,215,329	101,726	2,223,816	785	8,487
	Commercial	31,073	2,098,193	30,953	2,131,581	(120)	33,388
	Public	593	132,397	539	129,142	(54)	(3,255)
	Subtotal	132,607	4,445,919	133,218	4,484,539	611	38,620
Flat Rate Services:	Pvt Fire Protection	2,100		2,100			
	Subtotal	2,100		2,100			
	TOTALS FOR MONTHLY SERVICE:	134,707	4,445,919	135,318	4,484,539	611	38,620
						0.45%	0.87%

WASTEWATER SYSTEM		UWF Model Projected TY 12/31/97 per EXH 20		Commission Model Projected TY 12/31/97		Difference: Commission in Excess of UWF	
		Bills Rendered	Billed Consump	Bills Rendered	Billed Consump	Bills Rendered	Billed Consump
Metered Sales:	Residential	76,230	1,303,918	77,859	1,446,021	1,629	142,103
	Commercial	28,670	2,141,347	28,725	2,084,317	55	(57,030)
	Public	352	77,102	299	73,256	(53)	(3,846)
	Subtotal	105,252	3,522,367	106,883	3,603,594	1,631	81,227
	TOTALS FOR MONTHLY SERVICE:	105,252	3,522,367	106,883	3,603,594	1,631	81,227
						1.55%	2.31%

SOURCES: EXH 20, EXH 34.