FLORIDA PUBLIC SERVICE COMMISSION
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M E M O R A N D U M

September 26, 1996

TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYO)

FROM: DIVISION OF WATER & WASTEWATER (MERCHANT, MONIZ, WEBB, STARLING, RENDELL, WASHINGTON, XANDERS)
DIVISION OF AUDITING AND FINANCIAL ANALYSIS (CAUSSEAUX, MAUREY, C. ROMIG, SALAK)
DIVISION OF LEGAL SERVICES (REYES)

RE: DOCKET NO. 951056-WS - PALM COAST UTILITY CORPORATION - APPLICATION FOR RATE INCREASE
COUNTY: FLAGLER

AGENDA: OCTOBER 8, 1996 - REGULAR AGENDA - POST HEARING DECISION - PARTICIPATION IS LIMITED TO COMMISSIONERS AND STAFF

CRITICAL DATES: 8-MONTH EXPIRATION DATE: OCTOBER 12, 1996

SPECIAL INSTRUCTIONS: THIS ITEM SHOULD BE SCHEDULED BEFORE DOCKET NO. 951593-WS

LOCATION OF FILE: S:\PSC\WAW\WP\951056_2.RCM

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CASE BACKGROUND

Palm Coast Utility Corporation (Palm Coast) is a utility, which provides water and wastewater service to the public in Flagler County. Palm Coast is located in a critical use area as designated by the St. Johns River Water Management District (SJRWMD). During the twelve months ending December 31, 1994 (the historical test year), the utility recorded operating revenues of $5,007,702 for water service and $2,951,217 for wastewater service. During the same period, Palm Coast reported a net operating loss of $2,247 for water and net operating income of $281,533 for wastewater.

On December 27, 1995, the utility filed an application for increased rates pursuant to Chapters 367.081 and 367.082, Florida Statutes. The utility satisfied the Minimum Filing Requirements (MFRs) on February 12, 1996 for a rate increase, and that date was designated as the official filing date pursuant to Section 367.083, Florida Statutes.

The utility's requested test year for interim purposes is the historical period ending December 31, 1994. Its requested test period for final rates is the projected year ending December 31, 1995. For interim, the utility requested total revenues of $5,515,503 and $3,432,636 for water and wastewater, respectively. This represents revenue increases of $457,694 (8.30%) for water and $442,999 (12.9%) for wastewater, designed to produce a rate of return of 7.70%.

By Order No. PSC-96-0493-FOF-WS, issued April 9, 1996, the Commission approved interim rates for PCUC based upon a historic test year, designed to generate $5,491,319 in annual water revenues and $3,432,636 in annual wastewater revenues, subject to refund with interest. This represents a $483,617 (9.66%) increase over water test year revenues, and a $481,419 (16.31%) increase over wastewater test year revenues.

For final purposes, the utility has requested total revenue of $6,971,647 for water and $4,906,850 for wastewater. These revenues reflect revenue increases of $1,479,626 (26.94%) for water and $1,575,817 (47.31%) for wastewater. The utility's final revenues are based on the utility's requested overall rate of return of 8.84%.

The utility contends that the necessity for a rate increase arises from the fact that as adjusted for the test year ending December 31, 1995, it will have a rate of return of only 2.64% on a rate base of $21,328,433 for its water operations and a rate of

return of only 3.54% on a rate base of $16,031,209 for its wastewater operations.

The utility did not request that this case be processed pursuant to the proposed agency action procedure as provided in Section 367.081(8), Florida Statutes. The prehearing was held in Tallahassee on June 20, 1996. The hearing was held at the Knights of Columbus building in Palm Coast on July 1 and 2, 1996 and continued and concluded in Tallahassee on July 19, 1996.

The Office of Public Counsel, Dunes Community Development District, and Flagler County have intervened in this docket prior to the commencement of the technical hearing.

Abbreviations and Technical Terms

The following is a list of acronyms and technical terms which may have been used in the recommendation.

COMPANY AND PARTY NAMES

DUNES	Dunes Community Development District
ICDC	ITT Community Development Corporation
OPC	Office of Public Counsel
PCUC	Palm Coast Utility Corporation

TECHNICAL TERMS:

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
CPI	Consumer Price Index
CWIP	Construction Work in Progress
DEP	Department of Environmental Protection
ERCs	Equivalent Residential Connections
FAC	Florida Administrative Code
FASB	Financial Accounting Standards Board
GPD	Gallons per Day
GPM	Gallons per Minute
I&I	Infiltration and Inflow
ITCs	Investment Tax Credits
MCLs	Maximum Contaminant Levels
MFRs	Minimum Filing Requirements
MGD	Million Gallons per Day
NARUC	National Association of Utility Regulatory Commissioners
PHFU	Plant Held for Future Use

R&D	Research and Development
RIB	Rapid Infiltration Basin
SFAS	Statements of Financial Accounting Standards
SJRWMD	St. Johns River Water Management District
T&D	Transmission and Distribution System
TDS	Total Dissolved Solids
UFW	Unaccounted for Water
UPIS	Utility Plant In Service
USOA	Uniform System of Accounts
WMD	Water Management District
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

DISCUSSION OF ISSUES

ISSUE A: Should the proposed stipulations be approved?

RECOMMENDATION: Yes. The proposed stipulations as listed in Staff Analysis should be approved. (REYES)

STAFF ANALYSIS: In the Prehearing Order No. PSC-96-0825-PHO-WS, issued June 26, 1996, the parties proposed stipulations for five issues. However, these proposed stipulations were not ruled on at the hearing. All stipulations listed below should be accepted by the Commission.

1. The cost of common equity capital should be established using the leverage formula in effect at the time of the Commission decision in this case.

2. The following adjustments in Staff Audit Exception No. 4 should be accepted by the Commission:

   a. Water materials and supplies (Account 620) should be reduced by $1,194 for undocumented expenses.

   b. Water miscellaneous expenses (Account 675) should be reduced by $6,406 for the following:

      - $3,200 ($10,000 x 32%) for the lobbying portion of Florida Waterworks Association Dues.

      - $706 for employee travel expenses for speaking at a conference.

      - $2,500 for Christmas lights on the water tanks.

   c. Water Contractual Services-Accounting (Account 632) should be increased by $4,000 for a final billing adjustment.

   d. Water Contractual Services-Legal (Account 633) of $1,780 should be removed for costs incurred for the sale of the utility.

3. Rental expenses should be reduced by $36,981 and Chamber of Commerce dues should be reduced by $828 in accordance with the miscellaneous expense adjustments reflected on witness Dismukes' Schedule 16.

4. Non-used plant, non-used accumulated depreciation, non-used CIAC or non-used accumulated amortization of CIAC should not be included in rate base.

The parties also proposed the following stipulation; however, this issue is addressed in Issue 45 of this recommendation and should not be approved.

5. Cost-free Investment Tax Credits should be increased by $125,569, resulting in a year-end balance of $2,391,641 before reconciliation to rate base.

ISSUE 1: Is the quality of service satisfactory ?

RECOMMENDATION: Yes. The Commission should find that the quality of service provided by PCUC is satisfactory. (CROUCH)

POSITION OF PARTIES

PCUC: The quality of service provided by Palm Coast Utility Corporation (PCUC) is exemplary.

DUNES: No position.

FLAGLER: Adopt OPC's position and discussion.

OPC: On balance the Commission should not find that PCUC's quality of service is unsatisfactory. However, PCUC should be required to respond to specific quality of service concerns expressed by customers.

STAFF ANALYSIS: OPC pointed out in their brief that the bulk of the customer testimony during the hearing dealt with the unreasonably high rate charged by PCUC. (BR 3, TR 37, 40-41, 57, 62, 65, 76, 82, 102, 321, 333, 338) In fact, two customers complimented PCUC for the quality and reliability of the water they receive from the utility. (TR 31, 102) One customer testified that PCUC was not user friendly, (TR 32) while others testified about the arrogant attitude displayed by ITT personnel. (TR 76, TR 84) In summary, OPC thought that the Commission should heed the customers call for reasonable rates, and the utility should be required to respond to the specific quality of service concerns expressed by the customers in the public testimony portion of the hearing. (BR 2-4)

PCUC replied that compliance with all Florida Department of Environmental Protection (FDEP) regulations was established by the testimony of two FDEP officials. (BR 1-2, TR 573-574A, 756-758) According to FDEP testimony, both water treatment plants and the wastewater system are properly permitted, and the overall maintenance of the water and wastewater treatment plants and the distribution, collection and disposal facilities is satisfactory. (TR 573-574A, 576, 756-758, EXH 35) Water Treatment Plant # 1 received the FDEP Water Treatment Operation Award in 1995, recognizing the "effective operation and maintenance program and...commitment to maintaining and protecting the drinking water quality and treatment facilities." (TR 758)

Staff agrees with OPC that PCUC should respond to specific quality of service concerns expressed by customers. The record supports PCUC's position that they are responsive to reported

problems. Staff, therefore, recommends that the record supports a determination that the quality of service provided by PCUC is satisfactory.

ISSUE 2: Should a year-end or 13-month average rate base and capital structure be recognized for ratemaking purposes?

RECOMMENDATION: A 13-month average should be used for both rate base and cost of capital. Also, adjustments should be made to remove the utility's year-end adjustments to annualize revenues, chemicals and purchased power expenses, and CIAC gross-up amortization. (WEBB)

POSITION OF THE PARTIES

PCUC: Year-end.

DUNES: No position.

FLAGLER: Adopt Public Counsel's position and analysis.

OPC: A 13-month average rate base should be used.

STAFF ANALYSIS: In the MFRs, the utility requested use of a projected year-end rate base and capital structure. As discussed in the case background, the test year ended December 31, 1995 involves 6-months of actual and 6-months of projected data. Utility witness Seidman explains that substantial water and wastewater plant additions of $7 million were made during 1995, with most of the additions not being completed until at least the middle of the year. He states that, for this reason, there is a $4.8 million dollar difference between using average versus year-end treatment. (TR 168)

OPC witness Dismukes recommends that the Commission use a 13-month average rate base for the water system. She states that Rule 25-30.433(4), Florida Administrative Code, requires the use of a 13-month average rate base unless the applicant can demonstrate an unreasonable burden. Ms. Dismukes further states that, with respect to the water system, the utility has not demonstrated any unusual or extenuating circumstances that would warrant year-end treatment. During cross examination, Ms. Dismukes states that the utility did add a substantial amount of plant to the wastewater system during the test year, so she utilized a year-end rate base for her analysis of this system. When asked if she would consider a 13% increase in plant or a 5% increase in customer growth extraordinary, Ms. Dismukes answered "No". (TR 564-567)

Utility witness Seidman rebuts Ms. Dismukes' proposal with regard to the water operations. He contends that her reliance on Rule 25-30.433(4), Florida Administrative Code, is incorrect. Mr. Seidman further states that the purpose of the rule is to establish separate averaging methods for Class A, B, and C utilities, not to

require that rate base only be presented on an average test year. He states that it is the utility's choice to file average or year-end and for the Commission to consider which method is more appropriate. (TR 938-940) Further, in its brief, PCUC contends that using an average test year would deny the utility the opportunity of earning a rate of return on about $4.8 million dollars of plant additions. (BR 3)

Staff believes that Mr. Seidman is correct in his interpretation of Rule 25-30.433(4), Florida Administrative Code, in that this rule does nothing more than establish the averaging method for a utility to use depending on whether it is Class A, B, or C. Therefore, we believe Ms. Dismukes is incorrect that the rule requires use of a 13-month average rate base. The rule does not require such; it just states that if average treatment is used, it shall be a 13-month average for Class A utilities.

Staff believes that the issue is not whether a utility may file for year-end treatment, instead whether year-end treatment is appropriate. In the case of Citizens of Florida v. Hawkins, 356 So. 2d 254, 257 (Fla. 1978), the Court found that, in the absence of the most extraordinary of conditions, the Commission should apply average investment during the test year in determining rate base. Basically, the utility has stated that year-end treatment is appropriate because, during the test year, $7 million dollars was spent on plant investment, and only $2.2 million of plant has made it into rate base due to 13-month average treatment. The utility further states that to not allow year-end would impair the utility from earning a rate of return on the $4.8 million of plant left out of rate base. (TR 168)

Staff does not believe that the utility has provided the evidence necessary to warrant year-end treatment. Staff believes that a more solid argument is necessary on the part of the utility to prove that extraordinary conditions do exist. It is insufficient for a utility to simply state that plant investment was made and, therefore, extraordinary conditions exist which warrant year-end treatment. Further, staff believes that a more in-depth comparative analysis of the utility's rate base is an important factor in determining whether a certain dollar amount of plant investment is extraordinary. We believe this is especially true in the instant case, based on our analysis.

Staff believes the difficulty of this issue is how we measure extraordinary conditions with PCUC. The utility's rate base is largely contributed, as well as non-used and useful. We believe it is important to determine if plant additions alone drive the need for year-end treatment, or if it should be plant net of accumulated depreciation, CIAC, advances, or even used and useful adjustments.

In our analysis, we took all of the components of rate base into consideration; thus, we referred to the company's total rate base amounts for year-end versus 13-month average treatment.

Based on the utility's total rate base amounts in the MFRs (EXH 7, Vol. I), we calculated an approximate 4% increase going from 13-month average to year-end treatment. Staff does not believe that this difference represents extraordinary conditions. Based on the foregoing discussion and analysis, we accordingly recommend that the Commission approve 13-month average treatment for the utility's rate base and capital structure. As such, staff has reflected the utility's rate base and capital structure on a 13-month average basis. We have also removed the utility's year-end adjustments to annualize revenues, chemicals and purchased power expenses, and CIAC gross-up amortization.

ISSUE 3: Were the appraisals for the 1986 purchase of the sprayfield site and the 1991 purchase of the rapid infiltration basin (RIB) site prepared by an independent, qualified appraiser?

RECOMMENDATION: Yes. (STARLING)

POSITION OF PARTIES

PCUC: Yes.

DUNES: No position.

FLAGLER: The appraisals were prepared by a properly credentialed appraiser but were not reasonable under the circumstances.

OPC: The appraisals were prepared by a properly credentialed appraiser but were not reasonable under the circumstances.

STAFF ANALYSIS PCUC witness Spano prepared both appraisals. Mr. Spano possesses the proper credentials and experience. (EXH 38) Although Mr. Spano has prepared numerous appraisals for PCUC, he also has many other clients. (TR 889) Mr. Spano testified that he acted in an independent manner, in compliance with standard appraisal practice. (TR 802) Mr. Spano has never before now presented testimony in support of his appraisals before the Commission. (TR 869-870)

As discussed in Issue 6, however, staff believes that the appraisals were not reasonable under the circumstances.

ISSUE 4: When was the sprayfield site first dedicated to utility service, and by whom?

RECOMMENDATION: In 1979, by PCUC. (STARLING)

POSITION OF PARTIES

PCUC: 1979, by PCUC.

DUNES: No position.

FLAGLER: 1979, ITT Corporate family through its agent and subsidiary, PCUC.

OPC: 1979, ITT Corporate family through its agent and subsidiary, PCUC.

STAFF ANALYSIS The sprayfield disposal site was constructed in 1979 by PCUC. (TR 952) PCUC purchased the land from ITTCDC, the related party developer, in 1986. (TR 952) PCUC purchased the land based upon its appraised value of $364,500 for 83.3 acres or $4,376 per acre. (EXH 38, CDS-2, p. 24; TR 952)

ISSUE 5: When was the RIB site first dedicated to utility service, and by whom?

RECOMMENDATION: In 1991, by PCUC. (STARLING)

POSITION OF PARTIES

PCUC: 1991, by PCUC.

DUNES: No position.

FLAGLER: 1991, ITT Corporate family through its agent and subsidiary, PCUC.

OPC: 1991, ITT Corporate family through its agent and subsidiary, PCUC.

STAFF ANALYSIS The RIB site was constructed in 1991 by PCUC. (TR 945) PCUC purchased the land from ITTCDC, the related party developer, in 1991. (TR 945) The land's total cost of $559,893 was entered on PCUC's books on June 30, 1995 and was based upon an October, 1990 appraisal. (TR 944-945) The appraisal recommends two values: $7,000 per acre for the RIB Site and $1,400 for an easement area. (EXH 38, CDS-3, p. 32b)

PCUC subsequently purchased an additional 4.601 acres of land in 1995 from ITTCDC. The land was needed to provide a buffer for the site, and the cost was the same per unit cost determined for the RIB site in October, 1990. (TR 950)

The calculation of PCUC's investment for the RIB land is summarized below:

Description	Size (Acres)	$/acre	Cost
RIB site	74.262	$7,000	$519,760
Easement	7.314	$1,400	$ 10,240
Subtotal	81.575	$6,497	$530,000
Buffer	4.601	$6,497	$ 29,893
Total	86.177	$6,497	$559,893

ISSUE 6: How should the sprayfield and RIB sites be valued?

RECOMMENDATION: The sites should be valued based upon their fair market value as of the date they were first dedicated to public service. Staff recommends, however, that PCUC's appraisal falls far short of establishing fair market value and, under the circumstances, is not credible. Staff recommends that the fair market value for the RIB should be based upon the May, 1988 sale from Pellicer to Wright for $2,993 per acre, a 43.15% reduction from the appraised value. Since no other comparable sales were available for the sprayfield, staff recommends that the same percentage adjustment which is recommended for the RIB land (43.15%) should be applied to the sprayfield land, resulting in a fair market value of $1,888 per acre. (STARLING)

POSITION OF PARTIES

PCUC: At fair market value as of the date they were first dedicated to utility service.

DUNES: No position.

FLAGLER: Using the trended historical costs because the PCUC appraisals are not reasonable or credible.

OPC: Using the trended historical costs because the PCUC appraisals are not reasonable or credible.

STAFF ANALYSIS As discussed in Issues 4 and 5, the sprayfield and RIB sites were purchased by PCUC from the related party developer for the appraised $4,375 and $6,497 per acre values, respectively. The RIB and sprayfield sites were first acquired by an ITT related party, Lehigh Portland Cement Company, as part of a 12,777 acre land acquisition in 1968 for $4,345,000 or $341 per acre. (EXH 30, p. 14 and p. 87)

The RIB and sprayfield are adjacent to one another and are located on the east side of Old Kings Road between Palm Coast Parkway and State Road 100. (TR 806; EXH 38, CDS-3, p. 27) They are located 1.5 miles (or 1.0 mile depending upon which appraisal you reference) from the nearest water and sewer utility service. (EXH 38, CDS-2, p. 16; EXH 38, CDS-3, p. 19) Telephone and electrical service were available along Old King's Road. (TR 807) Old King's Road, however, is a private road which was constructed by ITT. (TR 849) Even though the sites are located in an excellent location near Flagler Beach and the core of the Palm Coast development, no subdivisions have as yet been platted nor has any development occurred along this section of Old King's Road.

(TR 867) The explanation by Mr. Spano for the failure of this area to develop is provided in the 1990 RIB appraisal and follows:

> "In summary, it is our opinion that demand for property similar to the subject is presently limited. It is our opinion that the site's highest and best use is for continued silviculture use on an interim basis until such time as demand warrants more intensive development. Because of the over-supply of existing sites better suited for immediate development [emphasis added] located closer to existing service centers, it is our opinion that the highest and best use is for speculative investment with continued silviculture uses prior to more intensive residential development at a later time when economic conditions warrant." (EXH 38, CDS-3, p. 27)

The State of Florida has a land use plan applicable to the Palm Coast development but the utility's appraiser, Mr. Spano, could not recall what that use was. (TR 861-865) He did know, however, that the land potentially could be developed for residential use. (TR 861-865) Neither of Mr. Spano's appraisals provide an answer to this question. The 1985 appraisal, however, does indicate that Palm Coast was divided into seven planning areas. (EXH 38, CDS-3, p. 11)

An appraisal is basically a research problem. (EXH 38, CDS-2, p. 17) Mr. Spano testified that most appraisals reflect the concept that the value estimated should reflect the highest and best use of the property. (TR 803) The basic appraisal methodology is a straight-forward comparable sales analysis in which a variety of sales of property of varying degrees of comparability are compared to the subject property and adjusted for differences where necessary to arrive at an indicated value for the subject property. (TR 806) Mr. Spano discussed the impact which the following factors had on the comparability of his RIB and comparable sales: cash equivalency, market conditions, size, location, zoning, topography, and utilities. (EXH 38, CDS-2, p. 22-24; EXH 38, CDS-3, p. 28-32b) The following factors were discussed in the 1985 sprayfield appraisal: time, size, location, topography, and special conditions. (EXH 38, CDS-2, p. 22)

The average cost of land in the 1985 sprayfield appraisal is based upon a weighted average of the comparable sales which were used in the report. (TR 875) Mr. Spano does not explain or describe the weighting, however, since the figure is based solely on his subjective judgement. (TR 875) Mr. Spano also failed to

provide any explanation or quantification of the weighting factors used in the 1990 RIB appraisal. (TR 855, TR 872, TR 878) This failure to explain or quantify the impact which these differences have on his final conclusions makes it difficult to verify the reasonableness of Mr. Spano's opinion as to the appraised land values. (TR 878)

Mr. Spano's four comparable sales from the 1991 RIB appraisal have the following highest and best uses: commercial development, combination commercial and residential development, and two with residential development. (EXH 38, CDS-3, pp. 34-37) Mr. Spano determined that the RIB had a highest and best use of speculative investment for residential development and the sprayfield had a highest and best use of residential development. (TR 803, EXH 38) Mr. Spano states that the difference between these two highest and best uses is mainly one of semantics. (TR 871) Staff believes that the difference, however, is more than just semantics. Land which can not be developed until some time in the future should be discounted if it is compared to land which could be developed sooner. (TR 871) It is notable that Mr. Spano fails to include any market absorption studies in his appraisals, which studies would have provided the Commission objective criteria to determine the effect of adverse market conditions on his appraisals.

None of the RIB comparable sales have a highest and best use of speculative investment for potential residential development. (EXH 38, CDS-2, p. 34-37) Mr. Spano acknowledges that the comparable sales used in his RIB appraisal were more appropriately suited to development which would occur at a closer point in time than the subject properties. (TR 871) Mr. Spano claims to have adjusted for this factor but fails to quantify the percentage or dollar amount of the adjustment. (TR 871)

The comparable properties used in Mr. Spano's 1990 RIB appraisal had water and wastewater service lines located nearby. (EXH 38, CDS-3, p. 31-32) PCUC provided Mr. Spano with an estimated cost of $434,000 to provide water and wastewater to the RIB site. (EXH 38, CDS-3, p. 31) This represents a cost per acre of $5,036 ($434,000/86.177), making it economically unfeasible to extend utilities to the subject sites at that point in time. (TR 854) Mr. Spano also claims to have adjusted for the difference in the availability of utilities in his comparative analysis. (TR 878) Once again, however, he fails to quantify the dollar adjustment for this difference between the comparable sales and the RIB site. (TR 878) Other than stating water and sewer lines would have to be extended approximately one mile to the sprayfield site, Mr. Spano's 1985 sprayfield appraisal does not include utilities as a factor in his comparative analysis. (EXH 38, CDS-2, pp. 22-24)

As discussed earlier, Old King's Road is a private road. Mr. Spano agrees that it might be relevant whether a property which is being appraised has access through a highway that is not publicly maintained or dedicated. (TR 850) Mr. Spano claims to have adjusted for this difference in his comparative analysis but cannot quantify the dollar impact for this particular adjustment. (TR 855)

Mr. Spano indicates that some of the sales from the 1990 appraisal are considered more useful for comparative purposes than others. (EXH 38, CDS-3, p. 28) Mr. Spano indicates that some of the most useful information is furnished by Sale 0391-0488. (EXH 38, CDS-3, p. 32b) This sale was to the Flagler County Board of Commissioners, and the land was used for a jail site. (EXH 38, CDS-3, p. 36, TR 881) The County paid $627,273 for 82.95 acres, $7,562 per acre. (EXH 38, p. 36) Municipal water and sewer were available to the property but no quantification of the cost of providing utilities was provided. (EXH 39, p. 36) The jail site is located on the edge of development and had a highest and best use of residential development. (TR 881)

Mr. Spano prepared a matrix which summarizes the comparability factors which were discussed. (EXH 38, CDS-3, p. 28) This matrix indicates that the jail site was superior to the RIB for every factor discussed except market conditions. (EXH 38, p. 28) The appraisal explains that the market condition factor represents the gradual increase in land values over time. (EXH 38, p. 29) The appraised value of the RIB site was $7,000 per acre. (EXH 38, p. 32b) Therefore, Mr. Spano, in the final result, has only discounted the jail site (the sale which has some of the most useful information) by $562 per acre (maybe more depending on the upward adjustment for the market condition factor) for the differences in the availability of utilities, the location of the sites off of a private road, and the fact that the subject sales are more suitable for development at a closer point in time than the RIB and sprayfield sites.

Staff witness Sapp has been the Flagler County Chief Deputy Property Appraiser for 16 years and has been elected Property Appraiser for the past 4 years. (TR 729) Mr. Sapp explained that his main problem with the RIB appraisal is one of opinion and that his opinion of Mr. Spano's comparables is different than Mr. Spano's opinion of the RIB's comparable sales. (TR 741) Mr. Sapp testified that two of Mr. Spano's comparable sales were based upon abstracted values for a portion of the property and that this is something which is only done when you are desperate for sales. (TR 741) Mr. Sapp adds that the jail site sale was the comparable sale which Mr. Spano hung his hat on and that is the one which Mr. Sapp could not agree with because the jail site sold for $7,000 per acre

and an adjacent 15-acre tract of land sold for $2,933 per acre during the same time period. (TR 741-742) Mr. Sapp testified he could not accept a $7,000 per acre cost because Mr. Spano's comparables were the four highest comparables sold in those years, and he was aware of seven other sales which are better suited to use as comparable sales for the RIB than the comparable sales from the RIB appraisal. (TR 741-745, EXH 34) The average of these sales is $2,300 to $2,400 and that is his current assessment for the RIB. (TR 742)

Mr. Spano reviewed the comparable sales which were provided by Mr. Sapp and provided a summary of his criticisms of these sales. (EXH 39) Mr. Spano's only criticism of the Pellicer to Wright sale (Sale OR 348, Page 429-430) is, that even though the sale was between a willing selling and a willing buyer, its value was too low. (TR 886-887, EXH 39) This property is located adjacent to the jail site and was, in fact, used in the jail site appraisal simply to indicate a minimum value limit. (TR 886) This comparable sale consists of 15 acres and was purchased for $44,000 or $2,933 per acre in May, 1988. (EXH 39, p.3)

In 1996, a 709.9550-acre site was sold by ITTCDC to an unrelated party, Con-Cor, for $1,600,000 ($1,625,000 if a forfeited security deposit is included). (TR 822-823) This site is located near the RIB site. (TR 821) ITT thermal imaging studies indicated that only 425 acres of this land was usable. (TR 822) Therefore, the cost per acre ranges from $2,253.66 to $3,764 if an adjustment is included for the amount of unusable land. Like the RIB and sprayfield sites, the Con-Cor site was also included in the 12,777 acres purchased in 1968. (EXH 30, p. 15)

Staff witness Dodrill believes that the cost paid for the RIB site is excessive. (EXH 30, p. 9) His opinion is based upon discussions he had with the Flagler County Tax Appraiser, staff witness Sapp, who informed Mr. Dodrill about the 1996 Con-Cor sale. (EXH 30, p. 15) Mr. Dodrill's workpapers also indicate a concern about the availability of utilities and the fact that the comparable sales could be developed sooner than the RIB site. (EXH 30, p. 11-12)

Mr. Dodrill recommends that the $6,497 per acre price paid for the RIB site should be revalued to reflect a trended original cost per acre of $1,771.48. (EXH 30, p. 18) Therefore, the original trended cost for the 81.576 acres equals $144,510. (EXH 30, p. 16) Mr. Dodrill calculated that the difference between the $341 per acre cost of the 1968 land acquisition and the $2,390 per acre cost of the Con-Cor site represents an annual compound rate of 7.43%. (EXH 30, p. 18) This 7.43% annual compound rate was used as the indexing factor.

Mr. Dodrill calculated a value of $2,359.60 per acre for the 4.601 acre buffer site which was purchased in 1995 using the same indexing methodology. (EXH 30, p. 18) Using these values results in a reduction of $385,490 to the $559,893 booked cost of the RIB site. Mr. Dodrill proposes that the 83.3 acres of land for the sprayfield should be valued based upon the 1985 trended original cost of $1,152.35 per acre. (EXH 30, p. 27) This results in a reduction of $268,509 to the $364,500 booked cost of the sprayfield. (EXH 30, p. 27)

Utility witness Spano testified that Mr. Dodrill's method of indexing is nothing more than data manipulation unsupported by market data and is contrary to accepted real property appraisal practice. (TR 816) Mr. Spano explains that a property's value should be based upon the results of an analysis of many local factors. (TR 816-818) Unfortunately, Mr. Spano has failed to provide the Commission with any objective criteria for these alleged local factors. Mr. Sapp glanced at Mr. Dodrill's land value calculation but knows nothing about it. (TR 738) Mr. Sapp did testify that you can not compare a 13,000 acre parcel of land to an 80 acre parcel. (TR 736)

Mr. Spano disagrees with the use of a prior bulk sale involving a substantial amount of land as a benchmark to estimate the value for relatively small parcels of land eleven to twenty-two years later because it is contrary to accepted appraisal practice. (TR 819-820) Mr. Spano adds that it is unreasonable to employ such a methodology when more accurate and current data is available. (TR 821)

CONCLUSION

Staff agrees that the land value should only be indexed when there is no data available which is more accurate or current. This is a continuation of past Commission practice for land purchases between related parties. (Order No. 850031, p. 11-12; Order No. 12174, p.5) Staff also believes that it is not appropriate to value the RIB site and sprayfield using 12,777 and 700 acre purchases as benchmarks.

Staff recommends that the cost should be based upon the fair market of the land. Staff recommends that the RIB and sprayfield land appraisals are not credible indicators of the fair market value of the land and should not be used to establish the original cost for ratemaking purposes. Mr. Spano's testimony that adjustments were made for the differences between the comparable sales and the subject sites (utilities, private road, highest and best use/market absorption rates) are based only on his subjective opinion and are not supported by any corroborative evidence. It is

quite obvious to even a casual observer that single family land which can be sold in two years is worth much more than land which can not be sold for 10 or more years, and Mr. Spano failed to quantify the adjustment which he made for this difference between the comparable sales and the RIB. Also, a reasonable argument could be made that Mr. Spano should have deducted the entire cost of water and wastewater lines from the total appraised values of the two tracts. Mr. Spano also excluded a potential comparable sale from his appraisal because, in his opinion, it only indicates a minimum value limit. Finally, the sale of land to Con-Cor for $2,254 per acre ($3,764 if an adjustment is included for unusable land) also indicates that the $7,000 per acre appraised value is not credible. Even though the Con-Cor sale occurred six years after the RIB purchase, staff believes that the Con-Cor sale provides more evidence that Mr. Spano's testimony is not reasonable.

Since Mr. Spano's appraisals are not a credible indicator of the fair market value of the land, staff recommends that the value of the RIB site should be based upon the $2,933 per acre sale of the 15-acres of land which is adjacent to the jail site. Mr. Spano admitted that the $2,933 per acre cost of this sale, which was supported by Mr. Sapp for use as a comparable, represents a minimum value limit of the land. (TR 886) Staff believes that this minimum value is appropriate since the purchase was between related parties. Using a cost of $2,933 per acre for the 74.262 acres of RIB land results in a reduction of $318,321.76 to the RIB's booked value. Staff's recommended land value of $241,571 is 43.15% of the $559,893 booked value of this land.

Staff recommends that an adjustment to the sprayfield land value is also necessary. Staff's recommended RIB value is $2,933 per acre and the booked cost of the sprayfield land is $4,375 per acre. No other comparable sales, besides what was included in the 1985 appraisal, for the sprayfield were provided. Use of Mr. Dodrill's indexing methodology results in a 1979 value of $749 per acre for the sprayfield. As discussed earlier, however, the land values should not be based upon indexing.

Staff recommends that the adjustment for the sprayfield land should be based upon the 43.15% difference between the RIB appraisal and staff's recommended RIB value. Although no testimony was presented in support of this methodology, staff believes that it is appropriate since the sprayfield and RIB are adjacent sites and it is reasonable to infer that if the RIB appraisal is overstated by a certain percentage, then the sprayfield appraisal is also overstated by a similar percentage. Applying the 43.15% difference to the sprayfield's booked cost results in a recommended

cost of $157,267 or $1,888 per acre. This is a $207,233 reduction to the sprayfield's $364,500 booked value.

ISSUE 7: Should an adjustment be made to the cost of the rapid infiltration basin land and buffer sites purchased by the Company from its affiliate?

RECOMMENDATION: Yes, land should be reduced by $318,322. (STARLING, MONIZ)

POSITION OF PARTIES

PCUC: No. The cost recorded is the original cost, as determined by an independent certified appraiser, to the person first dedicating the land to utility service.

DUNES: No position

FLAGLER: Yes, reduction of $404,770.

OPC: Yes, land should be reduced by $404,770.

STAFF ANALYSIS: This is a fall-out issue from Issue 6. Based on the staff analysis contained in Issue 6, staff recommends an adjustment be made to reduce the cost of rapid infiltration basin land and buffer site by $318,322.

ISSUE 8: Should an adjustment be made to the cost of the spray field land site purchased by the Company from its affiliates?

RECOMMENDATION: Yes wastewater land should be reduced by $207,233. (STARLING, MONIZ)

POSITION OF PARTIES

PCUC: No. The cost recorded is the original cost, as determined by an independent certified appraiser, to the person first dedicating the land to utility service.

DUNES: No position.

FLAGLER: Yes, land should be reduced by $268,509.

OPC: Yes, land should be reduced by $268,509.

STAFF ANALYSIS: This is a fall-out issue from Issue 6. Based on the staff analysis contained in Issue 6, staff recommends an adjustment be made to reduce the cost of the spray field land by $207,233.

ISSUE 9: Should plant in service be reduced for the misclassification of major rehabilitation projects? (Audit Exception No. 3)

RECOMMENDATION: No. Plant in service should not be reduced for the misclassification of major rehabilitation projects. (MONIZ)

POSITION OF PARTIES

PCUC: No. The projects are properly classified.

DUNES: No position.

FLAGLER: Adopts OPC's position.

OPC: Yes. Water plant in service should be reduced by $548,416 and wastewater plant should be reduced by $504,537.

STAFF ANALYSIS: Staff witness Dodrill testified that PCUC misclassified certain repair or rehabilitation costs. He stated that the supporting documentation for the sewer rehabilitation program, the well program and the interior rehabilitation of the elevated tank, indicated these were recurring periodic expenses which never should have been charged to plant. Mr. Dodrill proposed removing $548,416 from water plant in service and $504,537 from sewer plant in service. (TR 660, EXH 30)

OPC witness Dismukes testified that she agreed with the Commission's staff auditor that the Company capitalized some rehabilitation costs which should have been expensed. She concurred with the auditor that plant in service should be reduced by the above amounts. (TR 561)

In his rebuttal testimony, PCUC witness Seidman disagreed with Mr. Dodrill's opinion. He argued that the projects referred to by Mr. Dodrill were not routine, ongoing, recurring events. He testified that each line rehabilitation and replacement project was a unique circumstance that required a response to a failure which affected service continuity, resulting in replacement and retirement of line segments. The costs incurred, as well as the costs of the retired property, were properly accounted for as a retirement in accordance with the National Association of Utility Regulatory Commissioners (NARUC) uniform system of accounts (USOA). He maintained that if the cost of the replacement plant is expensed and the plant balances are additionally reduced by the cost of the retired units, there will be no cost on the books for the line segments. (TR 954)

Mr. Seidman also testified that the projects to restructure the interior and exterior of the elevated water tanks and water plant softening basins were nonrecurring major rehabilitation projects which added to the life of the equipment. Hence, they were properly capitalized. (TR 954-955)

Regarding the well program, Mr. Seidman testified the first project was for the activation of a new well, the second project was for four new back-up diesel generators and the third project included costs for redrilling two wells. According to Mr. Seidman, all of these are capital projects and were properly capitalized. (TR 955)

In addition, Mr. Seidman testified that Mr. Dodrill recommended removal of the plant, but did not recommend how the costs should be treated once removed. He argued that if the costs are removed from plant in service, as suggested by Mr. Dodrill, an adjustment should be made to increase test year expenses by $54,000 to amortize the costs of the well over four years. Further, wastewater test year expenses would have to be increased by $100,000 to recognize the average level of annual sewer line replacement projects. (TR 956)

Staff is not convinced by the testimony of Mr. Dodrill and Ms. Dismukes that the utility misclassified its rehabilitation projects. Mr. Dodrill's position was based on support provided to him during the course of the audit, using the standard Commission auditing procedures. Due to time constraints during the audit, Mr. Dodrill may not have access the data provided by Mr. Seidman in rebuttal. The utility has presented rebuttal testimony describing each project and rebutting Mr. Dodrill's testimony that these projects were related to recurring costs and should have been expensed. Mr. Seidman's testimony revealed that the charges were not routine or recurring events and should have been capitalized not expensed. He testified that lines were retired and replaced, which extended the useful life and, thus, according to the uniform system of accounts, were properly capitalized. He also testified that the well projects and the projects to restructure the water tanks and water plant softening basins were capital projects, which were also properly capitalized.

Based on the above, staff believes the utility properly capitalized its rehabilitation projects. Hence, we do not believe an adjustment is necessary.

ISSUE 10: Dropped.

ISSUE 11: Should a margin reserve be included in the calculations of used and useful?

RECOMMENDATION: Yes. Consistent with Commission policy a margin reserve should be included in the used and useful calculation. (CROUCH)

POSITION OF PARTIES

PCUC: Yes, as per PSC policy.

DUNES: No position.

FLAGLER: No. A margin reserve, which is plant to be used by future customers, should not be a cost of current ratepayers. This is especially true for PCUC where it is not a simple utility-ratepayer balance of costs but a three party balance, utility-ratepayer-associated company.

OPC: No. Margin reserve is for the benefit of future customers and should not be paid for by current customers.

STAFF ANALYSIS: The Office of Public Counsel has consistently opposed the inclusion of a margin reserve in used and useful calculations. OPC witness Biddy testified that "I do not think the margin reserve requested by PCUC in this rate filing is appropriate" (TR 512) Mr. Biddy goes on to state that " while it may be appropriate for a utility to have reserve capacity to accommodate demands placed upon the system because of growth, it is not appropriate to make current customers pay for this reserve capacity in a margin reserve." (TR 512)

In his summary, Mr. Biddy states that "Firstly, on margin reserve it is the Office of Public Counsel's position that margin reserve is an unnecessary burden to existing customers, which the Utility and the developer should bear for future growth." (TR 528) OPC witness Dismukes testified that "The inclusion of a margin reserve to account for future customers above and beyond the future test year levels represents investment that will not be used and useful in serving current customers." (TR 562)

Palm Coast witness Guastella testifies, "In the last case, the FPSC accepted the Company's overall methodology of calculating used and useful adjustments. For both water and sewer systems, the FPSC adopted the allowance of margin reserve, recognizing that utilities cannot reasonably assume safe and adequate service if they do not have margin reserve capacity beyond the capacity needed for

immediate demands." (TR 240) Mr. Guastella also stated that in PCUC's last rate case the FPSC found that an allowance for margin reserve is essential. (TR 240)

Neither Flagler nor Dunes offered testimony on margin reserve although Flagler did offer a position in their Brief in opposition to inclusion of a margin reserve as a cost to current ratepayers.

Section 367.111(1) Florida Statutes, provides that "Each utility shall provide service to the area described in its certificate of authorization within a reasonable time." The Commission recognizes that for a utility to meet its statutory responsibilities, it must have sufficient capacity and investment to meet the existing and changing demands of present and potential customers. Hence, staff agrees with PCUC that a margin reserve must be included in the calculations for used and useful plant.

The Commission has consistently recognized margin reserve as an element in used and useful calculations. Order No. 22844, March 23, 1990; Order No. PSC-92-0594-FOF-SU, July 1, 1992; and Order No. PSC-93-0423-FOF-WS, March 22, 1993. The Commission included a margin reserve because it found that the utility has a statutory obligation to have adequate capacity to serve future customers who are expected to create a demand on the system.

As supported by the record and past commission orders, staff recommends that a margin reserve be authorized and included in the used and useful calculations for Palm Coast.

ISSUE 12: If margin reserve is included in the calculation of used and useful, what is the appropriate margin reserve period?

PRIMARY RECOMMENDATION: A twelve (12) month margin reserve is appropriate for water transmission and distribution lines and wastewater collection lines and pumping systems. An eighteen month margin reserve period is appropriate for the following plant: water treatment plant, water source of supply, and high service pumping. A three year margin reserve is appropriate for the wastewater treatment plant and effluent disposal facilities. (CROUCH)

ALTERNATIVE RECOMMENDATION: Instead of a three year margin reserve for wastewater treatment plant and effluent disposal facilities, the alternate recommendation is to only allow eighteen months margin reserve consistent with past commission decisions. The margin reserve periods for other facilities remain the same as the primary recommendation. (CROUCH)

POSITION OF PARTIES

PCUC: As per Used and Useful Analysis.

DUNES: No position.

FLAGLER: None. As no margin reserve period has been proven, no margin reserve should be allowed. Conservation resulting from a large price increase may offset growth over the periods proposed.

OPC: The Staff has historically recommended a 1 1/2 year margin reserve for water and wastewater treatment facilities and a 1 year margin reserve for water and wastewater lines. If the Commission grants PCUC a margin reserve, the reserve periods should not exceed the periods historically recommended by Staff.

PRIMARY STAFF ANALYSIS: Mr. Guastella proposes that a margin reserve period of 18 months is appropriate for the water source of supply and transmission and distribution system. (EXH 15) He proposes that a margin reserve period of 3 years is appropriate for the water treatment plant. He proposes that a margin reserve period of 5 years is appropriate for the wastewater treatment and effluent disposal systems and 18 months is appropriate for the wastewater collection system. (EXH 15)

Under cross examination, PCUC witness Guastella claimed that it took five years to design, permit and construct the wastewater treatment plant and that it took three years to design, permit and construct the membrane water treatment plant. (TR 380-381) He

also argues that the margin reserve should also recognize regulatory lag. (TR)

OPC did not present any testimony on an appropriate margin reserve period. OPC's brief argues that it opposes any consideration of margin reserve but if it is included then the following margin reserve periods are appropriate: 18 months for all treatment facilities and 12 months for all water and wastewater lines.

Staff witness Amaya pointed out in her testimony that the commission does not currently have rules governing the calculation of used and useful percentages or the allowable time for margin reserve. (TR 598) She further testifies, however, that there are draft rules being considered for adoption in the near future and the margin reserve periods she recommends are those proposed by staff in the draft rule used and useful formulas. (TR 598) Ms. Amaya recommends the inclusion of a three year margin reserve for wastewater treatment plant and effluent disposal, 18 months margin reserve for water treatment plant, source of supply, and high service pumping, 12 months margin reserve for [transmission and distribution and collection] lines. (TR 597) She explains that the recommended three year margin reserve period for wastewater treatment plant better accommodates the time required for design, permitting, and construction of plant. (TR 599) This three year period allows the utility to build larger increments of plant, thereby taking advantage of economies of scale without unduly burdening existing customers through higher rates. (TR 599) She points out that most lines or mains are already constructed. (TR 599)

Staff's primary recommendation is a departure from previous commission decisions in that staff recommends a three year margin reserve be allowed for the wastewater treatment plant and effluent disposal system. In past decisions, the commission has allowed 18 months for both water and wastewater treatment plants. Staff believes that the record supports an increase in the margin reserve period that should be allowed for the wastewater treatment plant to three years. The additional time required for planning, design, permitting and construction is primarily due to additional requirements levied by recent DEP rule changes. Staff notes that it took the utility five years to design, permit, and construct the treatment wastewater treatment plant and over three years to design, permit, and construct the new water treatment plant.

Staff agrees that although the transmission, distribution, and collections lines are essentially already constructed, they have not been considered 100% used and useful in past cases. Staff believes that it is appropriate to limit the margin reserve for

this plant to 12 months. This is consistent with past Commission practice.

ALTERNATE STAFF ANALYSIS If staff's primary recommendation is not approved then the alternate recommendation is to follow past commission decisions and allow 18 months for both water and wastewater plant and 12 months for lines. The primary justification for allowing only an 18 month margin reserve period for plant is that the utility does not actually start accruing significant capital outlays until the plant is constructed. The utility has not presented any information which indicates that the construction period for its water or wastewater plants was greater than 18 months.

ISSUE 13: If a margin reserve is approved, should CIAC be imputed on the ERCs included in the margin reserve?

RECOMMENDATION: Yes. Consistent with Commission practice, CIAC should be imputed as a matching provision to the margin reserve calculation. However, staff believes it is appropriate to make the adjustment for 50% of the imputed amount as an averaging method to recognize that the imputed amount will be collected over the life of the margin reserve period, not all at the beginning of the period. Accordingly, CIAC should be increased by $344,432 and $849,939 for water and wastewater, respectively. Accumulated amortization of CIAC should be increased by $5,489 for water and $13,047 for wastewater. Additionally, test year amortization expense should be reduced by $10,977 and $26,093 for water and wastewater, respectively. (WEBB)

POSITION OF THE PARTIES

PCUC: No.

DUNES: No position.

FLAGLER: Yes. If plant needed by future customers is to be included in rate base as a margin reserve the corresponding CIAC must also be included as an offset.

OPC: Yes.

STAFF ANALYSIS: PCUC witness Guastella testified on margin reserve and the imputation of CIAC. He began his testimony by asserting that whether the source of funding is prepaid or not should make no difference in imputation; there should be no imputation. Mr. Guastella contends that the arrangements between a developer and new/future utility customers to prepay service availability charges should not affect used and useful calculations. CIAC should not be reduced before there is a connected customer paying rates for utility service. He explained that prepaid CIAC relates to future customers and has nothing to do with margin reserve. Further, prepaid CIAC is a mechanism which allows a developer to partially offset carrying costs associated with the formation of a new utility. (TR 241-242)

Mr. Guastella testifies that the Commission has recognized in the past that carrying costs of utility plant for future customers (beyond the margin reserve plant) should be borne by those future customers. Thus, he explains, there is an AFPI charge which is designed to recover the carrying cost of non-used and useful plant. Witness Guastella contends that it is proper to offset prepaid CIAC in calculating AFPI charges; however, it is not proper to use

prepaid CIAC as an offset to margin reserve or any other used and useful calculation. (TR 242)

Mr. Guastella further explains that water and wastewater utilities should be encouraged to build prudently-sized systems to provide safe and adequate service to all customers, current and new. He states that by imputing CIAC on used and useful plant related to margin reserve, utilities will begin to not build prudently because it will actually cost more. Instead, smaller facilities will be built and be 100% used and useful without margin reserves, thereby avoiding imputation of CIAC and a reduction to rate base. He states that this will eventually be the cause of increased rates for all customers. (TR 242)

OPC witness Dismukes asserts that if the Commission decides that a margin reserve should be included in used and useful, there should be an imputation of CIAC. She states that to achieve a proper matching, an amount of CIAC equal to the number of ERCs in the margin reserve should be reduced from rate base. Ms. Dismukes further states it is important to recognize that, in this case, the utility is asking for the cost of additional capacity to serve future customers. Also, the utility is proposing to increase plant capacity charges so the Commission should use the new capacity charges in calculating the imputation. Ms. Dismukes contends that by imputing CIAC on margin reserve, the existing customers are precluded from paying for plant that will be used to serve future customers. (TR 563-564)

Utility witness Guastella rebuts Ms. Dismukes' reasons for wanting to impute CIAC. First, he contends that Ms. Dismukes is incorrect when she says that imputation is necessary for a proper matching with margin reserve. Mr. Guastella explains that the margin reserve is based on year-end 1995 and that CIAC related to the number of ERCs in the margin reserve will not be collected until subsequent to year-end 1995. Also, as more customers come on-line, the need for margin reserve increases. Accordingly, he states, the need for margin reserve to meet the demands of existing and future customers is always current, and the ERCs represented by customer growth is always in the future. This, he says, is "by definition the nature of margin reserve." (TR 1069-1070)

Mr. Guastella's recommendation to not impute CIAC on the margin reserve is contrary to the Commission's policy of doing so. He believes that the Commission should reevaluate its policy based on his testimony. He states that the Commission's policy on imputation of CIAC conflicts with its policy on AFPI. Essentially, the AFPI charge was established in recognition that future customers should pay for the carrying costs associated with non-used and useful plant. "The arrangement established between the

Palm Coast developer and real estate purchasers is conceptually the same." (TR 1070-1071)

While the utility believes that imputation of CIAC on the margin reserve negates the margin reserve and thus is contrary to prudently constructing plant, staff is not convinced by the utility's position that the Commission's practice of imputing CIAC on margin reserve should be eliminated. Staff agrees with Ms. Dismukes' testimony that CIAC should be imputed in order to achieve proper matching of the CIAC collections made from those customers which will connect during the margin reserve period. Prior Commission decisions in Order Nos. 25092 and PSC-93-1113-FOF-WS, issued on 9/23/91 and 7/30/93, respectively, evidence Commission practice with respect to imputation of CIAC.

However, at the Southern States Utilities, Inc. final agenda on July 31, 1996, Docket No. 950495-WS (at this time the Final Order has not been issued), the Commission decided to impute only 50% of the amount of CIAC attributed to the margin reserve. The Commission found that the total amount imputed would not be collected at the beginning of the margin reserve period, rather that it would be averaged over the life of such period. Staff believes that this finding should be applied in the instant case, as well.

Staff has recommended in Issue 11 that a margin reserve be included in determining used and useful. The next point is what CIAC charges should be used in the imputation. Both the current and proposed charges are included in MFR Schedules E-10 and E-11. (EXH 7) Since the margin reserve period is beyond the test year, staff agrees with Ms. Dismukes' testimony to use PCUC's proposed system capacity charges. Accordingly, staff has used system capacity charges of $1,500 and $1,600 for water and wastewater, respectively. These charges have been allocated between treatment plant and mains according to the ratios of plant.

Based on staff's analysis, we recommend that 50% of the imputed CIAC on the margin reserve should result in the following adjustments:

	Water	Wastewater
CIAC	$344,432	$849,939
Accum. Amort. of CIAC	5,489	13,047
Test Year Amort. Expense	(10,977)	(26,093)

ISSUE 14: What is an acceptable level of unaccounted for water?

RECOMMENDATION: A reasonable level of unaccounted for water is 12.5% (CROUCH)

POSITION OF PARTIES

PCUC: Without further explanation, 12.5% is an acceptable level of unaccounted for water.

DUNES: No position.

FLAGLER: Adopting Public Counsel's position and discussion.

OPC: To achieve appropriate levels of unaccounted for water, the Commission should allow no more than 10% of unaccounted for water.

STAFF ANALYSIS: OPC witness Biddy testified, "To encourage efficiency, PSC should allow no more than 10% unaccounted for water..." (TR 514) He goes on to state that "I do not believe PCUC has excessive unaccounted for water." (TR 515)
Mr. Biddy claims that, "However, the flushing water used for water quality compliance is extraordinarily high..." "A well designed system should have no more than 5% water use for flushing. In my opinion, use of more than 5% of total finished water for flushing is excessive." (TR 515) Mr. Biddy offered no engineering references to support his opinion, however.

Utility witness Seidman responded to Mr. Biddy in rebuttal testimony, "I don't know how he can select an amount that fits all situations without regard to the characteristics of the system. The amount of flushing is to a large extent a function of system configuration, customer density and quantity and frequency of customer use." (TR 979) Mr. Seidman notes that PCUC's unaccounted for water does not exceed even the 10% standard proposed by Mr. Biddy. (TR 176)

Staff agrees with Mr. Seidman. There are no firm guidelines as to what is acceptable and what is excessive unaccounted for water. The level of unaccounted for water at PCUC is less than 10%. Therefore, the issue of determining a reasonable level for unaccounted for water is moot. Staff recommends, however, that an allowance of 12.5% unaccounted for water is appropriate. Staff encourages the utility to maintain accurate records of line breaks, line flushing, fire flows, etc. While such uses are not revenue producing, they are accounted for uses of finished water.

ISSUE 15: Does PCUC have excessive unaccounted for water and, if so, what adjustments are appropriate?

RECOMMENDATION: No. No adjustments are appropriate. (STARLING)

POSITION OF PARTIES

PCUC: No. No adjustments are appropriate.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: Once the large amount of which is used for flushing is "accounted for", PCUC"s level of unaccounted for water falls within the 10% allowance historically allowed by the Commission.

STAFF ANALYSIS: In Issue 14, staff recommends that a reasonable level of unaccounted for water is 12.5%. PCUC's unaccounted for water during the test year, six months of which is projected, is 4.68%. (EXH 7, Schedule F-1) Using 12 months of actual data, unaccounted for water totaled 5.23% of water pumped. (EXH 42)

Based upon these facts, staff recommends that PCUC does not have excessive unaccounted for water. As discussed in Issue 16, however, the water used for flushing, a usage which is accounted for, represents 19.2% of the total water pumped at PCUC.

ISSUE 16: Is there excess flushing at PCUC's water system, and if so, what adjustments are appropriate?

RECOMMENDATION: No. No adjustments are appropriate since the water used for flushing at PCUC is needed to maintain a satisfactory water quality for its current customers. Staff recommends that PCUC attempt to negotiate an agreement with the City of Marineland for the purchase of water from PCUC. (STARLING)

POSITION OF PARTIES

PCUC: No. No adjustments are appropriate.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: Yes, PCUC is forced to use an excessive amount of water for line flushing to maintain water quality. Use of more than 5% of total finished water produced for flushing is excessive. The Commission should accordingly remove from test year expenses the chemical and purchased power expenses associated with flushing in excess of 5%.

STAFF ANALYSIS: The average quantity of water used for flushing in 1995 was equal to 19.2% of the total water pumped. (TR 515) The annual power and chemical expenses associated with the pumping and treatment of water are $237,869 and $167,883, respectively. (EXH 7, Schedule B-5) Utility witness Seidman testified that the flushing is necessary to maintain a high quality of water for the utility's current customers. (TR 977) Mr. Seidman also testified that the percentage of water used for flushing has dropped steadily since 1989. (EXH 42) Mr. Seidman adds that 5% of the water is used for flushing on the beach side of PCUC's service area. (TR 978)

The utility's water system has a large network of piping sized to ultimately distribute water to a population of approximately 225,000. (EXH 19, p. 12) Currently, PCUC has only 25,000 customers. (EXH 19, p. 12) This results in long detention times in the distribution system, which can lead to water quality degradation. (EXH 19, p. 12) Also, chloramine is used by PCUC to disinfect the water. (TR 978) Since it is difficult to maintain an adequate chlorine residual when chloramines are used as the disinfectant, additional flushing is required. (TR 978).

OPC witness Biddy testified that a well designed system should use no more than 5% of its water for flushing. (TR 515) He does not, however, recommend any adjustments to expenses because of any

excess flushing. (TR 515) Staff has calculated that an adjustment, using a 5% flushing allowance, would reduce power and chemical expenses by $30,849 and $21,733, respectively.

Mr. Seidman testified that no adjustments for excess flushing are appropriate since the flushing is required to maintain water quality for the PCUC's current customers. (TR 977) Utility witness Guastella adds that a significant portion of the T&D system was installed in the 1970's, at lower costs than what would have been required had the system been installed gradually over time. Therefore, the current customers are paying a lower cost for the lines before any used and useful adjustments are applied. (TR 252-256; TR 273-279)

Staff recommends that no adjustments be made for flushing in PCUC's water system. The evidence indicates that the flushing is needed to maintain a satisfactory water quality for the utility's current customers. (TR 978) The amount of water used for flushing has leveled and the percentage of water used for pumping should decrease as customer demands increase. (EXH 42) Staff does not believe that it would be appropriate to remove expenses for an activity which is needed to maintain water quality for the utility's current customers.

The evidence indicates that the flushing is related to the fact that PCUC has an extensive transmission and distribution (T&D) system which is oversized. (EXH 19, p. 12; TR 979-980; EXH 15, p. 22) Staff believes, however, that the T&D system used and useful adjustment recommended in Issue 27 provides adequate ratemaking recognition of the utility's oversized transmission and distribution system.

Staff also recommends that PCUC attempt to reach an agreement with the City of Marineland to purchase water from PCUC. Marineland is the most remote potential customer on the beachside and some of the water which is currently being flushed could instead be sold to a revenue producing customer. (TR 1048)

ISSUE 17: What is an acceptable level of infiltration and inflow?

RECOMMENDATION: For existing systems, an acceptable level for infiltration and inflow is up to 40 gallons per day per capita (gpdc). (CROUCH)

POSITION OF PARTIES

PCUC: For an existing system, an acceptable level of infiltration is 500 gpd/inch dia./mile of gravity mains and service laterals. If the total unbilled flows do not exceed this amount, then inflow need not be separately addressed. A reasonable allowance for inflow is 10% of treated flows.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: The criteria of 200 gallons/day/in. pipe diameter/mile of pipe suggested in the Recommended Standards for Wastewater Facilities should be used as the acceptable level of infiltration and inflow.

STAFF ANALYSIS: Mr. Martin, DEP Engineer, when cross examined by OPC's Mr. Reilly stated that the amount of infiltration experienced by Palm Coast "...is within the normal range of what we would expect on a utility system." (TR 578)
Later, Mr. Reilly asked if Mr. Martin was familiar with the ten-state standard of 200 gallons per day, per inch diameter, per mile of pipe. Mr. Martin answered, "We basically follow that for construction aspects of collection and transmission lines when we do an initial testing on the collection line or transmission line, that they need to meet that standard. It's over a course of time that may possibly be greater in the future." (TR 579-580) Mr. Martin re-emphasized that 200 gallons per day, per inch diameter, per mile of pipe is what DEP looks for in a new installation. (TR 587)

Mr. Seidman's rebuttal testimony for PCUC claimed a 500 gpd,per inch diameter, per mile as a standard traditionally used by the commission. (TR 983) However, when cross-examined by Mr. Reilly, he could not give an example of a case where the commission had used that 500 gpd figure. (TR 1019)

Staff witness Ms. Amaya, testified that the EPA handbook [Sewer System Infrastructure Analysis and Rehabilitation] (EXH 28) allows 40 gallons per capita per day (gpcd) for total infiltration and inflow which is equal to 50% of the base domestic flow of 80 gpcd prior to any flows being considered excessive. This is

especially important since the Ten States Standard considers infiltration only and does not consider inflow. (TR 610)

Staff recommends that 40 gpcd be the acceptable level for infiltration and inflow consistent with evidence presented in the record.

ISSUE 18: Does PCUC have excessive infiltration and/or inflow and, if so, what adjustments are necessary?

RECOMMENDATION: Staff recommends that PCUC does not have excessive infiltration and/or inflow. The wastewater system, however, does have infiltration and inflow associated with a collection system which has a low customer density. Staff does not recommend that any adjustments should be made to the customer demand applied in the utility's used and useful calculation or the wastewater expenses. (STARLING)

POSITION OF PARTIES

PCUC: No. No adjustments are appropriate.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: Any excessive inflow and infiltration should be excluded from the treated wastewater. Based upon the above Ten States Standards PCUC has 111,118 gpd of excess inflow and infiltration above the 510,514 gpd allowance. This excess flow attributable to infiltration represents 5.3% of PCUC's wastewater flows.

STAFF ANALYSIS: In Issue 17, staff recommends than an acceptable level of infiltration and inflow (I&I) should be calculated using the EPA method. PCUC does not have excessive I&I if this method is used to calculate a reasonable allowance for infiltration and/or inflow. (TR 610-612)

OPC witness Biddy proposes that the 3 month average daily flow derived by Utility witness Guastella (EXH 15, JFG-1, p. 36) should be reduced by the amount of excessive infiltration and inflow which he calculated, 377,080 gpd. (EXH 25, TLB-1) Mr. Biddy did not recommend any adjustments to power and chemical expenses to recognize that I&I is coming from non-used and useful lines.

Mr. Guastella's calculated wastewater flow, however, already includes an adjustment for infiltration and inflow which is associated with non-used and useful lines. (TR 1123-1124; EXH 15, p. 36) Mr. Guastella did not use the actual flows which the wastewater treatment plant treated in 1995. (EXH 15, JFG-1, p. 35-36) Instead, he calculated that 119 gpd of wastewater is expected from an ERC (EXH 7, p. 137-N) and added a 15% allowance for infiltration and inflow to this amount. (EXH 15, p. 36) Since the EPA provides an I&I allowance of up to 50% for each ERC, staff witness Amaya concurs with Mr. Guastella's 15% I&I allowance. (TR 598-599)

Staff recommends that no adjustments are necessary for I&I in the used and useful calculations. In MFR Schedule F-2, the wastewater treatment plant (wwtp) was projected to receive an average daily flow of 2.084 mgd during 1995. Mr. Guastella's average daily flow for the wwtp used and useful calculation is only 1.74 mgd. (EXH 15, p. 36) Therefore, Mr. Guastella has effectively included an I&I adjustment to the average daily wastewater flow of 343,571 gpd in his used and useful calculation. (TR 1123-1124) If Mr. Guastella had used PCUC's 1995 projected wastewater flows in the used and useful calculation, then staff believes that an adjustment for I&I (associated with non-used and useful lines) would have been appropriate. Staff also notes that Mr. Guastella has only included an allowance of 261,135 gpd for I&I in his used and useful calculation. (EXH 15, p. 36) This number is less than the 510,514 gpd I&I allowance for the entire wastewater collection system which Mr. Biddy has proposed.

Staff recommends that no expense adjustments are appropriate for I&I associated with non-used and useful lines. Staff believes that no expense adjustments are necessary since an I&I adjustment has already been made in the wwtp and effluent disposal used and useful calculations. Staff is also recommending, see Issue 28, that a significant used and useful adjustment should be applied to the wastewater collection system.

ISSUE 19: Should 20% of facility costs be automatically considered 100% used and useful because of economies of scale considerations?

RECOMMENDATION: Staff recommends that the Commission include an economies of scale factor for PCUC's water and wastewater treatment plants and effluent disposal system. For the water system, staff recommends that economies of scale should be recognized by allowing the utility to recover 100% of its investment for the membrane softening plant (wtp #2) structures and improvements (account 354.3) as well as the following equipment included in account 320.3: concentrate disposal equipment, generators and related engines, wellfield control system, instrumentation, telemetering and controls, and structural piping. For the wastewater treatment plant and effluent disposal facilities, staff recommends that the utility's requested economy of scale factor should be accepted. Staff does not recommend that an economy of scale factor should be applied to any plant associated with either the water transmission and distribution or wastewater collection systems. (STARLING)

POSITION OF PARTIES

PCUC: Yes. The economic benefits of economies of scale should be recognized and an acceptable method is to limit 80% of plant costs to be subject to a used and useful adjustment.

DUNES: No position.

FLAGLER: No. Plant to be used by future customers should be an expense of future customers. The ratemaking process requires a consistency of time period. All income and expenses should relate to the same time. If plant not currently needed is allowed, the revenues to be attributed to that plant must also be included.

OPC: No. All facility cost should be evenly shared by existing and future customers.

STAFF ANALYSIS: Utility witness Guastella testified that water and sewer utilities should be encouraged to construct prudently-sized systems capable of providing safe and adequate service on a continuous basis to all customers and whenever those customers connect. (TR 242) Staff witness Amaya testified that the construction of economically sized plants will have long-term as well as short-term benefits in terms of providing ultimately a lower cost facility to serve customers in the future. (TR 612) Mr. Guastella testifies that other utility industries (electric and gas) regulated by the FPSC construct facilities with sufficient capacity to meet both short and long term growth, the costs of which are recognized for rate setting purposes. (TR 1061-1062) He believes that used and useful determinations for water and sewer

utilities should not be so stringent as to deny similar reasonable rate allowances, nor should they foster within the water and sewer industry a disincentive to construct reasonably-sized facilities. (TR 1062)

Mr. Guastella believes that there is a need for some methodology which includes economies of scale as a general allowance in the used and useful calculation. (TR 1068) Ms. Amaya also recommends that it is appropriate to consider economies of scale in the used and useful determination for PCUC's water treatment plant and wastewater treatment and disposal plant. (TR 599; TR 603)

OPC witness Biddy testifies that he does not believe the economy of scale factor is appropriate since every customer should only pay his or her fair share for the overall facility cost, and these costs should be allocated evenly between current and future customers. (TR 523) Section 367.111(1), Florida Statutes, requires that the utility shall provide service to the area described in its certificate of authorization within a reasonable time. In order to comply with this statutory requirement to provide service within its certificated area, a utility must construct plant capacity which exceeds the demands of only its current customers.

None of the experts who testified in this proceeding disputed that economies of scale exist in the construction of water and wastewater facilities. Even though the utility failed to provide any engineering studies or documentation which quantifies the savings which economies of scale provided at PCUC, staff does not believe that this is sufficient cause to reject an allowance for economies of scale. Mr. Guastella testified that:

> As I indicated before, I think some things don't require the presentation of engineering studies; and I think this is obvious enough to many of them where you didn't have to give them an engineering study for them to understand what you were saying, and for them, based on simply their own experience, to know that that's correct. (TR 266)

Mr. Guastella also testified that he has seen studies for various components of utility plant which showed that the difference in cost between constructing one facility at one level of cost compared to 80% of its capacity was relatively minor, particularly when compared to the increase in capacity that you could get for a relatively minor difference in cost. (TR 265)

Under current Commission used and useful practice, staff believes that water and wastewater utilities are subject to used and useful adjustments which encourage utilities to construct smaller increments of plant at a cost which is ultimately higher for both the current and future customers. Staff believes that it is appropriate to give utilities an incentive to construct prudently sized increments of treatment facilities and, therefore, recommends that a factor should be included in the water treatment and wastewater treatment and disposal used and useful calculations which recognize economies of scale.

Mr. Guastella proposes that if a water or wastewater system component is subject to a used and useful adjustment, then the adjustment should only be applied to 80% of the investment. The remaining 20% should automatically be considered 100% used and useful. (EXH 15) Staff has calculated that Mr. Guastella's economies of scale factor increases the investment which he found used and useful by $2,684,552 for water and $4,856,583 for wastewater. In Issue 32, staff has prepared an attachment which details this calculation for each plant account.

For the PCUC water system, Ms. Amaya proposes that an economies of scale factor should be recognized by allowing the utility to recover 100% of its investment for the membrane softening plant (wtp #2) structures and building. (TR 603) WTP #2 currently has a capacity of 2.0 mgd and the building is ultimately sized to treat 6.0 mgd. (TR 599) Ms. Amaya testified that it was prudent and in the interest of economies of scale for the utility to have sized the membrane softening plant structure for the ultimate 6.0 mgd capacity. (TR 603) Since Ms. Amaya has recommended that the membrane train treatment unit is only 33% used and useful, staff calculated that she has included an additional $3,218,251 of plant in rate base for wtp #2 which would have otherwise been excluded if not for the economies of scale recognition. Ms. Amaya did not propose any economy of scale adjustments for the water transmission and distribution system. (TR 604)

For the water system, staff recommends that the Commission recognize an economy of scale allowance by including the wtp #2 structures and improvements and the facilities not associated with the 2.0 mgd membrane train as 100% used and useful. Staff believes that this proposal provides adequate ratemaking recognition of the economies of scale associated with the construction of wtp #2. Staff does not recommend, however, that any economy of scale factor should be recognized for PCUC's water transmission and distribution system. The distribution lines can serve over 46,000 lots which may not all be occupied within 50 years, whereas wtp #2 was prudently sized. Staff's recommended economy of scale allowance

results in the inclusion of $3,246,400 of plant which would have otherwise been excluded.

For the wastewater system, Ms. Amaya proposes that economies of scale should be recognized through the allowance of a three year margin reserve. (TR 599) Staff does not recommend that the Commission include an economy of scale factor within the margin reserve calculation. Margin reserve is another controversial issue which should be treated separately.

Staff recommends that the Commission accept the utility's proposed economies of scale methodology for the wastewater treatment and effluent disposal facilities (accounts 354.4 and 380.4). There is no evidence which indicates that the wwtp and effluent disposal systems were not prudently sized for PCUC's current as well as near term future customers. As is the case for the water transmission and distribution system, however, staff does not believe that any economy of scale consideration should be allowed for the wastewater collection facilities. The economy of scale factor in staff's wwtp and effluent disposal used and useful calculation results in the inclusion of $781,984 of wwtp and $226,315 of effluent disposal plant which would have otherwise been excluded.

Staff is aware of one case where the Commission considered economies of scale in its used and useful determination. In Order No. 24735 (pp. 9-10), issued July 1, 1991, the Commission found that even though Gulf's Corkscrew water treatment plant was sized for a build-out capacity of 3.0 mgd (only 0.5 mgd of which had been constructed at that time) that it was appropriate to consider the facility as 100% used and useful, except for a minor $82,324 adjustment for reserved building space and oversized piping.

ISSUE 20: Is it appropriate to include a fire flow allowance in the calculation of the used and useful percentage for the water transmission and distribution system, supply wells, and water treatment plants?

RECOMMENDATION: Staff recommends that inclusion of a fire flow is appropriate for the water treatment plant. Staff does not recommend that a fire flow allowance be included for the water transmission and distribution system and the source of supply. (STARLING)

POSITION OF PARTIES

PCUC: Yes, as per Used and Useful Analysis.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: No. Fire flow provision should be included in the used and useful calculation of finished water storage but not for the supply wells, treatment plant and distribution mains.

STAFF ANALYSIS: In PCUC's last rate case, the PSC allowed an estimated fire demand of 2,000 gpm for five hours (600,000 gpd) in its used and useful determination for source of supply, water treatment plant, and storage. (EXH 7, pp. 137A-137N; TR 379-380). PCUC has requested the same 600,000 gpd allowance for fire flow in this case for the water treatment plant and the source of supply. (EXH 15, JFG-1, pp. 19-20) PCUC has requested a fire flow allowance of 1,200,000 gallons for storage instead of the 600,000 gallons approved in the last rate case. (EXH 15, p. 21) PCUC has also requested an allowance for fire flow in the transmission and distribution system used and useful calculation. (EXH 15, p. 22) The Commission has previously not included a fire flow allowance for PCUC's water transmission and distribution (T&D) system. (EXH 7, p. 137-D) Mr. Guastella has included $7,093,746 of plant investment for fire flow needs.

OPC witness Biddy testified that it is not cost effective to use source of supply and treatment plant to meet instantaneous demands, such as peak hourly flows and fire flows. (TR 513-514) For this reason, Mr. Biddy does not recommend allowance of a fire flow for source of supply or water treatment plant. (TR 514) Mr. Biddy also testified that water treatment plants and wells are not designed to provide fire flows. (TR 529) Mr. Biddy rejects PCUC's proposal for including a fire flow allowance in the transmission and distribution system. (EXH 25, TLB-1) Mr. Biddy does recommend inclusion of a 600,000 gpd allowance for fire flow in the storage

used and useful calculation. (EXH 25, TLB-1) As shown in the attachment provided in Issue 32, Mr. Biddy has included $318,522 of plant investment for fire flow.

Staff witness Amaya proposes a 600,000 gpd fire flow allowance for the water treatment, high service pumping, and storage components of the water system. Ms. Amaya does not include a fire flow allowance in the source of supply or transmission and distribution used and useful calculations. (EXH 28) Staff calculates that Ms. Amaya has included $369,989 of plant investment for fire flow.

Utility witness Guastella testified that the PSC has specifically rejected arguments against including a fire flow allowance within the source of supply and water treatment plant used and useful calculations in prior PCUC rate cases. (TR 1059) Mr. Guastella adds that fire demands may occur which would require the utilitization of all components of the water system. (TR 1073) As support for this statement, Mr. Guastella testified that, during the 1985 forest fires, the utility experienced demands of 6,000 gpm for two days. (TR 1073) Staff calculates that a demand of 6,000 gpm would empty the utility's current 4.15 mg of storage in 11.5 hours if the wtp's did not replenish the storage tanks from the water treatment facilities.

Mr. Guastella also testified that, from a regulatory rate setting standpoint, it is generally recognized that the utility needs to meet maximum day demands plus fire flows when designing and constructing its system. (TR 1072, 1110) He adds that the AWWA Rate Manuals contain allocations of water treatment and source of supply costs to fire protection rates. (TR 1111)

Staff believes that, from an engineering design perspective, it is not cost effective to size the source of supply and treatment facilities to meet fire flow requirements. At PCUC, however, the water system has experienced a demand on its treatment and supply facilities which resulted from forest fires. (TR 1073) Staff recommends that the Commission approve Ms. Amaya's proposal for including fire flow in the water treatment plant used and useful calculation but not the source of supply calculation. Staff has calculated that $365,917 of additional plant investment is included through its recommended fire flow allowance. Staff believes that this modest allowance for fire flow in the water treatment plant used and useful calculation is reasonable.

Mr. Guastella has also included an allowance for fire flow in the transmission and distribution (T&D) system used and useful calculation. (EXH 15) Mr. Guastella agreed that one of the differences between a system which provides fire flow and one which

does not is the size of the mains (fire hydrants being another). (TR 1125) Staff believes that the size of the mains is the primary difference, and Mr. Guastella's allowance is not based on the incremental costs of providing this service. (TR 1125) Inclusion of the utility's requested fire flow allowance increases the T&D used and useful plant investment by $5,465,039 or 21.1% of booked cost of T&D plant.

Staff recommends that a fire flow allowance is not appropriate for PCUC's T&D system. The utility's proposed allowance is not based upon the incremental difference of the larger sized lines constructed to provide fire protection. Staff also agrees with Mr. Biddy's and Ms. Amaya's recommendations that the fairest way to allocate the cost of PCUC's T&D system between current and future customers is to take the ratio of lots occupied to lots available.

ISSUE 21: Is the utility's method of calculating the maximum day flow appropriate for calculating used and useful percentages for water facilities?

PRIMARY RECOMMENDATION: Yes. (STARLING)

ALTERNATE RECOMMENDATION: No. (CROUCH)

POSITION OF PARTIES

PCUC: Yes. The maximum day utilized by PCUC contains no unusual usage.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: No, a single maximum day flow should not be used in the used and useful calculations in this filing. The Commission should establish maximum day flows by utilizing the average of the 5 highest days of the maximum month.

PRIMARY STAFF ANALYSIS Both Utility witness Guastella and Staff witness Amaya propose that a singular maximum day should be used for the water system used and useful calculations. (EXH 15; EXH 28) Mr. Biddy recommends that the average of the five maximum days should be used. (EXH 25) Mr. Biddy opposes using a single maximum day since this day may include undetected leaks, flushing and unusual usage, in addition to the PSC allowed unaccounted for water. (TR 515) Mr. Biddy adds that the average of the five maximum days has been the policy historically used by the Commission. (TR 515) Staff has calculated that the difference between the two demands is 544,000 gallons or 11%.

Mr. Guastella testified that the maximum day demand of 4.89 mgd on the system occurred on September 30, 1994 and did not have any unusual events. (EXH 15, p. 4) Mr. Guastella testified that the FPSC has consistently used the maximum day demand for PCUC instead of the average of the five maximum days. (TR 1059, TR 1074) Mr. Guastella did not use the maximum day PCUC actually experienced, he used was the third highest daily demand. (TR 1074) These other two maximum demands were rejected because they had unusual usage. (TR 1074)

Primary staff recommends that the single maximum day should be used in the used and useful calculations. Staff believes that PCUC has properly excluded unusual maximum demands. The 10 States Standards, an engineering design reference for water systems, requires that plants be sized to meet maximum day demands, not the

average of the five maximum day demands. (EXH 25) Staff also notes that use of a single maximum demand has been previously accepted in previous PCUC rate proceedings.

ALTERNATE STAFF ANALYSIS: This issue is essentially about commission policy. Past Commission decisions have consistently used the average of five maximum days when calculating used and useful percentages for water facilities. While the commission does not have a specific rule governing calculation of the maximum day, the instructions in the MFRs, Schedule F-3, asks for the single day with the highest pumpage rate for the test year, and also asks for the average of the five days with the highest pumpage rate from any one month in the test year. Past commission policy, however, has required the use of the average of the five maximum days when calculating used and useful percentages for water facilities. (TR 515) Mr. Biddy testified that it is our [OPC] contention that the average of five max days evens out undetected unusual leaks or main breaks, and this method has been used by the PSC before. (TR 529) Mr. Guastella preferred to use a single maximum day and in fact he used the third highest maximum day and rejected the first and second highest maximum day flows because they did include unusual usage. (TR 1074)

While the use of a single maximum day might be simpler, staff alternate recommendation agrees with OPC. The average of the five maximum days is consistent with Commission policy.

ISSUE 22: Should the Commission use operating permit capacities instead of construction permit capacities for the used and useful calculations?

RECOMMENDATION: The Commission should use the most recent operating capacity permitted by DEP for wastewater treatment plant used and useful calculations. DEP issues only a construction permit for water treatment facilities. (CROUCH)

POSITION OF PARTIES

PCUC: In this case, it is generally appropriate to use operating permit capacities. However, in this case, using the design capacity of the wastewater treatment plant produces a used and useful percentage which more appropriately reflects costs for rate setting purposes.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: No, the construction permit capacities should be used because they represent the actual capacities constructed.

STAFF ANALYSIS: This issue pertains to wastewater treatment plants, only, since DEP issued only a construction permit for water treatment plants. While OPC believes that construction permit capacities represent the actual capacities constructed, staff has found that this is not always the case. Many times a construction permit will reflect only the capacity being added, and not the actual overall capacity of the plant.

Mr. Jeff Martin, a Professional Engineer III with DEP, testified for staff. During his cross examination by OPC's Mr. Reilly, he explained that DEP now has only one wastewater permit, an operating permit, and any time there is construction activity or a modification of the permit, DEP will modify the one permit document. (TR 581) OPC notes that this may make this issue moot in future rate cases. (BR) PCUC recommends that, in this case, the design capacity of the wastewater treatment (4.0 mgd) is appropriate. (BR)

Based upon the facts presented by DEP, staff recommends that the construction permit capacity be used for water treatment plants while the new operating permit capacity be used for wastewater treatment plants when calculating used and useful percentages.

ISSUE 23: What is the appropriate allowance for equalization and emergency storage in the used and useful calculation?

RECOMMENDATION: Staff recommends that the appropriate allowance for equalization and emergency storage is 75% of the projected maximum daily demand. (STARLING)

POSITION OF PARTIES

PCUC: 50% of maximum day flows.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: Half of the average daily flow (ADF) is adequate for equalization and emergency storage.

STAFF ANALYSIS: Utility witness Guastella recommends an equalization and emergency storage allowance of 50% projected maximum daily flow in the storage used and useful calculation. (EXH 15, JFG-1, p. 21) Staff witness Amaya included an allowance of 75% of the maximum daily flow for equalization and emergency uses. (TR 603) OPC witness Biddy recommends that only 50% of the average daily flow, not the maximum daily flow, is adequate for equalization and emergency storage. (TR 517) Mr. Biddy testifies that this is more than adequate for equalization (which has a design criteria of 20-25% of the average daily flow) and the remaining 25% can be used for emergency storage. (TR 517) Even though 10-States Standards includes a criteria of one day average flow for emergency storage, Mr. Biddy only allows 25% of the average daily flow for emergency storage since the amount of emergency storage is the owner's (PCUC's) option. (TR 517; EXH 25, TLB-1, p. 2)

Staff recommends that the equalization and emergency storage allowance proposed by Ms. Amaya should be accepted. Mr. Biddy has recognized that storage facilities are cheaper to construct than treatment facilities when supporting the exclusion of a fire flow requirement in tne treatment plant and source of supply used and useful calculations. (TR 513-514) He then, however, proposes adjustments to equalization and emergency storage which result in only a 59.82% storage used and useful percentage. (EXH 25, TLB-2) Staff believes that, given the utility's past experience with the 1985 forest fires and its location near the Atlantic coastline with the annual threat posed by hurricanes, a liberal allowance for emergency storage is appropriate for PCUC and should be recognized through the adoption of Ms. Amaya's equalization and emergency storage allowance.

ISSUE 24: Should 10% of the finished water storage be treated as retention storage?

RECOMMENDATION: Yes, for ground storage tanks only. An allowance for retention in elevated storage tanks is not appropriate. (CROUCH)

POSITION OF PARTIES

PCUC: Yes. Storage tanks, ground and elevated, should not have to be drained dry in order to have their full cost recognized in rate base.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: No, it is not justified to assume 10% of the storage capacity is dead storage for every single storage tank. Retention storage should be allowed only if it is confirmed in as-built drawings.

STAFF ANALYSIS: Retention, or dead, storage is that portion of the finished water storage which is unusable. As described by Mr. Biddy, OPC's witness, "When designing storage tanks and high service pumps, engineers have to check the available net positive suction head (NPSH) and ensure that it is greater than the net required positive suction head to avoid cavitation problems. Therefore, the vortex situation is rare because high service pumps are always placed at a low grade to obtain the maximum NPSH. I believe some retention storage adjustment is necessary." (TR 518) Mr Biddy does state, however, that "Retention storage is not applicable to elevated storage tanks." (TR 518)

PCUC witness Guastella under cross examination verified that it is his belief that elevated tanks should never be drained down to less than 10% of their capacity. (TR 247) In rebuttal testimony, Mr. Guastella states, "As a practical matter, the utility is simply not going to pump its ground storage facilities to the point of suction, nor is it going to permit its elevated storage facilities to empty down to the mains." (TR 1078)

Staff witness Amaya testified that "To calculate the used and useful percentage for finished water storage, I first determined the firm reliable capacity. Since elevated storage does not have "dead" storage, I deducted 10% dead storage from the ground storage tanks only." (TR 603)

Staff agrees with Mr. Guastella that it may not be a good idea to drain an elevated storage tank. Mr. Biddy and Ms. Amaya point

out that it is possible to use all the storage capacity of an elevated tank but that it is impossible to drain a portion of the bottom of a ground storage tank due to NPSH design. Therefore it is staff's recommendation that a 10% retention, or dead, storage is applicable for ground storage tanks only as shown in as-built drawings.

ISSUE 25: What are the appropriate methods for calculating the water source of supply, treatment plant, high service pumping, and storage used and useful percentages?

RECOMMENDATION: Staff recommends that used and useful for the water source of supply should be calculated by dividing the projected maximum day flow by the source of supply's firm reliable capacity. Staff recommends that no used and useful calculation is necessary for water treatment plant #1 since that plant is 100% used and useful. Staff recommends that used and useful for water treatment plant #2 (wtp #2) should be calculated by first adding the projected maximum day demand and fire flow and then subtracting the capacity of water treatment plant one from this sum. The resulting number should then be divided by wtp #2's capacity. Staff recommends that used and useful for high service pumping should be calculated by dividing the projected peak hour demand by the high service pumping's firm reliable capacity. Staff recommends that used and useful for storage should be calculated by dividing sum of the equalization, emergency, and fire flow requirements by the available storage capacity. (STARLING)

POSITION OF PARTIES

PCUC: As per Used and Useful Analysis.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: The appropriate methods for calculating the water source of supply, treatment plant, high service pumping and storage used and useful percentages can be found on the first two pages of TLB-1 located in Exhibit 25.

STAFF ANALYSIS: Attachment 2, see Issue 32, provides a breakdown of the impact which the margin reserve, fire flow, and economies of scale factors have on the utility's used and useful plant for PCUC witness Guastella, staff witness Amaya, OPC witness Biddy, and staff.

SOURCE OF SUPPLY

PCUC's source of supply consists of 30 wells. (EXH 15, JFG-1, p. 19) Twenty-seven of these wells provide raw water for water treatment plant #1 (wtp #1) and three provide water for wtp #2. (EXH 15, p. 19) PCUC witness Guastella calculated a 77.4% used and useful percentage by dividing the 5,416,653 gpd projected maximum day demand (using an 18 month margin reserve) plus 600,000 gpd of fire flow by the source of supply's 7,768,600 gpd firm reliable

capacity. The firm reliable capacity was calculated by excluding the three maximum wells serving wtp #1 and the largest well serving wtp #2. (EXH 15, p. 19) Mr. Guastella also reduced the well capacity by the amount of raw water which is rejected at wtp #2 as concentrate (353,000 gpd). This adjustment is necessary since additional water must feed wtp #2 for the level of concentrate produced by the treatment process. (EXH 15, p. 4) As discussed in Issue 19, Mr. Guastella has also included an adjustment for economies of scale. The economies of scale adjustment increases his used and useful percentage to 81.9%. (EXH 15, p. 18)

Staff witness Amaya calculated a 64.71% used and useful percentage by dividing the 5,291,124 gpd projected maximum day demand (using an 18 month margin reserve) by a 8,176,120 gpd firm reliable capacity. (EXH 28, KAA-2) The firm reliable capacity excludes two wells which are serving wtp #1 and one well which is serving wtp #2. Ms. Amaya also reduced the well capacity by the amount of concentrate which is rejected at wtp #2. (EXH 28, KAA-2) Ms. Amaya did not include any allowance for economies of scale in her calculation. (EXH 28)

OPC witness Biddy calculated a 44.62% used and useful percentage by dividing the 3,466,123 gpd average daily demand during 1994 by a 7,768,600 gpd firm reliable capacity. (EXH 25, TLB-2) Mr. Biddy does not include any allowances for fire flow or margin reserve in his used and useful calculation.

Staff recommends that the used and useful percentage is 64.57%. This percentage was calculated using Ms. Amaya's methodology with only one change. Ms. Amaya's and Mr. Guastella's projected maximum daily flow is based upon a 1995 year-end flow. In Issue 2, however, staff has recommended that an average rate base should be used. Therefore, 6 months of projected flow, 11,803 gpd, should be removed from Ms. Amaya's maximum day demand. Mr. Guastella agreed that the average 1995 demand should be used if a year end rate base is not approved. (TR 1120-1121). This minor adjustment to the maximum day demand will be appropriate for other used and useful calculations discussed in this issue.

WATER TREATMENT PLANT

The water treatment facilities include a 6.0 mgd lime softening water treatment plant (wtp #1) and a 2.0 mgd membrane softening water treatment plant (wtp #2). The capacity of wtp #1 must be adjusted since some of the water produced at wtp #1 is used for plant purposes (backwashing the filters, application of lime and chlorine, lime sludge processing). (EXH 15, p. 5-6) In prior PCUC rate cases, the PSC has recognized an allowance of 10% (600,000 gpd) for wtp #1 uses. (EXH 15, p. 5-6) In PCUC's last

rate case, the PSC directed the utility to analyze wtp #1's internal plant uses for its next rate case. (EXH 15, p. 6) Engineering studies were prepared and indicate that 13.3% of the wtp #1 capacity is needed for plant requirements. (EXH 15, p. 6) During 1994, actual average plant uses for chemical processing and backwashing equaled 14.2% of the total water produced. (EXH 15, p. 6) Ms. Amaya also recommends that wtp #1's capacity should be reduced by 13.3% to reflect the actual capacity which is available. (TR 603) Based upon the engineering studies and actual measurements of internal plant water usage, staff recommends that wtp #1's capacity is 5.202 mgd.

WTP #1 Used and Useful

Mr. Guastella states that wtp #1 is 100% used and useful. (EXH 15, p. 18) Ms. Amaya also supports a 100% used and useful percentage for wtp #1 since it was determined to be 100% used and useful in the last case and no additional capacity has been added at this facility since that time. (TR 603) Mr. Biddy recommends that both wtp #1 and wtp #2 are 58.73% used and useful. This percentage was calculated by dividing the average five maximum day flows (4.346 mgd) by the combined wtp #1 and wtp #2 capacities (7.4 mgd). (EXH 25)

Staff recommends that wtp #1 is 100% used and useful. Staff does not believe that OPC's proposed used and useful treatment for wtp #1 is reasonable. The facility was considered 100% used and useful in the last rate case, and no capacity has been added at this facility since that time. The only additional treatment capacity which PCUC has constructed since its last rate case is wtp #2. Staff believes that any water treatment used and useful adjustments should only be applied to wtp #2.

WTP #2 Used and Useful

PCUC completed construction of wtp #2 in 1991. The wtp #2 building and other improvements are sized for a final treatment capacity of 6.0 mgd. (TR 599) Initially, only 2.0 mgd of treatment capacity was constructed. (TR 599)

Mr. Guastella calculated that the wtp #2 used and useful percentage is 89.3%. This percentage was calculated by dividing the 5,826,924 gpd projected maximum daily flow (using a 3 year margin reserve) plus a 600,000 gpd fire flow allowance by the combined 7.2 mgd capacity of the two water treatment plants. (EXH 15, p. 20) The economies of scale factor increases the wtp #2 used and useful percentage to 91.44%. (EXH 15, p. 18) Mr. Biddy calculated that wtp #2 has the same used and useful percentage as wtp #1. (EXH 25)

Ms. Amaya recommends that the used and useful for percentage for the membrane softening treatment equipment is 34.46%. (TR 600) This was calculated by first adding the 5,291,124 gpd projected maximum daily flows (using an 18 month margin reserve) and a 600,000 gpd fire flow and then subtracting the 5.202 mgd wtp #1 capacity. (TR 603) This total was then divided by the 2.0 mgd wtp #2 capacity. (TR 603; EXH 28, KAA-2) Ms. Amaya recommends that economies of scale should be recognized by considering the membrane plant structures to be 100% used and useful. (TR 603) Recognition of this economy of scale adjustment increases Ms. Amaya's used and useful percentage for PCUC's investment at wtp #2 to 75.27%.

Staff recommends that the used and useful percentage for the wtp #2 membrane softening treatment equipment is 33.88% used and useful. This percentage was calculated using Ms. Amaya's methodology with only one change. Ms. Amaya's projected maximum daily flow is based upon a year-end figure. In Issue 2, however, staff has recommended that an average rate base should be used. Therefore, 6 months of projected flow, 11,803 gpd, is removed from Ms. Amaya's maximum day demand. As discussed in Issue 19, staff is also recommending that economies of scale should be recognized by including the wtp #2 structure and non-membrane train related equipment as 100% used and useful. Recognition of this economies of scale adjustment increases staff's used and useful percentage for PCUC's investment at wtp #2 to 75.05%.

Mr. Guastella believes that this methodology fails to recognize the integrated operation of the two treatment plants. (TR 1075) If Mr. Guastella's statement that the two plants should be considered integrated for the used and useful calculation is accepted, then Mr. Biddy's calculation of one used and useful percentage for both plants is appropriate. Mr. Guastella, however, has applied a used and useful percentage of 100% for wtp #1 and a used and useful percentage of 91.44% for wtp #2. Ms. Amaya's proposed methodology recognizes that wtp #2 was constructed to meet demands which can no longer be supplied only by wtp #1. Staff believes it is appropriate to consider only those system demands which exceed wtp #1's capacity in the determination of the wtp #2 membrane train used and useful percentage.

HIGH SERVICE PUMPING

Ms. Amaya is the only witness who performed a used and useful calculation specifically for high service pumping. Ms. Amaya calculated that the high service pumps are 74.99% used and useful. (EXH 28, KAA-2, p. 1) Ms. Amaya calculated this percentage by dividing the 7349 gpm peak hourly flows experienced at PCUC (two times the projected maximum day demand) by the 9,800 gpm firm reliable pumping capacity. (EXH 28) Mr. Guastella states that Ms.

Amaya should have removed another high service pump at wtp #2 when calculating the firm reliable capacity. (TR 1076) Mr. Guastella believes that this is necessary since the high service pumps at each plant should be allocated separately. (TR 1076)

Staff recommends that the used and useful percentage for high service pumping is 75.6%. This percentage was calculated by dividing the projected peak hour flows by the high service pumping firm reliable capacity. The costs for the high service pumping equipment were booked into Accounts 311.2 ($71,447) and 320.3 ($36,000). (EXH 48) Staff recommends that it is appropriate to apply its recommended percentage to these amounts. (TR 602)

STORAGE

The total PCUC investment in storage facilities is only $1,969,660. (EXH 15, p. 18) Mr. Guastella and Ms. Amaya both recommend that the storage facilities are 100% used and useful. Mr. Guastella added an allowance of 50% of the projected maximum day (with a 3 year margin reserve) for equalization and storage to an allowance for fire flow and an allowance for retention and then divided this sum by PCUC's storage capacity. Ms. Amaya added an allowance of 75% of the projected maximum day (with an 18 month margin reserve) and an allowance for fire flow and divided this sum by the available storage capacity. The available storage capacity was assumed to be the actual ground storage capacity less a 10% allowance for retention plus the total available volume of elevated storage.

Mr. Biddy recommends that the storage facilities are 59.82% used and useful This was calculated by adding an allowance of 50% of the average day demand for equalization and emergency storage and dividing this sum by the available storage capacity of 3.9 mg. (EXH 25)

Staff recommends that the storage facilities are 100% used and useful. The primary difference between the recommendations of Mr. Biddy and the other two experts was the allowance for emergency storage. Mr. Biddy proposes that this allowance be minimized since there is not a specific design requirement for emergency storage, and it is the utility's option. (EXH 25) For the reasons previously discussed in Issue 23, staff believes that it is appropriate to include a liberal allowance for emergency storage.

ISSUE 26: What is the appropriate method for calculating the wastewater treatment plant and effluent disposal used and useful percentages?

RECOMMENDATION: Staff recommends that the wastewater treatment plant used and useful percentage be calculated by dividing the projected annual average daily flow by the treatment capacity and that effluent disposal used and useful percentage should be calculated by dividing the projected annual average daily flow by the total effluent disposal capacity which PCUC has constructed. (STARLING)

POSITION OF PARTIES

PCUC: As per Used and Useful Analysis.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: The appropriate method for calculating the wastewater treatment plant and effluent disposal used and useful percentages can be found on the third page of TLB-1 located in Exhibit 25.

STAFF ANALYSIS

WASTEWATER TREATMENT PLANT

Utility witness Guastella calculated that the wastewater treatment plant (wwtp) was 69.1% used and useful. (EXH 15, p. 35) This was calculated by dividing the projected 2,764,608 gpd 3 month average daily wastewater flow (using a 5 year margin reserve) by a 4.0 mgd plant capacity. (EXH 15, p. 35) Mr. Guastella has also included an allowance for economies of scale which results in an overall wwtp used and useful percentage of 75.3%. (EXH 15, p. 28)

Staff witness Amaya calculated that the wastewater treatment plant was 61.39% used and useful. This was calculated by dividing the projected 2,056,574 gpd annual average daily flow (using a 3 year margin reserve) by a 3.35 mgd plant capacity. (TR 594, TR 601) The 3.35 mgd plant capacity is based upon a new DEP construction and operating permit which DEP issued to PCUC on June 28, 1996. (EXH 27, TR 594)

OPC witness Biddy calculated that the wastewater treatment plant was 42.8% used and useful. (TR 504) This was calculated by subtracting 377,080 gpd of excessive infiltration and inflow (I&I) from the 2,089,080 gpd 3 month average daily flow for year-end 1995. This total was then divided by the 4.0 mgd wwtp constructed

capacity. (EXH 25) As discussed in Issue 18, staff does not recommend that the utility's projected wastewater flows which be adjusted since an adjustment of 342,571 gpd for I&I is already included in the used and useful calculation. (EXH 15, p. 35, TR 1123-1124)

PCUC's 3 month average daily was calculated by multiplying the AADF by 1.2. (EXH 15, p. 35; TR 1127-1228) Ms. Amaya recommends that the annual average daily flow should be applied in the used and useful calculation since the DEP construction permit indicates that the plant's rated capacity is based upon an annual average daily flow (AADF). (TR 605) Mr. Guastella testifies that despite the fact that the plant is rated as an annual average daily flow, treatment plant must also be designed to meet the maximum three-month demand. (TR 1088) Mr. Guastella adds that the plant costs are also related to the three-month design criteria and that PCUC could not meet the wastewater flow demands of its customers if the plant capacity was limited to the AADF. (TR 1088) He further states that the planning and design of wastewater facilities is based upon the three month average daily flow. (TR 1089)

Staff recommends that the annual average daily flow should be applied in the used and useful calculation. Utilities can request that the plant capacity be met by any of three flow criteria: annual average daily flow, three month average daily flow, and maximum month daily flow. (TR 1089) PCUC's engineering report, "Preliminary Basis of Design", indicates that the following parameters were used as the basis of design for the wwtp: annual average daily flow of 4.0 mgd, maximum daily flow of 6.0 mgd, and an instantaneous flow of 8.0 mgd. (EXH 1, Appendix A) Staff believes it is reasonable to infer from this information that if the wwtp had been rated based upon a 3 max month average daily flow then the capacity would have been greater than 4.0 mgd. Ms. Amaya's used and useful calculation recognizes that a plant which is rated at 4.0 mgd based upon the annual average daily will not have the same capacity rating if it was based upon the three month average daily flow. The use of any other flow demand skews the used and useful ratio. (TR 605)

Without the benefit of having a chance to review the recently issued DEP wastewater permit, Ms. Amaya recommended that the wwtp capacity was 3.35 mgd. (TR 594-595) Ms. Amaya testified that if the permit indicates that the plant capacity is still 4.0 mgd, then a 4.0 mgd capacity should still be used. (TR 626) Staff has reviewed the permit, and it clearly indicates that the plant capacity is 4.0 mgd (based upon annual average daily flow) but that flows to the plant are limited to the 3.35 mgd effluent disposal capacity. (EXH 27) Even though the wwtp capacity has been

changed, PCUC and OPC both recommend using 4.0 mgd capacity in the used and useful calculation. (PCUC BR 34; OPC BR)

Staff's recommended 50.17% used and useful percentage was calculated by dividing the projected 1998 average annual daily flow of 2,006,768 gpd (using a 3 year margin reserve) by the 4.0 mgd wwtp capacity. As discussed in Issue 19, staff recommends that the utility's proposed economy of scale factor should be approved for the wwtp. Staff's recommended economies of scale allowance results in a final used and useful percentage of 60.14% or an additional $781,984 of plant investment being considered used and useful.

EFFLUENT DISPOSAL

PCUC's has several facilities which are available for the disposal of effluent treated by the wastewater treatment plant. The disposal facilities are: a 600,000 gpd sprayfield, a 1,000,000 gpd RIB site, a 750,000 gpd RIB site, and 1,000,000 gpd at the Dunes. This results in a current effluent disposal rating of 3.35 mgd based upon the annual average flow. (EXH 27)

Mr. Guastella calculated that the effluent disposal system was 100% used and useful. (EXH 15, p. 35) This percentage was calculated by dividing the projected 3 month average daily flow (using a 5 year margin reserve) by a 2.3 mgd effluent disposal capacity. (EXH 15, p. 35) The effluent disposal capacity was calculated by reducing a total disposal capacity of 3.4 mgd by the sprayfield capacity of 600,000 gpd and a Dunes disposal capacity of 500,000 gpd. (EXH 15, p. 35) Mr. Guastella claims that the sprayfield capacity should be excluded since the sprayfield can not be used during wet weather. (EXH 15, p. 35) Mr. Guastella did not include an economies of scale factor since the effluent disposal system is already 100% used and useful without any economy of scale consideration.

Mr. Biddy calculated that the effluent disposal system is 50.35% used and useful. (EXH 25) This percentage was calculated by dividing the 3 month average daily flow for year-end 1995 (2,089,080 gpd) less the 377,080 gpd I&I adjustment by an effluent disposal capacity of 3.4 mgd. (EXH 25) Mr. Biddy has not include any adjustment to remove the 1.0 mgd of effluent disposal capacity at the Dunes. Since PCUC did not incur any investment for the 1.0 mgd of disposal capacity at the Dunes, staff believes that it is appropriate to exclude the 1.0 mgd Dune capacity from the used and useful calculation.

Ms. Amaya calculated that the effluent disposal system is 74.75% used and useful. (TR 595) This percentage was calculated by dividing the 2,056,574 gpd projected annual average daily flow

(using a 3 year margin reserve) less an allocation of 300,000 gpd of effluent flow to the Dunes by an effluent disposal capacity of 2.35 mgd. (TR 595, EXH 28) Ms. Amaya also proposes that the 6.0 mg effluent storage tank is 30% used and useful adjustment. (EXH 28, KAA-2, p. 2)

Staff recommends that the effluent disposal system is 85.39% used and useful. This percentage was calculated by dividing the projected annual average daily flow, 2,006,768 gpd, by an effluent disposal capacity of 2,350,000 gpd. As discussed in Issue 19, staff recommends that the utility's proposed economy of scale factor should be approved for the effluent disposal system. Staff's recommended economies of scale allowance results in a final used and useful percentage of 88.32% or an additional $226,315 of plant investment being considered used and useful.

ISSUE 27: What is the appropriate method for calculating the water transmission and distribution system used and useful percentage?

RECOMMENDATION: Staff recommends that the distribution system used and useful percentage should be calculated by dividing the number of projected lots by the number of lots on lines. For the transmission system, used and useful should be calculated by dividing the number of projected lots on lines by the equivalent lots served by the transmission mains. For services, used and useful should be calculated by dividing the total number of lots on lines by the number of services which have been installed. For fire hydrants, used and useful should be calculated by taking the ratio of active hydrants to total hydrants. (STARLING)

POSITION OF PARTIES

PCUC: The calculation should be based on an analysis of component parts including the recognition of equivalent flows of customers expressed in ERCs.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: The lot count method is appropriate and should be used for this proceeding.

STAFF ANALYSIS: The transmission and distribution (T&D) system consists of several different types of facilities, each having their own characteristics. Consequently, staff recommends that a different used and useful methodology is appropriate for each component of the T&D system.

Distribution Lines

The 1995 year-end cost for distribution lines is $18,244,413. (EXH 15 JFG-1, p. 22) The distribution system is sized to serve 46,438 lots. (EXH 15, p. 22) As of October, 1995, only 10,415 of the 46,438 lots were connected. (EXH 28, KAA-2, p.1)

Utility witness Guastella calculated a 54.1% used and useful percentage by dividing the 14,568 projected number of ERCs (using an 18 month margin reserve) and a 10,541 ERC allowance for fire flow by the total number of lots served. (EXH 15, JFG-1, p. 22) Mr. Guastella then adds a factor for economies of scale which results in a final used and useful percentage of 63.28%, an additional $1,666,550.

Mr. Guastella testified that it is appropriate to take the ratio of ERCs to lots since the design of mains must take into consideration the residential flows with respect to some lots, as well as significantly higher flows with respect to commercial lots. (TR 1080) He testified that the cost of mains is based on the cost to meet flow and pressure requirements as well as to meet the number of lots to be served. (TR 1080) Mr. Guastella adds that the Commission has accepted the use of the ratio of ERCs to lots in prior PCUC rate cases. (TR 1059; EXH 15, JFG-1, p. 18)

OPC witness Biddy calculated a 24.57% used and useful percentage by dividing the number of connected lots during 1995 (11,409) by the total number of lots on lines (46,438). Mr. Biddy testified that the T&D system used and useful analysis is not a flow measurement or flow projection technique. (TR 519) Mr. Biddy adds that the lot count does not fail to recognize water main cost to accommodate fire flow and looped lines, because it allocates the total cost of the lines through used and useful percentages. (TR 520) Mr. Biddy believes that the lot count method is a fair method for allocating the cost of lines between current and future customers. (TR 520)

Staff witness Amaya calculated a 34.47% used and useful percentage by dividing the projected number of connected lots (10,985) by the total number of lots on lines (46,764). (TR 604) The number of connected and available lots are based upon the utility's water system maps. (TR 604) Ms. Amaya testifies that it would be necessary to either convert the number of lots available to ERCs to compare to ERCs connected, or, compare lots connected to lots available in order to compare "apples to apples." (TR 604)

Staff recommends that the used and useful percentage be calculated by taking the ratio of projected lots connected (11,182) to the total number of lots on lines (46,764). Staff's calculation is a change from previous Commission used and useful determinations at PCUC in that the ratio is not based upon ERCs to lots and the margin reserve period is limited to 12 months. Staff believes that the size of the lines is the primary difference between a system which is sized to serve residential only customers and one which will serve high demand commercial areas. Staff agrees with the conclusions of Mr. Biddy and Ms. Amaya that the fairest way to allocate the cost of the distribution lines is by taking the ratio of lots connected to lots served.

PCUC is a developer related utility and has incurred significant capital costs to construct a vastly oversized system which benefitted the developer's efforts to sell lots. Staff does not believe that it is appropriate to allocate any additional costs for T&D lines, other than a 12 month allowance for margin reserve,

to the utility's current customers. By requiring that the utility construct an oversized distribution system and then requesting a 65.9% used and useful percentage, the developer is shifting a portion of the development's infrastructure costs to the utility's current customers. Staff believes that this is not appropriate. If the developer had contributed the lines to PCUC, then the question of used and useful for the T&D system would be moot.

Transmission Lines

The 1995 year-end cost for transmission lines is $7,863,032. (EXH 15, p. 22) Unlike the distribution system, the transmission system has not been extended to every area of PCUC. (EXH 15, p. 23) Mr. Guastella calculated that the transmission system is currently serving a total of 34,651 lots. (EXH 15, p. 23)

Mr. Biddy did not prepare a separate used and useful calculation for the transmission system. (EXH 28, TLB-2) Mr. Biddy recommends that the transmission system used and useful percentage should equal the 24.57% which he calculated using the distribution system capacity. (EXH 28)

Ms. Amaya calculated that the transmission system was 72.46% used and useful. (EXH 28) This percentage was calculated by dividing the total equivalent lots served (34,651) plus a margin reserve, by the total lots available at PCUC. (EXH 28) Ms. Amaya testified that, unlike the distribution mains, in many cases no fewer transmission lines could have been constructed to serve current customers. (TR 605)

Staff recommends that the transmission system used and useful should be calculated by dividing the projected number of connected lots by the total equivalent lots which are being served by the existing transmission system. This results in a used and useful percentage of 32.27%, (10,415+767)/34,651. Staff believes that this methodology is appropriate since the transmission system is not currently sized to serve 46,438 lots.

Services

PCUC has installed 15,172 water services at a 1995 year-end cost of $1,140,496. (EXH 15, JFG-1, p. 24) Utility witness Guastella calculated an 89.6% used and useful percentage by dividing the projected number of ERCs being served (13,596) by the number of installed services. (Id.) Mr. Biddy calculated a 75.2% used and useful percentage by dividing the total number of 1995 connected lots, 11,409, by 15,172. (EXH 28, TLB-2) Ms. Amaya calculated a 72.4% used and useful percentage by dividing the

projected number of connected lots, 10,985, by 15,172. (EXH 28, KAA-2, p. 1)

Staff recommends that the used and useful percentage is 73.7%. This was calculated by dividing the projected number of lots connected, 11,182, by 15,172. The difference between Ms. Amaya's and staff's calculations arises since staff calculated that the expected ERC growth from 1995 to 1996 is 767 ERCs, not the 570 used by Ms. Amaya.

Fire Hydrants

Mr. Guastella calculated a 94.8% used and useful percentage for the hydrants by dividing the total number of active hydrants, 2,536, by the total number of hydrants, 2,674. (EXH 15, JFG-1, p. 25) This percentage increases to 95.8% after application of the economy of scale gross-up. (EXH 15, JFG-1, p. 18)

Ms. Amaya did not prepare a used and useful calculation for hydrants. Mr. Biddy states that the fire hydrants are part of the distribution system, and there is no need to perform a separate used and useful analysis. (TR 521)

Mr. Guastella testifies that fire hydrants have not yet been installed throughout the system. (TR 1084) Mr. Guastella testifies that only the active hydrants which are necessary to provide fire protection for existing customers have been included as used and useful. (TR 1084)

Staff recommends that the fire hydrant used and useful percentage is 94.8%. This percentage was calculated by dividing the total number of active hydrants by the total number of hydrants installed. The evidence indicates that hydrants have not been installed throughout the T&D system. Therefore, Mr. Biddy's used and useful calculation is not appropriate.

ISSUE 28: What is the appropriate method for calculating the wastewater collection system and pumping plant used and useful percentage?

RECOMMENDATION: Staff recommends that used and useful for the gravity collection system should be calculated by dividing the projected number of lots connected by the total number of lots served by gravity lines. Staff recommends that used and useful for the PEP mains should be calculated by dividing the projected number of lots connected by the total number of lots served by PEP mains. Staff recommends that the PEP tanks are 100% used and useful. Staff recommends that used and useful for pumping plant (lift stations) should be calculated by dividing the estimated peak flows to the lift stations by the station capacity. Staff recommends that used and useful percentage for force mains should be calculated using the pumping station used and useful percentage with an adjustment for manifold force mains.

POSITION OF PARTIES

PCUC: The calculation for the collection system and pumping plant should be based on an analysis of their component parts including the recognition of equivalent flows of customers expressed in ERCs.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: The lot count method is appropriate and should be used for this proceeding.

STAFF ANALYSIS: PCUC's wastewater collection system consists of two distinct areas. One area (consisting of 25,062 lots) is served by a wastewater collection system with gravity lines, force mains, and lift stations; wastewater in the other area of Palm Coast (consisting of 21,376 lots) is served by a PEP system (pretreatment effluent pumping). (EXH 15, JFG-1, p. 29)

Staff witness Amaya and Utility witness Guastella recommend that separate used and useful calculations be performed for each component of the wastewater collection system. (EXH 15; EXH 28) Mr. Biddy's amended testimony recommends that separate calculations are only necessary for the following wastewater collection system components: one calculation for gravity lines, force mains, and pumping facilities; another calculation for services; and a final calculation for services. (EXH 25, TLB-3)

Staff believes that since the PEP and gravity system each serve different areas of Palm Coast it is appropriate to perform

separate used and useful calculations for these plant components. Staff also recommends that separate used and useful calculations are also appropriate for the pumping stations, force mains, and services. Separate calculations for each of these components is consistent with past Commission used and useful determinations for PCUC. (EXH 7, pp. 137G-137J)

Gravity Lines

The 1995 year-end booked cost for gravity lines is $22,940,448. (EXH 15, JFG-1, p. 29) Mr. Guastella calculated a 49.8% used and useful percentage for gravity mains by dividing the projected number of ERCs (less any customers connected to the PEP system), by the number of lots served by gravity mains. Application of Mr. Guastella's economies of scale gross-up increases the used and useful percentage to 59.8%. (EXH 15, p. 28)

Mr. Biddy calculated a 21.95% used and useful percentage by dividing the average 1995 connected lots, 10,192, by the total number of lots on lines, 46,438. (EXH 25) Since the gravity lines only serve 25,062 lots, staff believes that Mr. Biddy's calculation is flawed. Mr. Biddy also failed to include an adjustment which recognizes that 1,281 lots are currently connected to the PEP system.

Ms. Amaya calculated a 34.47% used and useful percentage by dividing the projected number of lots connected, less the number of lots served by the PEP system, by the total lots served by gravity lines. (EXH 28, KAA-2, p. 3)

Staff recommends that the used and useful percentage is 34.29%. This was calculated by adding a margin reserve of 418 ERCs to the 8,175 lots connected to the gravity system and dividing this total by 25,062. Regression analysis indicates that the 774 additional ERCs are projected to connect over a 12 month period. Staff allocated 418 of the 774 ERCs to the gravity part of the collection system and the remaining 356 ERCs to the PEP part of the collection system.

PEP Collection Lines

The 1995 year-end booked cost for PEP mains is $5,862,547. (EXH 15, JFG-1, p. 29) Mr. Guastella calculated a 6.7% used and useful percentage by dividing the projected number of ERCs served by the PEP system, 1,434, by the total number of lots served by the PEP. (EXH 15, JFG-1, p. 29) Staff calculated that Mr. Guastella's economy of scale gross-up increases the used and useful percentage to 25.36%.

Mr. Biddy calculated a 6.01% used and useful percentage by dividing the total number of lots connected to the PEP system, 1,286, by the number of lots on PEP mains, 21,376. (EXH 25, TLB-3) Ms. Amaya calculated a 6.33% used and useful percentage by dividing the projected number of lots connected to the PEP system by 21,376. (EXH 28, KAA-2, p. 3)

Staff's recommended 7.66% used and useful percentage was calculated by dividing the projected number of connected lots (1,637) by 21,376. The projected number of lots was calculated by adding a margin reserve of 356 ERCs to the 1,281 lots connected to the PEP system.

PEP Tanks

The 1995 year-end booked value of PEP tanks is $2,119,907. (EXH 15, JFG-1, p. 29) Mr. Guastella determined that these tanks are 100% used and useful since they are only installed when a customer connects to the PEP system. (EXH 15, p. 29) Ms. Amaya agrees with the utility's used and useful proposal for PEP tanks. (TR 606) Staff also recommends that these tanks are 100% used and useful.

Pumping Stations

The 1995 year-end booked value for pumping facilities is $4,335,210. (EXH 15, p. 27 (Accounts 354.3 and 371.3) Mr. Guastella calculated a 46.4% used and useful percentage for the pumping plant. (EXH 15, p. 32) To calculate this percentage Mr. Guastella first added the estimated peak demands of each lift station. (EXH 15, p. 33) Mr. Guastella then added total capacity of each lift station. The estimated peak demands were projected for the 18 month margin reserve period and then divided by the combined capacity of all of the lift stations. (EXH 15, p. 32-33)

In PCUC's last rate case, Mr. Guastella used a peaking factor of 2, instead of the peaking factor of 3 used in this case. (TR 606; TR 1086) Mr. Guastella changed his peaking factor because the peaking factor for domestic wastewater flows show that a peaking factor in excess of three is warranted. (TR 1086)

Mr. Biddy proposes that the ratio of lots connected to lots served, which he recommended for the gravity mains, should also be used for pumping plant. (EXH 25, TLB-3) Ms. Amaya calculated the used and useful percentage using PCUC's methodology with one change, a peaking factor of two was used to estimate individual lift station flows. (TR 606-607; EXH 28, KAA-2, pp. 2-3)

Staff recommends that, with one change, Mr. Guastella's methodology is appropriate for the pumping plant used and useful calculation. A review of the peak demands at lift stations 19-1, PS-D, 13-3, 13-2, 21-1, 22-1, 22-2, and 20-1 indicates that the estimated peak flows exceed the station capacity. Staff recommends that it is appropriate to use a peaking factor of three but the peak flow should be limited to the lift station's capacity. This modification decreases the peak flow by 986 gpm and results in a 38.73% used and useful percentage, using a one year margin reserve.

Force Mains

The 1995 year-end booked value for force mains is $4,570,541. (EXH 15, p. 29) Mr. Guastella's force main used and useful calculation is based upon the pumping plant used and useful percentage adjusted to recognize the fact that some of the force mains are major manifold. (EXH 15, p. 30) Mr. Guastella defines a major manifold main as those mains which carry the combined flow from all lift stations. (EXH 15, p. 13) For this reason, they should be considered 100% used and useful. (EXH 15, p. 30)

Mr. Biddy recommends that the used and useful percentage for force mains should equal the percentage which he calculated for gravity mains. (EXH 25, TLB-3) Ms. Amaya recommends that the utility's methodology is appropriate with the exception that the peak flows should be two instead of three. (TR 607)

Staff recommends that the force main used and useful should be calculated using PCUC's methodology as long as the peak flows to the lift stations are limited to the station capacity and the margin reserve period is one year. This adjustment results in a 69.99% used and useful percentage for force mains.

ISSUE 29: Should facility lands be considered 100% used and useful without detailed justification?

RECOMMENDATION: No. Staff recommends, however, that no used and useful adjustments to land are appropriate. (STARLING)

POSITION OF PARTIES

PCUC: Yes.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: No. Calculations should be performed to justify the used and useful allocation for these facilities. Without the information necessary to make those calculations, the Commission should assign to facility lands, the same percentages of used and useful given to related utility facilities.

STAFF ANALYSIS: OPC witness Biddy believes that the PSC should not automatically allow a 100% used and useful percentage for utility land. (TR 518) Mr. Biddy, proposes a used and useful adjustment based upon the total land occupied by the water and wastewater facilities divided by the total land available. (TR 518-519)

Mr. Guastella responds that the cost of land would be no smaller to serve existing customers and, therefore, should be considered 100% used and useful. (TR 1070) Staff witness Amaya did not propose any used and useful adjustments for land.

Staff recommends that no used and useful adjustments are appropriate for the utility land. Staff agrees that the cost of land would not be lower to serve only the existing customers. No evidence has been presented which indicates that the any of the land sites were grossly oversized. Staff's review of prior PCUC rate orders indicates that no used and useful adjustments were made for land in prior PCUC cases.

ISSUE 30: Should a facility be considered 100% used and useful again, if it was determined to be 100% used and useful in a previous proceeding?

RECOMMENDATION: Normally yes. However, if commission procedures for calculating used and useful have changed or if additional capacity has been installed since the previous determination that the facility was 100% used and useful, an adjustment may be appropriate. (CROUCH)

POSITION OF PARTIES

PCUC: Yes. Once the Commission has determined that a facility is 100% used and useful in serving the public, the recovery of the cost of that facility through rates should not be rescinded, regardless of whether additional capacity is installed.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: No. Evaluation of any changes in the facilities capacities and customer demands are necessary before determining the used and useful percentages.

STAFF ANALYSIS: This issue deals with Commission policy. There was little, if any, discussion about this issue during the hearing. However, the issue was raised during the pre-hearing and needs to be addressed. Staff agrees with OPC that the Commission should not automatically assume that because it approved a used and useful percentage in a prior case that anything less than previously approved should not be adopted. There are a number of factors which could have contributed to a decline in used and useful percentages.

There are several scenarios which might be considered by the commission in determining the appropriate used and useful percentage for a specific rate case. The first occurs when customer demands are lower than in the previous rate case thus creating a lower used and useful percentage. Under this scenario, the percentage found in the previous proceeding is the appropriate percentage to use, providing that no new plant component(s) have been added. A second scenario could occur when new plant components have been added and a used and useful percentage on the new capacity yields a lower percentage than the last proceeding. In this situation, the new, lower used and useful percentage is appropriate if the resulting plant in service (UPIS) is greater than the UPIS granted in the last proceeding. A third scenario allows for errors in the commission's previous methodology or

calculation of used and useful percentages. Under this scenario, the new used and useful percentage should be used, even if the previous investment is affected. A forth scenario might arise if the methodology used by the commission in calculating used and useful percentages is changed. This might result in a lower used and useful percentage.

PCUC suggests in its brief that once the commission determines that a facility is 100% used and useful, the recovery of the cost of that facility should not be rescinded. (BR 45) If this were true then an error made in a previous proceeding would have to be ignored, and if the methodology used by the commission were changed, such as calculating used and useful by individual NARUC accounts instead of by overall water or wastewater treatment plant as was done in the past, then those new percentages, if lower, would also have to be ignored.

Staff does not agree with PCUC but recommends that there are scenarios where a new, possibly lower used and useful percentage might be appropriate.

ISSUE 31: Should non-used and useful adjustments be made to general plant?

RECOMMENDATION: Yes. The appropriate used and useful percentage for the general plant structures and improvements is 90.98%. (STARLING)

POSITION OF PARTIES

PCUC: No. General plant is 100% used and useful.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: Yes. Consistent with the treatment by the Commission and the Company in the two previous rate cases, general plant should be reduced consistent with the adjustments to administrative and general expense.

STAFF ANALYSIS OPC witness Dismukes recommends that a 86.8% used and useful adjustment to general plant accounts associated with structures and improvements and office furniture is appropriate. (TR 561-562; EXH 26, KHD-1, Schedule 10) Ms. Dismukes testified that this adjustment is consistent with prior Commission decisions for PCUC. (TR 561) Ms. Dismukes recommendation excludes any margin reserve consideration, which was included in the Commission's determination in the prior PCUC rate case. No utility witnesses responded to Ms. Dismukes proposed adjustment.

Staff recommends that the used and useful percentage is 90.98% for the general plant for structures and improvements and office furniture. The difference between staff's recommended used and useful percentage and Ms. Dismukes' proposal results because staff includes an allowance for margin reserve.

ISSUE 32: What are the appropriate used and useful percentages?

RECOMMENDATION: The appropriate used and useful percentages are as provided in attachment 2. (STARLING)

POSITION OF PARTIES

PCUC: As per MFRs and Used and Useful Analysis.

DUNES: No position.

FLAGLER: Adopting OPC's position and discussion.

OPC: The appropriate used and useful percentages for the water and wastewater facilities are presented in Exhibit 25 at TLB-2 and TLB-3. This is a fallout issue.

STAFF ANALYSIS: This is a fall-out issue since the appropriate percentages will depend upon the decisions in Issues 11-12 and Issues 18-31. Attachment 1 provides a summary of the different used and useful percentages and resulting dollar adjustments for each witness. Attachment 2 provides a breakdown of the used and useful rate base impact for each of the different components of the used and useful determination (margin reserve, fire flow, economies of scale, infiltration and inflow).

WATER SYSTEM USED AND USEFUL COMPARISON

A/C No.	WATER SYSTEM Description	13 Month Avg	Guastella (PCUC) Used & Useful Percent	Guastella (PCUC) Used & Useful Amount	Amaya Used & Useful Percent	Amaya Used & Useful Amount	Biddy (OPC) Used & Useful Percent	Biddy (OPC) Used & Useful Amount	Staff Recommended Used & Useful Percent	Staff Recommended Used & Useful Amount
	INTANGIBLE PLANT									
301.1	Organization	$6,130	100.0%	$6,130	100.00%	$6,130	100.00%	$6,130	100.00%	$6,130
302.1	Franchises	$2,664	100.0%	$2,664	100.00%	$2,664	100.00%	$2,664	100.00%	$2,664
339.1	Other Plant & Misc. Equipment	$207,527	100.0%	$207,527	100.00%	$207,527	100.00%	$207,527	100.00%	$207,527
	SOURCE OF SUPPLY AND PUMPING PLANT									
303.2	Land & Land Rights	$123,422	100.0%	$123,422	100.00%	$123,422	44.62%	$55,067	100.00%	$123,422
304.2	Structures & Improvements	$105,208	81.9%	$86,186	64.71%	$68,080	44.62%	$46,941	64.57%	$67,937
305.2	Collect. & Impound. Reservoirs	$0								
306.2	Lake, River & Other Intakes	$0								
307.2	Wells & Springs	$4,628,702	81.9%	$3,791,815	64.71%	$2,995,435	44.62%	$2,065,192	64.57%	$2,988,944
308.2	Infiltration Galleries & Tunnels	$0								
309.2	Supply Mains	$2,191,871	100.0%	$2,191,871	100.00%	$2,191,871	44.62%	$977,949	64.57%	$1,415,382
310.2	Power Generation Equipment	$0								
311.2	Pumping Equipment - Non high service pumping	$307,352	81.9%	$251,782	64.71%	$198,901	44.62%	$137,132	64.57%	$198,470
311.2	Pumping Equipment - High service pumping	$106,924	84.4%	$90,208	74.99%	$80,185	44.62%	$47,706	75.60%	$80,835
339.2	Other Plant & Misc. Equipment	$95,961	81.9%	$78,611	64.71%	$62,101	44.62%	$42,815	64.57%	$61,966
	WATER TREATMENT PLANT									
303.3	Land & Land Rights	$280,476	100.0%	$280,476	100.00%	$280,476	58.73%	$164,723	100.00%	$280,476
304.3	Structures & Improvements - LS wtp	$1,251,136	100.0%	$1,251,136	100.00%	$1,251,136	58.73%	$734,789	100.00%	$1,251,136
304.3	Structures & Improvements - RO wtp	$2,693,952	91.44%	$2,463,350	100.00%	$2,693,952	58.73%	$1,582,151	100.00%	$2,693,952
320.3	Water Treatment Equipment - LS wtp	$4,077,923	100.0%	$4,077,923	100.00%	$4,077,923	58.73%	$2,394,953	100.00%	$4,077,923
320.3	Water Treatment Equipment - RO wtp membrane	$2,972,454	91.44%	$2,718,012	34.46%	$1,024,195	58.73%	$1,745,714	33.88%	$1,007,154
320.3	Water Treatment Equipment - RO wtp non-membrane train	$2,216,126	91.44%	$2,026,426	100.00%	$2,216,126	58.73%	$1,301,525	100.00%	$2,216,126
339.3	Other Plant & Misc. Equipment	$0								
	Total Water Treatment Plant	$13,492,067		$12,817,322		$11,543,808		$7,923,855		$11,526,768
	TRANSMISSION & DISTRIBUTION PLANT									
303.4	Land & Land Rights	$100,734	100.0%	$100,734	100.00%	$100,734	59.82%	$60,261	100.00%	$100,734
304.4	Structures & Improvements	$5,499	100.0%	$5,499	100.00%	$5,499	100.00%	$5,499	100.00%	$5,499
330.4	Distr. Reservoirs & Standpipes	$1,969,660	100.0%	$1,969,660	100.00%	$1,969,660	59.82%	$1,178,292	100.00%	$1,969,660
331.4	Distribution Mains	$18,096,693	63.3%	$11,451,587	23.49%	$4,251,057	24.57%	$4,446,039	23.91%	$4,327,201
331.4	Transmission Mains	$7,799,367	71.9%	$5,609,305	72.46%	$5,651,209	24.57%	$1,916,187	32.27%	$2,516,883
333.4	Services	$1,035,265	91.7%	$949,131	72.40%	$749,564	75.20%	$778,496	73.70%	$763,006
334.4	Meters & Meter Installations	$2,213,614	100.0%	$2,213,614	100.00%	$2,213,614	100.00%	$2,213,614	100.00%	$2,213,614
335.4	Hydrants	$2,445,677	95.8%	$2,343,937	94.8%	$2,319,460	24.57%	$600,860	94.84%	$2,319,460
339.4	Other Plant & Misc. Equipment	$0								
	GENERAL PLANT									
303.5	Land & Land Rights	$0	100.0%	$0						
304.5	Structures & Improvements	$529,769	100.0%	$529,769	100.00%	$529,769	86.80%	$459,820	90.98%	$481,984
340.5	Office Furniture & Equipment	$347,148	100.0%	$347,148	100.00%	$347,148	86.80%	$301,312	90.98%	$315,835
341.5	Transportation Equipment	$615,228	100.0%	$615,228	100.00%	$615,228	100.00%	$615,228	100.00%	$615,228
342.5	Stores Equipment	$6,026	100.0%	$6,026	100.00%	$6,026	100.00%	$6,026	100.00%	$6,026
343.5	Tools, Shop & Garage Equipment	$158,638	100.0%	$158,638	100.00%	$158,638	100.00%	$158,638	100.00%	$158,638
344.5	Laboratory Equipment	$20,722	100.0%	$20,722	100.00%	$20,722	100.00%	$20,722	100.00%	$20,722
345.5	Power Operated Equipment	$209,756	100.0%	$209,756	100.00%	$209,756	100.00%	$209,756	100.00%	$209,756
346.5	Communication Equipment	$52,483	100.0%	$52,483	100.00%	$52,483	100.00%	$52,483	100.00%	$52,483
347.5	Miscellaneous Equipment	$1,514	100.0%	$1,514	100.00%	$1,514	100.00%	$1,514	100.00%	$1,514
348.5	Other Tangible Plant	$0								
	Total	$56,875,621	81.29%	$46,232,290	64.50%	$36,682,205	43.14%	$24,537,704	57.60%	$32,758,288

WASTERWATER SYSTEM USED AND USEFUL COMPARISON

A/C No.	WASTEWATER SYSTEM Description	13 Month Avg	Guastella (PCUC) Used & Useful Percent	Guastella (PCUC) Used & Useful Amount	Amaya Used & Useful Percent	Amaya Used & Useful Amount	Biddy (OPC) Used & Useful Percent	Biddy (OPC) Used & Useful Amount	Staff Recommended Used & Useful Percent	Staff Recommended Used & Useful Amount
	INTANGIBLE PLANT									
351.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130	100.00%	$6,130	100.00%	$6,130
352.1	Franchises	$2,684	100.00%	$2,684	100.00%	$2,684	100.00%	$2,684	100.00%	$2,684
389.1	Other Plant & Misc. Equipment	$121,386	100.00%	$121,386	100.00%	$121,386	100.00%	$121,386	100.00%	$121,386
	COLLECTION PLANT									
353.2	Land & Land Rights	$0								
354.2	Structures & Improvements	$6,560	100.00%	$6,560	100.00%	$6,560	100.00%	$6,560	100.00%	$6,560
360.2	Collection Sewers - Force Mains	$4,528,081	78.96%	$3,575,373	58.52%	$2,649,833	21.95%	$993,803	38.73%	$1,753,726
361.2	Collection Sewers - Gravity Mains	$22,727,333	59.84%	$13,600,036	34.47%	$7,833,322	21.95%	$4,988,091	34.29%	$7,792,514
361.2	Collection Sewers - PEP Mains	$5,808,084	25.36%	$1,472,930	6.33%	$367,896	6.02%	$349,420	7.66%	$444,790
361.2	Collection Sewers - PEP tanks	$2,100,213	100.00%	$2,100,213	100.00%	$2,100,213	6.02%	$126,351	100.00%	$2,100,213
362.2	Special Collecting Structures	$0								
363.2	Services to Customers	$2,964,847	57.04%	$1,691,149	34.47%	$1,021,880	34.21%	$1,014,190	34.29%	$1,016,556
364.2	Flow Measuring Devices	$0								
365.2	Flow Measuring Installations	$0								
389.2	Other Plant & Misc. Equipment	$0								
	SYSTEM PUMPING PLANT									
353.3	Land & Land Rights	$207,043	100.00%	$207,043	100.00%	$207,043	21.95%	$45,441	100.00%	$207,043
354.3	Structures & Improvements	$101,995	57.12%	$58,260	29.75%	$30,346	21.95%	$22,385	38.73%	$39,502
370.3	Receiving Wells	$0								
371.3	Pumping Equipment	$4,146,720	57.12%	$2,368,606	29.75%	$1,233,738	21.95%	$910,103	38.73%	$1,605,990
389.3	Other Plant & Misc. Equipment	$0								
	TREATMENT AND DISPOSAL PLANT									
353.4	Land & Land Rights	$946,489	100.00%	$946,489	100.00%	$946,489	66.17%	$626,292	100.00%	$946,489
354.4	Structures & Improvements - Treatment Equipment	$5,150,633	75.29%	$3,878,023	51.41%	$2,648,164	42.80%	$2,204,472	60.14%	$3,097,384
354.4	Structures & Improvements - Disposal Equipment	$217,145	100.00%	$217,145	74.75%	$162,311	50.35%	$109,339	88.31%	$191,765
380.4	Treatment Equipment	$2,695,261	75.29%	$2,029,320	51.41%	$1,385,751	42.80%	$1,153,572	60.14%	$1,620,822
380.4	Disposal Equipment	$2,518,768	100.00%	$2,518,768	74.75%	$1,882,724	50.35%	$1,268,274	88.31%	$2,224,374
381.4	Plant Sewers	$0								
382.4	Outfall Sewer Lines	$0								
389.4	Other Plant & Misc. Equipment	$0								
	GENERAL PLANT									
353.5	Land & Land Rights	$0								
354.5	Structures & Improvements	$534,224	100.00%	$534,224	100.00%	$534,224	86.80%	$463,706	90.98%	$486,037
390.5	Office Furniture & Equipment	$350,077	100.00%	$350,077	100.00%	$350,077	86.80%	$303,867	90.98%	$318,500
391.5	Transportation Equipment	$620,417	100.00%	$620,417	100.00%	$620,417	100.00%	$620,417	100.00%	$620,417
392.5	Stores Equipment	$6,076	100.00%	$6,076	100.00%	$6,076	100.00%	$6,076	100.00%	$6,076
393.5	Tools, Shop & Garage Equipment	$159,977	100.00%	$159,977	100.00%	$159,977	100.00%	$159,977	100.00%	$159,977
394.5	Laboratory Equipment	$20,896	100.00%	$20,896	100.00%	$20,896	100.00%	$20,896	100.00%	$20,896
395.5	Power Operated Equipment	$211,526	100.00%	$211,526	100.00%	$211,526	100.00%	$211,526	100.00%	$211,526
396.5	Communication Equipment	$52,925	100.00%	$52,925	100.00%	$52,925	100.00%	$52,925	100.00%	$52,925
397.5	Miscellaneous Equipment	$1,527	100.00%	$1,527	100.00%	$1,527	100.00%	$1,527	100.00%	$1,527
398.5	Other Tangible Plant	$0			100.00%	$0	100.00%	$0		
	Total	$56,207,018	65.40%	$36,757,760	43.70%	$24,564,116	28.09%	$15,789,411	44.58%	$25,055,810

Palm Coast Utility Corporation Witness Guastella

A/C No.	WATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Current Customer Demand Percent	Current Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Fire Flow Percent	Fire Flow Amount
	INTANGIBLE PLANT											
301.1	Organization	$6,130	100.0%	$6,130	100.00%	$6,130	0.00%					
302.1	Franchises	$2,664	100.0%	$2,664	100.00%	$2,664	0.00%					
339.1	Other Plant & Misc. Equipment	$207,527	100.0%	$207,527	100.00%	$207,527	0.00%					
	SOURCE OF SUPPLY AND PUMPING PLANT											
303.2	Land & Land Rights	$123,422	100.0%	$123,422	100.00%	$123,422	0.00%	$0	0.00%	$0	0.00%	$0
304.2	Structures & Improvements	$105,208	81.9%	$86,186	62.95%	$66,224	6.78%	$7,132	4.47%	$4,704	7.72%	$8,126
305.2	Collect. & Impound. Reservoirs	$0										
306.2	Lake, River & Other Intakes	$0										
307.2	Wells & Springs	$4,628,702	81.9%	$3,791,815	62.95%	$2,913,569	6.78%	$313,791	4.47%	$206,962	7.72%	$357,493
308.2	Infiltration Galleries & Tunnels	$0										
309.2	Supply Mains	$2,191,871	100.0%	$2,191,871	100.00%	$2,191,871	0.00%	$0	0.00%	$0	0.00%	$0
310.2	Power Generation Equipment	$0										
311.2	Pumping Equipment - Non high service pumping	$307,352	81.9%	$251,782	62.95%	$193,465	6.78%	$20,836	4.47%	$13,743	7.72%	$23,738
311.2	Pumping Equipment - High service pumping	$106,924	84.4%	$90,208	62.90%	$67,251	6.78%	$7,249	6.97%	$7,451	7.72%	$8,258
339.2	Other Plant & Misc. Equipment	$95,961	81.9%	$78,611	62.95%	$60,403	6.78%	$6,505	4.47%	$4,291	7.72%	$7,411
	WATER TREATMENT PLANT											
303.3	Land & Land Rights	$280,476	100.0%	$280,476	100.00%	$280,476						
304.3	Structures & Improvements - LS wtp	$1,251,136	100.0%	$1,251,136	100.00%	$1,251,136	0.00%	$0	0.00%	$0	0.00%	$0
304.3	Structures & Improvements - RO wtp	$2,693,952	91.44%	$2,463,350	67.92%	$1,829,566	13.01%	$350,559	2.18%	$58,728	8.33%	$224,496
320.3	Water Treatment Equipment - LS wtp	$4,077,923	100.0%	$4,077,923	100.00%	$4,077,923	0.00%	$0	0.00%	$0	0.00%	$0
320.3	Water Treatment Equipment - RO wtp membrane	$2,972,454	91.44%	$2,718,012	67.92%	$2,018,716	13.01%	$386,800	2.18%	$64,791	8.33%	$247,704
320.3	Water Treatment Equipment - RO wtp non-membrane train	$2,216,126	91.44%	$2,026,426	67.92%	$1,505,043	13.01%	$288,381	2.18%	$48,325	8.33%	$184,677
339.3	Other Plant & Misc. Equipment	$0										
	Total Water Treatment Plant	$13,492,067		$12,817,322		$10,962,860		$1,025,741		$171,844		$656,878
	TRANSMISSION & DISTRIBUTION PLANT											
303.4	Land & Land Rights	$100,734	100.0%	$100,734	100.00%	$100,734	0.00%	$0	0.00%	$0	0.00%	$0
304.4	Structures & Improvements	$5,499	100.0%	$5,499	100.00%	$5,499	0.00%	$0	0.00%	$0	0.00%	$0
330.4	Distr. Reservoirs & Standpipes	$1,969,660	100.0%	$1,969,660	58.92%	$1,160,438	11.29%	$222,340	0.88%	$17,342	28.92%	$569,540
331.4	Distribution Mains	$18,096,693	63.3%	$11,451,587	28.32%	$5,125,279	3.05%	$551,809	9.21%	$1,666,550	22.70%	$4,107,949
331.4	Transmission Mains	$7,799,367	71.9%	$5,609,305	42.84%	$3,346,521	4.61%	$359,908	7.00%	$545,785	17.40%	$1,357,090
333.4	Services	$1,035,265	91.7%	$949,131	80.90%	$837,519	8.71%	$90,207	2.07%	$21,405	0.00%	$0
334.4	Meters & Meter Installations	$2,213,614	100.0%	$2,213,614	100.00%	$2,213,614	0.00%	$0	0.00%	$0	0.00%	$0
335.4	Hydrants	$2,445,677	95.8%	$2,343,937	94.84%	$2,319,460	0.00%	$0	1.00%	$24,477	0.00%	$0
339.4	Other Plant & Misc. Equipment	$0	0.0%	$0								
	GENERAL PLANT											
303.5	Land & Land Rights	$0	100.0%	$0								
304.5	Structures & Improvements	$529,769	100.0%	$529,769	100.00%	$529,769						
340.5	Office Furniture & Equipment	$347,148	100.0%	$347,148	100.00%	$347,148						
341.5	Transportation Equipment	$615,228	100.0%	$615,228	100.00%	$615,228						
342.5	Stores Equipment	$6,026	100.0%	$6,026	100.00%	$6,026						
343.5	Tools, Shop & Garage Equipment	$158,638	100.0%	$158,638	100.00%	$158,638						
344.5	Laboratory Equipment	$20,722	100.0%	$20,722	100.00%	$20,722						
345.5	Power Operated Equipment	$209,756	100.0%	$209,756	100.00%	$209,756						
346.5	Communication Equipment	$52,483	100.0%	$52,483	100.00%	$52,483						
347.5	Miscellaneous Equipment	$1,514	100.0%	$1,514	100.00%	$1,514						
348.5	Other Tangible Plant	$0	100.0%	$0	100.00%	$0						
	Total	$56,875,621	81.29%	$46,232,290	59.51%	$33,845,735	4.58%	$2,605,519	4.72%	$2,684,552	12.48%	$7,096,483

Staff Witness Amaya

A/C No.	WATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Current Customer Demand Percent	Current Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Fire Flow Percent	Fire Flow Amount
	INTANGIBLE PLANT											
301.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130						
302.1	Franchises	$2,664	100.00%	$2,664	100.00%	$2,664						
339.1	Other Plant & Misc. Equipment	$207,527	100.00%	$207,527	100.00%	$207,527						
	SOURCE OF SUPPLY AND PUMPING PLANT											
303.2	Land & Land Rights	$123,422	100.00%	$123,422	100.00%	$123,422						
304.2	Structures & Improvements	$105,208	64.71%	$68,080	59.81%	$62,918	4.91%	$5,162	0.00%	$0	0.00%	$0
305.2	Collect. & Impound. Reservoirs	$0										
306.2	Lake, River & Other Intakes	$0										
307.2	Wells & Springs	$4,628,702	64.71%	$2,995,435	59.81%	$2,768,349	4.91%	$227,086	0.00%	$0	0.00%	$0
308.2	Infiltration Galleries & Tunnels	$0										
309.2	Supply Mains	$2,191,871	100.00%	$2,191,871	100.00%	$2,191,871	0.00%	$0	0.00%	$0	0.00%	$0
310.2	Power Generation Equipment	$0										
311.2	Pumping Equipment - Non high service pumping	$307,352	64.71%	$198,901	59.81%	$183,822	4.91%	$15,079	0.00%	$0	0.00%	$0
311.2	Pumping Equipment - High service pumping	$106,924	74.99%	$80,185	69.31%	$74,105	5.69%	$6,080	0.00%	$0	0.00%	$0
339.2	Other Plant & Misc. Equipment	$95,961	64.71%	$62,101	59.81%	$57,393	4.91%	$4,708	0.00%	$0	0.00%	$0
	WATER TREATMENT PLANT											
303.3	Land & Land Rights	$280,476	100.00%	$280,476	100.00%	$280,476	0.00%	$0	0.00%	$0	0.00%	$0
304.3	Structures & Improvements - LS wtp	$1,251,136	100.00%	$1,251,136	100.00%	$1,251,136	0.00%	$0	0.00%	$0	0.00%	$0
304.3	Structures & Improvements - RO wtp	$2,693,952	100.00%	$2,693,952	28.60%	$770,492	2.35%	$63,203	65.54%	$1,765,718	3.51%	$94,539
320.3	Water Treatment Equipment - LS wtp	$4,077,923	100.00%	$4,077,923	100.00%	$4,077,923	0.00%	$0	0.00%	$0	0.00%	$0
320.3	Water Treatment Equipment - RO wtp membrane	$2,972,454	34.46%	$1,024,195	28.60%	$850,146	2.35%	$69,737	0.00%	$0	3.51%	$104,312
320.3	Water Treatment Equipment - RO wtp non-membrane train	$2,216,126	100.00%	$2,216,126	28.60%	$633,830	2.35%	$51,993	65.54%	$1,452,533	3.51%	$77,771
339.3	Other Plant & Misc. Equipment	$0										
	Total Water Treatment Plant	$13,492,067		$11,543,808		$7,864,002		$184,933		$3,218,251		$276,622
	TRANSMISSION & DISTRIBUTION PLANT											
303.4	Land & Land Rights	$100,734	100.00%	$100,734	100.00%	$100,734	0.00%	$0	0.00%	$0	0.00%	$0
304.4	Structures & Improvements	$5,499	100.00%	$5,499	100.00%	$5,499	0.00%	$0	0.00%	$0	0.00%	$0
330.4	Distr. Reservoirs & Standpipes	$1,969,660	100.00%	$1,969,660	95.26%	$1,876,293	0.00%	$0	0.00%	$0	4.74%	$93,367
331.4	Distribution Mains	$18,096,693	23.49%	$4,251,057	22.27%	$4,030,474	1.22%	$220,583	0.00%	$0	0.00%	$0
331.4	Transmission Mains	$7,799,367	72.46%	$5,651,209	68.70%	$5,358,180	3.76%	$293,029	0.00%	$0	0.00%	$0
333.4	Services	$1,035,265	72.40%	$749,564	68.65%	$710,670	3.76%	$38,894	0.00%	$0	0.00%	$0
334.4	Meters & Meter Installations	$2,213,614	100.00%	$2,213,614	100.00%	$2,213,614	0.00%	$0	0.00%	$0	0.00%	$0
335.4	Hydrants	$2,445,677	94.8%	$2,319,460	94.84%	$2,319,460	0.00%	$0	0.00%	$0	0.00%	$0
339.4	Other Plant & Misc. Equipment	$0										
	GENERAL PLANT											
303.5	Land & Land Rights	$0										
304.5	Structures & Improvements	$529,769	100.00%	$529,769	100.00%	$529,769						
340.5	Office Furniture & Equipment	$347,148	100.00%	$347,148	100.00%	$347,148						
341.5	Transportation Equipment	$615,228	100.00%	$615,228	100.00%	$615,228						
342.5	Stores Equipment	$6,026	100.00%	$6,026	100.00%	$6,026						
343.5	Tools, Shop & Garage Equipment	$158,638	100.00%	$158,638	100.00%	$158,638						
344.5	Laboratory Equipment	$20,722	100.00%	$20,722	100.00%	$20,722						
345.5	Power Operated Equipment	$209,756	100.00%	$209,756	100.00%	$209,756						
346.5	Communication Equipment	$52,483	100.00%	$52,483	100.00%	$52,483						
347.5	Miscellaneous Equipment	$1,514	100.00%	$1,514	100.00%	$1,514						
348.5	Other Tangible Plant	$0	100.00%	$0	100.00%	$0						
	Total	$56,875,621	64.50%	$36,682,205	56.44%	$32,098,411	1.75%	$995,553	5.66%	$3,218,251	0.65%	$369,989

OPC Witness Biddy

A/C No	WATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Current Customer Demand Percent	Current Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Fire Flow Percent	Fire Flow Amount
	INTANGIBLE PLANT											
301.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130						
302.1	Franchises	$2,664	100.00%	$2,664	100.00%	$2,664						
339.1	Other Plant & Misc. Equipment	$207,527	100.00%	$207,527	100.00%	$207,527						
	SOURCE OF SUPPLY AND PUMPING PLANT											
303.2	Land & Land Rights	$123,422	44.62%	$55,067	44.62%	$55,067	0.00%	$0	0.00%	$0	0.00%	$0
304.2	Structures & Improvements	$105,208	44.62%	$46,941	44.62%	$46,941	0.00%	$0	0.00%	$0	0.00%	$0
305.2	Collect. & Impound. Reservoirs	$0										
306.2	Lake, River & Other Intakes	$0										
307.2	Wells & Springs	$4,628,702	44.62%	$2,065,192	44.62%	$2,065,192	0.00%	$0	0.00%	$0	0.00%	$0
308.2	Infiltration Galleries & Tunnels	$0										
309.2	Supply Mains	$2,191,871	44.62%	$977,949	44.62%	$977,949	0.00%	$0	0.00%	$0	0.00%	$0
310.2	Power Generation Equipment	$0										
311.2	Pumping Equipment - Non high service pumping	$307,352	44.62%	$137,132	44.62%	$137,132	0.00%	$0	0.00%	$0	0.00%	$0
311.2	Pumping Equipment - High service pumping	$106,924	44.62%	$47,706	44.62%	$47,706	0.00%	$0	0.00%	$0	0.00%	$0
339.2	Other Plant & Misc. Equipment	$95,961	44.62%	$42,815	44.62%	$42,815	0.00%	$0	0.00%	$0	0.00%	$0
	WATER TREATMENT PLANT											
303.3	Land & Land Rights	$280,476	58.73%	$164,723	58.73%	$164,723	0.00%	$0	0.00%	$0	0.00%	$0
304.3	Structures & Improvements - LS wtp	$1,251,136	58.73%	$734,789	58.73%	$734,789	0.00%	$0	0.00%	$0	0.00%	$0
304.3	Structures & Improvements - RO wtp	$2,693,952	58.73%	$1,582,151	58.73%	$1,582,151	0.00%	$0	0.00%	$0	0.00%	$0
320.3	Water Treatment Equipment - LS wtp	$4,077,923	58.73%	$2,394,953	58.73%	$2,394,953	0.00%	$0	0.00%	$0	0.00%	$0
320.3	Water Treatment Equipment - RO wtp membrane	$2,972,454	58.73%	$1,745,714	58.73%	$1,745,714	0.00%	$0	0.00%	$0	0.00%	$0
320.3	Water Treatment Equipment - RO wtp non-membrane train	$2,216,126	58.73%	$1,301,525	58.73%	$1,301,525	0.00%	$0	0.00%	$0	0.00%	$0
339.3	Other Plant & Misc. Equipment	$0										
	Total Water Treatment Plant	$13,492,067		$7,923,855		$7,923,855		$0		$0		$0
	TRANSMISSION & DISTRIBUTION PLANT											
303.4	Land & Land Rights	$100,734	59.82%	$60,261	44.44%	$44,764	0.00%	$0	0.00%	$0	15.38%	$15,498
304.4	Structures & Improvements	$5,499	100.00%	$5,499	100.00%	$5,499	0.00%	$0	0.00%	$0	0.00%	$0
330.4	Distr. Reservoirs & Standpipes	$1,969,660	59.82%	$1,178,292	44.44%	$875,267	0.00%	$0	0.00%	$0	15.38%	$303,025
331.4	Distribution Mains	$18,096,693	24.57%	$4,446,039	24.57%	$4,446,039	0.00%	$0	0.00%	$0	0.00%	$0
331.4	Transmission Mains	$7,799,367	24.57%	$1,916,167	24.57%	$1,916,167	0.00%	$0	0.00%	$0	0.00%	$0
333.4	Services	$1,035,265	75.20%	$778,496	75.20%	$778,496	0.00%	$0	0.00%	$0	0.00%	$0
334.4	Meters & Meter Installations	$2,213,614	100.00%	$2,213,614	100.00%	$2,213,614	0.00%	$0	0.00%	$0	0.00%	$0
335.4	Hydrants	$2,445,677	24.57%	$600,860	24.57%	$600,860	0.00%	$0	0.00%	$0	0.00%	$0
339.4	Other Plant & Misc. Equipment	$0										
	GENERAL PLANT											
303.5	Land & Land Rights	$0										
304.5	Structures & Improvements	$529,769	86.80%	$459,820	86.80%	$459,820	0.00%	$0	0.00%	$0	0.00%	$0
340.5	Office Furniture & Equipment	$347,148	86.80%	$301,324	86.80%	$301,324	0.00%	$0	0.00%	$0	0.00%	$0
341.5	Transportation Equipment	$615,228	100.00%	$615,228	100.00%	$615,228	0.00%	$0	0.00%	$0	0.00%	$0
342.5	Stores Equipment	$6,026	100.00%	$6,026	100.00%	$6,026	0.00%	$0	0.00%	$0	0.00%	$0
343.5	Tools, Shop & Garage Equipment	$158,638	100.00%	$158,638	100.00%	$158,638	0.00%	$0	0.00%	$0	0.00%	$0
344.5	Laboratory Equipment	$20,722	100.00%	$20,722	100.00%	$20,722	0.00%	$0	0.00%	$0	0.00%	$0
345.5	Power Operated Equipment	$209,756	100.00%	$209,756	100.00%	$209,756	0.00%	$0	0.00%	$0	0.00%	$0
346.5	Communication Equipment	$52,483	100.00%	$52,483	100.00%	$52,483	0.00%	$0	0.00%	$0	0.00%	$0
347.5	Miscellaneous Equipment	$1,514	100.00%	$1,514	100.00%	$1,514	0.00%	$0	0.00%	$0	0.00%	$0
348.5	Other Tangible Plant	$0										
	Total	$56,875,621	43.14%	$24,537,717	42.58%	$24,219,195	0.00%	$0	0.00%	$0	0.56%	$318,522

Staff Recommended

A/C No.	WATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Current Customer Demand Percent	Current Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Fire Flow Percent	Fire Flow Amount
	INTANGIBLE PLANT											
301.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130	0.00%	$0	0.00%	$0	0.00%	$0
302.1	Franchises	$2,664	100.00%	$2,664	100.00%	$2,664	0.00%	$0	0.00%	$0	0.00%	$0
339.1	Other Plant & Misc. Equipment	$207,527	100.00%	$207,527	100.00%	$207,527	0.00%	$0	0.00%	$0	0.00%	$0
	SOURCE OF SUPPLY AND PUMPING PLANT											
303.2	Land & Land Rights	$123,422	100.00%	$123,422	100.00%	$123,422	0.00%	$0	0.00%	$0	0.00%	$0
304.2	Structures & Improvements	$105,208	64.57%	$67,937	59.81%	$62,923	4.77%	$5,014	0.00%	$0	0.00%	$0
305.2	Collect. & Impound. Reservoirs	$0										
306.2	Lake, River & Other Intakes	$0										
307.2	Wells & Springs	$4,628,702	64.57%	$2,988,944	59.81%	$2,768,349	4.77%	$220,595	0.00%	$0	0.00%	$0
308.2	Infiltration Galleries & Tunnels	$0										
309.2	Supply Mains	$2,191,871	64.57%	$1,415,382	59.81%	$1,310,921	4.77%	$104,460	0.00%	$0	0.00%	$0
310.2	Power Generation Equipment	$0										
311.2	Pumping Equipment - Non high service pumping	$307,352	64.57%	$198,470	59.81%	$183,822	4.77%	$14,648	0.00%	$0	0.00%	$0
311.2	Pumping Equipment - High service pumping	$106,924	75.60%	$80,835	70.02%	$74,869	5.58%	$5,966	0.00%	$0	0.00%	$0
339.2	Other Plant & Misc. Equipment	$95,961	64.57%	$61,966	59.81%	$57,393	4.77%	$4,573	0.00%	$0	0.00%	$0
	WATER TREATMENT PLANT											
303.3	Land & Land Rights	$280,476	100.00%	$280,476	100.00%	$280,476	0.00%	$0	0.00%	$0	0.00%	$0
304.3	Structures & Improvements - LS wtp	$1,251,136	100.00%	$1,251,136	100.00%	$1,251,136	0.00%	$0	0.00%	$0	0.00%	$0
304.3	Structures & Improvements - RO wtp	$2,693,952	100.00%	$2,693,952	28.18%	$759,150	2.25%	$60,493	66.12%	$1,781,162	3.46%	$93,147
320.3	Water Treatment Equipment - LS wtp	$4,077,923	100.00%	$4,077,923	100.00%	$4,077,923	0.00%	$0	0.00%	$0	0.00%	$0
320.3	Water Treatment Equipment - RO wtp membrane	$2,972,454	33.88%	$1,007,154	28.18%	$837,631	2.25%	$66,746	0.00%	$0	3.46%	$102,777
320.3	Water Treatment Equipment - RO wtp non-membrane train	$2,216,126	100.00%	$2,216,126	28.18%	$624,500	2.25%	$49,763	66.12%	$1,465,238	3.46%	$76,626
339.3	Other Plant & Misc. Equipment	$0										
	Total Water Treatment Plant	$13,492,067		$11,526,768		$7,830,816		$177,002		$3,246,400		$272,550
	TRANSMISSION & DISTRIBUTION PLANT											
303.4	Land & Land Rights	$100,734	100.00%	$100,734	100.00%	$100,734	0.00%	$0	0.00%	$0	0.00%	$0
304.4	Structures & Improvements	$5,499	100.00%	$5,499	100.00%	$5,499	0.00%	$0	0.00%	$0	0.00%	$0
330.4	Distr. Reservoirs & Standpipes	$1,969,660	100.00%	$1,969,660	95.26%	$1,876,293	0.00%	$0	0.00%	$0	4.74%	$93,367
331.4	Distribution Mains	$18,096,693	23.91%	$4,327,201	22.27%	$4,030,388	1.64%	$296,813	0.00%	$0	0.00%	$0
331.4	Transmission Mains	$7,799,367	32.27%	$2,516,883	30.06%	$2,344,244	2.21%	$172,639	0.00%	$0	0.00%	$0
333.4	Services	$1,035,265	73.70%	$763,006	68.65%	$710,670	5.06%	$52,336	0.00%	$0	0.00%	$0
334.4	Meters & Meter Installations	$2,213,614	100.00%	$2,213,614	100.00%	$2,213,614	0.00%	$0	0.00%	$0	0.00%	$0
335.4	Hydrants	$2,445,677	94.84%	$2,319,460	94.84%	$2,319,460	0.00%	$0	0.00%	$0	0.00%	$0
339.4	Other Plant & Misc. Equipment	$0										
	GENERAL PLANT											
303.5	Land & Land Rights	$0										
304.5	Structures & Improvements	$529,769	90.98%	$481,984	86.80%	$459,839	4.18%	$22,144	0.00%	$0	0.00%	$0
340.5	Office Furniture & Equipment	$347,148	90.98%	$315,835	86.80%	$301,324	4.18%	$14,511	0.00%	$0	0.00%	$0
341.5	Transportation Equipment	$615,228	100.00%	$615,228	100.00%	$615,228	0.00%	$0	0.00%	$0	0.00%	$0
342.5	Stores Equipment	$6,026	100.00%	$6,026	100.00%	$6,026	0.00%	$0	0.00%	$0	0.00%	$0
343.5	Tools, Shop & Garage Equipment	$158,638	100.00%	$158,638	100.00%	$158,638	0.00%	$0	0.00%	$0	0.00%	$0
344.5	Laboratory Equipment	$20,722	100.00%	$20,722	100.00%	$20,722	0.00%	$0	0.00%	$0	0.00%	$0
345.5	Power Operated Equipment	$209,756	100.00%	$209,756	100.00%	$209,756	0.00%	$0	0.00%	$0	0.00%	$0
346.5	Communication Equipment	$52,483	100.00%	$52,483	100.00%	$52,483	0.00%	$0	0.00%	$0	0.00%	$0
347.5	Miscellaneous Equipment	$1,514	100.00%	$1,514	100.00%	$1,514	0.00%	$0	0.00%	$0	0.00%	$0
348.5	Other Tangible Plant	$0										
	Total	$56,875,621	57.60%	$32,758,288	49.33%	$28,055,269	1.92%	$1,090,703	5.71%	$3,246,400	0.64%	$365,917

Palm Coast Utility Corporation Witness Guastella

A/C No.	WASTEWATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Current Customer Demand Percent	Current Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Adjustment for Infiltration and Inflow Percent	Adjustment for Infiltration and Inflow Amount
	INTANGIBLE PLANT											
351.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130						
352.1	Franchises	$2,684	100.00%	$2,684	100.00%	$2,684						
389.1	Other Plant & Misc. Equipment	$121,386	100.00%	$121,386	100.00%	$121,386						
	COLLECTION PLANT											
353.2	Land & Land Rights	$0										
354.2	Structures & Improvements	$6,560	100.00%	$6,560	100.00%	$6,560						
360.2	Collection Sewers - Force Mains	$4,528,081	78.96%	$3,575,373	71.33%	$3,229,880	2.42%	$109,580	5.21%	$235,913	0.00%	$0
361.2	Collection Sewers - Gravity Mains	$22,727,333	59.84%	$13,600,036	44.51%	$10,114,942	5.31%	$1,207,010	10.02%	$2,278,084	0.00%	$0
361.2	Collection Sewers - PEP Mains	$5,808,084	25.36%	$1,472,930	5.99%	$348,061	0.72%	$41,572	18.65%	$1,083,297	0.00%	$0
361.2	Collection Sewers - PEP tanks	$2,100,213	100.00%	$2,100,213	100.00%	$2,100,213						
362.2	Special Collecting Structures	$0										
363.2	Services to Customers	$2,964,847	57.04%	$1,691,149	41.33%	$1,225,357	4.93%	$146,219	10.78%	$319,573		
364.2	Flow Measuring Devices	$0										
365.2	Flow Measuring Installations	$0										
389.2	Other Plant & Misc. Equipment	$0										
	SYSTEM PUMPING PLANT											
353.3	Land & Land Rights	$207,043	100.00%	$207,043	100.00%	$207,043						
354.3	Structures & Improvements	$101,995	57.12%	$58,260	41.46%	$42,289	4.95%	$5,046	10.71%	$10,925	0.00%	$0
370.3	Receiving Wells	$0										
371.3	Pumping Equipment	$4,146,720	57.12%	$2,368,606	41.46%	$1,719,303	4.95%	$205,151	10.71%	$444,153	0.00%	
389.3	Other Plant & Misc. Equipment	$0										
	TREATMENT AND DISPOSAL PLANT											
353.4	Land & Land Rights	$946,489	100.00%	$946,489	100.00%	$946,489						
354.4	Structures & Improvements - Treatment Equipment	$5,150,633	75.29%	$3,878,023	52.23%	$2,690,021	16.89%	$869,849	6.18%	$318,153	8.59%	$442,402
354.4	Structures & Improvements - Disposal Equipment	$217,145	100.00%	$217,145	98.40%	$213,668	1.60%	$3,477	0.00%	$0	0.00%	$0
380.4	Treatment Equipment	$2,695,261	75.29%	$2,029,320	52.23%	$1,407,654	16.89%	$455,181	6.18%	$166,485	8.59%	$231,503
380.4	Disposal Equipment	$2,518,768	100.00%	$2,518,768	98.40%	$2,478,435	1.60%	$40,333	0.00%	$0	0.00%	$0
381.4	Plant Sewers	$0										
382.4	Outfall Sewer Lines	$0										
389.4	Other Plant & Misc. Equipment	$0										
	GENERAL PLANT											
353.5	Land & Land Rights	$0										
354.5	Structures & Improvements	$534,224	100.00%	$534,224	100.00%	$534,224						
390.5	Office Furniture & Equipment	$350,077	100.00%	$350,077	100.00%	$350,077						
391.5	Transportation Equipment	$620,417	100.00%	$620,417	100.00%	$620,417						
392.5	Stores Equipment	$6,076	100.00%	$6,076	100.00%	$6,076						
393.5	Tools, Shop & Garage Equipment	$159,977	100.00%	$159,977	100.00%	$159,977						
394.5	Laboratory Equipment	$20,896	100.00%	$20,896	100.00%	$20,896						
395.5	Power Operated Equipment	$211,526	100.00%	$211,526	100.00%	$211,526						
396.5	Communication Equipment	$52,925	100.00%	$52,925	100.00%	$52,925						
397.5	Miscellaneous Equipment	$1,527	100.00%	$1,527	100.00%	$1,527						
398.5	Other Tangible Plant	$0										
	Total	$56,207,018	65.40%	$36,757,760	51.27%	$28,817,760	5.49%	$3,083,418	8.64%	$4,856,583	1.20%	$673,905

Staff Witness Amaya

A/C No.	WASTEWATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Customer Demand Percent	Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Adjustment for Infiltration and Inflow Percent	Adjustment for Infiltration and Inflow Amount
	INTANGIBLE PLANT											
351.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130						
352.1	Franchises	$2,684	100.00%	$2,684	100.00%	$2,684						
389.1	Other Plant & Misc. Equipment	$121,386	100.00%	$121,386	100.00%	$121,386						
	COLLECTION PLANT											
353.2	Land & Land Rights	$0										
354.2	Structures & Improvements	$6,560	100.00%	$6,560	100.00%	$6,560						
360.2	Collection Sewers - Force Mains	$4,528,081	58.52%	$2,649,833	57.58%	$2,607,269	0.94%	$42,564	0.00%	$0	0.00%	$0
361.2	Collection Sewers - Gravity Mains	$22,727,333	34.47%	$7,833,322	32.62%	$7,413,453	1.85%	$419,869	0.00%	$0	0.00%	$0
361.2	Collection Sewers - PEP Mains	$5,808,084	6.33%	$367,896	5.99%	$348,061	0.34%	$19,835	0.00%	$0	0.00%	$0
361.2	Collection Sewers - PEP tanks	$2,100,213	100.00%	$2,100,213	100.00%	$2,100,213						
362.2	Special Collecting Structures	$0										
363.2	Services to Customers	$2,964,847	34.47%	$1,021,880	32.62%	$967,107	1.85%	$54,773	0.00%	$0	0.00%	$0
364.2	Flow Measuring Devices	$0										
365.2	Flow Measuring Installations	$0										
389.2	Other Plant & Misc. Equipment	$0										
	SYSTEM PUMPING PLANT											
353.3	Land & Land Rights	$207,043	100.00%	$207,043	100.00%	$207,043						
354.3	Structures & Improvements	$101,995	29.75%	$30,346	28.16%	$28,718	1.60%	$1,627	0.00%	$0	0.00%	$0
370.3	Receiving Wells	$0										
371.3	Pumping Equipment	$4,146,720	29.75%	$1,233,738	28.16%	$1,167,580	1.60%	$66,158	0.00%	$0	0.00%	$0
389.3	Other Plant & Misc. Equipment	$0										
	TREATMENT AND DISPOSAL PLANT											
353.4	Land & Land Rights	$946,489	100.00%	$946,489	100.00%	$946,489						
354.4	Structures & Improvements - Treatment Equipment	$5,150,633	51.41%	$2,648,164	43.95%	$2,263,489	7.47%	$384,675	0.00%	$0	12.03%	$619,577
354.4	Structures & Improvements - Disposal Equipment	$217,145	74.75%	$162,311	63.89%	$138,734	10.86%	$23,578	0.00%	$0	12.03%	$26,121
380.4	Treatment Equipment	$2,695,261	51.41%	$1,385,751	43.95%	$1,184,455	7.47%	$201,296	0.00%	$0	12.03%	$324,217
380.4	Disposal Equipment	$2,518,768	74.75%	$1,882,724	63.89%	$1,609,238	10.86%	$273,486	0.00%	$0	12.03%	$302,986
381.4	Plant Sewers	$0										
382.4	Outfall Sewer Lines	$0										
389.4	Other Plant & Misc. Equipment	$0										
	GENERAL PLANT											
353.5	Land & Land Rights	$0										
354.5	Structures & Improvements	$534,224	100.00%	$534,224	100.00%	$534,224						
390.5	Office Furniture & Equipment	$350,077	100.00%	$350,077	100.00%	$350,077						
391.5	Transportation Equipment	$620,417	100.00%	$620,417	100.00%	$620,417						
392.5	Stores Equipment	$6,076	100.00%	$6,076	100.00%	$6,076						
393.5	Tools, Shop & Garage Equipment	$159,977	100.00%	$159,977	100.00%	$159,977						
394.5	Laboratory Equipment	$20,896	100.00%	$20,896	100.00%	$20,896						
395.5	Power Operated Equipment	$211,526	100.00%	$211,526	100.00%	$211,526						
396.5	Communication Equipment	$52,925	100.00%	$52,925	100.00%	$52,925						
397.5	Miscellaneous Equipment	$1,527	100.00%	$1,527	100.00%	$1,527						
398.5	Other Tangible Plant	$0	100.00%	$0	100.00%	$0						
	Total	$56,207,018	43.70%	$24,564,116	41.06%	$23,076,255	2.65%	$1,487,861	0.00%	$0	2.26%	$1,272,901

OPC Witness Biddy

A/C No.	WASTEWATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Customer Demand Percent	Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Adjustment for Infiltration and Inflow Percent	Adjustment for Infiltration and Inflow Amount
	INTANGIBLE PLANT											
351.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130						
352.1	Franchises	$2,684	100.00%	$2,684	100.00%	$2,684						
389.1	Other Plant & Misc. Equipment	$121,386	100.00%	$121,386	100.00%	$121,386						
	COLLECTION PLANT											
353.2	Land & Land Rights	$0										
354.2	Structures & Improvements	$6,560	100.00%	$6,560	100.00%	$6,560						
360.2	Collection Sewers - Force Mains	$4,528,081	21.95%	$993,803	21.95%	$993,803	0.00%	$0	0.00%	$0	0.00%	$0
361.2	Collection Sewers - Gravity Mains	$22,727,333	21.95%	$4,988,091	21.95%	$4,988,091	0.00%	$0	0.00%	$0	0.00%	$0
361.2	Collection Sewers - PEP Mains	$5,808,084	6.02%	$349,420	6.02%	$349,420	0.00%	$0	0.00%	$0	0.00%	$0
361.2	Collection Sewers - PEP tanks	$2,100,213	6.02%	$126,351	6.02%	$126,351	0.00%	$0	0.00%	$0	0.00%	$0
362.2	Special Collecting Structures	$0										
363.2	Services to Customers	$2,964,847	34.21%	$1,014,190	34.21%	$1,014,190	0.00%	$0	0.00%	$0	0.00%	$0
364.2	Flow Measuring Devices	$0										
365.2	Flow Measuring Installations	$0										
389.2	Other Plant & Misc. Equipment	$0										
	SYSTEM PUMPING PLANT											
353.3	Land & Land Rights	$207,043	21.95%	$45,441	21.95%	$45,441	0.00%	$0	0.00%	$0	0.00%	$0
354.3	Structures & Improvements	$101,995	21.95%	$22,385	21.95%	$22,385	0.00%	$0	0.00%	$0	0.00%	$0
370.3	Receiving Wells	$0										
371.3	Pumping Equipment	$4,146,720	21.95%	$910,103	21.95%	$910,103	0.00%	$0	0.00%	$0	0.00%	$0
389.3	Other Plant & Misc. Equipment	$0										
	TREATMENT AND DISPOSAL PLANT											
353.4	Land & Land Rights	$946,489	66.17%	$626,292	66.17%	$626,292	0.00%	$0	0.00%	$0	0.00%	$0
354.4	Structures & Improvements - Treatment Equipment	$5,150,633	42.80%	$2,204,472	42.80%	$2,204,472	0.00%	$0	0.00%	$0	18.02%	$927,951
354.4	Structures & Improvements - Disposal Equipment	$217,145	50.35%	$109,339	50.35%	$109,339	0.00%	$0	0.00%	$0	21.20%	$46,025
380.4	Treatment Equipment	$2,695,261	42.80%	$1,153,572	42.80%	$1,153,572	0.00%	$0	0.00%	$0	18.02%	$485,585
380.4	Disposal Equipment	$2,518,768	50.35%	$1,268,274	50.35%	$1,268,274	0.00%	$0	0.00%	$0	21.20%	$533,868
381.4	Plant Sewers	$0										
382.4	Outfall Sewer Lines	$0										
389.4	Other Plant & Misc. Equipment	$0										
	GENERAL PLANT											
353.5	Land & Land Rights	$0										
354.5	Structures & Improvements	$534,224	86.80%	$463,706	86.80%	$463,706						
390.5	Office Furniture & Equipment	$350,077	86.80%	$303,867	86.80%	$303,867						
391.5	Transportation Equipment	$620,417	100.00%	$620,417	100.00%	$620,417						
392.5	Stores Equipment	$6,076	100.00%	$6,076	100.00%	$6,076						
393.5	Tools, Shop & Garage Equipment	$159,977	100.00%	$159,977	100.00%	$159,977						
394.5	Laboratory Equipment	$20,896	100.00%	$20,896	100.00%	$20,896						
395.5	Power Operated Equipment	$211,526	100.00%	$211,526	100.00%	$211,526						
396.5	Communication Equipment	$52,925	100.00%	$52,925	100.00%	$52,925						
397.5	Miscellaneous Equipment	$1,527	100.00%	$1,527	100.00%	$1,527						
398.5	Other Tangible Plant	$0	100.00%	$0	100.00%	$0						
	Total	$56,207,018	28.09%	$15,789,411	28.09%	$15,789,411	0.00%	$0	0.00%	$0	3.55%	$1,993,429

DOCKET NO. 950156-WS
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ATTACHMENT 2
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Staff Recommended

A/C No.	WASTEWATER SYSTEM Description	13 Month Avg	Used & Useful Percent	Used & Useful Amount	Customer Demand Percent	Customer Demand Amount	Margin Reserve Percent	Margin Reserve Amount	Economy of Scale Percent	Economy of Scale Amount	Adjustment for Infiltration and Inflow Percent	Adjustment for Infiltration and Inflow Amount
	INTANGIBLE PLANT											
351.1	Organization	$6,130	100.00%	$6,130	100.00%	$6,130						
352.1	Franchises	$2,684	100.00%	$2,684	100.00%	$2,684						
389.1	Other Plant & Misc. Equipment	$121,386	100.00%	$121,386	100.00%	$121,386						
	COLLECTION PLANT											
353.2	Land & Land Rights	$0										
354.2	Structures & Improvements	$6,560	100.00%	$6,560	100.00%	$6,560						
360.2	Collection Sewers - Force Mains	$4,528,081	38.73%	$1,753,726	36.65%	$1,659,542	2.08%	$94,184	0.00%	$0	0.00%	$0
361.2	Collection Sewers - Gravity Mains	$22,727,333	34.29%	$7,792,514	32.62%	$7,413,453	1.67%	$379,061	0.00%	$0	0.00%	$0
361.2	Collection Sewers - PEP Mains	$5,808,084	7.66%	$444,790	5.99%	$348,061	1.67%	$96,729	0.00%	$0	0.00%	$0
361.2	Collection Sewers - PEP tanks	$2,100,213	100.00%	$2,100,213	100.00%	$2,100,213						
362.2	Special Collecting Structures	$0										
363.2	Services to Customers	$2,964,847	34.29%	$1,016,556	32.62%	$967,107	1.67%	$49,450	0.00%	$0	0.00%	$0
364.2	Flow Measuring Devices	$0										
365.2	Flow Measuring Installations	$0										
389.2	Other Plant & Misc. Equipment	$0										
	SYSTEM PUMPING PLANT											
353.3	Land & Land Rights	$207,043	100.00%	$207,043	100.00%	$207,043						
354.3	Structures & Improvements	$101,995	38.73%	$39,502	36.65%	$37,382	2.08%	$2,120	0.00%	$0	0.00%	$0
370.3	Receiving Wells	$0										
371.3	Pumping Equipment	$4,146,720	38.73%	$1,605,990	36.65%	$1,519,817	2.08%	$86,174	0.00%	$0	0.00%	$0
389.3	Other Plant & Misc. Equipment	$0										
	TREATMENT AND DISPOSAL PLANT											
353.4	Land & Land Rights	$946,489	100.00%	$946,489	100.00%	$946,489						
354.4	Structures & Improvements - Treatment Equipment	$5,150,633	60.14%	$3,097,384	42.54%	$2,191,246	7.63%	$392,786	9.97%	$513,353	13.43%	$691,820
354.4	Structures & Improvements - Disposal Equipment	$217,145	88.31%	$191,765	72.41%	$157,244	7.63%	$16,559	8.27%	$17,962	22.86%	$49,645
380.4	Treatment Equipment	$2,695,261	60.14%	$1,620,822	42.54%	$1,146,652	7.63%	$205,540	9.97%	$268,631	13.43%	$362,021
380.4	Disposal Equipment	$2,518,768	88.31%	$2,224,374	72.41%	$1,823,941	7.63%	$192,080	8.27%	$208,353	22.86%	$575,855
381.4	Plant Sewers	$0										
382.4	Outfall Sewer Lines	$0										
389.4	Other Plant & Misc. Equipment	$0										
	GENERAL PLANT											
353.5	Land & Land Rights	$0										
354.5	Structures & Improvements	$534,224	90.98%	$486,037	86.80%	$463,706	4.18%	$22,331				
390.5	Office Furniture & Equipment	$350,077	90.98%	$318,500	86.80%	$303,867	4.18%	$14,633				
391.5	Transportation Equipment	$620,417	100.00%	$620,417	100.00%	$620,417						
392.5	Stores Equipment	$6,076	100.00%	$6,076	100.00%	$6,076						
393.5	Tools, Shop & Garage Equipment	$159,977	100.00%	$159,977	100.00%	$159,977						
394.5	Laboratory Equipment	$20,896	100.00%	$20,896	100.00%	$20,896						
395.5	Power Operated Equipment	$211,526	100.00%	$211,526	100.00%	$211,526						
396.5	Communication Equipment	$52,925	100.00%	$52,925	100.00%	$52,925						
397.5	Miscellaneous Equipment	$1,527	100.00%	$1,527	100.00%	$1,527						
398.5	Other Tangible Plant	$0										
	Total	$56,207,018	44.58%	$25,055,810	40.02%	$22,495,866	2.76%	$1,551,645	1.79%	$1,008,299	2.99%	$1,679,341

ISSUE 33: Should an adjustment be made to depreciation expense and accumulated depreciation of the cost of rapid infiltration basin to the appropriate accounts?

RECOMMENDATION: No. (MONIZ)

POSITION OF PARTIES

PCUC: No. The costs of the RIB are not misclassified.

DUNES: No position.

FLAGLER: Adopts OPC's position.

OPC: Yes. Accumulated depreciation should be reduced by $34,270 and depreciation expense should be reduced by $34,270.

STAFF ANALYSIS: Staff witness Dodrill testified that PCUC misclassified improvements to the newer rapid infiltration basins (RIBs) site in USOA Account 380, Treatment and Disposal Equipment. He advocated reclassification of these costs to Uniform Systems of Accounts (USOA) Account 354, Structures and Improvements, which account has longer guideline service lives and, hence, lower depreciation rates. (EXH. 30)

Ms. Dismukes testified that she agreed with the staff auditor's finding that the utility improperly classified the cost of the RIB. Consequently, the amount of depreciation was incorrect and the amount of accumulated depreciation was likewise incorrect. To correct the company's errors, accumulated depreciation should be reduced $34,270 and depreciation should be likewise reduced. (TR 561)

PCUC witness Seidman testified that based on the general descriptions in Account 380, the utility has consistently classified RIB's as treatment and disposal facilities and the Commission has accepted this classification through its approval of related depreciation rates. PCUC believes that the guideline depreciable life for Account 380 fairly represents the expected life of its RIB's. (TR 953)

Mr. Seidman maintained that the RIBs were designed and are being used for further treatment and reuse/disposal of reclaimed water. The reclaimed water is applied to the bottom of the RIBs to allow for percolating through the soil for further treatment prior to discharging to the ground water. Further, according to Mr. Seidman, the use of rapid infiltration technology is relatively new and was not specifically envisioned in NARUC USOA; however, a RIB is similar in function to the oxidation ponds, lagoons and

filtering equipment described in Account 380 of the USOA. (TR 954)

The utility's response to the audit, states that the descriptions of grading and clearing in the account, upon which the auditor relies in his work papers, is grading and clearing "when directly occasioned by the building of a structure." The utility argues that no structures exist at the RIB site. Similarly, the drainage systems and landscaping relate to structure improvements. Further, the RIB site, including any landscaping required as a buffer, is in total a functioning wastewater disposal facility, not a structure with improvements and should remain in Account 380. (EXH 41)

Staff is not persuaded by Mr. Dodrill's and Ms. Dismukes' testimony that the utility misclassified the RIB. Since Ms. Dismukes provides no additional testimony on this issue other than agreeing with Mr. Dodrill, staff will address our analysis to his testimony. First, Mr. Dodrill agrees that there is an element of engineering judgement in determining where items should be booked and that he does not have the expertise. (TR 674) He also acknowledges that a RIB is similar in function to an oxidation pond or lagoon and a sedimentation basin, both of which are properly booked in Account 380. (TR 677-678) Further, the NARUC Uniform System of Accounts does not specifically identify a RIB and where it should be booked. Based on the above, we believe the guideline depreciable life for Account 380 fairly represents the expected life of the RIB. Therefore, staff is not recommending an adjustment be made to reclassify the RIB.

ISSUE 34: Should non-used CIAC be included as a reduction to rate base?

RECOMMENDATION: This is a proposed stipulation discussed in Issue A. (WEBB)

POSITION OF THE PARTIES

PCUC: The parties have proposed a stipulation that non-used plant, non-used accumulated depreciation, non-used CIAC or non-used accumulated amortization of CIAC should not be included in rate base.

DUNES: No position.

FLAGLER: The parties have proposed a stipulation that non-used plant, non-used accumulated depreciation, non-used CIAC or non-used accumulated amortization of CIAC should not be included in rate base.

OPC: No.

STAFF ANALYSIS: A stipulation has been proposed by the parties for this issue, and staff recommends approval of the stipulation is Issue A.

ISSUE 35: Dropped.

ISSUE 36: What is the proper amount of CIAC to use as a deduction from rate base?

RECOMMENDATION: The proper amount is the amount that the Commission approves as being used and useful. (WEBB)

POSITION OF THE PARTIES

PCUC: As per MFRs, all of the CIAC associated with existing customers should be used as a deduction in determining rate base.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The amount of CIAC that should be a deduction to rate base is subject to the resolution of other issues.

STAFF ANALYSIS: It appears that all parties agree that the appropriate amount of CIAC to use as a deduction from rate base should be that amount which is deemed used and useful. For presentation purposes, CIAC is presented in rate base as a gross amount. The non-used and useful adjustments for all components are netted in rate base as a separate line item. Based on the above positions, no further staff analysis is necessary. Staff, therefore, recommends that the Commission find that used and useful CIAC is the proper amount to deduct from rate base.

ISSUE 37: Should net debit deferred income taxes be included in rate base and if so should any adjustments be made to the amount proposed by the Company?

RECOMMENDATION: Yes, net debit deferred income taxes should be included in rate base. The amounts proposed by the Company should be decreased by $264,759 for water and increased by $332,444 for wastewater. (C. ROMIG)

POSITION OF THE PARTIES

PCUC: Yes. No adjustments to the amounts in the MFRs are appropriate.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: At a minimum, net debit deferred taxes should be reduced by $378,629, for an extraordinary property loss deferred tax which should not be recovered from ratepayers.

STAFF ANALYSIS: Per MFR Schedules A-1 and A-2 (EXH 7), the projected used and useful 13-month average net debit deferred taxes are $1,180,646 for water and $1,898,140 for wastewater. (EXH 7) The year- end MFR net debit deferred taxes for the same period are $1,119,911 for water and $1,940,403 for wastewater. The Company's calculations of these amounts are on MFR Schedule A-3-DTAX, pages 1 through 3. (EXH 7)

Simply stated, PCUC calculated its net debit deferred taxes by examining its gross debit deferred taxes apart from its examination of its gross credit deferred taxes. To the debit deferred taxes, it made a specific adjustment to remove the prepaid pre-1987 taxes the Commission disallowed in its last rate case and allocated the balance of the debit deferred taxes between used and useful and nonused and useful based on the ratio of additions of CIAC and taxable advances since the 1988 test year. Relative to its gross credit deferred taxes, PCUC did not make any specific adjustments to these. PCUC allocated the credit deferred taxes between used and useful and nonused and useful on the basis of the ratio of used and useful and nonused and useful gross plant. The adjusted debit deferred taxes and the adjusted credit deferred taxes were then netted against one another, and the resulting net debit deferred taxes were included in the appropriate rate base calculations.

As pointed out by Palm Coast Witness Frank Seidman in his Direct Testimony,

> Commission Rule 25-30.433(3), F.A.C. requires that the used and useful portions of debit and credit deferred taxes be offset against one another for ratemaking purposes. If the net balance is a credit, it is to be included in the capital structure. If it is a debit, it is to be included in rate base. In this case, the net was a debit. (TR 170-171)

Further, in explanation of MFR Schedule A-3-DTAX, Witness Seidman explains that,

> ... debit deferred taxes are associated with taxes on CIAC. Credit deferred taxes are primarily associated with timing differences between book and tax depreciation. Therefore, the used and useful adjustment for the debit deferred taxes is proportionate to that for CIAC, while the adjustment for credit deferred taxes is proportionate to used and useful plant. (TR 170-171)

In her Direct Testimony, OPC Witness Kimberly H. Dismukes recommends that,

> ... the Commission reduce the amount of net debit deferred taxes included in rate base by $218,090 for the water operations and by $160,539 for wastewater. The Company's requested net debit deferred taxes includes deferred taxes associated with an extraordinary property loss. I believe this relates to the faulty plant installed by ICDC that the Commission disallowed from rate base in the Company's last rate proceeding. Accordingly, it would not be appropriate to include the associated deferred taxes in rate base. (TR 564)

Although Witness Seidman filed Rebuttal Testimony on June 17, 1996 (TR 904) and Supplemental Rebuttal on July 12, 1996 (TR 976), Mr. Seidman did not rebut the conclusion of Ms. Dismukes, that net debit deferred taxes included in rate base be reduced by $218,090 for water and by $160,539 for wastewater.

Commission Order No. 22843 in Docket No. 890277-WS was the Company's last rate case order. In that order, the Commission reduced the debit deferred taxes by $291,702, which are identified as the thirteen-month average of the debit deferred taxes associated with an extraordinary property loss that was recorded in its financial statements in compliance with Statement of Financial Accounting Standard No. 90, "Regulated Enterprises - Accounting for Abandonments and Disallowances of Plant Costs." Order No. 22843 states that for ratemaking purposes, the extraordinary property

loss was completely excluded and determined that the related $291,702 debit deferred taxes should also be excluded.

The record in this proceeding is silent as far as reconciliation of OPC Witness Dismukes's recommended total exclusion of $378,629 ($218,090 - water plus $160,539 - wastewater) with the $291,702 exclusion in Order No. 22843. Also, Witness Seidman did not rebut Ms. Dismukes' proposed adjustment, nor did PCUC specifically address the adjustment in its brief.

At the hearing, the OPC cross-examined Witness Seidman relative to FS-6 (EXH 41) which was filed with Seidman's rebuttal testimony and MFR A-3-DTAX (EXH 7). Through OPC's questions and Witness Seidman's responses, one of PCUC's adjustments to its debit deferred taxes was elaborated upon. Of PCUC's $5,528,829 13-month average exclusion from debit deferred taxes, $3,139,877 were related to non-used and useful CIAC and $2,388,952 were related to an adjustment carried forward from the last order. In the last rate proceeding, in Order No. 22843, the Commission disallowed $3,078,522 (the equivalent of the current $2,388,952 amount) in debit deferred taxes related to pre-1987 collections of wastewater CIAC on which the Commission determined PCUC would have avoided paying income taxes had PCUC used the "look back" rule and been successful, instead of the "look forward" rule to determine the taxability of cash CIAC receipts. If successful, PCUC could have avoided paying taxes and a part of the deferred debit taxes would not have been there. (TR 996-999)

Although Staff believes the clarification of the non-used and useful adjustment to debit deferred taxes to be beneficial, Staff believes that PCUC has made the appropriate adjustments to debit deferred taxes based on Order No. 22843 and PCUC's proposed used and useful elements of rate base, with the exception of the $378,629 reduction related to the extraordinary property loss, that is discussed above.

Regarding the Company's proposed used and useful elements of rate base, Staff has recommended numerous changes in other issues in this recommendation to the Company's proposed amounts. Part of the Company's debit deferred tax adjustment is based on non-used and useful additions of CIAC and taxable advances since the 1988 test year and its credit deferred tax adjustment is based on the nonused and useful gross plant. Further, PCUC based its proposed rate base on the test year ending balances, whereas Staff is recommending the use of a 13-month average rate base. Therefore, Staff has made corresponding non-used and useful deferred tax adjustments based upon its recommended used and useful CIAC and its recommended used and useful plant, adjusted to the recommended averages. These are essentially "fall-out" adjustments that reduce

net debit deferred taxes by $46,669 for water and increase net debit deferred taxes by $492,983 for wastewater.

In its brief, PCUC takes the position that no adjustments to the amounts in the MFRs are appropriate. (BR 47) OPC's position is that deferred taxes should be reduced by $378,629 (BR 39); Flagler adopted the OPC's position (BR 23); and the Dunes did not take a position on this issue. (BR 3)

Based on the record and other "fall-out" adjustments, staff recommends that the debit deferred taxes be reduced by $264,759 ($218,090 plus $46,669) for water and increased by $332,444 ($492,983 minus $160,539) for wastewater.

The deferred tax adjustments are shown on the rate base schedules, Schedules Nos. 1-A and 1-B.

ISSUE 38: Should any adjustments be made to plant in service related to percolation ponds that were taken out of service or general plant due to the Company providing operation and maintenance services to non-PCUC water and wastewater systems?

RECOMMENDATION: No. (MONIZ)

POSITION OF PARTIES

PCUC: No

DUNES: No position.

FLAGLER: Adopts OPC's position.

OPC: No

STAFF ANALYSIS: This issue was raised by the Office of Public Counsel subsequent to the prehearing conference. However, no prefiled testimony or cross-examination was presented at the hearing. Further, OPC's position now is that no adjustment should be made. Without any evidence in the record to support an adjustment, staff recommends that no adjustment be made.

ISSUE 39: What provision for working capital should be included in rate base?

RECOMMENDATION: A zero provision for working capital should be approved, which was calculated using the balance sheet approach in accordance with Rule 25-30.433(2), Florida Administrative Code. (WEBB)

POSITION OF THE PARTIES

PCUC: A zero working capital allowance should be approved.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: Negative working capital for the water operations of $799,493 and for the wastewater operations of $558,004 should be included in rate base as an offset to the net debit deferred taxes included in rate base.

STAFF ANALYSIS: Utility witness Seidman explains his calculation of working capital in accordance with Rule 25-30.433(2), Florida Administrative Code, utilizing the balance sheet approach. As this calculation results in a negative number, thus a zero working capital allowance, Mr. Seidman testified that this method does not reflect the utility's need for working capital. Instead, this method reflects the balance of net current assets and deferred non-tax debits that exist. Further, Mr. Seidman testified that the balance sheet method of calculating working capital ignores the utility's need for working capital. (TR 171-172)

OPC witness Dismukes recommends offsetting the utility's net debit deferred taxes included in rate base with a negative working capital of $799,493 for water and $558,004 for wastewater. (TR 564) This is all Ms. Dismukes has to say with regard to working capital.

In rebuttal, Mr. Seidman testified that the Commission requires a Class A utility to calculate working capital using the balance sheet approach. He explains that under the balance sheet approach, net debit deferred taxes are not a component as "they clearly are long term assets related to tax timing differences of CIAC and depreciation and are amortized generally over the life of related assets." Mr. Seidman further points out that the method of one-eighth of O&M required for Class B and C utilities specifically requires debit deferred taxes and credit deferred taxes to be netted separate from working capital. Further, witness Seidman reiterates that a zero working capital fails to recognize a

utility's need for working capital. He equates this to a penalty and states that a negative working capital would only further reduce the cost basis of long-term assets upon which the utility should be allowed to earn a fair rate of return. (TR 937-938)

Staff first points out that Rule 25-30.433(3), Florida Administrative Code, addresses debit deferred taxes in rate base. It states that net debit deferred taxes, if any, should be included as a separate line item in the rate base calculation. Therefore, the utility's net debit deferred taxes should not be netted against a negative working capital, as witness Dismukes suggests. Furthermore, Mr. Seidman's interpretation, as discussed above, is inaccurate in that this subsection addresses deferred income taxes for all three classes of utilities, as well as the disallowance of other deferred debits when the formula method of working capital is used. The rule requires all utilities to net deferred taxes (net the debits and the credits) regardless of the utility's class size or the method employed in determining working capital.

Based on staff's analysis in accordance with Rule 25-30.433(2), Florida Administrative Code, working capital has been calculated using the balance sheet approach, which method results in a negative amount. The evidence in the record supports that working capital should be reflected as zero. Furthermore, Rule 25-30.433(3), Florida Administrative Code, requires net debit deferred taxes to be reflected in rate base as a separate line item, not netted against working capital. Accordingly, staff recommends that the Commission approve a zero provision for working capital.

ISSUE 40: What are the appropriate rate base amounts?

RECOMMENDATION: The appropriate rate base amounts should be $11,227,302 for water and $6,590,653 for wastewater. (WEBB)

POSITION OF THE PARTIES

PCUC: Fall-out issue.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The appropriate rate base amounts are subject to the resolution of other issues.

STAFF ANALYSIS: Based upon a 13-month average rate base determination and staff's recommended adjustments, the appropriate rate base amounts should be $11,227,302 for water and $6,590,653 for wastewater. The water and wastewater rate base and adjustment schedules are attached as Schedules 1-A, 1-B, and 1-C.

ISSUE 41: Dropped

ISSUE 42: Should CIAC be included as a component in the cost of capital?

RECOMMENDATION: Since it is recommended in Issue 36 that used and useful CIAC be treated as a reduction to rate base, Staff recommends CIAC not be included as a zero-cost component in the capital structure. (MAUREY, WEBB)

POSITION OF PARTIES

PCUC: No. CIAC should not be included in capital structure. There is no precedent for Public Counsel's proposal, which is contrary to long-standing ratemaking principles.

DUNES: No position.

FLAGLER: Adopting Public Counsel's position and discussion.

OPC: Yes, if the funds are used to finance used and useful assets. For a detailed discussion on this issue, refer to Issue 43.

STAFF ANALYSIS: It has been the long-standing practice of this Commission to net used and useful CIAC against rate base in the determination of the allowed rate base for ratemaking purposes. (TR 907) As discussed in Issue 36, all parties which take a position on this issue recommend the balance of used and useful CIAC be treated as a reduction to rate base in this case. (TR 908) Since it would be inappropriate to account for used and useful CIAC twice, Staff recommends CIAC not be included as a zero-cost component in the capital structure in this proceeding.

ISSUE 43: Should prepaid CIAC be included in the utility's capital structure?

RECOMMENDATION: Prepaid (non-used and useful) CIAC should not be included in PCUC's capital structure. (MAUREY, WEBB)

POSITION OF PARTIES

PCUC: No. CIAC should not be included in capital structure. OPC's proposal is unprecedented and contrary to long-standing ratemaking principles. Further, as recognized by the PSC, prepaid CIAC is non-used. Neither prepaid CIAC, nor any other non-used component, should be included in rate base or cost of capital.

DUNES: No position.

FLAGLER: Adopting Public Counsel's position and discussion.

OPC: Yes. Cost-free CIAC in the amount of $11,028,664 should be included in the Company's capital structure, if a year-end rate base is used. If an average rate base and capital structure is used, the amount should be $10,363,253.

STAFF ANALYSIS: Witness Dismukes, appearing on behalf of OPC, testified that the Utility has a significant amount of prepaid CIAC which the Utility asserts is non-used and useful but OPC believes has been used to fund used and useful assets. Witness Dismukes recommends these funds be included in PCUC's capital structure as a cost-free source of capital. (TR 542-543)

Witness Dismukes acknowledged that the Commission rejected this same adjustment in the Utility's last rate case in Order No. 22843 in Docket No. 890277-WS. However, she testified that the reasons for the Commission's rejection of this adjustment in the last case do not apply in the instant case. (TR 543)

Witness Dismukes testified that the Commission rejected the adjustment based upon three findings. First, the Commission found that the amount of prepaid CIAC held in trust should be offset against the CIAC balance for an appropriate comparison. Second, the Commission concluded that PCUC had a significant investment in non-used and useful assets since capital exceeded rate base by a significant amount. Finally, the Commission noted that there was no precedent for treating prepaid CIAC as cost-free capital. (TR 543-546)

Witness Dismukes testified that the first finding does not apply in the instant case because she offset the amount she believes is excess CIAC with the CIAC held in trust to determine

the amount she recommends be included in the capital structure. (TR 543) All prepaid CIAC is recorded in one wastewater subaccount with ITT Community Development Corporation (ITTCDC). These monies are held in trust by ITTCDC and are only turned over to PCUC when the customer requests service. At that time, the customer prepayments are then specifically broken out between water and wastewater plant. (TR 911-912)

Witness Dismukes testified that the results of her analysis of the relationship of prepaid CIAC to non-used and useful plant in the current rate case and her comparison of rate base and total capital in both the last rate case and the current case demonstrate that the second finding also does not apply at this time. It is witness Dismukes testimony that her analysis in Schedule 3 reveals that the Utility's balance of non-used and useful CIAC significantly exceeds the balance of non-used and useful plant. (EXH 26, Schedule 3; TR 543) In addition, she compared the difference between rate base and total capital in the last rate case and in the current case. In the prior case, total capital exceeded requested rate base by approximately $12.3 million. She notes that in this case total capital exceeds requested rate base by approximately $2.1 million. Witness Dismukes testified that this comparison indicates that PCUC did not use investor sources of capital to finance the approximately $10.2 million additional investment in plant. (EXH 26, Schedule 4; TR 544) Based on these analyses, it is her conclusion that the Utility used funds collected from customers in the form of prepaid CIAC to finance the additional investment in plant. (EXH 26, Schedules 3, and 4; TR 543-545)

Finally, witness Dismukes argues the Commission should not be deterred from making this adjustment simply because this adjustment has not been made in the past. Moreover, she contends, while the Commission has not made this adjustment in the past, PCUC is a unique utility that has significant amounts of non-used and useful plant, non-used and useful CIAC, and several mechanisms to provide it with a return on its non-used and useful investments. For these reasons, she recommends the Commission include $10,363,253 of cost-free CIAC in the Utility's capital structure. (EXH 26, Schedule 5; TR 545-546)

Witness Seidman, appearing on behalf of PCUC, recommends the Commission reaffirm its position in Order No. 22843 that non-used and useful CIAC not be included as a zero-cost component in the capital structure. Witness Seidman testified that the adjustment proposed by witness Dismukes violates utility regulatory accounting principles, that there is no precedent in this jurisdiction or any other jurisdiction of which he is aware for making such an adjustment, and that witness Dismukes did not provide any basis for

the Commission to reverse its decision from the last rate case. (TR 906-907)

Witness Seidman's first concern with witness Dismukes' proposed adjustment is that he believes it violates utility regulatory accounting principles. He contends her "proposal is contrary to the concept developed and consistently applied in Florida, namely to treat CIAC as an offset to plant in service." (TR 907) If witness Dismukes' proposal to include non-used and useful CIAC in the capital structure is accepted by the Commission, he argues, it would "result in a discriminatory mismatch of funds by crediting CIAC from future customers against the cost of serving current customers." (TR 907) Moreover, he argues, her proposal to include non-used and useful CIAC in the capital structure is equivalent to including a non-used and useful CIAC component in rate base. His point being, "if a component is not allowed to be in rate base directly, it cannot be allowed indirectly." (TR 916)

Witness Seidman testified that witness Dismukes did not prove her case. More specifically, witness Seidman contends that witness Dismukes' observation regarding how the relationship of capital to rate base has changed since PCUC's last rate case does not support her assertion that non-used and useful CIAC should be included in the capital structure. In his opinion, all this change shows is that investment in non-used and useful plant has been reduced as additional customers have been connected to the system over the seven years that have passed since the last rate case. (TR 908-909)

Witness Seidman further contends that witness Dismukes' claim that PCUC's balance of non-used and useful CIAC exceeds the balance of non-used and useful plant is incorrect. He argues that her comparison of non-used and useful CIAC to non-used and useful plant does not recognize all non-used and useful components nor does it reconcile those components to the balance sheet and income statement. Witness Seidman performed an analysis which he claims identifies all sources of non-used and useful components and reconciles these amounts to the balance sheet and capital structure. Based upon his analysis, he contends PCUC has a net investment of approximately $2.0 million in non-used and useful assets. However, he adds, it shouldn't matter whether the Utility has a large, small, or no investment in non-used facilities since the Commission does not set rates for non-used plant. (EXH 41, Schedule 6; TR 910-916)

Finally, witness Seidman testified that it would be "improper to disregard precedent just because doing so produces a result that Ms. Dismukes would rather see." (TR 907) He contends that witness Dismukes has not shown any precedent for including non-used and

useful CIAC in the capital structure nor any reason why the long-standing practice of offsetting plant with CIAC in determining rate base is not the proper treatment in this case. He also is critical of her decision to recognize used and useful CIAC as a deduction in determining rate base and at the same time recommending non-used and useful CIAC be included in the determination of the cost of capital supporting that rate base. Finally, witness Seidman testified that witness Dismukes did not provide any basis for the Commission to deviate from the decision it made in PCUC's last rate case. (TR 906-908)

Dunes did not take a position on this issue. Flagler County adopted OPC's position and discussion on this issue. Obviously, both parties which presented evidence regarding this issue believe strongly in their respective positions. Moreover, there are several instances where the facts regarding this issue are in dispute.

Staff believes that both parties offered persuasive testimony regarding this issue. After reviewing all the evidence in the record, Staff determined that there was insufficient reason to recommend the Commission deviate from the decision it rendered in the last rate case. Based on Staff's recommendations in Issues 2 and 32, it appears the Utility's investment in non-used and useful plant exceeds Staff's determination of the Utility's balance of non-used and useful CIAC by approximately $10.5 million. This contradicts witness Dismukes contention that non-used and useful CIAC exceeds non-used and useful plant. Although Staff agrees with witness Dismukes that lack of precedent alone should not prevent the Commission from making a decision if the facts in the case warrant such a decision, Staff does not believe witness Dismukes has demonstrated that PCUC relied on non-used and useful CIAC to finance used and useful plant as she alleges. For this reason, Staff recommends prepaid CIAC not be included in PCUC's capital structure.

ISSUE 44: What is the appropriate cost of debt?

RECOMMENDATION: The appropriate cost of long-term debt is 7.24% and the appropriate cost of short-term debt is 7.73%. (MAUREY)

POSITION OF PARTIES

PCUC: As per MFRs, the appropriate cost of long-term debt is 7.24% and the appropriate cost of short-term debt is 7.73%.

DUNES: No position.

FLAGLER: Adopting Public Counsel's position and discussion.

OPC: OPC does not take issue with PCUC's request.

STAFF ANALYSIS: In the course of Staff's audit of the Utility, witness Dodrill noted in Audit Disclosure No. 6 that the outstanding debt of PCUC may be impaired because of the parent company's unconditional guarantee of the debt. (TR 661-662) However, under cross examination witness Dodrill agreed that the purpose of the parent company's guarantee was to reduce the risk of nonpayment. He also agreed that the interest rate on the debt is lower than it would have been without the guarantee. (TR 682) Moreover, PCUC witness Seidman testified that the interest rate on PCUC's debt is enhanced rather than impaired as a result of the parent company's guarantee. (TR 959-961) No other parties took a position on this issue. Therefore, Staff recommends that the appropriate cost of long-term debt is 7.24% and the appropriate cost of short-term debt is 7.73% as filed in the Utility's MFRs. (EXH 7, Schedules D-4 and D-5)

ISSUE 45: What are the appropriate adjustments to investment tax credits (ITCs) and their cost rate, if any, and what is the resulting balance?

RECOMMENDATION: ITCs should be increased by $129,534 if an average rate base is used or by $125,569 if a year-end rate base is used. The result is a 13-month average balance of unamortized ITCs of $2,445,760 or a year-end balance of ITCs of $2,391,641. The ITCs should not receive a pro rata reconciliation adjustment. Their cost rate is zero. (C. ROMIG)

POSITION OF THE PARTIES

PCUC: The parties have proposed a stipulation that Cost-Free Investment Tax Credits should be increased by $125,569, resulting in a year-end balance of $2,391,641 before reconciliation to rate base.

DUNES: No position.

FLAGLER: The parties have proposed a stipulation that Cost-Free Investment Tax Credits should be increased by $125,569, resulting in a year-end balance of $2,391,641 before reconciliation to rate base.

OPC: Cost-free Investment Tax Credits should be increased by $125,569 if a year-end rate base is used and by $129,534 if an average rate base is used.

STAFF ANALYSIS: Per MFR Schedule D-2 (EXH 7), the Company proposes year-end zero cost ITCS of $2,266,072, but also reflects the 13-month average balance of $2,316,226. Further, per Witness Seidman's Direct Testimony, the Company proposes that the adjustments required to reconcile the capital structure to the approved rate base be done pro rata over all sources of funds. (TR 182)

I. AMOUNT OF ADJUSTMENT

Ms. Dismukes testified that in the Company's last rate case the Commission imputed ITCs in the capital structure because PCUC failed to claim any ITCs on certain additions that were transferred from CWIP to plant in service. Consistent with the Commission's decision in the last rate case, Ms. Dismukes recommends that the Commission impute the unamortized balance of ITCs, which she calculates to be $125,569 on a year-end basis (EXH 26) into the current capital structure. (TR 541-542) In his Rebuttal Testimony, PCUC Witness Seidman agreed with Ms. Dismukes' proposed adjustment. (TR 904-906) During the hearing, Mr. Seidman also

agreed with Staff that the thirteen-month average balance of these ITCs would be $129,534. (TR 1045-1046)

Since no party disputes the adjustment recommended by Ms. Dismukes and Staff believes it to be appropriate, Staff recommends that ITCs be increased by $129,534 if an average rate base is used or by $125,569 if a year-end rate base is used. The result is a 13-month average balance of unamortized ITCs of $2,445,760 or a year-end balance of ITCs of $2,391,641.

II. PRO RATA OR SPECIFIC RECONCILIATION

As proposed on MFR Schedules D-1 and D-2 (EXH 7) and as described in Witness Seidman's Direct Testimony, the capital of the utility has been reconciled to year end rate base on a pro rata basis. (TR 182) During cross-examination at the hearing, Witness Seidman stated that he understood that the Commission reconciled capital structure across the board except for customer deposits, which can be specifically identified with utility customers. However, Witness Seidman did agree with Staff that it is acceptable to include in the capital structure, customer deposits, ITCs and deferred taxes that are specifically related to the requested rate base and reconcile any remaining difference pro rata over the investor sources of capital only. (TR 223-224)

If a year-end rate base is used, staff agrees that consistency dictates that the adjustment is $125,569, before reconciliation to rate base. OPC, PCUC and Flagler agree that ITCs should be increased on a year end basis by $125,569. The Dunes did not take a position on this issue. However, if a thirteen-month average rate base is used, the 13-month average ITC equivalent for the same period is $129,534, which is the appropriate amount by which ITCs should be increased.

In its MFRs and its brief, PCUC proposed pro rata reconciliation to rate base. (BR 57) The OPC and Flagler did not state specific positions on the reconciliation element of this issue. The Dunes did not take a position on this issue.

Staff recommends that the ITC adjustment be a specific adjustment and that a pro rata adjustment not be applied to ITCs. The result is an adjustment increasing unamortized ITCs by $129,534 to $2,445,760 if an average rate base is used or by $125,569 to $2,391,641 if a year-end rate base is used. Further, because PCUC is an Option 1 company, the appropriate cost rate of the ITCs is zero.

The adjustment to capital structure is on Schedule No. 2.

ISSUE 46: What is the appropriate capital structure for ratemaking purposes?

RECOMMENDATION: The appropriate capital structure for ratemaking purposes is PCUC's stand-alone capital structure. (MAUREY)

POSITION OF PARTIES

PCUC: PCUC's stand-alone capital structure is appropriate.

DUNES: No position.

FLAGLER: Adopting Public Counsel's position and discussion.

OPC: The appropriate capital structure is subject to the resolution of other issues.

STAFF ANALYSIS: In the course of Staff's audit of the Utility, witness Dodrill noted in Audit Disclosure No. 7 that because of the parent company's guarantee of PCUC's debt, the Commission should look to the parent company's capital structure to calculate the cost of capital for PCUC in this proceeding. However, he also noted that Audit Disclosure No. 7 should only be considered if Audit Disclosure No. 6 (the appropriate cost of debt discussed in Issue 44) is acted upon by the Commission. (TR 661-662)

Witness Seidman, appearing on behalf of PCUC, testified that the debt of PCUC is utility debt and that this relationship is not changed by the requirement of a guarantee by the parent company. He also pointed out that the Commission recognized PCUC's stand-alone capital structure in the Utility's last rate case in Order No. 22843 in Docket No. 890277-WS. Finally, he testified that it was never demonstrated that PCUC's capital structure is unreasonable nor that a capital structure other than PCUC's would be more reasonable in this case. (TR 961-963)

During cross examination, witness Dodrill agreed that in each prior rate case where a capital structure was explicitly discussed, the Commission recognized PCUC's stand-alone capital structure. He also agreed that it would be reasonable to use PCUC's stand-alone capital structure in this proceeding. (TR 682-684)

The Dunes did not take a position on this issue. Flagler County adopted OPC's position and discussion on this issue. Witness Dismukes, appearing on behalf of OPC, used PCUC's stand-alone capital structure as the starting point for her recommendation regarding the appropriate cost of capital in this proceeding. Although she recommends the Commission make certain adjustments for ratemaking purposes, she none-the-less recognizes

PCUC's stand-alone capital structure as the appropriate capital structure to which these adjustments should be made. (EXH 26, Schedule 2; TR 541-547)

Therefore, because PCUC's capital structure is reasonable for a regulated utility and no other capital structure was demonstrated to be more reasonable for ratemaking purposes, Staff recommends the Commission recognize PCUC's stand-alone capital structure in this proceeding.

ISSUE 47: What is the appropriate weighted average cost of capital including the proper components, amounts, and cost rates associated with the capital structure for the test year?

RECOMMENDATION: The appropriate weighted average cost of capital is 8.04%. (MAUREY)

POSITION OF PARTIES

PCUC: As per Schedule D-1, as modified to include the effect of imputing ITCs (Issue 45) and giving full weight to customer deposits.

DUNES: No position.

FLAGLER: Adopting Public Counsel's position and discussion.

OPC: The appropriate weighted average cost of capital is subject to the resolution of other issues. In addition, when reconciling the capital structure to rate base, customer deposits should not be reconciled.

STAFF ANALYSIS: Based upon the proper components, amounts, and cost rates associated with the capital structure for the test year ended December 31, 1995, Staff concludes that the weighted average cost of capital is 8.04%. Schedule 2 details Staff's recommendation.

The 13-month average per book amounts are taken directly from PCUC's MFR filing. (EXH 7, Schedule D-2) A specific adjustment is made to the balance of Investment Tax Credits (ITCs). This adjustment is discussed in Issue 45. After this specific adjustment, a pro rata adjustment is made over the investor sources of capital to reconcile rate base and capital structure. The pro rata adjustment is applied only over investor sources of capital for two reasons. First, a specific adjustment is made to ITCs and it is recommended in Issue 45 that no further adjustment to the balance of ITCs be applied. Second, OPC witness Dismukes and PCUC witness Seidman both testified it is appropriate to hold the balance of customer deposits whole in the reconciliation of rate base and capital structure. (TR 547, 920) Neither the Dunes nor Flagler County offered any testimony with respect to this issue.

Staff agrees with and uses the respective cost rates provided by PCUC in their MFR filing. (EXH 7, Schedule D-1) The return on equity (ROE) filed by PCUC of 11.10% is the return indicated by the proper application of the Commission leverage formula approved in Order No. PSC-96-0729-FOF-WS issued May 31, 1996 in Docket No. 960006-WS.

Schedule 2 shows the components, amounts, cost rates, and weighted average cost of capital associated with the test year capital structure.

ISSUE 48: What are the appropriate projected number of water and wastewater bills and consumption to be used to calculate revenue for the projected test year and to calculate rates for water and wastewater service?

RECOMMENDATION: The appropriate projected number of water and wastewater bills to be used to calculate revenue and rates for the projected test year should be 184,812 and 126,252, respectively. The projected consumption should be 963,948 for water and 593,841 for wastewater. (WASHINGTON)

POSITION OF PARTIES

PCUC: The year end number of bills and consumption should be used for both water and wastewater.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The resolution of this issue depends upon the determination of rate base. If a year-end rate base is used, then the year-end customers and consumption should be used. However, if an average rate base is used then average customers should be used.

STAFF ANALYSIS: The utility used projected water and wastewater bills and consumption in calculating revenue and rates for the projected test year ending December 31, 1995. In its brief, OPC states that the resolution of this issue depends upon the determination of rate base. If a year-end rate base is used, then the year-end customers and consumption should be used. If an average rate base is used, then average customers should be used. (BR 48)

Utility witness Siedman testified under cross-examination that he knew the rule required the calculation of rate base on a 13-month average, and knew that there is a provision in the rate rule for deviating from the rule. He further testified that he didn't know that there was any specific tie between that general request for deviation and the presentation of a rate case on a 13-month versus a year-end basis. Mr. Seidman testified that the rule requires the utility to present the MFRs on a 13-month average, but does not require the utility to ask permission to also permission to also do it on a year-end basis. If the utility requests for a rate case to be evaluated on a year-end basis, it is up to the utility to prove that it is the proper methodology. (TR 221)

Consistent with staff's recommendation and analysis in Issue 2, staff believes that it is appropriate to use an average number of customers and consumption to calculate test year revenue and service rates. Further, during cross examination, Ms. Dismukes answered no when asked if she would consider a 5% increase in customer growth extraordinary. Staff agrees with OPC's position that if an average rate base is used, then average customers should be used. This is consistent with past Commission practice in calculation of service rates.

ISSUE 49: Should an adjustment be made to the amount of miscellaneous revenue to be included in the 1995 projected test year?

RECOMMENDATION: No adjustment should be made to the amount of miscellaneous revenue to be included in the 1995 projected test year. (WASHINGTON)

POSITION OF PARTIES

PCUC: No. When using a projected test year, it is inappropriate to pick one line item and update it to the actual amount.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: Yes. Water revenue should be increased by $5,174 and wastewater revenue should be increased by $5,197 to reflect actual 1995 miscellaneous revenue.

STAFF ANALYSIS: OPC witness Dismukes recommended increased revenue requirements of $5,174 and $5,197 for water and wastewater miscellaneous service revenues as budgeted for the projected test year to actual. (TR 549)

Utility witness Siedman testified that he disagrees with utility witness Dismukes recommended adjustments to miscellaneous revenues from the proposed amount to the actual amount for the test year. Because this rate application is based on a 1995 test year that, for all line items, is 6 months actual and 6 months projected, he testified that it is inappropriate to pick one line item and update it to the actual amount. (TR 922)

Staff concurs with utility witness Siedman. Furthermore, when the overall revenue requirements are taken into consideration, the recommended increased revenue adjustments are insignificant. Therefore, staff recommends that no adjustment should be made.

ISSUE 50: Should an adjustment be made to the amount of 1995 water revenue received from Hammock Dunes?

RECOMMENDATION: No adjustment should be made to the amount of 1995 water revenue received from Hammock Dunes. (WASHINGTON)

POSITION OF PARTIES

PCUC: No. The 1995 water revenue from Dunes has already been normalized in the MFRs to reflect its ongoing consumption pattern.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: No. No adjustment is necessary.

STAFF ANALYSIS: OPC witness Dismukes recommends that the Commission increase test year revenue relating to the Hammock Dunes community by $33,024. (TR 550) She testified that according to the company, Hammock Dunes flushed their lines often, but the frequency is not expected to continue into the future. Accordingly, PCUC reduced test year consumption for Hammock Dunes by 39,681,000 gallons. She reviewed the company's expenses associated with flushing the lines for Hammock Dunes in 1995 and did not see an appreciable decline compared to 1994. She further testified that the actual consumption during 1995 was 83,796,400 gallons--only slightly less than experienced in the past. She recommends that the Commission not reduce the level of consumption as requested by the company, but instead use actual test year consumption. (TR 550)

Utility witness Siedman disagrees with Ms. Dismukes' recommendation. Witness Siedman testified that the consumption levels for all customers has been calculated to reflect anticipated levels. He further pointed out that the consumption level for Hammock Dunes has been adjusted to reflect the anticipated level under normal, ongoing conditions. Hammock Dunes experienced a level of consumption in the first half of 1995 that is not expected to recur because it has taken action that will substantially reduce its needs for flushing. (TR 923)

The comparison of period consumption levels made by Ms. Dismukes does not reflect that change. During late 1994 and early 1995, Hammock Dunes temporarily employed high levels of flushing to maintain required chlorine residual levels. In the summer of 1995, Hammock Dunes completed the installation of chloramine booster stations in order to maintain chlorine levels without resorting to high levels of flushing. The water consumption experienced in late 1994 and early 1995 will not recur. When this is taken into

account, there is a significant decrease in annual consumption. When Ms. Dismukes compared annual 1995 to annual 1994 consumption she noted a small drop in consumption from 98 million gallons per year to 84 million, or about 15%. She further testified that comparing those periods does not fully reflect the difference in flushing associated with the installation of the booster stations. However, when you compare the more recent 12 month periods, ending April, 1995 and April, 1996 you see the full effect of the operational changes instituted by Hammock Dunes in mid 1995. As shown in Exhibit 41 (FS-8), for this period annual consumption dropped from approximately 127 million gallons per year to 40 million, or about 70%. PCUC's test year revenues are based on an annual consumption of 51 million gallons for Hammock Dunes compared to the 40 million gallons actually consumed in the 12 months ending April, 1996. If the test year revenues are based on 84 million gallons as proposed by Ms. Dismukes, they will be severely overstated. The effect is that PCUC could not achieve its allowed rate of return. (TR 923-924)

There is no dispute between the parties on this issue and the test year is projected. Therefore, staff recommends that no adjustment be made to the amount of 1995 water revenue received from Hammock Dunes.

ISSUE 51: Should adjustments be made for non-utility income and revenue recorded on the company's books?

RECOMMENDATION: Yes. Adjustments should be made to increase water and wastewater revenues by $1,802 and $50,834, respectively. (WEBB)

POSITION OF THE PARTIES

PCUC: No. Non-utility income should not be moved above the line for ratemaking purposes. It is not income associated with serving the utility's customers and the customers do not incur any cost related to that income.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: Yes. Non-utility income should be moved above the line for ratemaking purposes as it applies to water and wastewater service provided by the Company to Plantation Bay, Searay, Matanzas Shores, and Other. Water revenue should be increased by $1,802 and wastewater revenue should be increased by $50,834.

STAFF ANALYSIS: In OPC witness Dismukes' testimony, she addresses several adjustments that she believes should be made to move PCUC's recording of non-utility revenue to above the line for ratemaking purposes. First, she states that PCUC earns income for operation and maintenance (O&M) services provided to one water and three wastewater systems not owned by the utility. She states that the utility records the associated revenues below the line for ratemaking purposes. Ms. Dismukes contends that it is not made apparent whether the employees that perform O&M services for PCUC also perform the same duties for those other plants to which the utility provides water and wastewater services. Further, she states that it is not clear if the associated expenses have also been moved below the line or if the associated expenses include allocations for administrative and general (A&G) and other overhead costs. (TR 547-548)

Ms. Dismukes believes that the O&M services in question appear to be a utility function of PCUC and so she recommends moving the related revenue above the line for ratemaking purposes. The second half of this composite adjustment relates to revenues received from Aqua Tech Utility Services (Aqua Tech), a wholly owned subsidiary of PCUC. Ms. Dismukes contends that there are revenues recorded below the line of $50,365 associated with Aqua Tech. She states that it is not clear from the MFRs what services Aqua Tech provides or to whom. Therefore, she made an adjustment to increase test

year revenues by the amount indicated. Ms. Dismukes' composite adjustments, as described above, are an increase to test year revenue of $52,772 for water and $54,857 for wastewater. The detail for her adjustments can be found in Exhibit 26, Schedule 7. (TR 548-549)

Utility witness Seidman believes that Ms. Dismukes has misinterpreted how PCUC provides services to other utility systems, and, as a result, she has double counted revenues in her adjustments. Mr. Seidman explains that PCUC provides O&M services through Aqua Tech to four systems: the Matanzas Shores wastewater treatment plant, the Matanzas Shores lines, the Searay wastewater treatment plant, and the Plantation Bay water treatment plant. He explains that her adjustments include gross income received for these services and net income received by Aqua Tech. He contends that the revenues are the same, as Aqua Tech performs these services; therefore, she counts operating revenue twice for the same services. (TR 920-921)

Mr. Seidman disagrees with Ms. Dismukes' adjustment, regardless of any misinterpretation. He states that the revenues are properly booked as non-utility income, as the services provided are not related to utility-owned facilities nor to facilities providing service to PCUC customers. Mr. Seidman explains that PCUC personnel perform the services and that the related payroll expenses, including allocated overheads, are already excluded from O&M expenses in the MFRs. (TR 921-922)

During cross examination, Mr. Seidman admits that the direct salaries and related benefits expense is removed from O&M expenses for ratemaking purposes. However, related A&G expenses, general plant, salaries and benefits for officers, and other indirect costs, such as insurance and transportation, were not removed and placed below the line with the associated revenues. Exhibit 44, short-titled Response to Selected OPC Interrogatories Third Set and Response to OPC Interrogatory No. 23, was admitted into the record by OPC during cross examination of Mr. Seidman. This exhibit identifies non-utility income recorded on the utility's books and is the basis for OPC's final recommended adjustment. (TR 991-996)

Staff agrees with the utility that the revenues have been properly booked as non-utility income. Ideally, all costs associated with such income should be recorded below the line, as well, for ratemaking purposes. However, in this case, all revenues were removed and only a portion of the expenses were removed, which results in a mismatching of revenues with expenses. The customers should not bear the costs associated with PCUC's non-utility income. Staff believes that it is the utility's burden to prove that non-utility revenue is offset by all related costs, both

direct and indirect. Because such proof does not support the utility's argument, we recommend an adjustment to move PCUC's non-utility revenue above the line. Because the utility has not provided the dollar amount or the support for its adjustment to move direct loaded payroll costs below the line, we are unable to reverse such an adjustment as part of our recommendation. Accordingly, our recommendation is to only move the non-utility revenue above the line.

The basis for our adjustment is the utility's response to OPC's Interrogatory No. 23, Attachment G, which was identified as part of Exhibit 44, as described above. In its brief, OPC agrees to the amounts reflected in this exhibit and states that the adjustments originally recommended by Ms. Dismukes were incorrect, as she double counted the same income. (BR 53) Therefore, consistent with OPC's final recommended adjustments and based on the evidence in the record, staff recommends that water and wastewater revenues should be increased by $1,802 and $50,834, respectively.

ISSUE 52: Should non-used and useful adjustments to O&M expenses be made?

RECOMMENDATION: Yes, but no additional adjustments are necessary. (MERCHANT)

POSITION OF PARTIES

PCUC: No. All appropriate adjustments are already reflected in the MFRs.

DUNES: No position.

FLAGLER: Adopts OPC's position.

OPC: Yes

STAFF ANALYSIS: Consistent with its prior rate cases, PCUC performed an analysis of its operating departments for used and useful and made non-used and useful adjustments to its operation and maintenance (O&M) expenses for MFR purposes. (EXH 7, FS-4, Analysis of Operating Departments Used and Useful) PCUC witness Seidman testified that it is quite unusual for a utility to perform a used and useful analysis of its operating departments. He stated that the Commission has always recognized that O&M expenses are composed in general of variable, not sunk costs, and that operating costs are typically geared to serve only current customers even though large amounts of plant may be non-used and useful for ratemaking purposes. However, several rate cases ago, PCUC recognized that because it was closely associated with the developer, in the early stages of development some of its employees would be devoting time for planning, record keeping and maintenance associated with developing the community in general and maintaining non-used plant. (TR 176-177)

Witness Seidman explained that this is the third rate case in which an analysis was performed and, judging from its results, it will probably be the last. The amount of "non-used" operating department expenses is now down to less than ten percent. Only the expenses related to maintaining the distribution and collection mains still show non-used amounts of any significance. He contends that the analysis methodology is consistent with that used in previous rate cases. (TR 176-177)

PCUC is organized into seventeen function related departments. Five of these departments are related to water operations and three departments are related to wastewater operations. The remaining nine departments render administrative services that affect the overall operation of the utility. According to the utility, all

departments incur costs but not all departments have personnel. Departments without personnel provide a cost center for services related to their function. (EXH 7, FS-4, pg 1)

The costs for each department were evaluated through a review of the utility's organizational charts, a series of interviews with PCUC personnel, and a review of the costs posted for the departments during 1994 and the first six months of 1995. Costs were considered used for ratemaking purposes if they were incurred for the purpose of meeting the utility's obligations under Chapters 367, 373 and 403 of the Florida Statutes. If a department was determined to have some amount of non-used costs, that amount was expressed in terms of a weighted percent of the total costs of the department, and all costs were adjusted accordingly. The used and useful percentages requested by the utility are as follows: (EXH 7, FS-4, pg 1)

Dept. #	Department Name	U/U %
	Water Departments	
0751	Raw Water Supply & Pumping (WTP#1)	100.00%
0752	Lime Water Treatment (WTP #1)	100.00%
0753	Water Distribution	75.04%
0754	Membrane Water Supply (WTP #2)	100.00%
0755	Membrane Water Treatment (WTP #2)	100.00%
	Wastewater Departments	
0761	Wastewater Pumping	100.00%
0762	Wastewater Treatment	100.00%
0763	Wastewater Collection	84.95%
	Administrative Departments	
0770	Administrative & General	80.00%
0771	Controllers	85.49%
0772	Engineering	97.91%
0773	System & Data Processing	100.00%
0774	Customer Accounts	100.00%
0775	Personnel Services	100.00%
0776	Community Affairs	100.00%
0777	Purchasing & Safety	97.33%
0778	Inventory Control	78.62%

Of the 17 departments, the utility made used and useful adjustments to only seven. OPC witness Dismukes disagreed with these seven departments as well as the Personnel Services Department, which the utility reflected as 100%. (TR 550-555) Staff will address only those departments at issue below:

Water Distribution (0753) & Wastewater Collection (0763)

and useful was based on interviews. Ms. Dismukes believes that there are considerable differences between the two cases that are not explained. As such, she used a factor weighted 50% based upon the used and useful percentages of collection and distribution lines and 50% based upon the company's interview estimate. Her composite used and useful percentage for this department is 65.30%. (TR 551-552, EXH 26, Sch. 11)

On rebuttal, Mr. Seidman stated that Ms. Dismukes is mistaken that the current interview methodology is a deviation from past cases. In prior cases, he argued that based on employee interviews, it was decided that the lot ratio calculation best reflected the time estimates of management personnel spent on long term development issues. The current interviews reveal that the utility is operating in a more mature stage than in prior rate cases. Mr. Seidman concluded that based on the interviews, the lot ratios no longer reflected time spent and he elected to rely on the best estimates of the employees. He added that Ms. Dismukes' methodology underestimates the time and related costs of the A&G department. (TR 926-927)

Controllers Department (0771)

This department is headed by the Vice President (VP) of Finance and is responsible for coordinating and maintaining the financial records of the utility and for preparing all internal and public financial and regulatory reports. PCUC has estimated a composite used and useful of 85.49% based on employees' time spent on utility related work. (EXH 7, FS-4, pg 8-9, Table 4)

Ms. Dismukes also disagreed with the methodology used to determine the used and useful percentages for the Controllers Department. She used the same methodology she recommended for the A&G Department described above, 50% of used and useful lines with 50% of the utility's percentage. Her recommended composite used and useful for this department was 84.82%. (TR 552, EXH 26, Sch. 11)

Engineering Department (0772)

In determining its used and useful percentage for this department, the utility contends that the department's work is 100% used and useful, except for the Sr. VP of Engineering and Field Operations. His responsibilities include not only the Engineering Department, but all operating departments. Accordingly, PCUC used a composite of the operating departments to determine the used and useful for this position. This resulted in a composite percentage for the Engineering Department of 97.91%. (EXH 7, FS-4, pg 9-10, Table 5)

Ms. Dismukes had only two differences from the utility's methodology for this department. For the Sr. VP's composite rate, she substituted her composite percentages instead of those requested by the utility. This resulted in a composite rate of 97.75% compared the utility's of 97.91%. Although she stated that she had two differences, her testimony did not spell out a second specific difference. (TR 553, EXH 26, Sch. 11)

Purchasing & Safety (0777) and Inventory Control (0778) Departments

For both of these departments, PCUC used a composite used and useful percentage to reflect that several employees performed work relative to the factors derived from other departments. Accordingly, composite rates of 97.33% for the Purchasing and Safety Department and 78.62% for the Inventory Control Department were requested. (EXH 7, FS-4, pg 12-14, Tables 6 & 7)

The only difference between PCUC's composite rates for these departments and Ms. Dismukes' is that she used her recommended composite rates for the other departments built into the percentages. Ms. Dismukes' composite rates for each of these two departments is 97.14% and 77.01%, respectively.

Personnel Services Department (0775)

In its application, PCUC reflected this department as 100% sued and useful. Although this department has no employees, services provided include administering insurance, pension and savings plans, salary plans and medical insurance, as well as employee awards and functions. PCUC contends that the services provided by this department are the same regardless of whether a portion of any individual employee's time might be adjusted for used and useful considerations. (EXH 7, FS-4, pg 10-11)

OPC witness Dismukes disagreed with PCUC's determination for this department. She has calculated a composite used and useful of 90.61%, using the used and useful percentage of all expenses excluding personnel services. This composite rate, according to Ms. Dismukes, is consistent with cost allocation procedures where it is not possible to develop an independent allocation formula. (TR 554, EXH 26, Sch 10)

Mr. Seidman rebuts Ms. Dismukes by stating that the cost for these services remain the same regardless of whether a portion of any individual's time is considered non-used and useful. He argued that it is not a case for cost allocation, but a recognition that the costs will be incurred regardless and should be recovered by rates. (TR 927-928)

Staff's Analysis

Based on staff's review of the above calculations, we believe that the utility's underlying assumptions are reasonable and should be approved. As discussed in Issue 11, staff has recommended that a margin reserve be included for the water distribution and wastewater collection systems. We believe that the operations departments used and useful determinations should be consistent, where appropriate, with the methods used in determining the plant used and useful percentages. As such, staff recommends that the margin reserve is appropriate to include in these used and useful determinations for the Water Distribution and Wastewater Collection Departments.

For the A&G and Controllers Departments, staff disagrees with Ms. Dismukes' suggestion to blend the prior methodology with the utility's current basis of interviewing employees. The utility provided a very detailed breakdown of its basis with descriptions for each group of employees. We agree with the utility that used and useful adjustments are rarely made to other utilities, even when major used and useful adjustments are made. Staff believes that the evidence shows that PCUC has sufficiently documented that the circumstances have changed since the last rate case, and its interviewing method is more accurate in light of the current circumstances. Since operating costs in general correlate to used and useful customers, staff believes that an estimate based on time spent on utility matters by each employee or department is a more accurate measure of whether expenses should be reduced. Staff believes that Ms. Dismukes' method is a less accurate method when time estimates are available. As such, we believe that Ms. Dismukes' recommendation for the A&G and Controllers Departments should be rejected.

For the Engineering, Purchasing & Safety and Inventory Control Departments, OPC's adjustments were fall-outs of prior operating department used and useful percentages. Since staff has recommended that the utility's methodologies be accepted, we also do not believe any changes to these departments are necessary.

Regarding the Personnel Services Department, staff points out that this department currently does not include any employees, as the services are now performed by ITT. This department does not include the actual benefits associated with the non-used and useful employees in other operating departments as those costs are included within the individual departments. Thus, the benefits and payroll taxes have already been adjusted for non-used and useful as appropriate. On first glance, one would agree with Ms. Dismukes that if the salaries are non-used and useful, then so are the benefits. But what this department includes are the costs to

administer those benefits. We agree with the utility that these costs accordingly should be considered 100% used and useful or utility related. Staff believes that this is the same philosophy which determines that the System & Data Processing Department is consider 100% used and useful. Accordingly, we believe that no used and useful adjustment to the Personnel Services Department should be made.

In conclusion, staff recommends that used and useful adjustments are necessary to O&M expenses, as adjusted by the utility. No further adjustments are necessary.

ISSUE 55: Should an adjustment be made for affiliate charges?

RECOMMENDATION: Yes, an adjustment should be made to reduce affiliate charges by $15,153 for water and $10,259 for wastewater. (MONIZ, MERCHANT)

POSITION OF PARTIES

PCUC: No. The $21,201 contract service charge is reasonable for the service provided. These services were provided by affiliates in previous PCUC rate cases and accepted by the PSC. All other services provided through affiliates (medical, pension and insurance services, and payroll and computer processing costs) are cost-based and reasonable.

DUNES: No Position.

FLAGLER: Adopts OPC's Position.

OPC: Yes. The Commission should disallow $31,765 (before used and useful adjustments) of affiliate charges as depicted on Exhibit 26, Schedule 13, for the Company's failure to justify these charges.

STAFF ANALYSIS: OPC witness Dismukes proposed two adjustments related to affiliate transactions. The first adjustment relates to administrative services provided by PCUC's parent (ITT). Ms. Dismukes recommends that the Commission disallow expenses in the amount of $21,201. (TR 555) She testified that the Company failed to justify this expense and refused to provide on a timely basis the information needed to evaluate the reasonableness of the charge. (TR 555-556)

In response to Ms. Dismukes' adjustment, PCUC witness Seidman testified that the charge is for the availability of expertise at the parent level. He explains that ITT charges its subsidiaries an administrative service fee that ranges between .25% and 1.0% of revenues. He argues that this is the same fee basis included and accepted in previous cases. Further, according to Mr. Seidman, PCUC was charged the lowest fee, .25% of revenues. He contends that this fee is not for payroll expense, but for a multitude of services. He testifies that there is no information regarding subsidiary fees and ITT employees that could be used to test the reasonableness of the charge. According to Mr. Seidman, the test of reasonableness should be whether PCUC could receive these services from another source for $21,000 per year. (TR 930-931)

On cross examination by OPC, Mr. Seidman was asked questions related to ITT's contract service charge and Research and Development (R&D) assessment policy. He admitted that the

contractual services agreement policy of ITT did not mention that the services alleged by Mr. Seidman are to be provided. It merely states:

> Under the general relations agreements, units shall remit contract service charges and R&D assessments to ITT headquarters to cover the funding of international research and development and the costs of ITT corporate administrative and commercial services and advice provided to ITT companies. This policy describes the amounts due for ITT companies and units. (Exhibit 46)

Ms. Dismukes' second adjustment relates to charges from ITT Community Development Corporation (ICDC). During 1995, ICDC began providing accounts payable processing services to PCUC. This function was previously provided by the utility. She argues that the utility provided no justification for the change, other than a memo saying that "per agreement between Jim Perry of PCUC and myself there will be [a] monthly fee of $1000 for accounting services provided to PCUC." Further, the utility provided no information concerning how the fee was determined or that it is cost-effective for ICDC to provide this service. She proposed a $10,564 reduction to expenses, due to the absence of supporting documentation. (TR 556)

Mr. Seidman testifies that PCUC clearly receives accounts payable processing services from ICDC. He argues that cost justification is evident from the comparison of last year's expenses to this year's expenses. He contends that PCUC had previously been paying an employee $23,706 for the same service it is now paying ICDC $12,000. (TR 931-932)

Staff believes that the record does not provide sufficient support to determine what administrative services are provided under the ITT agreement and whether those transactions exceeded the market rate. Even Mr. Seidman admits that he did not have a test to measure the reasonableness of the charge. While he testified that the standard should be whether PCUC could receive these services from another source for $21,000 or less, the utility failed to provides any evidence to show what cost the utility would have incurred if it had been an arms-length transaction. Further, staff does not believe that water and wastewater customers should be required to pay for charges and R&D assessments to ITT headquarters to cover the funding of international research and development and the costs of ITT corporate administrative and commercial services.

It is the utility's burden to prove that its costs are reasonable. Florida Power Corp. v. Cresse, 413 So. 2d 1187, 1191 (1982). This burden is even greater when the purchase is between related parties. In GTE Florida Inc. v. Deason, 642 So. 2d 545 (Fla. 1994), the Court established that when affiliate transactions occur, that does not mean that "unfair or excessive profits are being generated, without more." The standard established to evaluate affiliate transactions is whether those transactions exceed the going market rate or are otherwise inherently unfair. The evidence in the GTE Florida case indicated that its related party costs were no greater than they would have been had services and supplies been purchased elsewhere.

The facts in this case differ from those established in the GTE Florida case. The distinction is that in the GTE Florida case, there was evidence in the record that showed that the utility's cost was equal to or less than what an arms-length transaction would have been. Other than the testimony provided by Mr. Seidman that either of the above charges are reasonable, PCUC did not provide any documentation to support these costs. As such, staff believes that the utility has essentially failed to prove the prudence of these charges.

Since the utility failed to meet its burden to justify its costs, staff believes the adjustments proposed by Ms. Dismukes should be made. Accordingly, we recommend reducing affiliate charges by $25,412 (31,765 less 20% non-used and useful) and then allocate 59.63% to water and 40.37% to wastewater.

ISSUE 56: Should any adjustments be made to true-up the 6-months of budgeted test year expenses to actual?

RECOMMENDATION: No adjustments should be made. (WEBB)

POSITION OF THE PARTIES

PCUC: No. All MFR line items are six month(s) actual and six month(s) projected for 1995. It would be improper to true-up just one group of costs - expenses. Although actual data can be useful in assessing the viability of projections, truing up would involve restating the whole application with unaudited information.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: No.

STAFF ANALYSIS: It appears that all parties agree that no adjustments should be made to true-up budgeted test year expenses to actual; therefore, no further staff analysis is required on this issue. Accordingly, staff recommends that the Commission find that no adjustments should be made to true-up budgeted test year expenses to actual.

ISSUE 57: Should an adjustment be made to personnel services expenses?

RECOMMENDATION: Yes. An adjustment to decrease personnel services expenses should be made in the amount of $10,204 and $6,909 for water and wastewater, respectively. (WEBB)

POSITION OF THE PARTIES

PCUC: No. An adjustment of $5,667 for nonrecurring costs may be appropriate.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: Yes. Personnel services expenses should be reduced by $17,113 before application of used and useful percentages.

STAFF ANALYSIS: In witness Dismukes' testimony, she contends that ITT Industries (ITT) began providing personnel services to PCUC for the second half of the test year. This was normally a function performed in-house by PCUC, but now will be performed by the utility's parent corporation, ITT. Ms. Dismukes states that the full cost of the services provided by ITT was included in test year expenses, while the utility did not remove PCUC personnel services expenses that will not recur because of the change. Ms. Dismukes does not dispute the amount charged by ITT; however, she does believe that the nonrecurring expenses realized by PCUC during the first half of 1995 should be removed. Accordingly, she recommends an adjustment to reduce test year water and wastewater expenses by $9,246 and $6,260, respectively. Ms. Dismukes' adjustments rely on her suggested used and useful adjustments. Her adjustments can be found in Exhibit 26, Schedule 12. (TR 555)

Witness Seidman first disagrees with Ms. Dismukes' application of a used and useful percentage to personnel services. He proposes that such expenses be 100% used and useful because the cost of providing the service remains the same whether or not a portion of an employee's time is adjusted for used and useful. Mr. Seidman further contends that Ms. Dismukes' calculations to remove the nonrecurring personnel services expenses were done incorrectly. He states that she deducted payroll taxes when the taxes had not been included in O&M expenses in the MFRs; also, she deducted recurring employee benefits. Mr. Seidman states that if Ms. Dismukes' used and useful adjustment is recognized, her adjustment to personnel services expenses is overstated by $10,369. However, if the Commission recognizes these expenses as being 100% used and useful, he states that her adjustment is overstated by $17,716. His

adjustments can be found in Exhibit 41, Schedule FS-9, revised July 1, 1996, at hearing. (TR 927-928)

Staff does not believe that Mr. Seidman has sufficiently supported his rebuttal to Ms. Dismukes' adjustments to personnel services expenses. Mr. Seidman's argument that payroll taxes had not been included in O&M expenses in the MFRs is relevant in terms of how payroll taxes should be categorized with regard to making a used and useful adjustment; however, it is irrelevant with regard to whether the expense is nonrecurring, in this situation. Further, in rebuttal, Mr. Seidman makes the statement that Ms. Dismukes deducted some recurring employee benefits. He does not explain or provide sufficient evidence as to why her total amount for employee benefits should be removed from this adjustment. The utility had the opportunity to provide an explanation as to why the employee benefits should be considered recurring; however, no such explanation was provided. Hence, it is staff's belief that the utility did not satisfactorily dispute the recommended adjustments made by OPC.

Staff believes that there is no dispute between the parties that personnel services are now being provided to PCUC by the parent company, ITT. Further, the parties agree that some nonrecurring expenses should be removed from test year expenses. In Issue 52, staff recommends used and useful of 100% for personnel services expenses. We believe that Ms. Dismukes' composite adjustment to remove nonrecurring personnel services expenses of $17,113, before any adjustment to used and useful, is appropriate. Accordingly, we recommend that the Commission approve an adjustment to remove nonrecurring personnel services expenses prorated between water and wastewater in the amounts of $10,204 and $6,909, respectively.

ISSUE 58: Should the miscellaneous expense adjustment for non-recurring legal fees reflected on Dismukes' Schedule 16 be made?

RECOMMENDATION: Yes. Legal expenses should be reduced by $4,457 for water and $3,017 for wastewater. (MONIZ)

POSITION OF PARTIES

PCUC: No. The legal expenses are reasonable and recurring in their total amount.

DUNES: No Position.

FLAGLER: Adopts OPC's Position.

OPC: Legal expenses should be reduced by $9,342, before application of used and useful percentages.

STAFF ANALYSIS: OPC witness Dismukes testified that test year legal expenses included a charge of $9,342 associated with the defense of a lawsuit filed by Fergurson Enterprises. The description of the lawsuit indicated that the costs will not recur in the future. Ms. Dismukes proposed an adjustment to reduce legal fees by $3,638 for water and $2,463 for wastewater. She applied a non-used and useful percentage of 34.7% ($9,342 x 34.7%). (TR 560, EXH 26)

PCUC witness Seidman responded that, although the specific charges from that law firm may not recur, legal expenses of that magnitude most likely will recur. He argued that the total legal expense projected for 1995, including the amount contested by Ms. Dismukes, is already less than what would be expected if measured against the combined increase in customer growth and CPI since the last authorized level. (TR 936) The utility provided no other evidence related to this issue.

The crux of this issue is whether or not the utility has proven that these legal expenses represent normal and recurring charges. The utility does admit that these specific legal costs will most likely not recur; however, it argued that these costs would be replaced with other legal fees. Regardless, the utility did not provide any evidence to support that these types of charges have occurred in the past or will continue to occur in the future, such as a comparison of historical legal expenses. It is the utility's burden to show that its requested expenses are reasonable. Florida Power Corporation v. Cresse, 413 So.2d 1187, 1191 (1982). The mere statement that costs of this nature are recurring is not sufficient without additional corroborative evidence. Hence, staff does not believe the utility has proven

these costs are necessary and reasonable. Based on this, we recommend adjustments to reduce legal fees by $4,457 for water and by $3,017 for wastewater, which include non-used and useful adjustments of 20%, as discussed in Issue 52.

ISSUE 59: Should any adjustments be made to administrative and general expenses due to the company providing operation and maintenance services to non-PCUC water and wastewater systems, test year expenses to reflect actual expenses, test year expenses to remove expenses incurred that were associated with the divesture of PCUC, or test year legal expenses?

RECOMMENDATION: No additional adjustments are necessary. (MONIZ)

POSITION OF PARTIES

PCUC: No.

DUNES: No position.

FLAGLER: Adopts OPC's position.

OPC: No adjustment is necessary if the Commission adopts the Citizens' position with respect to Issue 51. If the Commission does not adopt the Citizens' recommendation with respect to Issue 51, then an adjustment is appropriate.

STAFF ANALYSIS: This issue relates to four dissimilar expense components, three of which are covered in other issues. As discussed below, staff is not recommending that any adjustments be made in this issue.

Administrative & General (A&G) Expenses for Non-utility Services

As discussed in Issue 51, PCUC provides water and wastewater services to utilities it does not own. OPC witness Dismukes proposes an adjustment to increase revenues for the income earned by PCUC for these non-utility services. (TR 547-548) Utility witness Seidman testified that the direct salaries and overhead were removed from operating expenses, and, therefore, it is inappropriate to include the income above the line. (TR 921-922) However, Mr. Seidman admits that no other A&G costs, such as supervisors' time, management salaries, insurance, billing or transportation expenses, or general plant, were allocated to these non-utility services. (TR 994-995)

In its brief, OPC provides an alternative to estimate the additional costs for A&G and general plant to reduce expenses associated with these services, if no adjustment is made for revenues. (BR 63-65) However, OPC's position is that estimating the amount of additional A&G expenses and general plant produces a similar result of adding just the revenues. As such, OPC argues that the Commission should just increase the revenues. Since the issue to reflect increased revenues or remove additionally expenses

is essentially the same, staff has addressed this fully in Issue 51 and will not provide duplicative analysis in this issue.

Update to Actual Expenses

The utility's 1995 test year expenses are based on six months of actual and six months of projected expenses for the 1995 test year. As discussed in Issue 56, all parties have agreed that no adjustments are necessary to update the test year projected expenses to actual.

Divestiture

The utility made specific adjustments to its expenses to exclude costs related to the possible divestiture or sale of PCUC. (EXH 7) The record does not contain any evidence which disputes that these adjustments were inappropriate. Neither OPC or Dunes argued this issue in their briefs. Accordingly, staff believes that no adjustment is necessary.

Test Year Legal Expenses

The portion of this issue related to legal fees is discussed in Issue No. 58.

ISSUE 60: What is the appropriate amount of rate case expense?

RECOMMENDATION: The appropriate provision for rate case expense is $390,981. This results in an increase of $89,481 to the MFR requested amount. The four-year amortization results in additional test year rate case expense of $22,370, split equally between water and wastewater in the amount of $11,185, respectively. (WEBB)

POSITION OF THE PARTIES

PCUC: $419,248.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The Citizens recommend that the Commission disallow $159,000 of rate case expense as excessive and unsupported by the Company. In addition, the Commission should remove from requested rate case expense, the expenses related to the service availability charge filing.

STAFF ANALYSIS: The projected provision for rate case expense contained in the MFRs totals $301,500. Split equally between water and wastewater, the four-year amortization yields an annual expense of $37,688 for each system. (EXH 7, FS-1) Utility witness Seidman provided updated rate case expense as two supplemental filings to his rebuttal testimony. The utility's final request for rate case expense, including estimates to complete, totals $419,248. All of the utility's support for rate case expense and estimates to complete can be found in composite Exhibit 41, which includes FS-13A and FS-13B. The components of the original and final requests, and staff's recommended allowance for rate case expense are as follows:

	MFRs	EXH 41	Staff Adj.
Management & Regulatory Consultants (M&R)	$50,000	$72,586	$70,511
Guastella Associates	75,000	119,567	93,375
Eng. & Acctg./Additional Support	20,000*	16,120**	16,120
Gatlin, Woods & Carlson	92,500	177,486	177,486
Contingency costs	45,000*	----	----
PCUC costs	19,000	33,489	33,489
Total	$301,500	$419,248	$390,981

*These projected costs in the MFRs were meant as a catch-all for any costs that might be incurred as a result of additional support needed or as a result of issues raised by intervenors beyond those anticipated at the time of filing. The projected contingency costs were absorbed throughout the final rate case amounts shown in the second column.

**At final, this represents the costs associated with Southern Appraisal Corporation, the entity hired by PCUC to testify in matters of land valuation.

According to PCUC, it was a necessary expense for the utility to retain expert witnesses in order that the record be properly developed and accurate based on appropriate rate-setting and economic principles and practices. The utility contends that thorough expense documentation was submitted, which included projections to complete. Further, the utility asserts that a large portion of the rate case expense is due to "the unrestrained discovery efforts of OPC", and to complex issues and related theories which go against typical rate-setting practices. (BR 67-68)

In its brief, the utility claims that both OPC and staff have provided testimony contrary to "several longstanding PSC policies and generally accepted rate-setting practices". The utility states that, if the adjustments related to such testimony are adopted, the future financial viability of PCUC would be at risk as a result of large reductions to existing rates and revenues. Again, the utility contends that it was "critical" to retain expert testimony to combat the "ill-conceived theories and errors" such that the Commission would have sufficient information on which to make an informed decision. (BR 67-68)

In its brief, OPC contends that the requested rate case expense is unreasonable and excessive. OPC compares the current requested rate case expense to what was granted in PCUC's last rate case, which case Mr. Seidman agreed was controversial and quite complicated. (TR 1025) In the last rate case, the Commission granted $215,102 for rate case expense by Order No. 22843, issued on April 23, 1990. Mr. Seidman also agreed that, in the last rate case, the Commission was critical of PCUC for retaining outside consultants because it was believed that the utility had competent in-house staff to accomplish the job. (TR 1026, BR 66)

It is OPC's belief that the instant case has also been controversial, but not as complex as the utility's last case. OPC recommends that only an approximate $260,000 be granted for rate case expense based on the following reasons: (BR 67-69)

1. PCUC retained outside consultants to present this case, the same situation as in the last rate case. In the last case, the Commission found this to be extravagant.

2. The law firm employed used three different lawyers to sometimes accomplish the same tasks.

3. Two of the retained lawyers appeared at the hearing, despite the fact that very little cross-examination occurred.

4. The law firm charged $.20 per page to photocopy thousands of pages of documents related to the case. This is believed to be excessive and a task that should have been more appropriately turned over to a professional copying service.

5. PCUC's retention of expert witness Guastella was not necessary, as witness Seidman has testified on the same subjects in the past and could have done it at less than half the cost.

6. Mr. Guastella's inclusion of used and useful workshop costs and expenses should be removed from rate case expense.

7. Rate case legal expense levels seem to be inflated and estimates for preparing the brief are over-budgeted.

8. The proposed rate case expense includes expenses associated with the company's service availability application. This application is a separate docket and so the charges should not appear in this docket. If the Commission allows the costs in this docket, then the costs should be deferred and amortized over five years, consistent with the Commission's policy on non-recurring charges.

Based on staff's review of the supporting documentation, as well as the above discussions, we are recommending several adjustments to the utility's requested rate case expense. Those adjustments and explanations are outlined as follows:

GUASTELLA ASSOCIATES, INC.

During staff's analysis of the invoices for Mr. Guastella's fees and costs, we found insufficient support for the fees and additional costs incurred between 6/25/96 and 7/10/96. FS-13A (EXH

41) details actual (billed and unbilled) fees and costs from 6/95 through 6/25/96. FS-13B (EXH 41), the final updated rate case expense exhibit, includes fees and costs through 7/10/96 and estimates to complete. However, FS-13B does not contain the supporting invoices for those fees and costs related to the period between 6/25/96 and 7/10/96, for Mr. Guastella. Therefore, staff made an adjustment to remove the fees and costs associated with that period of time. In our adjustment, we did consider the known and measurable time(fees) and costs associated with the hearing dates of July 1 and 2, 1996. In all fairness, we believe that the fees and costs associated with the hearing should be adjusted back into rate case expense, as those are expenses all parties should be able to confirm. Staff's composite adjustment for Mr. Guastella's insufficiently supported fees and costs is a decrease to rate case expense of $6,742. (EXH 41, FS-13A & B)

Next, staff analyzed Mr. Guastella's fees and costs associated with a used and useful workshop that he attended on 7/11-7/12/95. During cross examination, Mr. Seidman contends that Mr. Guastella's participation was on behalf of the utility and necessary for purposes of determining staff and others' positions and how those positions might affect his used and useful determinations. Also, Mr. Seidman states that the workshop coincided with the preparation of this rate case. (TR 1031-1033) OPC, in its brief, states that these workshop related costs are inappropriately included in rate case expense and should be removed. (BR 68)

Staff believes that the expenses associated with this workshop were prudently incurred by the utility, as participation in such workshops is encouraged by the Commission. We recognize that, by nature, a Commission workshop expense is non-recurring and that it would be more appropriately reflected in Regulatory Commission Expense - Other. However, we do not believe that there is enough support in the record to make the determination that these expenses should be moved out of rate case expense. The account Regulatory Commission Expense - Other is not actually suggested by OPC, nor is an appropriate amortization period. (TR 1031-1033) Therefore, based on our analysis that the expense was prudently incurred and that there is insufficient support in the record to remove it from rate case expense, we recommend that the Commission make no adjustment with regard to these workshop related expenses.

Staff's next and final adjustment to rate case expense associated with witness Guastella relates to PCUC's retention of a consultant with an hourly rate of $190. First, staff believes that a utility has the right to hire the best consultant to present the utility's case. Second, staff recognizes that sometimes it might be necessary to retain more than one consultant in a rate case due to the magnitude of issues and due to levels of expertise in

various areas of rate-making. However, with this rationale, staff also believes that consultants' fees should be maintained at a level which is appropriate for ratepayers to bear.

In this case, staff does agree with OPC that witness Seidman is capable of testifying to the same issues on which witness Guastella provided expert testimony, and at less than half the hourly rate. (TR 1030, BR 68) However, it is the utility's prerogative to decide which issues it wants to be covered by its respective consultants. Staff believes the contention to be whether the utility should have hired an expert with a more reasonable rate than Mr. Guastella's.

While staff believes that PCUC's decision to retain Mr. Guastella for his expertise is reasonable, it does not automatically follow that the customers should have to bear the full costs for his services. The Commission enjoys a broad discretion with respect to allowance of rate case expense. Florida Crown Util. Servs., Inc. v. Utility Regulatory Bd. of Jacksonville, 274 So. 2d 597, 598 (Fla. 1st DCA 1973). Nevertheless, it would constitute an abuse of discretion for the Commission to automatically award rate case expense without reference to the prudence of the costs incurred in the rate case proceedings. Meadowbrook Util. Sys., Inc. v. FPSC, 518 So. 2d 326, 327 (Fla. 1st DCA 1987), rehearing denied, 529 So. 2d 694 (Fla. 1988). Based on the foregoing Court decisions, staff believes it is appropriate to adjust rate case expense for an hourly rate which we believe to be more reasonable for the rate payers of PCUC. The disallowed portion should be borne by the shareholders, whom we believe benefitted most by Mr. Guastella's expertise. Staff is recommending an adjustment downward to an hourly rate of $140, which is an approximate average of Mr. Guastella's and Mr. Seidman's hourly rates. Accordingly, we are recommending a decrease to rate case expense of $19,450, composed of approximately 389 hours charged to PCUC for work performed specifically by Mr. Guastella.

M&R CONSULTANTS, INC.

Staff's adjustments related to consulting services provided by M&R Consultants, witness Seidman, correspond exactly to the first adjustment discussed under Guastella Associates. Here, the analysis involves the fees and costs related to the time period between 6/25/96 and 6/30/96. All of staff's assumptions and the method of adjusting the fees and costs remain the same for this adjustment to Mr. Seidman's billings. Accordingly, staff's composite adjustment for Mr. Seidman's insufficiently supported fees and costs is a decrease to rate case expense of $2,075.

Next, staff analyzed the fees charged by Mr. Seidman for his services with regard to the utility's application for increased service availability charges (SAC). The expenses associated with Mr. Seidman's work on the SAC application are embedded in current rate case expense billings. Staff recognizes that the SAC application is a separate docket from the instant case, and that these charges should not be included in rate case expense. Basically, OPC and the utility disagree that these charges should be removed. OPC counsel suggests to Mr. Seidman that, if the Commission keeps the expenses in this docket, the expenses would need to be ascertained and then amortized over a period of time other than four years. (TR 1036-1039) Staff analysis of the approximate charges revealed that the time spent by Mr. Seidman on the SAC application totals, at most, 10% of the charges of $10,327 appearing on page 20 of 95, FS-13A. (EXH 41)

Staff believes that there is insufficient evidence in the record to say that the expenses in question should actually be deferred to Regulatory Commission Expense - Other; further, the amortization period to be used is not supported. It is staff's belief that the difference between a four-year amortization of our estimate ($1,300) and a five-year amortization, which would occur by moving the expenses to Regulatory Commission Expense - Other, would have a grossly immaterial impact on rates. On the basis of insufficient support in the record and on what staff believes to be an immaterial impact on rates, we recommend the Commission make no adjustment with regard to the SAC expenses.

SOUTHERN APPRAISAL CORPORATION

Staff believes that rate case expense associated with Southern Appraisal Corporation has been prudently incurred and supported. Therefore, no further staff analysis is required, and we recommend that no adjustments be made.

GATLIN, WOODS & CARLSON

During cross examination on rate case expense, Mr. Seidman was asked by OPC whether photocopying charges of 20 cents per page were reasonable charges for a professional firm to bill its clients. Mr. Seidman states that 15 to 20 cents is rather standard when the copying is done by a professional firm. OPC asks if it would save money to turn large copying jobs over to a copying center. Mr. Seidman states that it might be prudent to do so; however, it would depend on the circumstances. Further, Mr. Seidman was unsure of the line items on pages 56 and 74 of 95 (EXH 41) to which OPC was having him refer. As such, Mr. Seidman could not say what was copied, nor could he make a determination if the charges were prudently incurred. When questioned about the charges on page 74

of 95, Mr. Seidman further contends that the prudence of such charges is a matter of the circumstances, such as the time the copying was done and how quickly it had to be completed. Mr. Seidman states that Mr. Gatlin's firm does use outside copying services, and that in this case there must have been time constraints such that the copying was done in-house. (TR 1039-1043)

Staff believes that it is important to determine the prudence of costs such as photocopying. We have analyzed the charges, in this case, and believe that the expenses were prudently incurred and that Mr. Seidman sufficiently supports those charges on which he was challenged. We agree with Mr. Seidman's argument regarding time constraints and other circumstances, which dictate whether photocopying is done in-house or sent to a copying center. We believe that the record does not fully support the rationale for removing any of these photocopying expenses; further, no evidence was presented as to what a reasonable fee would be if the large jobs were sent out to copying centers. Accordingly, staff recommends that the Commission make no adjustments to rate case expense for photocopying charges.

Staff's final comments with regard to the legal firm's expenses relate to OPC's assertions that the legal firm's estimate to complete should not have increased due to an extra day of hearing. Mr. Seidman states that extra work would be necessary due to the substance of the events that transpired between the original hearing dates and the third day of hearing. (TR 1027-1029) It is staff's belief that, due to the complexity of the issues in this rate case and to the extra day of hearing, the estimates to complete submitted by Mr. Gatlin's firm are reasonable and prudent. OPC argues, in its brief, that the law firm used three different lawyers to sometimes accomplish the same task. (BR 67) Staff has analyzed the invoices submitted by Mr. Gatlin's firm, and we believe that there has been no overlapping of assignments. Also, we believe that there is no evidence in the record to substantiate OPC's argument that these lawyers worked on identical assignments. In its brief, OPC further argues that the appearance of two lawyers at the hearings was not necessary because the scope of the issues and the number of witnesses did not require both lawyers' expertise. (BR 67) Staff notes that two of our lawyers appeared at the hearings and have worked on this rate case due to our belief that the complexity of the issues in this case warrant such allocation of the corresponding workload. Accordingly, we recommend that the Commission make no adjustments with regard to the legal firm's estimate to complete, to the firm's utilization of three different lawyers in preparing this rate case, or to the firm's utilization of two lawyers at the hearings.

OTHER - RETAINING OUTSIDE CONSULTANTS

In its brief, OPC recommends that the Commission find the utility's retention of outside consultants unreasonable, just as the Commission found in PCUC's last rate case. (BR 67) In conducting its case before this Commission, it is common practice for a utility to hire expert witnesses to represent the utility. A utility may be large enough to warrant the work being performed in-house; however, the staff in-house may not have the level of expertise required or preferred by the utility to represent its positions. A utility has the right to conduct its case as it deems appropriate. Likewise, it is under the Commission's discretion to determine if rate case expense has been prudently incurred. We do not believe that any further adjustments are warranted or supported in the record for accounting, legal, engineering, or land appraisal rate case expense. We believe that our recommendations for the respective consultants, above, are appropriate, and we recommend that the Commission approve our recommendations, accordingly.

CONCLUSION

Based on staff's above analysis, we recommend that the Commission approve adjustments to decrease rate case expense for Mr. Guastella's insufficiently supported charges of $6,742 and for staff's analysis of a reasonable hourly rate of $19,450. We recommend that rate case expense should further be reduced by $2,075 for Mr. Seidman's insufficiently supported charges. The recommended composite reduction to rate case expense totals $28,267. Accordingly, staff's recommended provision for rate case expense totals $390,981. This results in an increase of $89,481 to the MFR requested amount. The four-year amortization results in additional test year rate case expense of $22,370, split equally between water and wastewater in the amount of $11,185, respectively.

ISSUE 60A: Dropped.

ISSUE 60B: Dropped.

ISSUE 61: Are adjustments necessary to property taxes for non-used and useful plant adjustments?

RECOMMENDATION: Yes. A decrease of $108,320 and $45,869 is necessary for water and wastewater, respectively. (WEBB)

POSITION OF THE PARTIES

PCUC: No, all appropriate adjustments for used and useful are included in the MFRs.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: Yes. Adjustments to property taxes should be made consistent with the used and useful adjustments.

STAFF ANALYSIS: Utility witness Seidman testified that he adjusted property taxes to reflect the current millage rates and used and useful amounts. (TR 181) He does not, however, explain how his adjustment is broken out for the portion related to the millage rate and the portion related to the used and useful adjustment. Therefore, staff made its adjustment based on the test year balance of property taxes in the MFRs, since the record does not support the breakdown of Mr. Seidman's adjustment. Further, staff has adjusted used and useful property taxes based on our used and useful adjustments to total plant balances. Accordingly, we recommend a decrease of $108,320 and $45,869 to property taxes for water and wastewater, respectively.

ISSUE 62: What are the appropriate adjustments to the provision for income taxes, including the appropriate federal tax rate, the parent debt adjustment, the interest reconciliation adjustment, the ITC interest synchronization adjustment and adjustments for other NOI adjustments?

PRIMARY RECOMMENDATION: The provision for income tax expense should be based on the consolidated federal tax rate of 35 percent and decreased by a net $166,755 for water and by a net $257,766 for wastewater. Of the foregoing amounts, the provisions are increased by $88,002 for water and by $79,142 for wastewater to adjust the parent debt adjustment. Second, the adjustment to the interest reconciliation adjustment increases the tax provision by $132,409 for water and by $120,302 for wastewater. Third, other Staff adjustments to revenues and expenses decrease tax expense by $387,166 for water and by $457,210 for wastewater. Last, an ITC interest synchronization adjustment is not appropriate as PCUC is an Option 1 Company. (C. ROMIG)

ALTERNATIVE RECOMMENDATION: The tax expense should be calculated using a 34% tax rate. The dollar effect of this change is a $21,679 total reduction to income tax expense or $13,367 and $8,312 for water and wastewater, respectively. (SALAK, CAUSSEAUX)

POSITION OF THE PARTIES

PCUC: As per MFRs.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The appropriate federal income tax rate is 34%.

STAFF ANALYSIS: Per MFR Schedules B-1 and B-2 (EXH 7), the proposed provision for income tax expense is $491,630 for water and $369,489 for wastewater. These amounts are calculated on the company's requested revenue requirement using ITT's consolidated federal tax rate of 35 percent and include an interest reconciliation adjustment as well as a parent debt adjustment. Further, the calculations are based on the use of its proposed year-end rate base. In his Direct Testimony, PCUC Witness Seidman states that, "The income tax provision treats PCUC on a stand alone basis, with the required recognition of a parent debt adjustment." (TR 181)

In her Direct Testimony, the OPC Witness Kimberly Dismukes states her belief that the federal income tax rate should be 34

percent as opposed to the 35 percent rate used by the Company. Witness Dismukes states that,

> The Company has not explained why it used a 35% tax rate, but it may relate to the fact that PCUC files a consolidated return with its parent company ITT. While ITT's federal income tax rate may be 35%, the Company's income taxes for book and ratemaking purposes are calculated on a stand alone basis. The income generated by PCUC would only be taxed at the federal income tax rate of 34%, not the 35% suggested by PCUC. (TR 558)

Ms. Dismukes' proposed adjustments to reflect the reduction of the federal tax rate from 35 percent to 34 percent reduce income tax by $22,395 for water and by $23,858 for wastewater. (EXH 26, Schedule 15)

In his Rebuttal Testimony, Witness Seidman rebuts Ms. Dismukes' proposed use of a 34 percent federal tax rate. Mr. Seidman states that,

> The appropriate federal tax rate for PCUC is 35%. PCUC files its income tax return as part of the ITT consolidated return. However, in its workpapers for the consolidated return and in its calculations for ratemaking purposes, its taxable income is determined on a stand alone basis. The marginal tax rate to which PCUC is subject, is the same as for ITT or 35%. (TR 934)

Further, Mr. Seidman states that he would agree with the use of a 34 percent federal tax rate if the Commission truly treated PCUC on a stand alone basis. As Mr. Seidman points out, the Commission,

> ... takes advantage of the consolidated relationship by requiring PCUC to make a parent debt adjustment to interest expense for ratemaking purposes. Based on the income level proposed in the MFR, the revenue requirement difference between a 34% tax rate and an 35% tax rate is $47,000. But, the parent debt adjustment saves the ratepayers $499,000 in revenue requirements. The net parent debt savings of $452,000 [$499,000-$47,000] is only possible because of the consolidated relationship. (TR 935)

Mr. Seidman conceded that the taxable income for PCUC is less than $10,000,000, the level of taxable income at which the 35 percent rate becomes applicable. (TR 1045) However, Witness

Seidman concludes that if the Commission were to ignore the consolidated relationship to justify a stand alone 34 percent tax rate, it follows that the Commission should also ignore the parent debt adjustment that is only possible because of consolidation. (TR 934-935)

Although the taxable income of Palm Coast on a stand alone basis is below $10 million, Staff recommends use of the consolidated PCUC/ITT federal tax rate of 35 percent. Staff acknowledges that PCUC is required by Rule 25-14.004, Florida Administrative Code, Effect of Parent Debt on Federal Corporate Income Tax, to adjust the income tax expense of the utility for the benefits of the parent debt adjustment. Nevertheless, Staff believes that PCUC has adequately demonstrated that the benefits of filing a consolidated return outweigh the extra cost of the higher bracket and that the benefits will be passed on to the ratepayers. For this reason, Staff recommends the use of the 35 percent consolidated federal tax rate.

The record is silent and the briefs did not address adjusting the parent debt adjustment or the interest reconciliation adjustment, an ITC interest synchronization adjustment and the adjustments to the provision for income tax to reflect Staff's recommended revenue and expense adjustments. Staff believes that the only adjustments to the components of income tax expense should be those that "fall out" from Staff's other recommendations. For this reason, the provisions are increased by $88,002 for water and by $79,142 for wastewater to adjust the parent debt adjustment. Second, the staff's interest reconciliation adjustment increases the tax provision by $132,409 for water and by $120,302 for wastewater. Third, other Staff adjustments to revenues and expenses decrease tax expense by $387,166 for water and by $457,210 for wastewater. Last, an ITC interest synchronization adjustment is not appropriate as PCUC is an Option 1 Company.

In summary, the provision for income tax expense should be based on the consolidated federal tax rate of 35 percent and decreased by a net $166,755 for water and by a net $257,766 for wastewater, as shown on the Statements of Operations, Schedule 3-A for water and 3-B for wastewater.

ALTERNATIVE STAFF ANALYSIS: Although all parties agree the 34% tax rate is the rate applicable to PCUC's taxable income on a stand alone basis, PCUC witness Seidman supports use of a 35% tax rate in calculating the tax expense of PCUC. Witness Seidman believes the Commission does not treat PCUC on a stand alone basis because of the parent debt adjustment that is larger than the difference in tax expense caused by use of a 35% tax rate. (TR 934-935) While it is true that the parent debt adjustment is only possible because

of the consolidated relationship, (TR 934-935) it is intended to address capital structure issues by recognizing that the stand alone capitalization of the utility may be affected by the affiliation with a parent. This is shown by the language of Rule 25-14.004, Effect of Parent Debt on Federal Corporate Income Tax, Florida Administrative Code, which states:

> . . . the income tax expense of a regulated company shall be adjusted to reflect the income tax expense of the parent debt that **may be invested in the equity of subsidiary** where a parent-subsidiary relationship exists and the parties to the relationship join in the filing of a consolidated income tax return. (Emphasis added.)

The rule further states:

> The adjustment shall be made by multiplying the debt ratio of the parent by the debt cost of the parent. This product shall be multiplied by the statutory tax rate applicable to the consolidated entity. This result shall be multiplied by the equity dollars of the subsidiary, excluding its retained earnings.

The parent debt adjustment is made by rule and applies no matter what tax rate is used. The adjustment recognizes the tax impacts of capitalization decisions of the parent. The rule presumes there was a decision by the parent to issue debt which was, in turn, invested in the utility as equity dollars. The parent debt rule, through the tax calculation, makes the ratepayers neutral as to whether the debt is received at the parent or utility level.[1]

OPC witness Dismukes testified that use of a 35% tax rate is irrelevant to the instant case. She testified the stand alone income of PCUC would be taxed at a 34% rate. (TR 558-559) Witness Seidman said he did not know of any precedent for using the 35% rate. (TR 1044) Witness Seidman conceded that PCUC's taxable income is less than $10 million. (TR 1045) He also testified that PCUC's work papers for the consolidated tax return determine taxable income on a stand-alone basis, as do its calculations for ratemaking purposes. (TR 934)

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[1] "It is the parent which issues debt; not the consolidated company, and giving consideration to the parent presents a more representative view of the relationship . . . . and to some extent recognizes the double leverage problem which (is) addressed." Order No. 9192, Docket No. 790084-TP(CR), issued December 27, 1979.

Other than the use of a parent debt adjustment, no other evidence was presented by PCUC for use of a 35% tax rate. Since the parent debt adjustment recognizes other factors involved in an affiliate relationship, alternative staff believes that income taxes should be calculated on a stand alone basis using the 34% tax rate.

ISSUE 63: Dropped.

ISSUE 64: What are the test year operating income amounts before any revenue increase?

RECOMMENDATION: The test year operating income amounts should be $1,049,237 for water and $490,152 for wastewater. (WEBB)

POSITION OF THE PARTIES

PCUC: Fall-out issue.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The final amount of test year operating income is subject to the resolution of other issues.

STAFF ANALYSIS: Based on the adjustments discussed in previous issues, staff recommends that the test year operating income before any provision for increased revenues should be $1,049,237 for water and $490,152 for wastewater. The schedules for water and wastewater operating income are attached as Schedules 3-A and 3-B, and the adjustments are shown on Schedule 3-C.

ISSUE 65: What are the revenue requirements?

RECOMMENDATION: The following revenue requirement should be approved: (WEBB)

	Total	$Incr.(Decr.)	%Change
Water	$5,150,098	($250,266)	(4.63%)
Wastewater	$3,354,699	$ 67,494	2.05%

POSITION OF THE PARTIES

PCUC: Fall-out issue.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The final amount is subject to the resolution of other issues.

STAFF ANALYSIS: The revenue requirement is a fall-out calculation based on staff's recommendations for rate base, cost of capital, and operating expenses. The utility requested approval of final rates designed to generate annual revenues of $6,971,647 and $4,906,850 for water and wastewater, respectively. These revenues exceed staff adjusted test year revenues by $1,571,283 (22.54%) for the water operations and $1,619,645 (33.01%) for the wastewater operations. Based upon staff's proposed recommendations with regard to the underlying rate base, cost of capital, and operating income issues, we recommend approval of rates that are designed to generate a revenue requirement of $5,150,098 for water and $3,354,699 for wastewater.

ISSUE 66: In light of Section 367.0817, Florida Statutes, should any revenue requirement associated with reuse be allocated to the water customers of PCUC?

RECOMMENDATION: No. No portion of the revenue requirement associated with reuse should be allocated to the water customers of PCUC. (XANDERS)

POSITION OF THE PARTIES

PCUC: No.

DUNES: No. PCUC has no incremental revenue requirement associated with reuse, since all of the incremental investment and expenses are incurred by Dunes. Therefore, there are not costs to be allocated to water customers, or for that matter, to Dunes.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: No position

STAFF ANALYSIS: Pursuant to Section 367.0817(3), Florida Statutes, the Commission has the authority to allocate the costs of a reuse project between an investor-owned utility's water, wastewater and reuse customers. Enacted in 1994, this new section has changed the way the Commission allocates costs between a utility's water and wastewater customers, when reuse is used as a means of effluent disposal.

The Dunes is the only party that provided an argument on this issue. According to the Dunes, Section 367.0817(3), Florida Statutes, is not applicable because PCUC has not submitted a "reuse project plan" for approval. In addition, because PCUC has incurred no treatment costs related to effluent reuse beyond those required as part of its normal secondary wastewater treatment and effluent disposal requirements, it is not appropriate to recover any portion of PCUC's normal wastewater treatment and disposal plan investment, or operating costs, from either its water customers or from Dunes. (BR 3, 4)

Staff is not entirely persuaded by the Dunes' argument. It is not necessary for a utility to have filed a reuse project plan to implement Section 367.0817(3), Florida Statutes. Reuse has traditionally been included in a utility's wastewater costs since it was primarily used as a method of effluent disposal. However, with the advent of more stringent requirements from the DEP and WMDs, reuse is now viewed as a source of water as well as a method of effluent disposal. Section 367.0817(3) allows the Commission to

recognize the benefits of reuse that inure to all of a utility's customers - including the water customers.

Harold Wilkening of the SJRWMD described the benefits of reuse. According to Mr. Wilkening, the primary benefits of using reuse include (1) replacing groundwater and preserving the higher quality water source and (2) reducing or eliminating water quality impacts. (TR 469) Additionally, other benefits of reuse that vary from case to case may include:

(1) it postpones the development of new water treatment facilities;
(2) it reduces the need to develop alternative water supply sources;
(3) it reduces the likelihood of adverse environmental impacts;
(4) it allows utilities to qualify for longer duration consumptive user permits;
(5) it is less expensive than other conventional wastewater treatment and disposal options;
(6) users receive a very reliable water supply source;
(7) it is not subject to water shortage restrictions;
(8) it contains levels of nutrients that reduce fertilization costs to the users. (TR 469-470)

Although we recognize that there are benefits to reuse, staff is recommending that no portion of the revenue requirement associated with reuse be allocated to the water customers. First, staff believes that most of the benefits described above appear to accrue to those water customers that receives service from a utility that provides reuse for irrigation. However, in this case, PCUC does not provide reuse for public access irrigation. The Dunes resells the effluent provided by PCUC to its customers for irrigation. (TR 408, 411-412) Therefore, staff believes that the majority of these benefits inure to the water customers of the Dunes, not PCUC. This does not mean, however, that there aren't any benefits to the water customers of PCUC. The PCUC water customers benefit from the reduction in water consumption in that area that has occurred as a result of reuse. (EXH 3, 22)

Second, the wastewater customers of PCUC benefit from the reuse provided to the Dunes. The Dunes is identified as a effluent disposal site on PCUC's wastewater permit. (TR 584) If the Dunes was no longer a customer of PCUC, then the permitted capacity of PCUC would be reduced by the amount corresponding to the Dunes. (TR 585) As a result, PCUC's wastewater customers benefit from the service provided to the Dunes since this service allows PCUC to dispose of its effluent without the need for additional disposal sites. (TR 307) Further, since the Dunes is an effluent customer,

not a sewer customer, the wastewater customers benefit since the Dunes shares in the cost of the disposal of their treated effluent. (TR 297) Because the costs of reuse are traditionally recovered from the wastewater ratepayers, these benefits are already being recognized in the wastewater customers' rates.

Although we do not believe that any revenues should be allocated in this proceeding, we do believe that such an allocation should be explored in future proceedings. The utility's consumptive use permit requires 75-85% of the utility's future wastewater flows to be reused through irrigation. (EXH 3, pg. 25) According to Exhibit 3, this is an unusually high amount, and discussions are underway to modify this requirement. Despite this fact, there is evidence that the utility may be providing reuse to customers other than the Dunes in the future. According to the Updated Abbreviated Reuse Feasibility Study dated May 1995, two golf courses in proximity to PCUC are in the planning stages and may be constructed by 1998. (EXH 3, pg 26) One of these golf courses is required by its development order to use Palm Coast's effluent for irrigation purposes. (EXH 3, pg 26) Therefore, it would be more appropriate to explore this issue in future proceedings.

ISSUE 67: Should a new class of effluent service be approved and, if so, what are the appropriate rates, if any, for effluent service?

RECOMMENDATION: Yes. A new class of service should be approved. The appropriate reuse rate is $.10/1,000 gallons, resulting in an annual reuse revenue of $36,500. (XANDERS)

POSITION OF THE PARTIES

PCUC: Yes, as per Effluent Reuse Rate Analysis

DUNES: No. The unfiltered effluent provided by PCUC is not suitable for reuse without further treatment and there is no general demand for such service. If a new class of service is approved, the rate should be set at zero, since Dunes already incurs all of the incremental cost associated with treating and disposing of the unfiltered effluent.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: No position

STAFF ANALYSIS: Palm Coast has requested a rate of $.67/1,000 gallons for the provision of effluent to the Dunes, Palm Coast's only effluent customer. (EXH 7, page 98; TR 243, 297) The requested rate is based on a cost allocation study completed by John Guastella, witness for Palm Coast. The study allocates the total cost of Palm Coast's .75 MGD Rapid Infiltration Basin (downgraded from 1.0 MGD) and 6.0 MGD wet weather storage tank to the reuse rate. (EXH 15) Using these costs, an effluent reuse revenue requirement has been determined which is divided by the total effluent produced by Palm Coast in order to develop the rate. (EXH 15) Only PCUC and the Dunes provided arguments regarding this issue.

Palm Coast believes that the proposed reuse rate is appropriate because the storage tank and Rapid Infiltration Basin (RIB) disposal facilities are part of an integrated system which meets the needs of both the general body of wastewater ratepayers and the Dunes. It argues that the cost of these facilities should be used to establish an effluent rate that recognizes a fair sharing of cost between the wastewater ratepayers and the Dunes and the value of the service to the Dunes. (BR 70)

The Dunes does not believe that a new class of service should be approved. If a new class of service is approved, however, then no rate is appropriate for effluent. This is because the Dunes incurs all of the incremental cost associated with treating and

disposing of the unfiltered effluent. Since the Dunes incurs all of the incremental cost, it believes that establishing a charge would violate the statutory requirement that utility rates be "just, reasonable, compensatory and not unfairly discriminatory." (BR 3, 5)

Both parties use past Commission practice as the basis for their arguments. The Dunes states that when an effluent reuse arrangement has provided benefits to both parties (as in this case), the Commission has set rates that reflect a sharing of the incremental cost of treating the effluent to advanced wastewater treatment standards. According to the Dunes, since both parties benefit in this case, past Commission practice would support a rate that reflects a "sharing" of the incremental costs. (BR 8) In this case, however, the Dunes has directly paid or incurred 100% of the incremental cost of effluent reuse. (BR 9) According to Witness Milian, these costs include: the pumping station at Palm Coast's plant site, a 12" effluent transmission main, chlorination facilities, wet weather storage, meters and distribution within the Dunes. (TR 447) According to its brief, since the Dunes has incurred these costs, there is no need for the Commission to establish a rate based on cost sharing. (BR 9)

PCUC, on the other hand, states that the incremental cost argument is irrelevant since rates are generally set on the basis of average cost. It argues that it is Commission practice to set an effluent rate that does not exceed the cost of alternative sources for irrigation water. In this case, the upper limit of the alternatives could be Palm Coast's raw water rate. (BR 72) Accordingly, the requested rate of $.67/1,000 is a reasonable midpoint. (BR 72)

Staff believes that there are several key issues that need to be addressed prior to establishing a reuse rate for Palm Coast. Therefore, our analysis will be divided into these issues.

New Class of Service

The first part of Issue 67 is: Should a new class of service be approved? This issue was considered previously in Docket No. 900315-WS, which was Palm Coast's application for an effluent class of service. In Order No. 23372, issued August 20, 1990, the Commission found that it was not appropriate to establish an effluent class of service for Palm Coast. The order cites three reasons for this decision:

1) Establishing a new class of service might send false signals that the utility was ready and able to satisfy a

demand for effluent when the utility was merely securing an alternative method of effluent disposal.

2) If a new class of service is established, a rate should be established at the same time.

3) A decision to establish a rate for effluent should be made in the context of a rate case where there is sufficient information to determine the prudence and reasonableness of establishing a charge for the provision of effluent.

Palm Coast treats its effluent to secondary treatment standards. (TR 297) This level of treatment is not sufficient for application in public access areas such as golf courses. (TR 298) Therefore, the Dunes must treat the effluent to a higher standard prior to selling the effluent to the Dunes' customers. (TR 411) In its position statement, the Dunes asserts that a new class should not be established because the effluent is not suitable for reuse without further treatment, and there is no general demand for such service.

Staff is not persuaded by the Dunes' argument. Although the Dunes must treat the effluent further before it can be applied in public areas, the effluent provided by PCUC is considered to be reuse. Both Palm Coast and the Dunes are located in the St. Johns River Water Management District (SJRWMD). (TR 471) The SJRWMD defines reuse as "the deliberate application of reclaimed water, in compliance with the DEP and SJRWMD rules, for a beneficial purpose. (TR 468-469) The reclaimed water provided to the Dunes meets this definition. (TR 474) In addition, the reuse meets the definition of effluent reuse under Section 367.021(6), Florida Statutes, which states that: effluent reuse means the use of wastewater after the treatment process, generally for reuse as irrigation water or for in-plant use.

With regard to demand, the circumstances have changed since the issuance of the Order in Docket No. 900315-WS. The entire SJRWMD has been designated a Water Resource Caution Area (WRCA). (TR 470) The purpose of this designation is to provide the greatest possible availability of reclaimed water and maximize reuse throughout the SJRWMD in order to conserve available water resources. (TR 470) Accordingly, when reclaimed water is readily available, the SJRWMD and DEP rules require water users to use reclaimed water in place of higher quality water sources unless the applicant demonstrates that its use is either not economically, environmentally or technically feasible. (TR 468, 470) Given the position of the SJRWMD regarding reuse, staff believes that there will be a greater demand for effluent in the future.

Based on the above, it is staff's opinion that the utility is providing a service and a valuable commodity to the Dunes which should be reflected in the utility's tariff, regardless of the level of reuse rate. Even if the Commission believes that a reuse rate of zero is appropriate, Section 367.091(2), Florida Statutes, requires that each utility's rates, charges and customer service policies must be contained in a tariff approved by and on file with the Commission. Therefore, staff is recommending that a new class of service be approved.

Is PCUC entitled to a reuse rate

As mentioned above, the effluent provided by PCUC must be treated to a higher standard by the Dunes before it can be provided to any of the Dunes' customers. To staff's knowledge, this is the first case where a utility regulated by the Public Service Commission has requested a rate for effluent that has to be treated to a higher standard by its customer. Mr. Guastella testified that he wasn't aware of any other utility in Florida that provides unfiltered effluent (secondarily treated) to a customer for further disposal. (TR 374)

In order to justify the need for a reuse rate, Palm Coast highlighted a provision of the second agreement in which Palm Coast agreed to pay the Dunes $558 for the right to dispose of 600,000 gallons per day at the Dunes and $3,341 to lease 7 millions gallons of wet weather storage. (BR 72, EXH 21) According to Palm Coast, during the course of this agreement, the Dunes did not construct any additional facilities to provide that service, nor did it incur any incremental capital costs in connection with this agreement. (BR 72) In its brief, the Dunes anticipated this argument and stated that the sharing of the incremental cost concept has been applied by the Commission when both parties benefit from the provision of reuse. According to the Dunes, in the lease situation, there was no sharing of benefit and PCUC was the only party to benefit from this agreement. Further, without a payment of some type, there would have been no legal consideration for Dunes' agreement to provide storage, and the contract would have been unenforceable. (BR 17)

The Dunes benefits from the source of irrigation water provided by Palm Coast. The Dunes receives secondarily treated effluent from Palm Coast and treats it to a higher standard. (TR 297-298) Although the Dunes must pay the costs of treating the effluent to a higher standard, it avoids the cost of treating the effluent to secondary standards. Additionally, Hal Wilkening of the SJRWMD testified that reuse serves to reduce the need for development of alternative water supply sources which are more expensive to the utility and its water customers. (TR 469) This

is true in this case. The Dunes' reuse facilities have a permitted capacity of 1.6 MGD average daily flow. (TR 411) The Dunes receives about 61,000 gpd of effluent from its own treatment facilities and is required by its most recent agreement with Palm Coast to take no less than 300,000 gpd from Palm Coast. (TR 411, 414) According to Gary Moyer, the Dunes' engineers recommended that the $4 million investment be made to receive effluent from PCUC after reviewing the costs of receiving potable water for irrigation. (TR 428)

Palm Coast benefits because the provision of effluent to the Dunes allows the Dunes to act as a method of effluent disposal. One reason for the original agreement was that Palm Coast had surplus wastewater effluent that could be made of use by the Dunes. (EXH 21) In addition, as mentioned in Issue 66, the Dunes is recognized as an effluent disposal site on PCUC's wastewater permit. (TR 584) If the Dunes was no longer a customer of PCUC, then the permitted capacity of PCUC would be reduced by the amount corresponding to the Dunes. (TR 585) As a result, PCUC's wastewater customers benefit from the service provided to the Dunes since this service allows PCUC to dispose of its effluent without the need for additional disposal sites. (TR 307)

The evidence in the record shows that there are arguments for and against a reuse rate. Arguments for a reuse rate are: Palm Coast provides a valuable service (or a product) to the Dunes and is entitled to some retribution for that service; the Dunes benefits from the provision of the effluent; and reuse is the most cost effective alternative source of irrigation for the Dunes. (TR 428, 469, 1092) Arguments against a reuse rate include Dunes has invested close to $4 million in order to receive effluent from Palm Coast; Dunes continues to pay operation and maintenance costs on the main between the Dunes and PCUC; and Dunes charges a rate to its customers, and will probably increase the rate if a reuse rate is approved. (TR 421, 447, EXH 23).

This case is unusual in that the customer intervened specifically to oppose a reuse rate. In most cases, the Commission has had to rely on the agreement between the utility and the customer, as well as any testimony from WMD representatives as to the appropriateness of a reuse rate. Also, in most other cases, the approved rate has been based on negotiations between the utility and the customer. (See, for example, Orders Nos. PSC-93-0423-FOF-WS, issued March 22, 1993 and PSC-96-1147-FOF-WS, issued September 12, 1996) Since the Dunes has intervened for the purpose of ensuring that no reuse rate be approved, it appears there was no negotiation between the utility and the customer in regard to the reuse rate. This is unusual, since in the past, the two parties

have had such clear agreements on everything else concerning the reuse arrangement. (TR 421, EXH 21)

The Dunes argues that past practice prevents the Commission from approving a rate in this case. According to the Dunes, this is because in prior cases involving effluent rates, the Commission has applied a principle that where effluent reuse benefits both parties, the parties should share the incremental cost associated with the reuse. (BR 8) Since the Dunes already pays a 100% share of the incremental costs that principle is not supported in this case. (BR 9) We are not persuaded by this argument because we do not believe that the Commission has consistently approved reuse rates based on incremental costs. As discussed above, some reuse rates have been approved based on negotiations between the utility and the reuse customer. Further, Mr. Guastella testified that methods for setting reuse rates are relatively new and evolving and that a consistent way of looking at reuse rates has not been established. (TR 376) Although in past cases Mr. Guastella has testified that reuse rate should be set based on incremental cost, his testimony in this case is clear that he does not believe that is a principle that should be applied in every case involving reuse rates. (TR 394) In this case, he performed a specific rate study for PCUC. (TR 394)

Additionally, staff notes that the Dunes recognized in the original agreement that it would incur a substantial cost in order to receive effluent from Palm Coast. The agreement states:

> ...in recognition of State policy favoring utilitization of treated effluent for irrigation purposes, it is the desire of the parties hereto to utilize PCUC's effluent for irrigation purposes even though there may not be a direct benefit to PCUC and DCDD may incur substantial cost to provide additional treatment of said effluent for irrigation purposes. (EXH 21)

Therefore, based on the Mr. Guastella's testimony regarding the establishment of reuse rates and Mr. Wilkening's testimony regarding the benefits of reuse, staff believes a reuse rate is appropriate in this case.

Does the Dunes have alternative sources of supply?

Gary Moyer, manager of the Dunes, testified that the Dunes has considered other alternatives for irrigation. (TR 429) The Dunes chose reuse because it was the most cost effective method of receiving irrigation water. (TR 429) Staff believes that this

method is also one of the more environmentally friendly alternatives. According to Mr. Wilkening, reuse serves to offset groundwater withdrawals which reduces the likelihood of adverse environmental impacts requiring mitigation. (TR 469) Mr. Milian, witness for the Dunes, testified that he would recommend that the Dunes consider other alternatives if a reuse rate is approved. (TR 457) According to Mr. Milian, the Dunes could obtain a lesser quality of water by taking water from canals or surface waters. (TR 457)

Upon cross examination regarding alternative sources of irrigation water, Mr. Moyer testified that the Dunes at one point had considered meeting its irrigation needs through potable water purchased from Palm Coast. (TR 428) He stated that after consideration of this alternative, the Dunes' board voted to invest $4 million to received the untreated effluent from Palm Coast for irrigation purposes. (TR 428) He also testified that the Dunes had not completed any analysis as to the cost to secure alternative sources. (TR 427-428)

Furthermore, there is some question as to whether the Dunes would be able to receive a consumptive use permit from the SJRWMD should the Dunes secure another source. In order to obtain a permit for water use, SJRWMD rules will require the Dunes to use reuse unless it can demonstrate that it is not technically, environmentally or economically feasible. (TR 478, 480) According to Mr. Wilkening, the Dunes has already shown that it is technically and environmentally feasible to receive reuse from PCUC. (TR 473) Therefore, the Dunes would have to show that it is not economically feasible to continue receiving reuse. Since economic feasibility is not defined by a rule and few cases have required a determination of economic feasibility, Mr. Wilkening was able to give little guidance as to what is considered economically feasible to the WMD. (TR 480-481)

Given the testimony of Mr. Wilkening regarding the SJRWMD's position on consumptive use permits and Mr. Moyer's testimony regarding the Dunes' investment in receiving effluent from Palm Coast, staff believes that the Dunes' ability to seek alternative sources may be limited.

Necessity of RIB and storage tank

As mentioned above, the requested rate is based on a cost allocation study completed by John Guastella, witness for Palm Coast. The study allocates the total cost of Palm Coast's .75 MGD Rapid Infiltration Basin (downgraded from 1.0 MGD) and 6.0 MGD wet weather storage tank to the reuse rate. (EXH 15) Since these are the two items of investment used to determine the reuse rates and

both the Dunes and the utility provided testimony and arguments as to whether these items are necessary to provide effluent to the Dunes, staff analyzed the record to determine the necessity of these items.

According to Mr. Guastella, the Rapid Infiltration Basin (RIB) and tank are a part of an integrated disposal system. (TR 298) As such, the cost of the RIB and the storage tank should be recovered from all of PCUC's customers, including the Dunes. (TR 301) According to the utility, this is consistent with the philosophy that rates are generally set on the basis of average cost, regardless of the absence of any incremental cost of service. (BR 71) The utility argues that if the PSC focuses solely on incremental costs, which is the crux of the Dunes' argument, it will be ignoring the actual costs PCUC incurs in owning and operating an integrated wastewater utility system, without which the Dunes would have to find more costly irrigation water. (BR 73) The Dunes, on the other hand, believes that the RIB and tank are not necessary to provide effluent to the Dunes. (BR 9) Therefore, the Dunes should not be required to recover the costs of these items.

The record is clear that the RIB is not necessary to provide effluent to the Dunes. None of the effluent that goes to the Dunes goes through the RIB. (TR 301) Palm Coast would have constructed the RIB whether or not the Dunes was an effluent customer of Palm Coast. (TR 301) With regard to the tank, however, the record contains conflicting information.

According to the utility, the storage tank is required to provide equalization to the Dunes to maintain effluent quality, and generally to provide wet weather storage for PCUC. (TR 305) Exhibit 5, which is a letter from the utility to the DEP, however, states that the purpose of the tank is to provide wet weather storage to Palm Coast's sprayfield and is not necessary to provide wet weather storage for the Dunes since the Dunes has its own wet weather storage at its reuse facility. (EXH 5) Mr. Guastella testified that the letter does not indicate that the tank is not necessary to provide service to the Dunes. (TR 304) Mr Guastella further testified that this letter is one piece of correspondence out of many and the letter does not state that the storage is "not for the Dunes". (TR 304)

The Dunes asserts that the overwhelming weight of the evidence indicates that the tank was required to provide wet weather storage for the Palm Coast sprayfield site, and it was not required to provide service to the Dunes. (BR 10) Although this is corroborated in exhibits from DEP and PCUC engineers, as well as testimony from a PSC staff witness, Gary Moyer (of the Dunes) does

allude to its necessity in his prefiled testimony. (EXH 1,2,3,5, TR 638) Specifically, Mr. Moyer testified:

> The unfiltered effluent is delivered to the District from a closed system--that is, it comes either directly from PCUC's wastewater treatment process (the chlorine contact chamber) or from PCUC's 6.0 MGD effluent storage tank. (TR 413)

Under the original agreement, Palm Coast took effluent from two basins and transported it to the Dunes for further treatment. (TR 364) However, a problem with algae caused the Dunes to install a main to take effluent directly from the chlorine contact chamber. (TR 365) Accordingly, the most recent agreement between the Dunes and PCUC requires that the effluent be delivered through a closed system. (EXH 21) The agreement indicates that the storage tank meets this requirement. (EXH 21) In its brief, the Dunes argues that the tank provides some flexibility in the provision of the effluent to the Dunes but that it is not required for this, and any needed operational flexibility could have been achieved by much less costly means. (BR 15)

Since Mr. Moyer testified that reuse is provided by the tank and the agreement alludes to its necessity, staff believes that the tank is necessary to provide service to the Dunes, however, not to the extent argued by the utility. We agree with the Dunes that the weight of the evidence shows that the fundamental purpose of the tank is to provide wet weather storage to Palm Coast. Mr. Guastella testified that his review of the many pieces of correspondence regarding the tank indicated that it was fairly clear that the storage facility was needed to provide service to the Dunes; however, the record does not contain this correspondence. (TR 304) What is in the record, however, are Reuse Feasibility Studies that show that the tank is needed for wet weather storage to Palm Coast. (EXH 1, pgs. 16-17; EXH 2, pgs. 3-6, 3-7; EXH 3, pg. 28)

Appropriate reuse rate

Staff considered several options for the appropriate rate, ranging from zero to the utility's requested rate of $.67/1,000 gallons. The first option was zero. We considered this rate because Mr. Wilkening testified as to how critical reuse is in that area, and it appears that the utility and the customer have found a way to promote reuse in a way that benefits them both. (TR 471-473) Approving a reuse rate other than zero may discourage reuse and cause the Dunes to search for alternative sources. Additionally, the Dunes and PCUC have worked closely on reaching an

agreement, and it appears that this was not done in this case. This is troubling to staff because the utility may be risking its relationship with the Dunes.

Despite this concern, staff notes that the Dunes may not be able to receive a consumptive use permit if it should seek alternative sources. As discussed above, the SJRWMD strongly encourages reuse in its district and this may prevent the Dunes from receiving a consumptive use permit for other sources of irrigation water. In addition, we believe that the Dunes and its customers benefit from reuse since reclaimed water users are not subject to the same restrictions as those who use potable water for irrigation in periods of drought. (TR 470) Nor is it subject to the daytime irrigation restrictions between 10 AM and 4 PM. (TR 470) Further, as staff noted above, we do not agree that the Commission has an established practice of setting reuse rates on incremental cost. Therefore, we believe a reuse rate greater than zero is appropriate.

Regarding the utility's requested rate, as discussed above, we are not convinced that the RIB and the tank are necessary for providing the Dunes' service. The difficulty in establishing a reuse rate based on cost is determining the items of investment necessary to provide reclaimed water to the end user. In this case, the utility selected two items of investment which it believes are necessary for providing the Dunes the effluent. (EXH 15) Although the Dunes does not use any effluent that comes from the RIB and there is a question as to the necessity of the tank, the utility believes that the rate should be based on the these items of investment because these items are a part of an integrated system used to provide the Dunes with effluent. (TR 298, 301, 370) Staff notes, however, that two other parts of the system - another RIB and a sprayfield were not used in calculating the rate. (EXH 4) In addition, items that are directly attributable to providing the Dunes reuse, the effluent pumping station and the effluent transmission line, could not be used for determining a reuse rate because the Dunes already pays the costs of operating and maintaining these items. (TR 413, EXH 23)

Staff believes the requested rate is not appropriate because it is unreasonably high given the fact a rate has never been charged before. As discussed above, a reuse rate that is too high could cause the Dunes to seek alternative sources. Although the record does not show that any alternative would be feasible, we do believe that a reuse rate that is too high could jeopardize the relationship between Palm Coast and the Dunes. Because these entities are involved in an arrangement that benefits each of them as well as their customers, staff does not believe that this would be appropriate.

In this case, staff is recommending that a reuse rate of $.10/1,000 gallons be approved. We admit that this is a judgment call, however, Mr. Guastella testified that to some degree, his cost allocation study is based on judgment. (TR 377) He also testified that there is no established method for setting reuse rates. (TR 376) While this is admittedly a nominal charge, it recognizes that reuse is a commodity of value and sends this signal to the Dunes. In addition, staff notes that the Dunes pays approximately $26,500 annually for operating and maintaining the effluent pump station at the Palm Coast WWTP. (EXH 23) Using the actual reuse flows for 1995 in Exhibit 17, staff has determined that the cost of operating the pump station is approximately $.07/1,000 gallons. Adding the recommended rate and the cost of operating and maintaining the pump station results in a total cost of $.17/1,000 gallons. According to the Dunes, the rates that the Commission has approved for reuse in the past have ranged from zero to $.25/1,000 gallons. (BR 12) The recommended rate falls within this range.

In addition to the reuse rate, we must also determine the appropriate flows for determining the reuse revenue to be subtracted from the wastewater revenue prior to determining wastewater rates. The company believes that 800,000 gallons is appropriate, based on an estimate for 1994. (TR 371) Exhibit 17 shows that the actual flow for 1995 was 1,000,000 gallons per day. (EXH 17, TR 372) According to Mr. Guastella, 800,000 gpd is appropriate because they believe that consumption will drop from 1,000,000 gpd once a rate is charged. (TR 373)

Staff believes that it is appropriate to use the actual flows for 1995 shown in Exhibit 17 for determining the reuse revenue. The record contains some discussion on the elasticity of reuse water, however, there is no evidence that reuse is truly price elastic. (TR 373) Since the record contains the actual flows for 1995, staff believes that this amount is appropriate for determining reuse revenues. Accordingly, the reuse revenue is $36,500, calculated as follows:

Reuse Flows*	1,000
	x365
Annual Flows*	365,000
Reuse Rate	x.10
Reuse Revenue	$36,500

*000's omitted

Based on the above, staff recommends that a new class of service should be approved, the appropriate reuse rate is $.10/1,000 gallons and the resulting revenue is $36,500.

ISSUE 68: What is the appropriate bulk water rate for PCUC?

RECOMMENDATION: The appropriate bulk water rate for PCUC should be the rate achieved when the same percentage increase for other water rates is applied to PCUC's current bulk rate. Therefore, the appropriate bulk water rate for PCUC to charge Hammock Dunes should be a BFC of $186.65 and a gallonage charge of $.96. (WASHINGTON)

POSITION OF PARTIES

PCUC: As per MFRs.

DUNES: The bulk water rate for Dunes should reflect the same percentage increase that is applied to all other water rates in order to ensure equitable treatment. The current bulk rate reflects the fact that Dunes' advance capacity payments refunded 100% of the investment in water facilities required to serve it.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: No position.

STAFF ANALYSIS: Dunes is the only bulk water customer of PCUC. (TR 215) Dunes has reserved 200,000 gpd of water capacity on the PCUC system. (TR 419) As testified by utility witness Moyer, under its bulk water agreement with PCUC, Dunes paid PCUC an advance capacity charge of $1,050,390 for its initial capacity purchase of 100,000 gpd in 1988. (TR 409) In August, 1995, Dunes paid another advance capacity charge of $1,125,000 for purchase of an additional 100,000 gpd of capacity. (TR 410) These "contribution" amounts were calculated to offset 100% of the utility's investment in the water plant required to serve Dunes, and included a "gross-up" of the related CIAC. (TR 409; TR 215; PSC Order No. 21606 at pgs 4-6)

Because Dunes paid in advance the entire cost of the plant needed to serve it, the Commission in 1989 approved a bulk water rate for Dunes that did not include return on investment, depreciation, or income tax components. (TR 216; PSC Order No. 21606 at pgs 6-7) This results in a monthly rate that is lower than that paid by other customers whose contributions pay for less than 100% of the plant required to serve them.

To maintain the correct relationship between the rates paid by Dunes and the rates paid by other customers, PCUC proposed in this case to apply the same percentage increase to the bulk water rate that it proposed to apply across-the-board to other water rates. (TR 214-5) Assuming a water rate increase is approved, Dunes supports an equal percentage increase methodology, since it results

in a fair allocation of the water rate increase among all water customers. (TR 410, 419)

Staff believes that Order No. 21606, issued July 26, 1989, in Docket No. 890173-WU, substantially supports the bulk water rate for PCUC. The Order establishes a procedure for the original bulk rate and justification as to why the rate is less than that of the general body of ratepayers. Therefore, staff recommends applying the same percentage increase to PCUC's current bulk rate as applied across-the-board in determining other water rates. Staff recommends that the appropriate bulk water rate for PCUC to charge Hammock Dunes should be a BFC of $186.65 and a gallonage charge of $.96.

ISSUE 69: What are the appropriate water and wastewater service rates for PCUC?

RECOMMENDATION: Consistent with staff's recommendation in Issue 67, the recommended service rates should be designed to produce annual operating revenues of $5,107,628 and $3,259,173 for the water and wastewater divisions, respectively. These recommended revenues exclude any miscellaneous revenues and reuse. The approved rates should 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 should not be implemented until required notice has been received by the customers pursuant to Rule 25-30.475(1), Florida Administrative Code. The utility should provide proof of the date notice was given within 10 days after the date of notice. (WASHINGTON)

POSITION OF PARTIES:

PCUC: As per MFRs.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: No position.

STAFF ANALYSIS: Staff recommends that the final service rates approved for the utility should be designed to produce annual operating revenues of $5,107,628 and $3,259,173 for the water and wastewater divisions, respectively. These recommended revenues exclude any miscellaneous revenues and reuse revenues as discussed in Issue 67. The Utility's requested revenues represent increases of $1,479,626 (26.94%) for water and $1,575,817 (47.31%) for wastewater based on the projected test year ending December 31, 1995.

Staff recommends that the final rates approved for the utility should be designed to produce annual operating revenues of $5,150,098 for water and $3,354,699 for wastewater as recommended in Issues 65 using the base facility charge rate design. However, the recommended service revenues, which service rates are set exclude any miscellaneous and reuse revenues.

The utility should be required to file revised tariff sheets and proposed customer notice to reflect the appropriate rates pursuant to Rule 25-22.0407(10), Florida Administrative Code. The approved rates should 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 may not be implemented until proper notice has been received by the customers. The utility should provide proof of the date notice was given within 10 days after the date of notice. The revised tariff sheets will be approved upon staff's verification that the tariffs are consistent with the Commission's decision and the proposed customer notice is adequate.

The comparison of the utility's original rates, interim rates, requested rates, and staff's recommended rates is shown on Schedule Nos. 4-A and 4-B.

ISSUE 70: What are the appropriate amounts by which rates should be reduced four years after the established effective date to reflect the removal of the amortized rate case expense as required by Section 367.0816, Florida Statutes?

RECOMMENDATION: The water and wastewater rates should be reduced as shown on Schedule Nos. 5-A and 5-B, to remove $51,176 for water and $51,176 for wastewater for rate case expense grossed-up for regulatory assessment fees which is being amortized over a four year period. The decreases in rates should become effective immediately following the expiration of the four year recovery period, pursuant to Section 367.0816, Florida Statutes. The utility should be required to file revised tariff sheets and 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 required rate reductions. (WASHINGTON)

POSITION OF PARTIES:

PCUC: Fall-out issue.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: The amounts are subject to the resolution of other issues.

STAFF ANALYSIS: Section 367.0816, Florida Statutes, requires that rate case expense be apportioned for recovery over a period of four years. The statute further requires that the rates of the utility be reduced immediately by the amount of the rate case expense previously included in the rates. This statute applies to all rate cases filed on or after October 1, 1989.

The water rates should be reduced by $51,176 and the wastewater rates should be reduced by $51,176 as shown in Schedules Nos. 5-A and 5-B. The revenue reductions reflect the annual rate case amounts amortized (expense) plus the gross-up for regulatory assessment fees.

The Utility should be required to file tariffs no later than one month prior to the actual date of the required rate reduction. The utility also should be required to file a proposed "customer letter" setting forth the lower rates and the reason for the reduction.

If the Utility files this reduction in conjunction with a price index or pass-through rate adjustment, separate data shall be filed for the price index and/or pass-through increase or decrease

and the reduction in the rates due to the amortized rate case expense.

ISSUE 71: In determining whether any portion of the interim increase granted should be refunded, how should the refund be calculated, and what is the amount of the refund?

RECOMMENDATION: The Utility should be required to refund 7.21% of water and 3.83% of wastewater revenues collected under interim rates. The refund should be made with interest in accordance with Rule 25-30.360(4), Florida Administrative Code. The utility should be required to submit the proper refund reports pursuant to Rule 25-30.360(7), Florida Administrative Code. The utility should treat any unclaimed refunds as CIAC pursuant to Rule 25-30.360(8), Florida Administrative Code. (WEBB, WASHINGTON)

POSITION OF PARTIES:

PCUC: Fall-out issue.

DUNES: No position.

FLAGLER: Adopting Public Counsel's Position and Discussion.

OPC: No position.

STAFF ANALYSIS: In Order No. PSC-96-0493-FOF-WS, issued on April 9, 1996, 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 approved interim revenues are shown below:

	Revenues	Increase	Percentage
Water	$5,491,319	$483,617	9.66%
Wastewater	$3,432,636	$481,419	16.31%

According to Section 367.082, Florida Statutes, any refund should be calculated to reduce the rate of return of the utility during the pendency of the proceedings 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 should be removed. Examples of these adjustments would be attrition allowance or rate case expense, which are recovered only after final rates are established.

In this proceeding, the test period for establishment of interim rates was the historical twelve months ending December 31, 1994. The test year for final rates is the projected twelve months ending December 31, 1995. The approved interim rates did not include any provisions for pro forma operating expenses or 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 have calculated a revised interim revenue requirement utilizing the same data used to establish final rates. Rate case expense was excluded, because it was not an actual expense during the interim collection period.

Using the principles discussed above, staff has calculated the revenue requirement for the interim collection period to be $5,098,923 for water and $3,303,523 for wastewater. The interim revenue requirements exceed these amounts. In order to determine the appropriate refund percent, miscellaneous revenues have been excluded. Therefore, staff recommends refund percentages of 7.21% and 3.83% for water and wastewater, respectively, for the interim period.

In addition to the refunds being made with interest as required Section 25-30.360(4), Florida Administrative Code, Staff is recommending that the utility be required to submit the proper refund reports pursuant to Rule 25-30.360(7), Florida Administrative Code. Also, the utility should treat any unclaimed refunds as CIAC pursuant to Rule 25-30.360(8), Florida Administrative Code.

ISSUE 72: What are the appropriate annual monthly discounted rates, and the effective date for AFUDC?

RECOMMENDATION: The annual AFUDC rate should be 8.04% and the discounted monthly rate should be 0.669571%, consistent with Rule 25-30.116, Florida Administrative Code. The AFUDC effective date should be January 1, 1996. (MONIZ)

POSITION OF PARTIES

PCUC: The appropriate annual rate is the rate of return determined in this proceeding. The monthly discounted rate should be that determined in accordance with Rule 25-30.116(3)(a), F.A.C. The effective date is the date the Final Order in this case takes effect.

DUNES: No Position

FLAGLER: No Position

OPC: No position.

STAFF ANALYSIS: In its filing, the utility requested that its AFUDC rate be changed to the approved weighted cost of capital. (EXH 7) As discussed in Issue No. 47, staff is recommending an 8.04% weighted cost of capital. Therefore, staff recommends an annual AFUDC rate of 8.04% and a discounted rate of 0.669571% consistent with Rule 25-30.116, Florida Administrative Code. Additionally, according to the above rule, the new AFUDC rate shall be effective the month following the end of the 12-month period used to establish that rate. Therefore, since the utility's test year ended December 31, 1995, the effective date should be January 1, 1996.

ISSUE 73: Should the docket be closed?

RECOMMENDATION: This docket should be closed after the time for filing an appeal has run, upon staff's verification that the utility has completed the required refunds with interest and the proper revised tariff sheets and customer notice have been filed by the utility and approved by staff. Further, the utility's corporate undertaking may be released upon staff's verification that the refund has been completed. (REYES, WASHINGTON)

POSITION OF THE PARTIES

PCUC: No position.

DUNES: No position.

FLAGLER: No position.

OPC: No position.

STAFF ANALYSIS: This docket should be closed after the time for filing an appeal has run, upon staff's verification that the utility has completed the required refunds with interest and the proper revised tariff sheets and customer notice have been filed by the utility and approved by staff. Further, the utility's corporate undertaking may be released upon staff's verification that the refund has been completed.

PALM COAST UTILITY CORPORATION
SCHEDULE OF WATER RATE BASE
TEST YEAR ENDED 12/31/95

SCHEDULE NO. 1-A
DOCKET NO. 951056-WS

	COMPONENT		TEST YEAR PER UTILITY YEAR-END	UTILITY ADJUSTMENTS	ADJUSTED TEST YEAR PER UTILITY	STAFF ADJUSTMENTS	STAFF ADJ. AVERAGE TEST YEAR
1	UTILITY PLANT IN SERVICE	$	63,505,519	(2,128,199)	$ 61,377,320	(1,089,914)	60,287,406
2	LAND & LAND RIGHTS		504,632	0	504,632	0	504,632
3	NON-USED & USEFUL COMPONENTS		(8,602,553)	0	(8,602,553)	(10,464,761)	(19,067,314)
4	CWIP		3,992,210	(3,992,210)	0	0	0
5	ACCUMULATED DEPRECIATION		(20,996,438)	1,074,065	(19,922,373)	938,154	(18,984,219)
6	CIAC		(16,390,083)	0	(16,390,083)	1,027,079	(15,363,004)
7	AMORTIZATION OF CIAC		3,241,580	0	3,241,580	(246,931)	2,994,649
8	NET DEBIT DEFERRED TAXES (USED)		1,119,911	0	1,119,911	(264,759)	855,152
9			0	0	0	0	0
10	ADVANCES FOR CONSTRUCTION		(2,672,139)	2,672,139	0	0	0
11	WORKING CAPITAL ALLOWANCE		0	0	0	0	0
12	OTHER		0	0	0	0	0
	RATE BASE	$	23,702,639	(2,374,205)	$ 21,328,434	(10,101,132)	11,227,302

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PALM COAST UTILITY CORPORATION
SCHEDULE OF WASTEWATER RATE BASE
TEST YEAR ENDED 12/31/95

SCHEDULE NO. 1-B
DOCKET NO. 951056-WS

	COMPONENT		TEST YEAR PER UTILITY YEAR-END	UTILITY ADJUSTMENTS		ADJUSTED TEST YEAR PER UTILITY	STAFF ADJUSTMENTS	STAFF ADJ. AVERAGE TEST YEAR
1	UTILITY PLANT IN SERVICE	$	56,249,291	2,128,199	$	58,377,490	(3,924,077)	54,453,413
2	LAND & LAND RIGHTS		1,153,532	0		1,153,532	(525,555)	627,977
3	NON-USED & USEFUL COMPONENTS		18,345,687	426,872		18,772,559	(5,654,054)	13,118,505
4	CWIP		0	0		0	0	0
5	ACCUMULATED DEPRECIATION		(18,107,234)	(986,635)		(19,093,869)	892,137	(18,201,732)
6	CIAC		(61,045,743)	0		(61,045,743)	300,877	(60,744,866)
7	AMORTIZATION OF CIAC		16,511,375	0		16,511,375	(786,524)	15,724,851
8	DEBIT DEFERRED INCOME TAXES		1,940,403	0		1,940,403	332,444	2,272,847
9			0	0		0	0	0
10	ADVANCES FOR CONSTRUCTION		(990,073)	405,534		(584,539)	(75,803)	(660,342)
11	WORKING CAPITAL ALLOWANCE		0	0		0	0	0
12	OTHER		0	0		0	0	0
	RATE BASE	$	14,057,238	1,973,970	$	16,031,208	(9,440,555)	6,590,653

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PALM COAST UTILITY CORPORATION
ADJUSTMENTS TO RATE BASE
TEST YEAR ENDED 12/31/95

SCHEDULE NO. 1-C
DOCKET NO. 951056-WS

EXPLANATION	WATER	WASTEWATER
PLANT IN SERVICE		
To reflect 13-month average test year	(1,089,914)	(3,924,077)
LAND		
1 Adjust cost from affiliate for sprayfield site	0	(207,233)
2 Adjust cost from affiliate for Rib site	0	(318,322)
Total	0	(525,555)
NON-USED AND USEFUL		
To reflect net non-used and useful adjustment	(10,464,761)	(5,654,054)
ACCUMULATED DEPRECIATION		
1 To reflect 13-month average test year	938,154	892,137
CIAC		
1 To reflect 13-month average test year	1,371,511	1,150,816
2 Imputation of CIAC-MR	(344,432)	(849,939)
Total	1,027,079	300,877
ACCUM. AMORT. OF CIAC		
1 To reflect 13-month average test year	(252,420)	(799,571)
2 Imputation of CIAC on margin reserve	5,489	13,047
Total	(246,931)	(786,524)
DEFERRED INCOME TAXES		
To reflect 13-month average test year	(264,759)	332,444
Total		
ADVANCES FOR CONSTRUCTION		
To reflect 13-month average test year	0	(75,803)

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PALM COAST UTILITY CORPORATION
CAPITAL STRUCTURE
TEST YEAR ENDED 12/31/95

SCHEDULE NO. 2
DOCKET NO. 951056-WS

	DESCRIPTION	TOTAL CAPITAL	SPECIFIC ADJUSTMENTS (EXPLAIN)	PRO RATA ADJUSTMENTS	CAPITAL RECONCILED TO RATE BASE	RATIO	COST RATE	WEIGHTED COST
PER UTILITY 1995 - YEAR-END								
1	LONG TERM DEBT	12,125,000	0	(643,582) $	11,481,418	30.73%	7.24%	2.23%
2	SHORT-TERM DEBT	4,312,000	0	(228,876)	4,083,124	10.93%	7.73%	0.84%
3	PREFERRED STOCK	0	0	0	0	0.00%	0.00%	0.00%
4	COMMON EQUITY	20,265,735	0	(1,075,683)	19,190,052	51.37%	11.10%	5.70%
5	CUSTOMER DEPOSITS	485,000	0	(25,743)	459,257	1.23%	6.00%	0.07%
6	DEFERRED INCOME TAXES	0	0	0	0	0.00%	0.00%	0.00%
7	DEFERRED ITC'S-ZERO COST	2,266,072	0	(120,281)	2,145,791	5.74%	0.00%	0.00%
8	OTHER	0	0	0	0	0.00%	0.00%	0.00%
9	TOTAL CAPITAL	39,453,807	0	(2,094,165) $	37,359,642	100.00%		8.85%
PER STAFF 1995 - 13-MONTH AVERAGE								
10	LONG TERM DEBT	12,557,692	0	(7,379,948) $	5,177,744	29.06%	7.24%	2.10%
11	SHORT-TERM DEBT	3,668,231	0	(2,155,759)	1,512,472	8.49%	7.73%	0.66%
12	PREFERRED STOCK	0	0	0	0	0.00%	0.00%	0.00%
13	COMMON EQUITY	19,943,543	0	(11,720,490)	8,223,053	46.15%	11.10%	5.12%
14	CUSTOMER DEPOSITS	458,926	0	0	458,926	2.58%	6.00%	0.15%
15	DEFERRED INCOME TAXES	0	0	0	0	0.00%	0.00%	0.00%
15	DEFERRED ITC'S-ZERO COST	2,316,226	129,534	0	2,445,760	13.73%	0.00%	0.00%
16	OTHER	0	0	0	0	0.00%	0.00%	0.00%
17	TOTAL CAPITAL	38,944,618	129,534	(21,256,197) $	17,817,955	100.00%		8.04%

RANGE OF REASONABLENESS	LOW	HIGH
RETURN ON EQUITY	10.10%	12.10%
OVERALL RATE OF RETURN	7.58%	8.50%

PALM COAST UTILITY CORPORATION
STATEMENT OF WATER OPERATIONS
TEST YEAR ENDED 12/31/95

SCHEDULE NO. 3-A
DOCKET NO. 951056-WS

	DESCRIPTION	TEST YEAR PER UTILITY 1995	UTILITY ADJUSTMENTS	ADJUSTED TEST YEAR/ UTILITY 1995	STAFF ADJUSTMENTS	STAFF ADJ TEST YEAR	REVENUE INCREASE	REVENUE REQUIREMENT
1	OPERATING REVENUES	$ 5,384,699	$ 1,586,948	$ 6,971,647	$ (1,571,283)	5,400,364	(250,266)	5,150,098
	OPERATING EXPENSES:						-4.63%	
2	OPERATION AND MAINTENANCE	$ 3,026,338	$ (222,018)	$ 2,804,320	$ (44,132)	2,760,188	$	2,760,188
3	DEPRECIATION	1,621,374	(437,104)	1,184,270	(349,719)	834,551		834,551
4	AMORTIZATION	(82,781)	(5,469)	(88,250)	5,469	(82,781)		(82,781)
5	TAXES OTHER THAN INCOME	874,220	(180,899)	693,321	(179,028)	514,293	(11,262)	503,031
6	INCOME TAXES	(289,553)	781,183	491,630	(166,755)	324,875	(92,184)	232,691
7	TOTAL OPERATING EXPENSES	$ 5,149,598	$ (64,307)	$ 5,085,291	$ (734,164)	4,351,127	(103,446)	4,247,681
8	OPERATING INCOME	$ 235,101	$ 1,651,255	$ 1,886,356	$ (837,119)	1,049,237	(146,820)	902,417
9	RATE BASE	$ 23,702,639	$	21,328,434		11,227,302		11,227,302
	RATE OF RETURN	0.99%		8.84%		9.35%		8.04%

PALM COAST UTILITY CORPORATION
STATEMENT OF WASTEWATER OPERATIONS
TEST YEAR ENDED 12/31/95

SCHEDULE NO. 3-B
DOCKET NO. 951056-WS

	DESCRIPTION	TEST YEAR PER UTILITY 1995	UTILITY ADJUSTMENTS	ADJUSTED TEST YEAR/ UTILITY 1995	STAFF ADJUSTMENTS	STAFF ADJ TEST YEAR	REVENUE INCREASE	REVENUE REQUIREMENT
1	OPERATING REVENUES	$ 3,150,538	$ 1,756,312	$ 4,906,850	$ (1,619,645)	3,287,205	67,494	3,354,699
	OPERATING EXPENSES						2.05%	
2	OPERATION AND MAINTENANCE	$ 2,049,154	$ (80,503)	$ 1,968,651	$ (54,030)	1,914,621	$	1,914,621
3	DEPRECIATION	35,244	728,836	764,080	(262,703)	501,377		501,377
4	AMORTIZATION	(57,525)	(1,309)	(58,834)	1,309	(57,525)		(57,525)
5	TAXES OTHER THAN INCOME	258,285	187,325	445,610	(118,753)	326,857	3,037	329,894
6	INCOME TAXES	131,947	237,542	369,489	(257,766)	111,723	24,861	136,584
7	TOTAL OPERATING EXPENSES	$ 2,417,105	$ 1,071,891	$ 3,488,996	$ (691,943)	2,797,053	27,898	2,824,951
8	OPERATING INCOME	$ 733,433	$ 684,421	$ 1,417,854	$ (927,702)	490,152	39,596	529,747
9	RATE BASE	$ 14,057,238		$ 16,031,208		6,590,653		6,590,653
	RATE OF RETURN	5.22%		8.84%		7.44%		8.04%

PALM COAST UTILITY CORPORATION
ADJUSTMENTS TO OPERATING STATEMENTS
TEST YEAR ENDED 12/31/95

SCHEDULE NO. 3-C
DOCKET NO. 951056-WS

EXPLANATION	WATER	WASTEWATER
OPERATING REVENUES		
1 Remove requested final revenue increase	(1,479,626)	(1,575,817)
2 To include non-utility income	1,802	50,834
3 To remove year end adjustment	(93,459)	(94,662)
Total	(1,571,283)	(1,619,645)
OPERATION & MAINTENANCE EXPENSE		
1 Adjustment per stipulation No. 2 (Audit Exception No. 4)	(6,276)	896
2 Remove unsupported affiliate charges	(15,153)	(10,259)
3 Remove non-recurring personnel services expenses	(10,204)	(6,909)
4 Remove non-recurring legal fees	(4,457)	(3,017)
5 Reflect additional current rate case expense	11,185	11,185
6 To reduce chamber dues & rental expenses per Stipulation No. 3	(828)	(36,981)
7 To remove year end adjustment for power & chemicals	(18,399)	(8,945)
Total	(44,132)	(54,030)
DEPRECIATION EXPENSE-NET		
1 Imputation of CIAC-MR I-48	(10,977)	(26,093)
2 Net used and useful adjustment	(338,742)	(236,610)
Total	(349,719)	(262,703)
AMORTIZATION, CIAC TAX GROSS UP		
To remove year end adjustment	5,469	1,309
TAXES OTHER THAN INCOME		
1 Remvoe RAF's on revenue adjustment	(70,708)	(72,884)
2 Non-used and useful property taxes I-108	(108,320)	(45,869)
Total	(179,028)	(118,753)
INCOME TAXES		
To adjust to test year income tax expense	(166,755)	(257,766)
OPERATING REVENUES		
Adjustment to reflect revenue requirement	$ (250,266)	$ 67,494
TAXES OTHER THAN INCOME TAXES		
Regulatory assessment taxes on additional revenues	$ (11,262)	$ 3,037
INCOME TAXES		
Income taxes related to revenue requirement	$ (92,184)	$ 24,861

PALM COAST UTILITY CORPORATION
FLAGLER COUNTY
Docket No. 951056-WS
Test Year Ended: December 31, 1995

Schedule No. 4-A

RATE SCHEDULE

WATER

Monthly Service Rates

	Rates Prior to Filing	Commission Approved Interim	Utility Requested Final	Staff Recommended Final
Residential, General Service, and Multi-Family				
Base Facility Charge:				
Meter Size:				
5/8" x 3/4"	$10.55	$11.49	$15.36	$12.53
1"	$26.34	$28.71	$38.39	$31.33
1-1/2"	$52.69	$57.42	$76.79	$62.66
2"	$84.29	$91.87	$122.86	$100.25
3"	$168.58	$183.73	$245.71	$200.51
4"	$263.41	$287.09	$383.93	$313.29
6"	$526.81	$574.16	$767.84	$626.59
Gallonage Charge, per 1,000 Gallons	$3.60	$3.92	$4.52	$2.93
Bulk Service				
6" - Hammock Dunes - BFC	$195.79	$213.39	$285.64	$186.65
Gallonage Charge, per 1,000 Gallons	$1.01	$1.10	$1.26	$0.96

Irrigation Service - All Classes

	Rates Prior to Filing	Commission Approved Interim	Utility Requested Final	Staff Recommended Final
Base Facility Charge:				
Meter Size:				
5/8" x 3/4"	$5.27	$5.75	$7.68	$6.27
1"	$26.34	$28.71	$38.39	$31.33
1-1/2"	$52.69	$57.42	$76.79	$62.66
2"	$84.29	$91.87	$122.86	$100.25
3"	$168.58	$183.73	$245.71	$200.51
4"	$263.41	$287.09	$383.93	$313.29
6"	$526.81	$574.16	$767.84	$626.59
Gallonage Charge, per 1,000 Gallons	$3.60	$3.92	$4.52	$2.93

Private Fire Protection

	Rates Prior to Filing	Commission Approved Interim	Utility Requested Final	Staff Recommended Final
Line Size				
4"	$87.89	$95.68	$31.97	$26.11
6"	$175.60	$191.38	$63.87	$52.22
8"	$280.95	$306.20	$102.18	$83.55
10"	$403.83	$440.13	$146.88	$120.10
12"	$754.94	$822.80	$274.58	$224.53
Public Fire Hydrants				
Per Hydrant - Per Year	$100.00	$100.00	$0.00	$0.00

Typical Residential Bills

5/8" x 3/4" meter				
3,000 Gallons	$21.35	$23.25	$28.92	$21.32
5,000 Gallons	$28.55	$31.09	$37.96	$27.17
10,000 Gallons	$46.55	$50.69	$60.56	$41.82

PALM COAST UTILITY CORPORATION
FLAGLER COUNTY
Docket No. 951056-WS
Test Year Ended: December 31, 1995

Schedule 5-A

RATE SCHEDULE

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

WATER

	Staff Recommended Final	Rate Decrease
Residential, General Service, and Multi-Family		
Base Facility Charge:		
Meter Size:		
5/8" x 3/4"	$12.53	$0.12
1"	$31.33	$0.31
1-1/2"	$62.66	$0.62
2"	$100.25	$0.99
3"	$200.51	$1.99
4"	$313.29	$3.10
6"	$626.59	$6.20
Gallonage Charge, per 1,000 Gallons	$2.93	$0.03
Bulk Service		
6" - Hammock Dunes - BFC	$186.65	$1.85
Gallonage Charge, per 1,000 Gallons	$0.96	$0.01

Irrigation Service - All Classes

	Staff Recommended Final	Rate Decrease
Base Facility Charge:		
Meter Size:		
5/8" x 3/4"	$6.27	$0.06
1"	$31.33	$0.31
1-1/2"	$62.66	$0.62
2"	$100.25	$0.99
3"	$200.51	$1.99
4"	$313.29	$3.10
6"	$626.59	$6.20
Gallonage Charge, per 1,000 Gallons	$2.93	$0.03

Private Fire Protection

Line Size	Staff Recommended Final	Rate Decrease
4"	$26.11	$0.26
6"	$52.22	$0.52
8"	$83.55	$0.83
10"	$120.10	$1.19
12"	$224.53	$2.22
Public Fire Hydrants		
Per Hydrant - Per Year	$0.00	$0.00

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PALM COAST UTILITY CORPORATION
FLAGLER COUNTY
Docket No. 951056-WS
Test Year Ended: December 31, 1995

Schedule 5-B

RATE SCHEDULE

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

Wastewater

Monthly Rates

	Staff Recommended Final	Rate Decrease
Residential Service		
Base Facility Charge:		
All meter sizes	$11.09	$0.17
Gallonage Charge		
Per 1,000 gallons (8,000 gallon cap)	$3.07	$0.05
General Service		
Base Facility Charge:		
Meter Size:		
5/8" x 3/4"	$11.09	$0.17
1"	$27.73	$0.42
1-1/2"	$55.46	$0.85
2"	$88.73	$1.35
3"	$177.46	$2.70
4"	$277.29	$4.22
6"	$554.58	$8.45
8"		
Gallonage Charge, per 1,000 Gallons	$3.68	$0.06