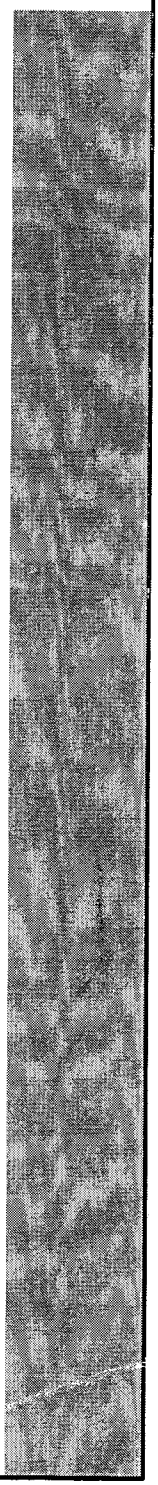
EXHIBIT DS - 2

STUDY OF MARGIN RESERVE AND IMPUTATION OF CIAC

on behalf of:

THE FLORIDA WATERWORKS ASSOCIATION

DOCKET NO. 960258-WS



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MARGIN RESERVE AND IMPUTATION OF CIAC

MILIAN, SWAIN & ASSOCIATES, INC.
OCTOBER 1996

STUDY FOR FLORIDA WATERWORKS ASSOCIATION
MARGIN RESERVE AND IMPUTATION OF CIAC

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MARGIN RESERVE AND IMPUTATION OF CIAC

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SECTION I

SUMMARY

STUDY FOR FLORIDA WATERWORKS ASSOCIATION
MARGIN RESERVE AND IMPUTATION OF CIAC

I. Summary

Introduction

Investor-owned water and wastewater utilities in Florida have found themselves financially squeezed by conflicting policies of state and local environmental and economic regulators. They are required by environmental regulators, in particular the Department of Environmental Protection (DEP), to invest in plant expansion to protect the level of service provided to current customers while providing for future growth. At the same time they are denied the ability to receive a return on the required investment by the Florida Public Service Commission's (PSC) policies of limiting margin reserve to 18 months and imputing contributions-in-aid-of-construction (CIAC) on margin reserve plant.

Commissioner Kiesling has noted that Florida has the greatest number of water and wastewater utility abandonments in the country. The decision is made all too often that the cost of running a water and wastewater utility in Florida, and the associated risks, outweigh the return on investment that is allowed. When a utility is abandoned, the customers suffer because they receive an inferior level of service and often end up paying higher rates so that problems can be remedied after the fact on an emergency basis. While abandonment represents the extreme case and historically has occurred only with smaller utilities, it is an indicator of the severity of the problems facing the industry.

Utilities have repeatedly presented testimony to the PSC as to the inadequacy of the margin reserve generally allowed to provide the financial stability needed to comply with requirements imposed by environmental regulators, the fact that imputing CIAC against margin reserve defeats the purpose of margin reserve and is inappropriate, and the detrimental effects of the Commission's policies on the long term cost of providing service. Even so, the PSC has only occasionally deviated from its long standing policies.

In March 1996, the Florida Waterworks Association (FWA) filed a petition for rulemaking on margin reserve and imputation of CIAC on the margin reserve calculation. The Association's proposed rule would:

- allow a margin reserve period of five years for water source and treatment facilities and wastewater treatment and effluent disposal facilities, unless otherwise justified, and
- not impute CIAC against the allowance for margin reserve.

The PSC denied FWA's proposal and, instead, in July 1996 proposed a rule that would:

- allow 18 months margin reserve for water source and treatment facilities and wastewater treatment and effluent disposal facilities and 12 months margin reserve for water transmission and distribution lines and the wastewater collection system, unless otherwise justified, and
- impute CIAC when margin reserve is authorized.

It is the Association's hope that, through rulemaking, outside the context of any particular rate hearing, the long-term impacts of these alternative margin reserve policies can be evaluated and duly considered and a policy can be codified that is fair to the utilities' existing and future customers as well as shareholders. Then in future rate hearings, evidence before the Commission may be limited to those cases which are exceptions to the rule.

Description of Study

Milian, Swain & Associates, Inc. (MSA) has undertaken a study for the FWA to identify and quantify the long-term impacts of environmental regulation and PSC policy related to margin reserve on planning and construction schedules and the resulting costs to utilities and their customers of the incremental construction decisions resulting from such policies. Over the years these issues have been reviewed by the Commission repeatedly. Testimony presented in water and wastewater rate cases has generally related to the specifics of one investor-owned utility at a given point in time.

In order to gauge the impact of environmental and economic regulation on utility decision making and the resulting costs to customers across the industry, utilities of all sizes throughout the State of Florida were polled. Data was gathered from investor-owned, PSC-regulated utilities as well as municipal and county utilities. Numerical data and anecdotal information provided by utilities was tabulated and summarized . Financial models were developed to demonstrate the impacts of alternative policies on rates over the long-term. The study is limited to the issues related to margin reserve and the imputation of CIAC. We have attempted to isolate these issues from others related to used and useful adjustments and economic regulation. This report summarizes our findings.

Section II presents a brief summary of environmental regulation which has a bearing on planning and construction schedules of water and wastewater utilities in Florida. This is not intended to be a comprehensive discussion of all environmental regulation affecting utilites. Certain timetables must be adhered to in planning and constructing expansion of water source and treatment and wastewater treatment and effluent disposal facilities. These timetables are presented along with actual experiences to demonstrate what

utilities are facing.

Section III presents a model of utility cost recovery which shows that, with the PSC's proposed rule on margin reserve and imputation of CIAC, it will be impossible for utilities to earn a fair rate of return on investment.

Section IV presents information obtained as to economies of scale of constructing different increments of plant. This information was distilled from engineering estimates, reports provided by water and wastewater utilities and their consulting engineers and PSC orders. Calculations are also presented to demonstrate the impacts of utilities' decisions on customer rates over the long-term.

Section V discusses imputation of CIAC. In most cases, CIAC imputation has the effect of removing the benefits of margin reserve. The obligation to meet the demands of existing customers while plant expansions are made to accommodate growth is on-going.

Section VI discusses Allowance for Funds Prudently Invested (AFPI) and how AFPI is no substitute for inadequate margin reserve and imputation of CIAC.

Section VII presents a comparison of rate recovery methods between municipal and investor-owned utilities.

The conclusions drawn as a result of the study are summarized below.

Conclusions

A. Environmental regulations have an impact on planning and construction schedules of utilities. Particularly in recent years such regulation has substantially extended the time it takes to obtain permits and has increased the associated costs. As shown in the following table, it typically requires 3 ½ to 5 years to plan, design, permit, construct, test and certify water and wastewater facility expansions.

Timetables for Water & Wastewater Facility Expansion

	Water	Wastewater
Planning	3-6 months	3-18 months
Design	3-6 months	6-24 months
Permitting	3-6 months	6-36 months
Construction	18-36 months	12-36 months
Testing & Certification	6 months	6 months

B. 18 month margin reserve does not allow utilities to recover costs associated with investment required by environmental regulators. Imputation of CIAC further reduces cost recovery on prudent, mandated investment.

Our model of utility cost recovery - a "best case" scenario assuming no regulatory lag, full recovery of operation and maintenance expenses and predictable customer growth and plant utilization - shows that if only 18 month margin reserve is allowed and CIAC is imputed, a utility will never be able to earn its authorized rate of return. In the example presented, actual return on investment, including monthly rates and AFPI, never exceeds 70% of the authorized weighted cost of capital.

C. The PSC's policies have had an impact on utilities' decisions relating to incremental plant expansion. In many cases utilities have chosen to expand in smaller increments in order to achieve a higher level of cost recovery, rather than in larger increments which would provide economies of scale, but on which cost recovery is unlikely. Additional costs which are incurred and passed along to

customers as a result of these decisions include:

- higher construction costs associated with smaller incremental expansions
- duplicative engineering, permitting and contractor mobilization costs
- higher rate case expense from more frequent rate hearings

D. The PSC's proposed rule will result in higher costs to customers in both the long and short-term. Yet the PSC's proposed rule provides disincentives for utilities to expand in larger increments.

When utilities make smaller incremental expansions, customer rates are higher in the short-term as well as in the long-term under the PSC's proposed rule. Our comparison of two alternative programs for incremental expansion of wastewater treatment facilities shows that the net present value of revenue requirements over 25 years is 16% higher if plant is expanded in smaller increments. Service availability charges and AFPI are also higher. Rates are higher from the first year.

A similar comparison for water treatment facilities shows even more dramatic results: the net present value of revenue requirements over 25 years is 41% higher if plant is expanded in smaller increments. Rates are initially lower, but become higher by the fourth year.

E. Allowance of AFPI does not adequately compensate utilities for disallowance of full margin reserve.

The results of the utility cost recovery model show that utilities are not made whole by AFPI, even when growth occurs as projected. Revenues from rates plus AFPI never provides more than 70% of the authorized rate of return. Even though the Commission recognizes that investment is prudent, the utility bears the entire risk for growth occuring as projected.

In addition, when CIAC has been imputed, the number of future customers subject to AFPI has not been increased. Using the utility cost recovery model we determined that over the 25 year period $3.4 million in AFPI collections was lost due to this flaw in the calculation.

F. Government-owned utilities must routinely include the full cost of investment in plant as well as construction work in progress in rates, without making adjustments for used-and-useful or margin reserve, in order to adequately compensate for the associated debt. They are under the same pressures as investor-owned utilities to keep rates low and stable, to comply with environmental regulation and to protect the health and safety of their customers. Yet they are required to recover these costs in order to meet bond covenants and maintain their credit ratings. Investor -owned utilities are being prevented from doing so under the PSC's proposed rules.

SECTION II

IMPACT OF ENVIRONMENTAL REGULATION ON PLANNING AND CONSTRUCTION SCHEDULES

II. Impact of environmental regulation on planning and construction schedules

As detailed below, environmental regulation has become more stringent in recent years. The greater demands on water and wastewater utilities result in higher costs of providing service to customers. The Commission has supported compliance with environmental regulation over the years in a number of ways. One example is the provision allowing utilities to recover required increased testing costs via the pass-through rate adjustment - which allows pass through of a mandated expense without a full rate case.

The Association's position is that where capital investment is mandated by environmental regulators, allowing full recovery in the form of current return on that investment is appropriate and in the best interest of utility customers as well as investors. Some counties which regulate investor-owned utilites have allowed pass-through of capital costs when those costs were mandated (eg: In 1994, Hillsborough County required demolition and restoration of Southern States Utilities' Seaboard Wastewater Treatment plant and then allowed pass-through of the associated costs).

Testimony has been presented to the Commission that, to the extent that used and useful allowances do not parallel design and regulatory requirements, used and useful is a direct financial disincentive for regulatory compliance and environmental protection which promotes resource endangerment *[Rebuttal Testimony of Richard M. Harvey, P.E. on behalf of Southern States Utilities, Inc., Docket No. 950495-WS].* In this section we discuss the impact of environmental regulation on water and wastewater utilities in Florida.

Wastewater Treatment and Disposal Facilities

The Florida Department of Environmental Protection is charged with enforcing Section 62-600 F.A.C., which requires long range planning of wastewater treatment facilities. Section 62-600.100 (2) F.A.C. states: "It is the policy of the Department to encourage an applicant, before submittal of a permit application, to study and evaluate alternative wastewater treatment techniques and to discuss alternatives with the Department."

Section 62-600.405 F.A.C. establishes timetables by which particular action must be taken to expand plant. When plant flows reach 50% of permitted capacity, a capacity analysis report must be prepared and submitted. A preliminary design must be initiated five years in advance of the time permitted capacity will be equaled or exceeded . Detailed plans and specification preparation must be underway four years in advance of

the time permitted capacity will be equaled or exceeded. A construction permit application must be filed with DEP for expansion of the facility three years in advance of the time permitted capacity will be equaled or exceeded. An operating permit application for the expanded facility must be filed six months prior to the time permitted capacity will be equaled or exceeded.

As one utility manager stated, "Under the current DEP rule for wastewater capacity, planning & design of expansions is virtually continuous." *[Palm Coast]*

Florida Cities' Golden Gate Wastewater Treatment Plant provides a good example of how the involvement of a number of different environmental regulators and changing requirements can affect a single plant expansion. The plant is currently under contract to be expanded from 0.75 MGD to 0.95 MGD, at a cost of $1.4 million. Regulatory considerations increased the scope and timing of the expansions as follows:

- The expansion is required pursuant to DEP rules and a study required by PSC Order No. PSC-92-0811-FOF-WS.

- DEP has indicated that Rule 62-600.400(1)(b) applies, requiring an additional clarifier and chlorine contact chamber as part of the expansion. This rule applies to new facilities and modifications of facilities for which a completed construction permit application is received by DEP after July 1,1991.

- An anerobic digester, also included in the project, is required to meet EPA standards for sewage sludge promulgated by February 19, 1993. DEP is currently revising 62-640, F.A.C. to concur with EPA requirements.

- Collier County Resolution No. 94-533 requires that site improvements be included in the project to improve odor control, landscaping, sidewalks and noise abatement. Zoning approval could not be obtained from the County without these improvements.

Reuse Facilities

Reuse feasibility studies are required by Rule 62.401(5) F.A.C. and Section 403.064 of the Florida Statutes. Rule 62-40.401(5), F.A.C. requires a reasonable amount of reuse of reclaimed water from domestic wastewater treatment facilities within designated critical water supply areas unless reuse is not economically, environmentally or technically feasible. Section 403.064 FS requires the evaluation of the costs and benefits of reclaimed water reuse as part of permit applications to construct or operate domestic wastewater treatment facilities submitted after January 1, 1992.

Rule 62-600.700 requires a preliminary design report as a basis for issuance of a construction permit for wastewater facilities. In addition, the applicant must have applied for a reuse of disposal system construction permit from DEP for a portion of the permitted capacity or must demonstrate that sufficient disposal and reuse capacity is available.

In many cases, counties, cities and unrelated development companies have become involved in utilities' plans to expand wastewater treatment plants because of reuse issues. Palm Coast is involved in regional planning for reuse of effluent disposal, together with Flagler County, the St. John's Water Management District and other local utilities and developers in the area. Obtaining concensus from all interested parties extends the time required for planning, design, permitting and construction of facilities.

Utilities expect to face compliance with new or changed environmental regulation as they prepare to construct new facilities or expand existing facilities. However, in order to coordinate reuse issues with their neighbors, utilities may be forced to incur costs for planning and design outside of their own normal facility planning periods. For example, Utilities, Inc./Alafaya Utilities found itself in the position of having to complete a reuse feasibility study well in advance of its next planned wastewater plant expansion when its neighbor, the City of Oviedo, announced plans to use Alafaya's service area for disposal of the City's effluent. Alafaya has had to expend funds to prove that it will need this area for disposal of its own effluent, far in advance of any potential construction.

Discharge to surface waters

In recent years there have been dramatic changes in federal, state and local regulation related to discharge to surface waters. Examples of specific regulatory requirements cited by utilities as those causing additional cost and time in planning, design, permitting and construction of wastewater treatment and disposal facilities are:

- The Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) regulations.
- The Indian River Lagoon System Wastewater Act, which stipulates the elimination of all surface water discharges within the system by July 1, 1995
- The Grizzle-Figg Act of 1987, which required all point discharges to portions of Tampa Bay either to cease or to upgrade the wastewater treatment facilities to advanced wastewater treatment.

- Sarasota County Ordinance No. 82-90, which requires effluent discharges to off-site surface waters to meet advanced wastewater treatement criteria.

- DEP permit requirements, which in some cases have included provisions prohibiting discharge into off-site surface waters even in where effluent is treated to advanced waste treatement criteria.

If discharge to surface waters is not specifically prohibited by federal, state or local regulations, Rule 62.620, F.A.C. requires utilities to obtain permits from DEP (which enforces NPDES regulations in Florida). Consulting engineers estimate that obtaining the required permit takes at least six months and has taken as long as two years. Permits must be renewed every five years. The criteria for discharge to surface waters is very stringent; requiring advanced treatment of wastewater so that discharge contains significantly lower levels of total suspended solids than both the receiving body of water and runoff from farmland and roadways.

Water Treatment Facilities

DEP staff indicates that utilities are encouraged to conduct capacity analyses for water treatment facilities (similar to that required for wastewater treatment facilities), but the rules have not yet been changed to require it. The current rules call for action at certain times based upon utilization of the plant. County Public Health Units of the Florida Department of Health and Rehabilitative Services (HRS) are responsible for enforcement of this rule.

Water utilities must obtain consumptive use permits through the Water Management Districts. According to one consulting engineer who works for both private and public water and wastewater utilities around the state, obtaining a consumptive use permit takes a minimum of six months, but it is not unusual for the process to take one to two years. The most contentious issues are usually the population projections and flow rates. Private utility generally have a more difficult time supporting their population projections. The Districts have been encouraging reuse, but have not had the means to enforce reuse on customers. More recently they have been offering the incentive of a 20 year permit (rather than the usual 5 year permit) where utilities will commit to 100% reuse. *[Kirk Martin of Missimer International, Inc.]*

Obtaining permits for construction or expansion of reverse osmosis or membrane softening water treatment plants has become particularly difficult in recent years due to increased regulation regarding disposal of concentrate (also referred to as brine or by-

surface water. Concentrate is now classified as industrial waste by the EPA. In the mid-1980's DEP issued new rules requiring toxicity tests and making it virtually impossible to obtain a permit for discharge to saline surface water. Construction of very expensive injection wells is required. *[Jeff Hart of Montgomery Watson]*

Changes in environmental regulation has been particularly difficult for those utilities constructing plant in small increments in order to limit non-used and useful plant. These utilities have master plans, outlining the phasing of the various facilities over many years as growth occurs. When permits are sought for expansion of existing facilities, the new facilities must be designed to comply with new or changed environmental regulations. In addition, regulators usually require that existing facilities be brought into compliance with new or changed regulations. If the regulations have changed since the master plan was prepared, additional time and cost must be incurred to redesign the facilities. Obviously, the more often plant is expanded, the more time and expense is incurred for compliance.

Time required for planning, design, permitting and construction of facilities
Data provided by utilities and their consulting engineers shows that under normal circumstances it takes from 3 to 5 ½ years to complete a water or wastewater facility expansion:

TABLE 2.1
Timetables for Water & Wastewater Facility Expansion

	Water	Wastewater
Planning	3-6 months	3-18 months
Design	3-6 months	6-24 months
Permitting	3-6 months	6-36 months
Construction	18-36 months	12-36 months
Testing & Certification	6 months	6 months

Where more than one environmental regulator is involved, the time it takes to obtain permits is often prolonged, as described in the following situations.

In 1990 Palm Coast began the study and the permitting process for a surface water discharge or a limited wet weather discharge to Graham Swamp. In 1993 after submitting all necessary permit application and supporting documents, including several Graham Swamp baseline monitoring reports, Palm Coast had to withdraw this permit application primarily due to strong objections from the Flagler County government.

In the early 1980's Atlantic Utilities of Sarasota planned construction of an advanced wastewater treatment plant to comply with a Sarasota County ordinance, with effluent disposal to offsite surface water. DEP issued a permit for construction of the treatment facility in March 1984. In August 1984, DEP notified Atlantic Utilities that it was prohibited from discharging into offsite surface waters. Atlantic proceeded with plans for a deep injection well. Permits were required from DEP, the Sarasota County Health Department and the County Utilities Department. Due to changes in regulation along the way, the facilities were not completed until 1989, six years after the original DEP permit was obtained.

It took Florida Cities approximately fifteen years to achieve compliance with regulatory requirements associated with the surface water discharge at Barefoot Bay. The Barefoot Bay advanced wastewater treatment plant upgrade was designed to eliminate a full time surface water discharge. The project involved consent order negotiations with DEP. An original consent order was negotiated with DEP, but further negotiations were required when the St. Johns River Water Management would not issue a permit to construct an injection well. The consent order was amended and DEP issued a permit to construct a restricted access slow rate land application site. Adjacent property owners intervened, and an administrative hearing was held. The permit was upheld, but the intervenors appealed. DEP directed Florida Cities to investigate other options for effluent disposal, a course which led to amendment of the consent order for irrigation on land with public access and discharge to surface water during periods of wet weather. Florida Cities began the planning process for the injection well in 1981; testing and certification of the advanced wastewater treatment plant upgrade was finally completed in 1996.

General Development Utilities applied for a permit for limited wet weather discharge to surface waters for its Julington Creek Division in the early 1990's. Dye studies and modeling of the St. Johns River were required by DEP. Consulting engineers developed the model and ran a number of iterations based on review by both the Jacksonville and Tallahassee offices of DEP. In addition, the company was required to

apply to EPA for a NPDES permit. The permitting process alone took 1 ½ to 2 years and cost the company approximately $300,000.

Southern States Utilities commenced its Burnt Store Water Supply and Reverse Osmosis plant expansion in 1989. Subsequent to issuance of the last disposal permit for brine, DEP changed its classification of brine to hazardous waste. Therefore, SSU's permit application was denied and SSU was order to cease discharge of brine to the Charlotte Harbour. The brine disposal issue had to be resolved before construction of the reverse osmosis expansion could begin. Several alternatives were presented to DEP, and all were rejected except the most costly alternative, to build a deep injection well. DEP agreed to allow SSU to replace the existing reverse osmosis facilities and continue discharge to Charlotte Harbour while the deep injection well was under construction. The first skid of reverse osmosis units was replaced and on-line in mid-1995, over five years after the plant expansion commenced. The deep injection well was completed by the end of 1995.

Mandated costs

It is the Association's position that mandated costs should be fully recoverable in current rates. In 1992 DEP and the PSC entered into a memorandum of understanding (MOU), which formally establishes the policies and procedures to be followed by the two agencies to promote and encourage water conservation and reuse, and safe and efficient water supply and wastewater management services. The PSC agreed to adopt and implement policies and procedures necessary to administer its duties under the MOU, including:

- review proposed rate structures for private utilities within its jurisdiction
- in light of DEP rules, evaluate capacity constraints imposed by statute and rules on private utilities within its jurisdiction, by its application of the used and useful concept and, if justified, asses the possible need for statutory rule revisions
- allow utilities which implement reuse projects to recover full cost of such facilities through their rate structures.

This MOU gave utilities reason to hope that the Commission would begin to allow full recovery of mandated costs by (1) deeming reuse facilities 100% used and useful, (2) allowing a margin reserve reflective of DEP's requirements for investment in plant expansion and (3) discontinuing imputation of CIAC, which effectively removes the benefit of margin reserve allowed in rate base. Unfortunately, this has not proved to be the case. The Commission has not allowed full recovery of mandated costs in recent

decisions, nor does the PSC's proposed rule on margin reserve and imputation of CIAC provide for full recovery.

For example Southern States Utilities has entered into several consent agreements with DEP that have required capital improvements. Yet the costs of those improvements have not been fully allowed in subsequent rate cases due to used and useful adjustments. In the company's recent rate case, capital projects with "Regulatory Mandate" made up approximately 37% of the total $98 million spent from 1992 to 1996. The PSC affirmed those classifications, yet still subjected some of the regulatory mandated investment to used and useful adjustments, thus denying the company a full return on them.

"Pay now or pay later"

If utilities are not allowed to earn a fair return on investment and maintain financial stability, it is likely they will be seeking ways to cut costs and defer improvements to their systems. This could result in higher rates to current and future customers and could also pose risks to health and safety. The cost of improving systems and bringing them into compliance with environmental regulation is usually greater than the cost of maintaining compliance. Associated rate increases would be more drastic.

Dade County provides a classic example of the maxim "pay now or pay later," which applies here. For years Miami-Dade Water and Sewer Authority kept rates low by deferring expenditures needed to comply with environmental regulation. In recent years, federal regulators have stepped in to force compliance. Significant investment has been required over a short period of time to remedy the problems. Rates are now skyrocketing for all customers - those who benefitted from the low rates in prior years as well as new customers on the system.

SECTION III

MODEL OF UTILITY COST RECOVERY

III. Model of utility cost recovery

The PSC authorizes investor-owned water and wastewater utilities in Florida to recover costs through a combination of:

- rates,
- miscellaneous service charges,
- Service Availability Charges, and
- Allowance for Funds Prudently Invested (AFPI).

In order to illustrate the financial impacts on utilities of the proposed rule on margin reserve and imputation of CIAC, a model of utility investment, allowed return and resulting return on equity to the utility is discussed in this section. Detailed calculations and schedules are presented in Appendix A. This model is a "best case" scenario in that it assumes no regulatory lag, full recovery of operation and maintenance expenses and predictable customer growth and plant utilization. Even under these ideal, unrealistic assumptions, under the PSC's recommended rule, the utility never achieves the allowed rate of return over a 25 year period. In the example presented, actual return on net investment, including monthly rates and AFPI, never exceeds 70% of the authorized weighted average cost of capital. In other words, in the best possible case, a utility can never hope to earn its authorized rate of return.

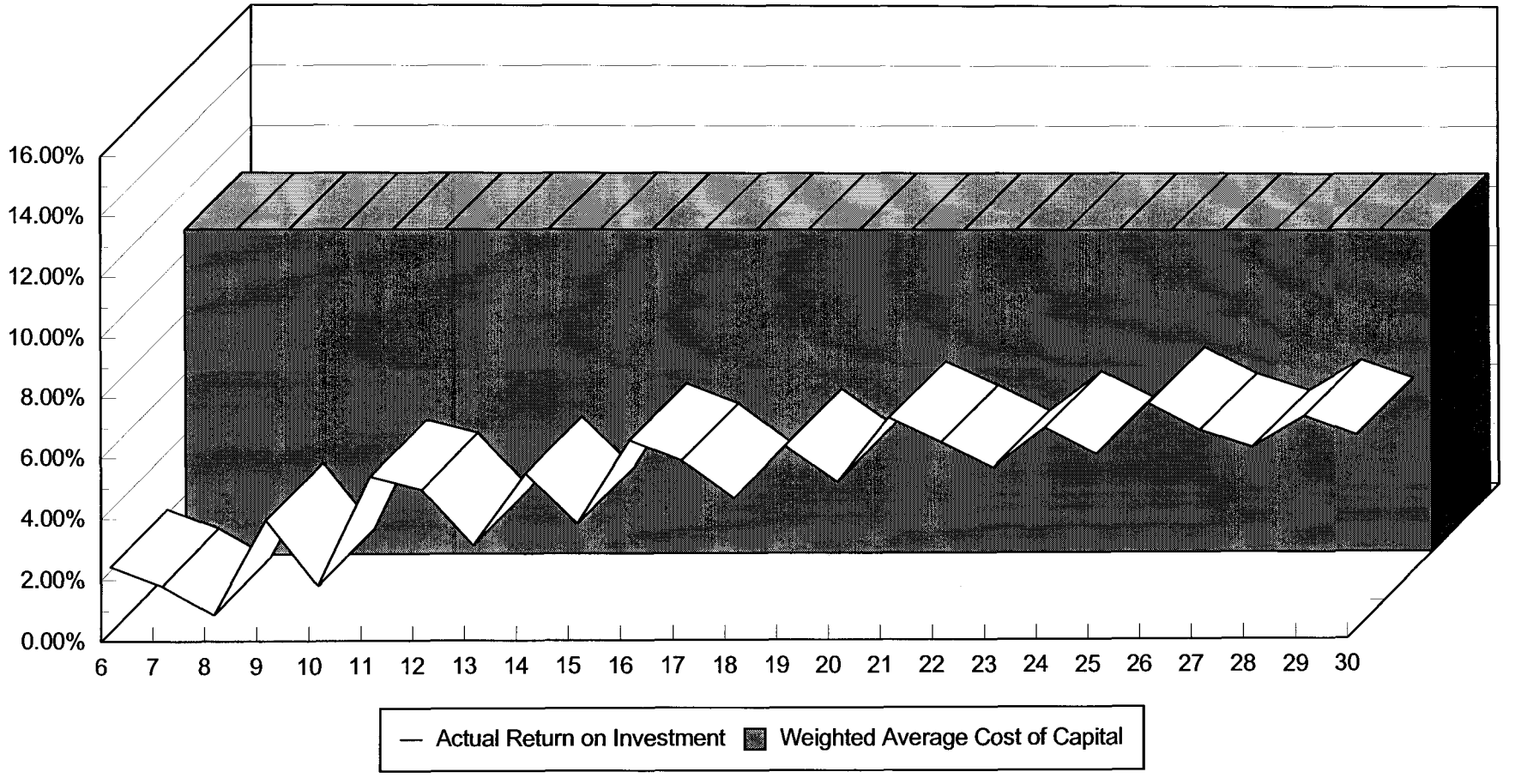
Through a combination of non-used and useful adjustments to rate base, allowance of only 18 months margin reserve in rate base and imputation of CIAC on margin reserve, utilities are denied a fair return, even when they are well managed and operating in compliance with environmental regulation.

Chart 3.1 shows a comparison of the actual return on investment (net income divided by net investment) to the authorized rate of return (weighted average cost of capital).

An explanation of the model follows.

CHART 3.1

Model Wastewater Utility
Actual Return on Investment vs. Allowed Weighted Average Cost of Capital
Plant Constructed in 30 Month Increments
Staff Recommendation: 18 Months Margin Reserve and Imputed CIAC



MODEL WASTEWATER UTILITY
DESCRIPTION & ASSUMPTIONS

(1) The purpose of this model is to present the financial impacts of proposed rules related to margin reserve and imputation of CIAC on investor-owned utilities in Florida.

(2) Financial impacts are presented over a 30 year projection period, including an initial 5 year construction period.

(3) Rate revenue for return on investment begins in the 6th year - the first year after plant is placed in service

(4) An assumption is made that rate revenues provide 100% reimbursement of operation and maintenance expenses and rate case expense.

(5) Plant additions are made in 2.5 year increments. Permitting, design and construction takes 5 years. Plant additions are placed in service six months before demand would otherwise exceed capacity, in accordance with DEP regulations.

(6) Customer growth is even and predictable.

(7) AFPI is calculated as of the beginning of the year the plant is placed in service. AFPI charge compounds for 2.5 years and re-starts when new plant comes on-line.

(8) Capital structure includes only long-term debt and equity.

(9) Capital Structure

	Initial	Ratio	Cost Rate	Weighted Cost
Long Term Debt	$19,500,000	60.0%	10.00%	6.00%
Short Term Debt		0.0%	9.00%	0.00%
Customer Deposits		0.0%	6.00%	0.00%
Deferred ITCs		0.0%	10.00%	0.00%
Deferred Income Taxes		0.0%	0.00%	0.00%
Common Equity	13,000,000	40.0%	11.88%	4.75%
Total Capital	$32,500,000	100.00%		10.75%

(10) AFUDC Rate 10.75%

(11) Inflation on the cost of plant construction is 3.0%

(12) Size of each increment of plant: 2.500 MGD

(13) Cost per MG of plant capacity $3.90 /MG of capacity

(14) Consumption 275 gpd/ERC

(15) New ERC's per Year 3,636

(16) Margin Reserve allowed 18 months

(17) CIAC Imputed? Yes

STUDY FOR FLORIDA WATERWORKS ASSOCIATION
MARGIN RESERVE AND IMPUTATION OF CIAC

MODEL WASTEWATER UTILITY
Key Results
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed

(1) Average Cost per ERC /year:

	Rates	Service Availabilty	AFPI	Total
Five years	$194	$185	$21	$378
Ten years	183	92	37	275
Fifteen years	186	62	43	248
Twenty years	193	46	46	240
Twenty-five years	202	37	47	238

Total cost per ERC over twenty-five years $5,962

(2) Net Present Value of Revenue Requirement

Rates	$28,138,655
CIAC	17,285,480
AFPI	788,292
Total	$46,212,428

(3) Net Present Value of Return to the Utility

Rates	$6,708,917
AFPI	788,292
Total	$7,497,209

(4) Average Rate of Return on Investment Earned 5.30%

Maximum Rate of Return on Investment Earned 7.46%

IV. Economies of Scale

The Commission has officially recognized that economies of scale provide benefits to utility customers. Proposed rule 25-30.432(3) states, "Utilities are encouraged to undertake planning that recognizes conservation, environmental protection, economies of scale and which is economically beneficial to its customers over the long term."

Despite widespread recognition of the benefits of economies of scale to utility customers, the PSC proposed rule in this Docket would allow only 18 months margin reserve in rate base and impute CIAC on margin reserve serve, thereby providing disincentives to utilities to size plants any larger than what would be considered 100% used and useful.

Cost recovery vs. economies of scale in decision making

In making decisions on plant expansion, utility managers are forced to choose between two unattractive alternatives:

(1) Expand facilities in smaller, more frequent increments in order to ensure as full a return on investment as possible for their investors. The result will usually be higher costs to customers in the long term; or

(2) Expand facilities in larger increments at less frequent intervals realizing that the plant will be deemed less than 100% used and useful by the PSC in the next rate case. The long-term cost to customers would be lower given larger, less frequent expansions, but investors could not expect to receive a full return on their investment.

Given these alternatives, the utility manager is forced to choose between the best alternative for the customers (existing and future customers) and the best alternative for the investors. The recommended rule virtually precludes finding a single alternative that is beneficial to both parties.

This is not merely a theoretical discussion. We found that managers of investor-owned utilities give serious consideration to economic regulation when making plant expansion decisions. Having been "burned" by used and useful decisions in rate cases in the past, some utilities place the consequences of traditional economic regulation above economies of scale when deciding on the appropriate size for water and wastewater facility expansions.

Gulf Utility Company has suffered financial loss due to the PSC's used-and-useful policies. As a result, plant expansions are always designed with used-and-useful

considerations in mind. The utility is continuously involved in constructing the next plant expansion. The company directed its engineering consultants to master plan the Three Oaks Wastewater Treatment and Disposal System expansion with emphasis on incremental phasing, respecting the PSC policy. The design calls for ten phases providing total treatment capacity of 6.0 MGD. Jim Elliott of Source, Inc., the consulting engineer for this project, stated that, from an engineering standpoint, a prudent plan for this project would be to provide three to four construction phases such that economy of scale could be realized. In addition to savings due to the lower cost per gallon of larger plant expansions, savings could have been realized in lower engineering and permitting fees and the avoided costs due to mobilization and re-mobilization. Elliott estimates engineering fees for each phase are $100,000, permitting fees approximately $5,000 and the cost of contractors' mobilization or re-mobilization is 20 to 25% of the total construction cost.

Similarly, Southern States Utilities has been expanding its Burnt Store Reverse Osmosis Water Treatment Plant in phases of approximately .25 MGD each. The ultimate demand is expected to be 2.25 MGD. Preliminary planning for Phase Four began in July 1996, four months before construction of Phase Three was scheduled for completion. Elliot, the consulting engineer for this project as well, states that, here again, from an engineering standpoint a prudent plan would be to provide three to four construction phases such that economy of scale could be realized.

Florida Cities Water Company states that economic regulation is the primary consideration in its plant expansion decisions. Since its Fiesta Key rate case in 1988, Florida Cities has chosen to make smaller plant expansions on which full recovery can be achieved rather than larger expansions on which only partial recovery is expected.

Cost comparison - wastewater treatment facilities

To illustrate the effect of alternative decisions on customer rates and return on investment over the long-term, various plant expansion scenarios were evaluated using the model described in Section III.

The first comparison uses cost data from Order No. PSC-93-1288-FOF-SU. In the 1980's Florida Cities had constructed a 2.5 MGD advanced wastewater treatment plant Florida Cities in its South Fort Myers Division in Lee County. The utility constructed components of the plant so that it could easily be expanded to 5.0 MGD, but activated only the 2.5 MGD train. The cost of constructing a 2.5 MGD plant would have been $9.7 million or approximately $3.90/1000 gallons. The cost of constructing a 5.0 MGD plant would have been $14.3 million, or approximately $2.86/1000 gallons. We have

used these cost figures and the following assumptions:

WWTP A — construction of facilities in five year increments. Each increment has capacity of 5.0 million gallons per day

WWTP B — construction of facilities in two and a half year increments. Each increment has capacity of 2.5 million gallons per day.

Planning, design, permitting and construction takes five years for each increment. Facilities are placed in service six months prior to the time demand would otherwise exceed capacity (as required by DEP rules). Customer growth occurs evenly over a 5 year period beginning in Year 6.

Major assumptions are the same as those presented in Section III. The model presents a "best case" scenario in that it assumes no regulatory lag, full recovery of operation and maintenance expenses and even and predictable customer growth and plant utilization.

A comparison between the two alternatives is presented in the following table:

TABLE 4.1
Comparison of Alternatives for Wastewater Treatment Plant Expansion

	WWTP A	WWTP B
Capacity	5.0 MGD	2.5 MGD
Cost per thousand gallons	$2.86	$3.90
Frequency of expansion	5 years	2.5 years
Net Present Value of Revenue Requirement:		
Rates	$24.3 million	$28.1 million
Service Availability Charges	11.9 million	17.3 million
AFPI	.8 million	2.9 million
Total	$37.0 million	$48.3 million
Net Present Value of Return to Utility		
Rates	$ 5.4 million	$ 6.7 million
AFPI	2.9 million	.8 million

Alternative WWTP A, constructing less frequently in larger increments, produces lower revenue requirements over the 25 year period and lower service availability charges than Alternative WWTP B. The net present value of revenue requirement from rates is 16% higher under Alternative WWTP B than under Alternative WWTP A. Alternative WWTP A is clearly more beneficial to both current and future customers over the long-term.

The utility is likely to choose alternative WWTP B, constructing plant in smaller increments. The net present value of allowed return on rate base is higher under this alternative over 30 years (including the initial construction period). Lower up-front investment is required and there is a quicker recovery of costs. Projected AFPI collections are higher under alternative WWTP A, but there is no guarantee that AFPI revenues will be achieved. Alternative WWTP A represents greater risk to the utility, which is not factored into the model.

Cost comparison - water treatment facilities

A similar comparison is presented for water treatment plant expansion using cost data provided by Southern States Utilities for alternative increments of expansion of its Venice Gardens water treatment plant. The cost of a .5 MGD expansion would be $1.7 million, or $3.40 per thousand gallons. The cost of a 1.0 MGD expansion would be $1.9 million, or $1.90 per thousand gallons. We have used these costs and the following assumptions to compare the economic consequences associated with the two alternatives:

WTP A construction of facilities in five year increments. Each increment has capacity of 1.0 million gallons per day

WTP B construction of facilities in two and a half year increments. Each increment has capacity of .5 million gallons per day.

A comparison between the two alternatives is presented in Table 3.2 on the following page.

The results are more dramatic in this example since the incremental cost of expansion is smaller. Alternative WTP A, construction of plant in larger less frequent increments, produces lower revenue requirements over 25 years than alternative WTP B, and lower service availability and AFPI charges. The net present value of revenue requirement recovered in rates is 40% lower under alternative WTP A. But, again, the utility would be likely to choose to expand in smaller, more costly increments because lower up-front investment is required and there is a quicker recovery of costs with less risk to the

utility. In this example, the net present value of return on investment to the utility from rates is 60% higher under alternative WTP B.

TABLE 4.2
Comparison of Alternatives for Water Treatment Plant Expansion

	WTP A	WTP B
Capacity	1.0 MGD	.5 MGD
Cost per thousand gallons	$1.90	$3.40
Frequency of expansion	5 years	2.5 years
Net Present Value of Revenue Requirement:		
Rates	$3.4 million	$4.8 million
Service Availability Charges	1.6 million	3.0 million
AFPI	.4 million	.1 million
Total	$5.4 million	$7.9 million
Net Present Value of Return to Utility:		
Rates	$ .8 million	$1.2 million
AFPI	.4 million	.1 million

Effects on Current and Future customers

As shown above, the PSC's proposed rule on margin reserve and imputation of CIAC encourages utilities to make choices that cost current and future customers much more over the long-term. The proposed rule may keep rates low for today's customers in the very short-term, but even these customers will feel the effects of increased rates within a few years. If utilities expand plant in smaller increments in order to maximize recovery, future rate increases will be more frequent and greater. More frequent rate cases means higher rate case expense passed through to the customers (a cost that is not factored into the model).

Future customers will pay higher service availability charges, AFPI and user rates. Higher connection fees could discourage growth, resulting in even higher rates to those customers already on-line. Adding new customers to the system tends to offset the level of rate increases needed in the future.

SECTION V

IMPUTATION OF CIAC

V. Imputation of CIAC

The Commission has acknowledged that inclusion of margin reserve in the calculation of used and useful plant is proper on the basis that:

> "A margin reserve allows the utility to recover investment in plant which is needed to serve future customers the utility must, by law, serve within a reasonable time. Further, a margin reserve benefits existing customers by ensuring that future customers will not overload existing facilities and impact on the quality and safety of service provided." [Order No. PSC-93-0423-FOF-WS]

Under the PSC's proposed rule, margin reserve is to be allowed, but CIAC is to be imputed on margin reserve. The net effect is that the imputation of CIAC removes most of the benefit of margin reserve from rate base. In the model described in Section III, imputation of CIAC removes 84% of margin reserve from rate base over the 25 year period. It is not uncommon for the entire margin reserve to be eliminated by imputing CIAC. In one recent case, imputation of CIAC exactly matched the rate base component associated with margin reserve so that the utility received no benefit from margin reserve. [Florida Cities Water Company - Golden Gate Division, Docket No. 941108-WS, Order No. PSC-95-0720-FOF-WS].

Utility managers have indicated that extending the margin reserve period to more closely approximate the time frame required for planning, designing, permitting and constructing plant expansions would be virtually useless if the provision requiring imputation of CIAC is not deleted from the proposed rule.

By eliminating margin reserve through the imputation of CIAC, the rule fails to recognize that the need for margin reserve plant "rolls forward." Utilities are *required* to have sufficient capacity to meet changes in demands of existing customers as well as growth in service demands on a continuous basis. They are *required* to start making capital investment long before contributions to partially cover that cost can be collected. There will always be a gap between the time plant must be made available, and paid for, and the time future customers provide contributions to partially cover the cost of that plant. This gap does not narrow with time because, as time passes, additional plant must be available to serve other future customers.

Historical data shows that utilities continuously make plant investment well in excess of CIAC collections. Table 4.1 shows a comparison of additions to plant versus CIAC collections by a number of utilities which have filed rate cases before the Commission over the past five years. 118 water systems and 56 wastewater systems are included in the tabulation, representing over $200 million in investment. Total additions to plant

TABLE 5.1
COMPARISON OF PLANT ADDITIONS TO CIAC COLLECTIONS

YEAR	WATER		WASTEWATER		TOTAL	
	Plant Additions	CIAC	Plant Additions	CIAC	Plant Additions	CIAC
1985	6,165,515	1,451,397	285,597	496,066	6,451,112	1,947,463
1986	7,020,051	2,144,882	1,821,260	683,794	8,841,311	2,828,676
1987	4,957,554	1,102,019	17,745,531	319,126	22,703,085	1,421,145
1988	5,540,827	1,423,572	6,897,334	3,101,227	12,438,161	4,524,799
1989	4,189,044	3,279,443	5,662,663	5,191,288	9,851,707	8,470,731
1990	8,573,150	3,082,830	7,203,152	3,088,111	15,776,302	6,170,941
1991	5,597,355	2,106,884	3,202,306	3,395,984	8,799,661	5,502,868
1992	12,665,207	3,292,178	10,001,272	3,450,274	22,666,479	6,742,452
1993	14,666,916	3,688,144	14,174,845	3,628,307	28,841,761	7,316,451
1994	23,992,409	4,699,813	11,883,351	4,727,903	35,875,760	9,427,716
1995	23,148,469	5,700,038	21,015,318	4,024,722	44,163,787	9,724,760
Total	116,516,497	31,971,200	99,892,629	32,106,802	216,409,126	64,078,002

By offsetting out-of-period, speculative CIAC collections against required investment that has already been made, imputation of CIAC violates the most basic utility accounting and rate setting principle of matching revenues and costs in a consistent period. Costs associated with margin reserve plant, which are mandated, ongoing costs, are incurred by the utility on a current basis. As customers connect to the system there will be a need for yet additional plant to serve new growth. Under the proposed rule, when this additional investment is required, the funds will not be available to provide for it.

SECTION VI

ALLOWANCE FOR FUNDS PRUDENTLY INVESTED

VI. Allowance for Funds Prudently Invested

AFPI vs. current rates

The PSC allows utilities to recover carrying costs and expenses associated with prudent non-used and useful plant from future customers as they connect through Allowance for Funds Prudently Invested (25-30.434, F.A.C.). Generally the charge compounds for five years and is established at the time of a rate case. By approving the charge, the Commission has acknowledged that investment in non-used and useful plant is prudent and the utility should receive a return on that investment. However, AFPI does not accomplish this because:

- Utilities are not made whole by AFPI, even when growth occurs as projected (as shown in the model discussed in Section III and presented in Appendix A).
- AFPI is speculative; collection of the revenue is entirely dependent upon growth occurring as projected. This risk is borne entirely by the utility.
- There is no adjustment to increase the number of future customers subject to AFPI when CIAC is imputed.

In addition, as used in the past, AFPI has resulted in an unfair shifting of costs from current customers to future customers. When cost recovery is shifted from current revenue requirement to AFPI, future customers end up paying for all "non-used and useful" plant while current customers receive the benefits of any economies of scale associated with that plant. This study is limited to the effects of the proposed rule on margin reserve and imputation of CIAC and does not include a full discussion of used and useful concepts.

Computation problems related to Imputation of CIAC

Utilities are permitted to collect AFPI in the future from a designated number of equivalent residential connections (ERC's), determined as those which will be served by prudent non-used and useful plant. Under the proposed rules on margin reserve and imputation of CIAC, some ERC's are excluded from both current revenue requirements and AFPI charges. Where margin reserve is allowed in rate base, a certain number of ERC's is included in margin reserve plant, thereby increasing used and useful percentages. ERC's included in margin reserve are used and useful, and therefore are not included as those from which AFPI could be collected.

Because CIAC is imputed on margin reserve, those ERC's are included in neither rates nor AFPI. As explained in the previous section, imputation of CIAC eliminates most of the benefits of margin reserve. As applied in previous rate cases, imputation is calculated by multiplying the number of ERC's expected to connect to the system over the margin reserve period by the approved service availability charge. No corresponding adjustment has been made to increase the number of ERC's on which AFPI can be collected.

In the model discussed in Section III, over the 25 year period $3.4 million in AFPI collections is lost. At least one-half of the future ERC's are included in margin reserve and eliminated by imputing CIAC. This problem will not arise if CIAC is not imputed on margin reserve.

SECTION VII

COMPARISON OF COST RECOVERY METHODS

MUNICIPAL/COUNTY-OWNED UTILITIES VS. INVESTOR-OWNED UTILITIES

VII. Municipal and county-owned utilities

Municipal and county-owned water and wastewater utilities typically fund plant expansions from a combination of revenue bonds, contributions in aid of construction, and directly from monthly user fees. When bond financed, two assurances of debt coverage must be met: (1) Revenues from rates and fees must be at least 110% of operation and maintenance expenses plus additions to renewal and replacement fund and bond reserve funds and (2) Revenues from rates and fees plus connection fees must be at least 120% of operation and maintenance expenses plus additions to renewal and replacement fund and bond reserve funds. These utilities are required to review rates annually and make rate adjustments if necessary to meet debt coverage requirements. Rate stabilization funds are generally established to mitigate the effects of minor fluctuations in cash flow requirements from year to year.

Municipal and county-owned water and wastewater utilities establish rates and charges to meet cash flow requirements. Whereas the PSC's policies are designed to prevent investor-owned water and wastewater utilities from currently recovering the costs associated with plant expansions made to serve future customers from existing customers, government-owned utilities *must* recover all debt service costs from existing customers. As a result, economies of scale are given primary consideration in decisions about plant expansions and the cost of complying with environmental regulation is passed through immediately to current customers.

Public utilities are "owned" by their customers. They are under at least as much pressure as investor-owned utilities to keep rates low. They are also under the same pressures to make the necessary investment to preserve quality of service, comply with environmental regulation and protect the health and safety of customers. And when they incur costs, they must recover those costs in rates in order to meet bond covenants and maintain their credit ratings. The difference is that public utilities are able to recover those costs whereas investor-owned utilities are being prevented from doing so. Although investor-owned utilities also must meet coverage requirements on 100% of its debt, the Commission is only allowing them to recover the "used and useful" portion of debt service.

SECTION VIII

CONCLUSIONS

VIII. Summary of Conclusions

- Environmental regulations have an impact on planning and construction schedules of utilities. Particularly, in recent years regulation has prolonged the time it takes to obtain permits and has increased the associated costs.

- 18 month margin reserve does not allow utilities to recover costs associated with investment required by environmental regulators.

- Imputation of CIAC further reduces cost recovery on prudent, mandated investment.

- The PSC's policies have had an impact on utilities' decisions relating to incremental plant expansion. In some cases utilities have chosen to expand in smaller increments in order to achieve a higher level of cost recovery, rather than in larger increments which would provide economies of scale, but on which cost recovery is unlikely.

- The PSC's proposed rule will result in higher costs to customers in the long and short-term.

- Allowance of AFPI does not adequately compensate utilities for disallowance of full margin reserve.

- Government-owned utilities routinely include the full cost of required plant expansions in rates, without making adjustments for used-and-useful or margin reserve.

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APPENDIX A

MODEL OF UTILITY COST RECOVERY

Scenario WWTP A:
Wastewater treatment plant constructed in 5 year increments

MODEL WASTEWATER UTILITY
DESCRIPTION & ASSUMPTIONS

(1) The purpose of this model is to present the financial impacts of proposed rules related to margin reserve and imputation of CIAC on investor-owned utilities in Florida.

(2) Financial impacts are presented over a 30 year projection period, including an initial 5 year construction period.

(3) Rate revenue for return on investment begins in the 6th year - the first year after plant is placed in service

(4) An assumption is made that rate revenues provide 100% reimbursement of operation and maintenance expenses and rate case expense.

(5) Plant additions are made in 5 year increments. Permitting, design and construction takes 5 years. Plant additions are placed in service six months before demand would otherwise exceed capacity, in accordance with DEP regulations.

(6) Customer growth is even and predictable.

(7) AFPI is calculated as of the beginning of the year the plant is placed in service. AFPI charge compounds for 5 years and re-starts when new plant comes on-line.

(8) Capital structure includes only long-term debt and equity.

(9) Capital Structure

	Initial	Ratio	Cost Rate	Weighted Cost
Long Term Debt	$14,300,000	60.0%	10.00%	6.00%
Short Term Debt		0.0%	9.00%	0.00%
Customer Deposits		0.0%	6.00%	0.00%
Deferred ITCs		0.0%	10.00%	0.00%
Deferred Income Taxes		0.0%	0.00%	0.00%
Common Equity	9,533,333	40.0%	11.88%	4.75%
Total Capital	$23,833,333	100.00%		10.75%

(10) AFUDC Rate 10.75%

(11) Inflation rate on cost of plant expansions 3.0%

(12) Size of each increment of plant: 5.000 MGD

(13) Cost per MG of plant capacity $2.86 /MG of capacity

(14) Consumption 275 gpd/ERC

(15) New ERC's per Year 3,636

(16) Margin Reserve allowed 18 months

(17) CIAC Imputed? Yes

MODEL WASTEWATER UTILITY
Key Results
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed

(1) Average Cost per ERC / year

	Rates	Service Availability	AFPI	Total
Five Years	$178	$127	$133	$438
Ten Years	162	64	150	375
Fifteen Years	161	42	159	363
Twenty Years	165	32	164	360
Twenty-five Years	169	25	166	361

Total cost per ERC over twenty-five years $9,020

(2) Net Present Value of Revenue Requirement:

Rates	$24,302,988
CIAC	11,894,710
AFPI	2,931,886
Total	$39,129,584

(3) Net Present Value of Return to the Utility

Rates	$5,440,750
AFPI	2,931,886
Total	$8,372,635

(4) Average Rate of Return on Investment Earned 6.16%

Maximum Rate of Return on Investment Earned 8.59%

MODEL WASTEWATER UTILITY
LIST OF SCHEDULES

Schedule I

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED NET INVESTMENT

a	b	c	d	e	f	g	h	i	j	k
YEAR	CWIP	Net Plant	Net CIAC	Net Investment	Rate Base	Allowed Rate of Return	Net Income at Allowed Rate of Rtn	AFPI	Total	Overall Rate of Return
1	753,431	0	0	753,431	0	10.75%	0	0	0	0.00%
2	3,090,588	0	0	3,090,588	0	10.75%	0	0	0	0.00%
3	7,406,292	0	0	7,406,292	0	10.75%	0	0	0	0.00%
4	12,145,973	0	0	12,145,973	0	10.75%	0	0	0	0.00%
5	17,732,817	0	0	17,732,817	0	10.75%	0	0	0	0.00%
6	2,228,136	16,604,256	(2,264,217)	16,568,175	2,251,638	10.75%	242,051	278,673	520,724	3.14%
7	6,084,380	15,912,412	(4,436,017)	17,560,776	3,008,559	10.75%	323,420	806,545	1,129,965	6.43%
8	11,333,217	15,220,568	(6,515,399)	20,038,386	3,581,159	10.75%	384,975	1,337,011	1,721,986	8.59%
9	17,065,716	14,528,724	(8,502,365)	23,092,075	3,969,439	10.75%	426,715	0	426,715	1.85%
10	506,274	33,941,169	(10,396,914)	24,050,530	1,695,004	10.75%	182,213	0	182,213	0.76%
11	2,583,020	32,411,646	(12,199,045)	22,795,621	8,529,181	10.75%	916,887	199,255	1,116,141	4.90%
12	7,053,464	30,882,124	(13,908,760)	24,026,828	8,867,280	10.75%	953,233	574,407	1,527,640	6.36%
13	13,138,305	29,352,601	(15,526,058)	26,964,848	8,991,892	10.75%	966,628	946,991	1,913,619	7.10%
14	19,783,842	27,823,078	(17,050,938)	30,555,982	8,903,016	10.75%	957,074	1,303,429	2,260,504	7.40%
15	586,911	49,599,937	(18,483,402)	31,703,445	7,224,943	10.75%	776,681	0	776,681	2.45%
16	2,994,428	47,099,315	(19,823,449)	30,270,294	16,129,950	10.75%	1,733,970	212,255	1,946,224	6.43%
17	8,176,898	44,598,693	(21,071,078)	31,704,512	15,892,214	10.75%	1,708,413	612,324	2,320,737	7.32%
18	15,230,896	42,098,071	(22,226,291)	35,102,675	15,413,480	10.75%	1,656,949	1,010,599	2,667,548	7.60%
19	22,934,895	39,597,449	(23,289,087)	39,243,258	14,693,746	10.75%	1,579,578	1,392,731	2,972,308	7.57%
20	680,390	64,115,310	(24,259,465)	40,536,235	14,314,502	10.75%	1,538,809	0	1,538,809	3.80%
21	3,471,363	60,488,918	(25,137,427)	38,822,854	24,862,026	10.75%	2,672,668	213,200	2,885,868	7.43%
22	9,479,266	56,862,526	(25,922,971)	40,418,820	23,881,625	10.75%	2,567,275	615,136	3,182,411	7.87%
23	17,656,783	53,236,134	(26,616,099)	44,276,817	22,631,003	10.75%	2,432,833	1,015,380	3,448,213	7.79%
24	26,587,830	49,609,742	(27,216,810)	48,980,762	21,110,158	10.75%	2,269,342	1,399,480	3,668,822	7.49%
25	788,759	77,305,177	(27,725,103)	50,368,833	22,436,984	10.75%	2,411,976	0	2,411,976	4.79%
26	4,024,261	72,373,709	(28,140,980)	48,256,990	34,529,343	10.75%	3,711,904	208,709	3,920,613	8.12%
27	10,989,067	67,442,241	(28,464,439)	49,966,868	32,616,302	10.75%	3,506,252	602,020	4,108,273	8.22%
28	20,469,050	62,510,772	(28,695,482)	54,284,341	30,401,161	10.75%	3,268,125	993,358	4,261,483	7.85%
29	30,822,582	57,579,304	(28,834,107)	59,567,779	27,883,919	10.75%	2,997,521	1,368,552	4,366,073	7.33%
30	914,388	88,958,418	(28,880,316)	60,992,490	31,246,143	10.75%	3,358,960	0	3,358,960	5.51%
			AVG	31,709,310				AVG	1,954,484	6.16%
			NPV	172,256,432		NPV	5,440,750	2,931,886	8,372,635	4.86%

Schedule II

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED REGULATORY INCOME

a YEAR	b Revenue From Rates	c O&M Expense	d Allowed Depreciation Expense	e Allowed Amortization Expense	f Property Taxes	g Gross Receipts Tax	h Allowed Interest Expense	i Allowed Pretax Profit	j Income Tax	k Allowed Net Profit	l Avg 5 Year Revenue Per ERC
1											
2											
3											
4											
5											
6	950,714	(90,909)	(276,738)	46,209	(172,961)	(42,782)	(135,098)	278,434	(171,481)	106,953	
7	1,334,781	(272,727)	(415,106)	138,626	(172,961)	(60,065)	(180,514)	372,034	(229,127)	142,907	
8	1,683,402	(454,545)	(553,475)	231,043	(172,961)	(75,753)	(214,870)	442,840	(272,735)	170,105	$178
9	1,996,576	(636,364)	(691,844)	323,460	(172,961)	(89,846)	(238,166)	490,855	(302,306)	188,548	
10	2,108,588	(818,182)	(917,714)	415,877	(382,381)	(94,886)	(101,700)	209,601	(129,089)	80,513	
11	3,676,658	(1,000,000)	(1,070,666)	508,294	(382,381)	(165,450)	(511,751)	1,054,705	(649,569)	405,136	
12	3,995,452	(1,181,818)	(1,223,618)	600,711	(382,381)	(179,795)	(532,037)	1,096,514	(675,318)	421,196	
13	4,273,190	(1,363,636)	(1,376,570)	693,128	(382,381)	(192,294)	(539,514)	1,111,923	(684,808)	427,115	$156
14	4,509,871	(1,545,455)	(1,529,523)	785,545	(382,381)	(202,944)	(534,181)	1,100,933	(678,040)	422,893	
15	4,853,589	(1,727,273)	(1,833,789)	877,962	(625,155)	(218,412)	(433,497)	893,425	(550,240)	343,185	
16	6,834,310	(1,909,091)	(2,000,498)	970,379	(625,155)	(307,544)	(967,797)	1,994,604	(1,228,431)	766,173	
17	7,056,768	(2,090,909)	(2,167,206)	1,062,796	(625,155)	(317,555)	(953,533)	1,965,206	(1,210,326)	754,880	
18	7,232,879	(2,272,727)	(2,333,914)	1,155,213	(625,155)	(325,480)	(924,809)	1,906,006	(1,173,866)	732,140	$161
19	7,362,642	(2,454,545)	(2,500,622)	1,247,630	(625,155)	(331,319)	(881,625)	1,817,005	(1,119,052)	697,953	
20	8,097,390	(2,636,364)	(2,901,114)	1,340,047	(906,598)	(364,383)	(858,870)	1,770,109	(1,090,170)	679,939	
21	10,409,287	(2,818,182)	(3,082,433)	1,432,464	(906,598)	(468,418)	(1,491,722)	3,074,399	(1,893,452)	1,180,946	
22	10,504,222	(3,000,000)	(3,263,753)	1,524,881	(906,598)	(472,690)	(1,432,898)	2,953,164	(1,818,787)	1,134,377	
23	10,547,188	(3,181,818)	(3,445,072)	1,617,298	(906,598)	(474,623)	(1,357,860)	2,798,514	(1,723,541)	1,074,973	$169
24	10,538,188	(3,363,636)	(3,626,392)	1,709,715	(906,598)	(474,218)	(1,266,610)	2,610,449	(1,607,716)	1,002,733	
25	11,768,968	(3,545,455)	(4,142,433)	1,802,132	(1,232,867)	(529,604)	(1,346,219)	2,774,522	(1,708,765)	1,065,757	
26	14,394,646	(3,727,273)	(4,339,692)	1,894,549	(1,232,867)	(647,759)	(2,071,761)	4,269,844	(2,629,700)	1,640,144	
27	14,326,912	(3,909,091)	(4,536,951)	1,986,966	(1,232,867)	(644,711)	(1,956,978)	4,033,280	(2,484,006)	1,549,274	
28	14,201,080	(4,090,909)	(4,734,209)	2,079,383	(1,232,867)	(639,049)	(1,824,070)	3,759,359	(2,315,304)	1,444,055	$178
29	14,017,151	(4,272,727)	(4,931,468)	2,171,800	(1,232,867)	(630,772)	(1,673,035)	3,448,081	(2,123,595)	1,324,486	
30	15,837,908	(4,454,545)	(5,585,155)	2,264,217	(1,611,102)	(712,706)	(1,874,769)	3,863,848	(2,379,657)	1,484,192	

Net Present Value of Revenue Requirement $24,302,988

Schedule III

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED RATE BASE & ALLOWED RETURN

a	b	c	d	e	f	g	h	i
			Rate Base					
YEAR	Average Net Plant	Used & Useful %	Net Plant U & U	Average Net CIAC	Imputed CIAC	Total	Allowed Rate of Return	Allowed Return on Rate Base
1								
2								
3								
4								
5								
6	$16,950,178	40%	$6,780,071	($1,132,108)	($3,396,325)	$2,251,638	10.75%	242,051
7	16,258,334	60%	9,755,001	(3,350,117)	(3,396,325)	3,008,559	10.75%	323,420
8	15,566,490	80%	12,453,192	(5,475,708)	(3,396,325)	3,581,159	10.75%	384,975
9	14,874,646	100%	14,874,646	(7,508,882)	(3,396,325)	3,969,439	10.75%	426,715
10	24,234,947	60%	14,540,968	(9,449,639)	(3,396,325)	1,695,004	10.75%	182,213
11	33,176,408	70%	23,223,485	(11,297,980)	(3,396,325)	8,529,181	10.75%	916,887
12	31,646,885	80%	25,317,508	(13,053,903)	(3,396,325)	8,867,280	10.75%	953,233
13	30,117,362	90%	27,105,626	(14,717,409)	(3,396,325)	8,991,892	10.75%	966,628
14	28,587,840	100%	28,587,840	(16,288,498)	(3,396,325)	8,903,016	10.75%	957,074
15	38,711,507	73%	28,388,439	(17,767,170)	(3,396,325)	7,224,943	10.75%	776,681
16	48,349,626	80%	38,679,700	(19,153,425)	(3,396,325)	16,129,950	10.75%	1,733,970
17	45,849,004	87%	39,735,803	(20,447,264)	(3,396,325)	15,892,214	10.75%	1,708,413
18	43,348,382	93%	40,458,490	(21,648,685)	(3,396,325)	15,413,480	10.75%	1,656,949
19	40,847,760	100%	40,847,760	(22,757,689)	(3,396,325)	14,693,746	10.75%	1,579,578
20	51,856,379	80%	41,485,104	(23,774,276)	(3,396,325)	14,314,502	10.75%	1,538,809
21	62,302,114	85%	52,956,797	(24,698,446)	(3,396,325)	24,862,026	10.75%	2,672,668
22	58,675,722	90%	52,808,150	(25,530,199)	(3,396,325)	23,881,625	10.75%	2,567,275
23	55,049,330	95%	52,296,863	(26,269,535)	(3,396,325)	22,631,003	10.75%	2,432,833
24	51,422,938	100%	51,422,938	(26,916,454)	(3,396,325)	21,110,158	10.75%	2,269,342
25	63,457,459	84%	53,304,266	(27,470,956)	(3,396,325)	22,436,984	10.75%	2,411,976
26	74,839,443	88%	65,858,710	(27,933,041)	(3,396,325)	34,529,343	10.75%	3,711,904
27	69,907,975	92%	64,315,337	(28,302,710)	(3,396,325)	32,616,302	10.75%	3,506,252
28	64,976,506	96%	62,377,446	(28,579,961)	(3,396,325)	30,401,161	10.75%	3,268,125
29	60,045,038	100%	60,045,038	(28,764,795)	(3,396,325)	27,883,919	10.75%	2,997,521
30	73,268,861	87%	63,499,680	(28,857,212)	(3,396,325)	31,246,143	10.75%	3,358,960
AVG								

Schedule IV

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED CWIP AND PLANT IN SERVICE BALANCES

a	b	c	d	e	f	g	h	i
	Total				Book Value - Utility Plant in Service			Average
YEAR	Total $ Spent	Total AFUDC	Transfers to Plant	CWIP Balance	Gross	Accum. Deprec	Net	Net Plant
1	715,000	38,431		753,431				
2	2,145,000	192,156		3,090,588				
3	3,803,800	511,904		7,406,292				
4	3,818,100	921,581		12,145,973				
5	4,232,540	1,354,303		17,732,817				
6	1,657,762	133,657	(17,296,100)	2,228,136	17,296,100	(691,844)	16,604,256	16,950,178
7	3,448,145	408,100		6,084,380	17,296,100	(1,383,688)	15,912,412	16,258,334
8	4,417,936	830,901		11,333,217	17,296,100	(2,075,532)	15,220,568	15,566,490
9	4,426,224	1,306,275		17,065,716	17,296,100	(2,767,376)	14,528,724	14,874,646
10	2,693,562	1,688,963	(20,941,968)	506,274	38,238,068	(4,296,899)	33,941,169	24,234,947
11	1,921,800	154,945		2,583,020	38,238,068	(5,826,421)	32,411,646	33,176,408
12	3,997,345	473,099		7,053,464	38,238,068	(7,355,944)	30,882,124	31,646,885
13	5,121,598	963,242		13,138,305	38,238,068	(8,885,467)	29,352,601	30,117,362
14	5,131,207	1,514,331		19,783,842	38,238,068	(10,414,990)	27,823,078	28,587,840
15	3,122,577	1,957,972	(24,277,480)	586,911	62,515,548	(12,915,612)	49,599,937	38,711,507
16	2,227,893	179,624		2,994,428	62,515,548	(15,416,233)	47,099,315	48,349,626
17	4,634,018	548,452		8,176,898	62,515,548	(17,916,855)	44,598,693	45,849,004
18	5,937,336	1,116,662		15,230,896	62,515,548	(20,417,477)	42,098,071	43,348,382
19	5,948,475	1,755,524		22,934,895	62,515,548	(22,918,099)	39,597,449	40,847,760
20	3,619,922	2,269,826	(28,144,253)	680,390	90,659,801	(26,544,491)	64,115,310	51,856,379
21	2,582,739	208,233		3,471,363	90,659,801	(30,170,883)	60,488,918	62,302,114
22	5,372,097	635,806		9,479,266	90,659,801	(33,797,275)	56,862,526	58,675,722
23	6,883,000	1,294,517		17,656,783	90,659,801	(37,423,667)	53,236,134	55,049,330
24	6,895,913	2,035,134		26,587,830	90,659,801	(41,050,060)	49,609,742	51,422,938
25	4,196,482	2,631,350	(32,626,903)	788,759	123,286,705	(45,981,528)	77,305,177	63,457,459
26	2,994,102	241,400		4,024,261	123,286,705	(50,912,996)	72,373,709	74,839,443
27	6,227,733	737,073		10,989,067	123,286,705	(55,844,464)	67,442,241	69,907,975
28	7,979,283	1,500,700		20,469,050	123,286,705	(60,775,932)	62,510,772	64,976,506
29	7,994,254	2,359,278		30,822,582	123,286,705	(65,707,400)	57,579,304	60,045,038
30	4,864,873	3,050,456	(37,823,523)	914,388	161,110,228	(72,151,810)	88,958,418	73,268,861

Schedule IVa

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED CONSTRUCTION

Cost of each increment of plant	$2.86 / MGD capacity
Capacity of each increment of plant	5.000 MGD
Inflation on cost of plant expansions	3.0%
Depreciable Life of Plant	25
All plant expansions are placed in service the first day of the year	

Cost of construction for each increment of Plant			
% Complete	$ Spent	AFUDC	Total
5.0%	$715,000	$38,431	$753,431
15.0%	$2,145,000	192,156	2,337,156
26.6%	$3,803,800	511,904	4,315,704
26.7%	$3,818,100	921,581	4,739,681
26.7%	$3,818,100	1,332,027	5,150,127
	$14,300,000	$2,996,100	$17,296,100

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
						CWIP								
YEAR	1st Increment		2nd Increment		3rd Increment		4th Increment		5th Increment		6th Increment		7th Increment	
	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC
1	715,000	38,431												
2	2,145,000	192,156												
3	3,803,800	511,904												
4	3,818,100	921,581												
5	3,818,100	1,332,027	414,440	22,276										
6			1,657,762	133,657										
7			3,448,145	408,100										
8			4,417,936	830,901										
9			4,426,224	1,306,275										
10			2,213,112	1,663,139	480,450	25,824								
11					1,921,800	154,945								
12					3,997,345	473,099								
13					5,121,598	963,242								
14					5,131,207	1,514,331								
15					2,565,604	1,928,034	556,973	29,937						
16							2,227,893	179,624						
17							4,634,018	548,452						
18							5,937,336	1,116,662						
19							5,948,475	1,755,524						
20							2,974,238	2,235,120	645,685	34,706				
21									2,582,739	208,233				
22									5,372,097	635,806				
23									6,883,000	1,294,517				
24									6,895,913	2,035,134				
25									3,447,957	2,591,117	748,526	40,233		
26											2,994,102	241,400		
27											6,227,733	737,073		
28											7,979,283	1,500,700		
29											7,994,254	2,359,278		
30											3,997,127	3,003,815	867,746	46,641

Schedule V

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF USED & USEFUL %

a	b	c	d	e	f	g	h
	Capacity						
YEAR	MGD	ERC's	Year-end Connections (ERCs)	Average Connections (ERCs)	Margin Reserve (ERCs)	Total ERCs in Rate Base	Used & Useful %
1							
2							
3							
4							
5							
6	5.000	18,182	3,636	1,818	5,455	7,273	40%
7	5.000	18,182	7,273	5,455	5,455	10,909	60%
8	5.000	18,182	10,909	9,091	5,455	14,545	80%
9	5.000	18,182	14,545	12,727	5,455	18,182	100%
10	10.000	36,364	18,182	16,364	5,455	21,818	60%
11	10.000	36,364	21,818	20,000	5,455	25,455	70%
12	10.000	36,364	25,455	23,636	5,455	29,091	80%
13	10.000	36,364	29,091	27,273	5,455	32,727	90%
14	10.000	36,364	32,727	30,909	5,455	36,364	100%
15	15.000	54,545	36,364	34,545	5,455	40,000	73%
16	15.000	54,545	40,000	38,182	5,455	43,636	80%
17	15.000	54,545	43,636	41,818	5,455	47,273	87%
18	15.000	54,545	47,273	45,455	5,455	50,909	93%
19	15.000	54,545	50,909	49,091	5,455	54,545	100%
20	20.000	72,727	54,545	52,727	5,455	58,182	80%
21	20.000	72,727	58,182	56,364	5,455	61,818	85%
22	20.000	72,727	61,818	60,000	5,455	65,455	90%
23	20.000	72,727	65,455	63,636	5,455	69,091	95%
24	20.000	72,727	69,091	67,273	5,455	72,727	100%
25	25.000	90,909	72,727	70,909	5,455	76,364	84%
26	25.000	90,909	76,364	74,545	5,455	80,000	88%
27	25.000	90,909	80,000	78,182	5,455	83,636	92%
28	25.000	90,909	83,636	81,818	5,455	87,273	96%
29	25.000	90,909	87,273	85,455	5,455	90,909	100%
30	30.000	109,091	90,909	89,091	5,455	94,545	87%

Schedule VI

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF IMPUTED CIAC IN RATE BASE

a	b	c	d	e	f	g	h
	Calculated Imputed CIAC					Limitation	
YEAR	Service Avail. Charge	Margin Res. ERC's	Gross Imputed CIAC	Amortization	Calc. Net Imputed CIAC	MR Plant in RateBase	Imputed CIAC in Rate Base
1							
2							
3							
4							
5							
6	$635.37	5,455	($3,465,638)	$69,313	($3,396,325)	$5,085,053	($3,396,325)
7	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,877,500	(3,396,325)
8	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,669,947	(3,396,325)
9	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,462,394	(3,396,325)
10	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,635,242	(3,396,325)
11	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,976,461	(3,396,325)
12	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,747,033	(3,396,325)
13	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,517,604	(3,396,325)
14	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,288,176	(3,396,325)
15	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,871,151	(3,396,325)
16	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,834,963	(3,396,325)
17	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,584,900	(3,396,325)
18	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,334,838	(3,396,325)
19	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,084,776	(3,396,325)
20	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,889,228	(3,396,325)
21	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,672,659	(3,396,325)
22	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,400,679	(3,396,325)
23	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,128,700	(3,396,325)
24	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,856,720	(3,396,325)
25	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,807,448	(3,396,325)
26	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,490,367	(3,396,325)
27	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	4,194,478	(3,396,325)
28	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,898,590	(3,396,325)
29	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,602,702	(3,396,325)
30	$635.37	5,455	(3,465,638)	69,313	(3,396,325)	3,663,443	(3,396,325)

Schedule VII

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED CIAC BALANCES

a	b	c	d	e	f	g
	New	CIAC	CIAC - Year End Balance			Average Net
YEAR	ERCs	Collected	Gross	Acc. Amort	Net	CIAC
1		$0				
2		0				
3		0				
4		0				
5		0				
6	3,636	2,310,425	2,310,425	(46,209)	2,264,217	1,132,108
7	3,636	2,310,425	4,620,851	(184,834)	4,436,017	3,350,117
8	3,636	2,310,425	6,931,276	(415,877)	6,515,399	5,475,708
9	3,636	2,310,425	9,241,701	(739,336)	8,502,365	7,508,882
10	3,636	2,310,425	11,552,126	(1,155,213)	10,396,914	9,449,639
11	3,636	2,310,425	13,862,552	(1,663,506)	12,199,045	11,297,980
12	3,636	2,310,425	16,172,977	(2,264,217)	13,908,760	13,053,903
13	3,636	2,310,425	18,483,402	(2,957,344)	15,526,058	14,717,409
14	3,636	2,310,425	20,793,827	(3,742,889)	17,050,938	16,288,498
15	3,636	2,310,425	23,104,253	(4,620,851)	18,483,402	17,767,170
16	3,636	2,310,425	25,414,678	(5,591,229)	19,823,449	19,153,425
17	3,636	2,310,425	27,725,103	(6,654,025)	21,071,078	20,447,264
18	3,636	2,310,425	30,035,528	(7,809,237)	22,226,291	21,648,685
19	3,636	2,310,425	32,345,954	(9,056,867)	23,289,087	22,757,689
20	3,636	2,310,425	34,656,379	(10,396,914)	24,259,465	23,774,276
21	3,636	2,310,425	36,966,804	(11,829,377)	25,137,427	24,698,446
22	3,636	2,310,425	39,277,230	(13,354,258)	25,922,971	25,530,199
23	3,636	2,310,425	41,587,655	(14,971,556)	26,616,099	26,269,535
24	3,636	2,310,425	43,898,080	(16,681,270)	27,216,810	26,916,454
25	3,636	2,310,425	46,208,505	(18,483,402)	27,725,103	27,470,956
26	3,636	2,310,425	48,518,931	(20,377,951)	28,140,980	27,933,041
27	3,636	2,310,425	50,829,356	(22,364,917)	28,464,439	28,302,710
28	3,636	2,310,425	53,139,781	(24,444,299)	28,695,482	28,579,961
29	3,636	2,310,425	55,450,206	(26,616,099)	28,834,107	28,764,795
30	3,636	2,310,425	57,760,632	(28,880,316)	28,880,316	28,857,212

Schedule VIIa

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
SERVICE AVAILABILITY CHARGES & CIAC BALANCES

A	Gross Book Value	$17,296,100
B	Land	0
C	Depreciable Assets	$17,296,100
D	Accumulated Depreciation to Date	0
E	Accumulated Depreciation at Design Capacity	3,459,220
F	Net Plant at Design Capacity	13,836,880
G	Transmission & Distribution Mains	0
H	Minimum Level of CIAC	0.00%
I	CIAC to Date	0
J	Accumulated Amortization of CIAC to Date	0
K	Acc. Amort. of CIAC at design capacity	0
L	Future Customers	18,182
M	Composite Depreciation Rate	4.00%
N	Number of Years to Design Capacity	5
O	Existing Service Availability Charge per ERC	0
P	Level of CIAC at Design Capacity	0.00%
Q	Requested Service Availability Charge per ERC	$635.37
R	Level of CIAC at Design Capacity	75.00%
S	Minimum Service Availability Charge per ERC	0
T	Level of CIAC at Design Capacity	0.00%
U	Maximum Service Availability Charge per ERC	$635.37
V	Level of CIAC at Design Capacity	75.00%
W	No. of Customers at Design Capacity	18,182
X	Current No. of Customers	0
Y	Annual Growth	3,636
Z	Depreciation/Amortization multiplier	1848.484848
AA	Number of Years	
AB	Depreciation rate	4.00%

Schedule VIII

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imput
PROJECTED AFPI COLLECTIONS

Projected AFPI Collections:

a YEAR	b New ERCs	c ERC's paying AFPI	d Average AFPI Charge	e AFPI Colected (k * l)
1	0	0	$0.00	$0
2	0	0	0.00	0
3	0	0	0.00	0
4	0	0	0.00	0
5	0	0	0.00	0
6	3,636	3,636	76.64	278,673
7	3,636	3,636	221.80	806,545
8	3,636	3,636	367.68	1,337,011
9	3,636	0	509.12	0
10	3,636	0	646.12	0
11	3,636	3,636	54.80	199,255
12	3,636	3,636	157.96	574,407
13	3,636	3,636	260.42	946,991
14	3,636	3,636	358.44	1,303,429
15	3,636	0	452.02	0
16	3,636	3,636	58.37	212,255
17	3,636	3,636	168.39	612,324
18	3,636	3,636	277.91	1,010,599
19	3,636	3,636	383.00	1,392,731
20	3,636	0	483.65	0
21	3,636	3,636	58.63	213,200
22	3,636	3,636	169.16	615,136
23	3,636	3,636	279.23	1,015,380
24	3,636	3,636	384.86	1,399,480
25	3,636	0	486.04	0
26	3,636	3,636	57.40	208,709
27	3,636	3,636	165.56	602,020
28	3,636	3,636	273.17	993,358
29	3,636	3,636	376.35	1,368,552
30	3,636	0	475.09	0

Schedule VIIIa

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	1st Increment
Cost of Qualifying Asset	$10,170,107
Divided by Future ERCs	10,909
Cost / ERC	$932.27
Rate of Return	10.75%
Annual Return per ERC	$100.22
Annual Reduction in Return per ERC	$4.01
Annual Depreciation Expense	$406,804
Divided by Future ERCs	10,909
Annual Depreciation per ERC	$37.29
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Retur	40.00%

	Year 6	Year 7	Year 8	Year 9	Year 10
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	37.29	37.29	37.29	37.29	37.29
Unfunded Exp - Prior Year					
Total Unfunded Expense	37.29	74.58	111.87	149.16	186.45
Unfunded Returns					
Return on Expense - Crnt Yr.	4.01	4.01	4.01	4.01	4.01
Return on Expense - Prior Yr.	0.00	4.01	8.02	12.03	16.04
Return on Plant - Current Yr.	100.22	96.21	92.20	88.19	84.18
Earnings - Prior Year	0.00	100.22	196.43	288.63	376.82
Compound Earnings - Prior Y	0.00	10.77	21.12	31.03	40.51
Total Compound Earnings	104.23	215.22	321.77	423.89	521.56
Year-end AFPI Charge (net of taxes)	141.52	289.80	433.64	573.05	708.01
Jan	11.79	153.84	301.75	445.22	584.26
Feb	23.58	166.19	313.74	456.84	595.50
Mar	35.37	178.55	325.72	468.46	606.75
Apr	47.16	190.91	337.71	480.07	618.00
May	58.95	203.26	349.70	491.69	629.24
Jun	70.74	215.62	361.68	503.31	640.49
Jul	82.53	227.98	373.67	514.93	651.74
Aug	94.32	240.34	385.66	526.54	662.99
Sep	106.11	252.69	397.65	538.16	674.23
Oct	117.90	265.05	409.63	549.78	685.48
Nov	129.69	277.41	421.62	561.39	696.73
Dec	141.48	289.76	433.61	573.01	707.97
AVG	76.64	221.80	367.68	509.12	646.12
New ERC's	3,636	3,636	3,636	3,636	3,636
Limitation	10,909	10,909	10,909	10,909	10,909
# of ERC's to pay AFPI:					
Jan	303	303	303	0	0
Feb	303	303	303	0	0
Mar	303	303	303	0	0
Apr	303	303	303	0	0
May	303	303	303	0	0
Jun	303	303	303	0	0
Jul	303	303	303	0	0
Aug	303	303	303	0	0
Sep	303	303	303	0	0
Oct	303	303	303	0	0
Nov	303	303	303	0	0
Dec	303	303	303	0	0
Total	3,636	3,636	3,636	0	0
Cumulative	3,636	7,273	10,909	10,909	10,909
AFPI Collected:					
Jan	$3,573	$46,617	$91,439	$0	$0
Feb	7,145	50,362	95,072	0	0
Mar	10,718	54,106	98,704	0	0
Apr	14,291	57,851	102,337	0	0
May	17,864	61,595	105,969	0	0
Jun	21,436	65,340	109,601	0	0
Jul	25,009	69,084	113,234	0	0
Aug	28,582	72,829	116,866	0	0
Sep	32,155	76,573	120,499	0	0
Oct	35,727	80,318	124,131	0	0
Nov	39,300	84,062	127,763	0	0
Dec	42,873	87,807	131,396	0	0
Total	278,673	806,545	1,337,011	0	0

Schedule VIIIb

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI
2nd Increment (based on Year 10 figures)

Cost of Qualifying Asset	9,693,979
Divided by Future ERCs	14,545
Cost / ERC	$666.48
Rate of Return	10.75%
Annual Return per ERC	$71.65
Annual Reduction in Return per ERC	$2.87
Annual Depreciation Expense	$387,759
Divided by Future ERCs	14,545
Annual Depreciation per ERC	$26.66
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Return	40.00%

		Year 11	Year 12	Year13	Year14	Year 15
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp		26.66	26.66	26.66	26.66	26.66
Unfunded Exp - Prior Year						
Total Unfunded Expense		26.66	53.32	79.98	106.64	133.30
Unfunded Returns						
Return on Expense - Crnt Yr.		2.87	2.87	2.87	2.87	2.87
Return on Expense - Prior Yr.		0.00	2.87	5.73	8.60	11.46
Return on Plant - Current Yr.		71.65	67.64	63.63	59.62	55.61
Earnings - Prior Year		0.00	71.65	139.28	202.91	262.53
Compound Earnings - Prior Yr		0.00	7.70	14.97	21.81	28.22
Total Compound Earnings		74.51	152.72	226.48	295.81	360.70
Year-end AFPI Charge (net of taxes)		101.17	206.04	306.46	402.45	493.99
	Jan	8.43	109.90	214.39	314.45	410.07
	Feb	16.86	118.64	222.76	322.45	417.69
	Mar	25.29	127.38	231.13	330.45	425.32
	Apr	33.72	136.12	239.50	338.45	432.95
	May	42.15	144.85	247.87	346.44	440.58
	Jun	50.58	153.59	256.24	354.44	448.21
	Jul	59.01	162.33	264.61	362.44	455.84
	Aug	67.44	171.07	272.98	370.44	463.47
	Sep	75.87	179.81	281.34	378.44	471.10
	Oct	84.30	188.55	289.71	386.44	478.73
	Nov	92.73	197.29	298.08	394.44	486.35
	Dec	101.16	206.03	306.45	402.44	493.98
	AVG	54.80	157.96	260.42	358.44	452.02
New ERC's		3,636	3,636	3,636	3,636	3,636
Limitation		14,545	14,545	14,545	14,545	14,545
# of ERC's to pay AFPI:						
	Jan	303	303	303	303	0
	Feb	303	303	303	303	0
	Mar	303	303	303	303	0
	Apr	303	303	303	303	0
	May	303	303	303	303	0
	Jun	303	303	303	303	0
	Jul	303	303	303	303	0
	Aug	303	303	303	303	0
	Sep	303	303	303	303	0
	Oct	303	303	303	303	0
	Nov	303	303	303	303	0
	Dec	303	303	303	303	0
	Total	3,636	3,636	3,636	3,636	0
	Cumulative	3,636	7,273	10,909	14,545	14,545
AFPI Collected:						
	Jan	$2,555	$33,303	$64,968	$95,288	$0
	Feb	5,109	35,951	67,504	97,712	0
	Mar	7,664	38,599	70,040	100,136	0
	Apr	10,218	41,247	72,576	102,559	0
	May	12,773	43,895	75,112	104,983	0
	Jun	15,327	46,543	77,648	107,407	0
	Jul	17,882	49,191	80,184	109,831	0
	Aug	20,436	51,839	82,720	112,255	0
	Sep	22,991	54,488	85,256	114,679	0
	Oct	25,545	57,136	87,792	117,103	0
	Nov	28,100	59,784	90,328	119,527	0
	Dec	30,655	62,432	92,864	121,950	0
	Total	199,255	574,407	946,991	1,303,429	0

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	3rd Increment	(based on Year 15 figures)
Cost of Qualifying Asset	10,323,069	
Divided by Future ERCs	14,545	
Cost / ERC	$709.73	
Rate of Return	10.75%	
Annual Return per ERC	$76.30	
Annual Reduction in Return per ERC	$3.05	
Annual Depreciation Expense	$412,923	
Divided by Future ERCs	14,545	
Annual Depreciation per ERC	$28.39	
Weighted Cost of Equity	4.30%	
Divided by Rate of Return	10.75%	
Percentage of Equity in Retur	40.00%	

	Year 16	Year 17	Year18	Year19	Year 20
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	28.39	28.39	28.39	28.39	28.39
Unfunded Exp - Prior Year					
Total Unfunded Expense	28.39	56.78	85.17	113.56	141.95
Unfunded Returns					
Return on Expense - Crnt Yr.	3.05	3.05	3.05	3.05	3.05
Return on Expense - Prior Yr.	0.00	3.05	6.10	9.16	12.21
Return on Plant - Current Yr.	76.30	72.29	68.28	64.27	60.26
Earnings - Prior Year	0.00	76.30	148.58	216.86	281.13
Compound Earnings - Prior Y	0.00	8.20	15.97	23.31	30.22
Total Compound Earnings	79.35	162.89	241.99	316.65	386.88
Year-end AFPI Charge (net of taxes)	107.74	219.67	327.16	430.21	528.82
Jan	8.98	117.09	228.65	335.77	438.45
Feb	17.96	126.42	237.61	344.36	446.67
Mar	26.94	135.74	246.56	352.94	454.89
Apr	35.92	145.07	255.52	361.53	463.10
May	44.90	154.40	264.48	370.12	471.32
Jun	53.88	163.73	273.44	378.71	479.54
Jul	62.86	173.05	282.39	387.29	487.76
Aug	71.84	182.38	291.35	395.88	495.97
Sep	80.82	191.71	300.31	404.47	504.19
Oct	89.80	201.04	309.27	413.06	512.41
Nov	98.78	210.36	318.22	421.65	520.63
Dec	107.76	219.69	327.18	430.23	528.84
AVG	58.37	168.39	277.91	383.00	483.65
New ERC's	3,636	3,636	3,636	3,636	3,636
Limitation	14,545	14,545	14,545	14,545	14,545
# of ERC's to pay AFPI:					
Jan	303	303	303	303	0
Feb	303	303	303	303	0
Mar	303	303	303	303	0
Apr	303	303	303	303	0
May	303	303	303	303	0
Jun	303	303	303	303	0
Jul	303	303	303	303	0
Aug	303	303	303	303	0
Sep	303	303	303	303	0
Oct	303	303	303	303	0
Nov	303	303	303	303	0
Dec	303	303	303	303	0
Total	3,636	3,636	3,636	3,636	0
Cumulative	3,636	7,273	10,909	14,545	14,545
AFPI Collected:					
Jan	$2,721	$35,481	$69,287	$101,748	$0
Feb	5,442	38,308	72,002	104,351	0
Mar	8,164	41,134	74,716	106,953	0
Apr	10,885	43,961	77,431	109,555	0
May	13,606	46,787	80,145	112,157	0
Jun	16,327	49,614	82,859	114,760	0
Jul	19,048	52,440	85,574	117,362	0
Aug	21,770	55,267	88,288	119,964	0
Sep	24,491	58,093	91,003	122,567	0
Oct	27,212	60,920	93,717	125,169	0
Nov	29,933	63,746	96,431	127,771	0
Dec	32,655	66,573	99,146	130,374	0
Total	212,255	612,324	1,010,599	1,392,731	0

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

4th Increment (based on Year 20 figures)

Cost of Qualifying Asset	10,371,276
Divided by Future ERCs	14,545
Cost / ERC	$713.05
Rate of Return	10.75%
Annual Return per ERC	$76.65
Annual Reduction in Return per ERC	$3.07
Annual Depreciation Expense	$414,851
Divided by Future ERCs	14,545
Annual Depreciation per ERC	$28.52
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Return	40.00%

	Year 21	Year 22	Year 23	Year 24	Year 25
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	28.52	28.52	28.52	28.52	28.52
Unfunded Exp - Prior Year					
Total Unfunded Expense	28.52	57.04	85.57	114.09	142.61
Unfunded Returns					
Return on Expense - Cmt Yr.	3.07	3.07	3.07	3.07	3.07
Return on Expense - Prior Yr.	0.00	3.07	6.13	9.20	12.26
Return on Plant - Current Yr.	76.65	72.64	68.64	64.63	60.62
Earnings - Prior Year	0.00	76.65	149.30	217.93	282.56
Compound Earnings - Prior Yr	0.00	8.24	16.05	23.43	30.37
Total Compound Earnings	79.72	163.67	243.18	318.25	388.88
Year-end AFPI Charge (net of taxes)	108.24	220.71	328.74	432.34	531.49
Jan	9.02	117.61	229.71	337.38	440.60
Feb	18.04	126.99	238.72	346.01	448.86
Mar	27.06	136.36	247.72	354.64	457.13
Apr	36.08	145.73	256.72	363.28	465.39
May	45.10	155.10	265.73	371.91	473.65
Jun	54.12	164.48	274.73	380.54	481.91
Jul	63.14	173.85	283.73	389.17	490.18
Aug	72.16	183.22	292.73	397.81	498.44
Sep	81.18	192.59	301.74	406.44	506.70
Oct	90.20	201.97	310.74	415.07	514.96
Nov	99.22	211.34	319.74	423.70	523.23
Dec	108.24	220.71	328.74	432.34	531.49
AVG	58.63	169.16	279.23	384.86	486.04
	3,636	3,636	3,636	3,636	3,636
	14,545	14,545	14,545	14,545	14,545
Jan	303	303	303	303	0
Feb	303	303	303	303	0
Mar	303	303	303	303	0
Apr	303	303	303	303	0
May	303	303	303	303	0
Jun	303	303	303	303	0
Jul	303	303	303	303	0
Aug	303	303	303	303	0
Sep	303	303	303	303	0
Oct	303	303	303	303	0
Nov	303	303	303	303	0
Dec	303	303	303	303	0
Total	3,636	3,636	3,636	3,636	0
Cumulative	3,636	7,273	10,909	14,545	14,545
Jan	$2,733	$35,640	$69,611	$102,235	$0
Feb	5,467	38,480	72,339	104,851	0
Mar	8,200	41,321	75,067	107,467	0
Apr	10,933	44,161	77,795	110,083	0
May	13,667	47,001	80,523	112,699	0
Jun	16,400	49,841	83,251	115,315	0
Jul	19,133	52,681	85,979	117,931	0
Aug	21,867	55,522	88,707	120,547	0
Sep	24,600	58,362	91,435	123,163	0
Oct	27,333	61,202	94,163	125,779	0
Nov	30,067	64,042	96,891	128,395	0
Dec	32,800	66,882	99,619	131,011	0
Total	213,200	615,136	1,015,380	1,399,480	0

Schedule VIIIe

MODEL WASTEWATER UTILITY
Scenario: WWTP - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI
5th Increment (based on Year 25 figures)

Cost of Qualifying Asset	10,153,194
Divided by Future ERCs	14,545
Cost / ERC	$698.05
Rate of Return	10.75%
Annual Return per ERC	$75.04
Annual Reduction in Return per ERC	$3.00
Annual Depreciation Expense	$406,128
Divided by Future ERCs	14,545
Annual Depreciation per ERC	$27.92
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Retur	40.00%

	Year 26	Year 27	Year 28	Year 29	Year 30
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	27.92	27.92	27.92	27.92	27.92
Unfunded Exp - Prior Year					
Total Unfunded Expense	27.92	55.84	83.77	111.69	139.61
Unfunded Returns					
Return on Expense - Crnt Yr.	3.00	3.00	3.00	3.00	3.00
Return on Expense - Prior Yr.	0.00	3.00	6.00	9.00	12.01
Return on Plant - Current Yr.	75.04	71.03	67.02	63.01	59.01
Earnings - Prior Year	0.00	75.04	146.07	213.10	276.11
Compound Earnings - Prior Y	0.00	8.07	15.70	22.91	29.68
Total Compound Earnings	78.04	160.14	237.80	311.03	379.81
Year-end AFPI Charge (net of taxes)	105.96	215.99	321.57	422.71	519.42
Jan	8.83	115.13	224.78	329.99	430.77
Feb	17.66	124.30	233.58	338.42	438.83
Mar	26.49	133.47	242.38	346.85	446.88
Apr	35.32	142.63	251.18	355.28	454.94
May	44.15	151.80	259.98	363.71	463.00
Jun	52.98	160.97	268.77	372.14	471.06
Jul	61.81	170.14	277.57	380.57	479.12
Aug	70.64	179.31	286.37	388.99	487.18
Sep	79.47	188.48	295.17	397.42	495.24
Oct	88.30	197.65	303.97	405.85	503.30
Nov	97.13	206.81	312.77	414.28	511.35
Dec	105.96	215.98	321.57	422.71	519.41
AVG	57.40	165.56	273.17	376.35	475.09
	3,636	3,636	3,636	3,636	3,636
	14,545	14,545	14,545	14,545	14,545
Jan	303	303	303	303	0
Feb	303	303	303	303	0
Mar	303	303	303	303	0
Apr	303	303	303	303	0
May	303	303	303	303	0
Jun	303	303	303	303	0
Jul	303	303	303	303	0
Aug	303	303	303	303	0
Sep	303	303	303	303	0
Oct	303	303	303	303	0
Nov	303	303	303	303	0
Dec	303	303	303	303	0
Total	3,636	3,636	3,636	3,636	0
Cumulative	3,636	7,273	10,909	14,545	14,545
Jan	$2,676	$34,887	$68,116	$99,998	$0
Feb	5,352	37,666	70,782	102,552	0
Mar	8,027	40,444	73,448	105,107	0
Apr	10,703	43,222	76,114	107,661	0
May	13,379	46,001	78,780	110,215	0
Jun	16,055	48,779	81,447	112,769	0
Jul	18,730	51,558	84,113	115,323	0
Aug	21,406	54,336	86,779	117,877	0
Sep	24,082	57,114	89,445	120,431	0
Oct	26,758	59,893	92,112	122,985	0
Nov	29,433	62,671	94,778	125,540	0
Dec	32,109	65,449	97,444	128,094	0
Total	208,709	602,020	993,358	1,368,552	0

APPENDIX B

MODEL OF UTILITY COST RECOVERY

Scenario WWTP B:
Wastewater treatment plant constructed in 2 ½ year increments

MODEL WASTEWATER UTILITY
DESCRIPTION & ASSUMPTIONS

(1) The purpose of this model is to present the financial impacts of proposed rules related to margin reserve and imputation of CIAC on investor-owned utilities in Florida.

(2) Financial impacts are presented over a 30 year projection period, including an initial 5 year construction period.

(3) Rate revenue for return on investment begins in the 6th year - the first year after plant is placed in service

(4) An assumption is made that rate revenues provide 100% reimbursement of operation and maintenance expenses and rate case expense.

(5) Plant additions are made in 2.5 year increments. Permitting, design and construction takes 5 years. Plant additions are placed in service six months before demand would otherwise exceed capacity, in accordance with DEP regulations.

(6) Customer growth is even and predictable.

(7) AFPI is calculated as of the beginning of the year the plant is placed in service. AFPI charge compounds for 2.5 years and re-starts when new plant comes on-line.

(8) Capital structure includes only long-term debt and equity.

(9) Capital Structure

	Initial	Ratio	Cost Rate	Weighted Cost
Long Term Debt	$19,500,000	60.0%	10.00%	6.00%
Short Term Debt		0.0%	9.00%	0.00%
Customer Deposits		0.0%	6.00%	0.00%
Deferred ITCs		0.0%	10.00%	0.00%
Deferred Income Taxes		0.0%	0.00%	0.00%
Common Equity	13,000,000	40.0%	11.88%	4.75%
Total Capital	$32,500,000	100.00%		10.75%

(10) AFUDC Rate 10.75%

(11) Inflation on the cost of plant construction is 3.0%

(12) Size of each increment of plant: 2.500 MGD

(13) Cost per MG of plant capacity $3.90 /MG of capacity

(14) Consumption 275 gpd/ERC

(15) New ERC's per Year 3,636

(16) Margin Reserve allowed 18 months

(17) CIAC Imputed? Yes

MODEL WASTEWATER UTILITY
Key Results
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed

(1) Average Cost per ERC / year:

	Rates	Service Availabilty	AFPI	Total
Five years	$194	$185	$21	$378
Ten years	183	92	37	275
Fifteen years	186	62	43	248
Twenty years	193	46	46	240
Twenty-five years	202	37	47	238

Total cost per ERC over twenty-five years $5,962

(2) Net Present Value of Revenue Requirement

Rates	$28,138,655
CIAC	17,285,480
AFPI	788,292
Total	$46,212,428

(3) Net Present Value of Return to the Utility

Rates	$6,708,917
AFPI	788,292
Total	$7,497,209

(4) Average Rate of Return on Investment Earned 5.30%

Maximum Rate of Return on Investment Earned 7.46%

MODEL WASTEWATER UTILITY
LIST OF SCHEDULES

Schedule I

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED NET INVESTMENT

a	b	c	d	e	f	g	h	i	j	k
	Net Investment				Return on Investment					
YEAR	CWIP	Net Plant	Net CIAC	Total (b+c+d)	Rate Base	Allowed Rate of Return	Allowed Return (f * g)	AFPI	Total (h+j)	Overall Rate of Return (j / e)
1	513,703	0	0	513,703	0		0	0	0	0.00%
2	2,107,219	0	0	2,107,219	0		0	0	0	0.00%
3	5,594,732	0	0	5,594,732	0		0	0	0	0.00%
4	10,516,894	0	0	10,516,894	0		0	0	0	0.00%
5	17,447,831	0	0	17,447,831	0		0	0	0	0.00%
6	10,304,863	11,321,084	(3,290,377)	18,335,570	2,664,799	10.75%	286,466	102,347	388,813	2.12%
7	16,659,418	10,849,372	(6,446,452)	21,062,338	2,926,437	10.75%	314,592	0	314,592	1.49%
8	8,358,983	22,388,198	(9,468,226)	21,278,955	402,124	10.75%	43,228	73,587	116,815	0.55%
9	14,227,329	21,416,047	(12,355,700)	23,287,676	6,054,595	10.75%	650,869	199,736	850,605	3.65%
10	6,555,736	34,151,366	(15,108,872)	25,598,230	3,559,115	10.75%	382,605	0	382,605	1.49%
11	11,946,160	32,608,070	(17,727,743)	26,826,488	9,800,532	10.75%	1,053,557	304,577	1,358,134	5.06%
12	19,312,831	31,064,775	(20,212,313)	30,165,293	9,576,018	10.75%	1,029,422	366,493	1,395,915	4.63%
13	9,690,353	43,444,985	(22,562,582)	30,572,756	7,206,380	10.75%	774,686	82,481	857,167	2.80%
14	16,493,373	41,321,543	(24,778,550)	33,036,367	13,777,133	10.75%	1,481,042	223,878	1,704,919	5.16%
15	7,599,894	55,088,816	(26,860,216)	35,828,494	11,665,610	10.75%	1,254,053	0	1,254,053	3.50%
16	13,848,874	52,303,261	(28,807,582)	37,344,553	18,778,733	10.75%	2,018,714	317,067	2,335,781	6.25%
17	22,388,864	49,517,707	(30,620,647)	41,285,924	17,905,993	10.75%	1,924,894	381,641	2,306,535	5.59%
18	11,233,775	62,873,310	(32,299,410)	41,807,675	16,053,548	10.75%	1,725,756	82,943	1,808,700	4.33%
19	19,120,340	59,415,208	(33,843,873)	44,691,675	23,137,053	10.75%	2,487,233	225,132	2,712,366	6.07%
20	8,810,361	74,378,798	(35,254,034)	47,935,124	21,678,456	10.75%	2,330,434	0	2,330,434	4.86%
21	16,054,640	70,153,124	(36,529,894)	49,677,870	29,373,690	10.75%	3,157,672	314,294	3,471,966	6.99%
22	25,954,830	65,927,451	(37,671,453)	54,210,827	27,649,237	10.75%	2,972,293	378,278	3,350,571	6.18%
23	13,023,024	80,413,804	(38,678,712)	54,758,116	26,401,449	10.75%	2,838,156	80,999	2,919,155	5.33%
24	22,165,715	75,408,463	(39,551,669)	58,022,509	33,860,379	10.75%	3,639,991	219,854	3,859,845	6.65%
25	10,213,623	91,758,913	(40,290,325)	61,682,211	33,154,881	10.75%	3,564,150	0	3,564,150	5.78%
26	18,611,728	85,863,747	(40,894,679)	63,580,796	41,309,678	10.75%	4,440,790	305,426	4,746,217	7.46%
27	30,088,762	79,968,581	(41,364,733)	68,692,610	38,496,081	10.75%	4,138,329	367,523	4,505,852	6.56%
28	15,097,254	95,765,783	(41,700,486)	69,162,550	37,884,320	10.75%	4,072,564	77,814	4,150,379	6.00%
29	25,696,138	88,966,768	(41,901,938)	72,760,969	45,629,499	10.75%	4,905,171	211,210	5,116,381	7.03%
30	11,840,388	106,924,969	(41,969,088)	76,796,268	45,732,289	10.75%	4,916,221	0	4,916,221	6.40%
			AVG	38,152,741				AVG	2,023,939	5.30%
			NPV	193,875,622		NPV	6,708,917	788,292	7,497,209	3.87%

Schedule II

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED REGULATORY INCOME

a YEAR	b Revenue From Rates	c O&M Expense	d Allowed Depreciation Expense	e Allowed Amortization Expense	f Property Taxes	g Gross Receipts Tax	h Allowed Interest Expense	i Allowed Pretax Profit	j Income Tax	k Allowed Net Profit	l Avg 5 Year Revenue Per ERC
1											
2											
3											
4											
5											
6	1,055,988	(90,909)	(377,369)	67,151	(117,928)	(47,519)	(159,888)	329,525	(202,947)	126,578	
7	1,254,848	(272,727)	(471,712)	201,452	(117,928)	(56,468)	(175,586)	361,879	(222,873)	139,006	
8	1,270,581	(454,545)	(777,721)	335,753	(243,038)	(57,176)	(24,127)	49,726	(30,625)	19,101	$194
9	2,610,969	(636,364)	(972,151)	470,054	(243,038)	(117,494)	(363,276)	748,702	(461,108)	287,593	
10	2,605,182	(818,182)	(1,234,636)	604,355	(385,824)	(117,233)	(213,547)	440,114	(271,057)	169,058	
11	4,070,709	(1,000,000)	(1,440,409)	738,656	(385,824)	(183,182)	(588,032)	1,211,918	(746,393)	465,525	
12	4,185,023	(1,181,818)	(1,543,295)	872,957	(385,824)	(188,326)	(574,561)	1,184,155	(729,294)	454,861	
13	4,316,071	(1,363,636)	(1,911,097)	1,007,258	(530,860)	(194,223)	(432,383)	891,129	(548,826)	342,303	$179
14	5,851,815	(1,545,455)	(2,123,442)	1,141,559	(530,860)	(263,332)	(826,628)	1,703,658	(1,049,245)	654,414	
15	6,012,122	(1,727,273)	(2,451,288)	1,275,860	(696,389)	(270,545)	(699,937)	1,442,551	(888,434)	554,116	
16	7,663,165	(1,909,091)	(2,674,132)	1,410,161	(696,389)	(344,842)	(1,126,724)	2,322,148	(1,430,158)	891,990	
17	7,661,755	(2,090,909)	(2,785,555)	1,544,462	(696,389)	(344,779)	(1,074,360)	2,214,227	(1,363,692)	850,535	
18	7,994,158	(2,272,727)	(3,227,563)	1,678,764	(864,526)	(359,737)	(963,213)	1,985,156	(1,222,613)	762,544	$189
19	9,647,564	(2,454,545)	(3,458,103)	1,813,065	(864,526)	(434,140)	(1,388,223)	2,861,091	(1,762,081)	1,099,010	
20	10,042,220	(2,636,364)	(3,863,473)	1,947,366	(1,056,418)	(451,900)	(1,300,707)	2,680,723	(1,650,997)	1,029,727	
21	11,824,711	(2,818,182)	(4,104,940)	2,081,667	(1,056,418)	(532,112)	(1,762,421)	3,632,304	(2,237,054)	1,395,250	
22	11,669,255	(3,000,000)	(4,225,673)	2,215,968	(1,056,418)	(525,116)	(1,658,954)	3,419,061	(2,105,722)	1,313,339	
23	12,237,494	(3,181,818)	(4,755,074)	2,350,269	(1,251,335)	(550,687)	(1,584,087)	3,264,761	(2,010,692)	1,254,069	$202
24	13,983,755	(3,363,636)	(5,005,341)	2,484,570	(1,251,335)	(629,269)	(2,031,623)	4,187,121	(2,578,753)	1,608,368	
25	14,650,997	(3,545,455)	(5,502,155)	2,618,871	(1,473,791)	(659,295)	(1,989,293)	4,099,880	(2,525,023)	1,574,857	
26	16,543,376	(3,727,273)	(5,764,162)	2,753,172	(1,473,791)	(744,452)	(2,478,581)	5,108,289	(3,146,079)	1,962,210	
27	16,189,219	(3,909,091)	(5,895,166)	2,887,473	(1,473,791)	(728,515)	(2,309,765)	4,760,364	(2,931,800)	1,828,564	
28	17,019,598	(4,090,909)	(6,527,054)	3,021,774	(1,699,754)	(765,882)	(2,273,059)	4,684,715	(2,885,210)	1,799,505	$216
29	18,843,624	(4,272,727)	(6,799,014)	3,156,075	(1,699,754)	(847,963)	(2,737,770)	5,642,471	(3,475,070)	2,167,401	
30	19,816,097	(4,454,545)	(7,403,443)	3,290,377	(1,957,641)	(891,724)	(2,743,937)	5,655,182	(3,482,898)	2,172,284	

Net Present Value of Revenue Requirement $28,138,655

Schedule III

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED RATE BASE & ALLOWED RETURN

a	b	c	d	e	f	g	h	i
			Rate Base					
YEAR	Average Net Plant	Used & Useful %	Net Plant U & U	Average Net CIAC	Imputed CIAC	Total	Allowed Rate of Return	Allowed Return on Rate Base
1								
2								
3								
4								
5								
6	$11,556,940	80%	$9,245,552	($1,645,188)	($4,935,565)	$2,664,799	10.75%	286,466
7	11,085,228	100%	11,085,228	(4,868,414)	(3,290,377)	2,926,437	10.75%	314,592
8	16,618,785	80%	13,295,028	(7,957,339)	(4,935,565)	402,124	10.75%	43,228
9	21,902,123	100%	21,902,123	(10,911,963)	(4,935,565)	6,054,595	10.75%	650,869
10	27,783,706	80%	22,226,965	(13,732,286)	(4,935,565)	3,559,115	10.75%	382,605
11	33,379,718	93%	31,154,404	(16,418,307)	(4,935,565)	9,800,532	10.75%	1,053,557
12	31,836,423	100%	31,836,423	(18,970,028)	(3,290,377)	9,576,018	10.75%	1,029,422
13	37,254,880	90%	33,529,392	(21,387,447)	(4,935,565)	7,206,380	10.75%	774,686
14	42,383,264	100%	42,383,264	(23,670,566)	(4,935,565)	13,777,133	10.75%	1,481,042
15	48,205,179	88%	42,420,558	(25,819,383)	(4,935,565)	11,665,610	10.75%	1,254,053
16	53,696,038	96%	51,548,197	(27,833,899)	(4,935,565)	18,778,733	10.75%	2,018,714
17	50,910,484	100%	50,910,484	(29,714,114)	(3,290,377)	17,905,993	10.75%	1,924,894
18	56,195,509	93%	52,449,141	(31,460,028)	(4,935,565)	16,053,548	10.75%	1,725,756
19	61,144,259	100%	61,144,259	(33,071,641)	(4,935,565)	23,137,053	10.75%	2,487,233
20	66,897,003	91%	61,162,974	(34,548,953)	(4,935,565)	21,678,456	10.75%	2,330,434
21	72,265,961	97%	70,201,219	(35,891,964)	(4,935,565)	29,373,690	10.75%	3,157,672
22	68,040,288	100%	68,040,288	(37,100,674)	(3,290,377)	27,649,237	10.75%	2,972,293
23	73,170,627	95%	69,512,096	(38,175,083)	(4,935,565)	26,401,449	10.75%	2,838,156
24	77,911,133	100%	77,911,133	(39,115,190)	(4,935,565)	33,860,379	10.75%	3,639,991
25	83,583,688	93%	78,011,442	(39,920,997)	(4,935,565)	33,154,881	10.75%	3,564,150
26	88,811,330	98%	86,837,745	(40,592,502)	(4,935,565)	41,309,678	10.75%	4,440,790
27	82,916,164	100%	82,916,164	(41,129,706)	(3,290,377)	38,496,081	10.75%	4,138,329
28	87,867,182	96%	84,352,495	(41,532,610)	(4,935,565)	37,884,320	10.75%	4,072,564
29	92,366,275	100%	92,366,275	(41,801,212)	(4,935,565)	45,629,499	10.75%	4,905,171
30	97,945,868	95%	92,603,367	(41,935,513)	(4,935,565)	45,732,289	10.75%	4,916,221
AVG								

Schedule IV

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CWIP AND PLANT IN SERVICE BALANCES

a	b	c	d	e	f	g	h	i
	Total				Book Value - Utility Plant in Service			Average
YEAR	Total $ Spent	Total AFUDC	Transfers to Plant	CWIP Balance	Gross	Accum. Deprec	Net	Net Plant
1	487,500	26,203		513,703				
2	1,462,500	131,016		2,107,219				
3	3,110,689	376,825		5,594,732				
4	4,154,816	767,345		10,516,894				
5	5,637,267	1,293,670		17,447,831				
6	3,892,080	757,747	(11,792,796)	10,304,863	11,792,796	(471,712)	11,321,084	11,556,940
7	5,112,796	1,241,759		16,659,418	11,792,796	(943,424)	10,849,372	11,085,228
8	3,611,792	598,750	(12,510,977)	8,358,983	24,303,773	(1,915,575)	22,388,198	16,618,785
9	4,816,571	1,051,775		14,227,329	24,303,773	(2,887,725)	21,416,047	21,902,123
10	5,026,198	1,580,824	(14,278,614)	6,555,736	38,582,387	(4,431,021)	34,151,366	27,783,706
11	4,511,988	878,437		11,946,160	38,582,387	(5,974,316)	32,608,070	33,379,718
12	5,927,132	1,439,539		19,312,831	38,582,387	(7,517,612)	31,064,775	31,836,423
13	4,187,057	694,116	(14,503,651)	9,690,353	53,086,038	(9,641,053)	43,444,985	37,254,880
14	5,583,726	1,219,295		16,493,373	53,086,038	(11,764,495)	41,321,543	42,383,264
15	5,826,741	1,832,608	(16,552,827)	7,599,894	69,638,865	(14,550,050)	55,088,816	48,205,179
16	5,230,630	1,018,349		13,848,874	69,638,865	(17,335,604)	52,303,261	53,696,038
17	6,871,170	1,668,821		22,388,864	69,638,865	(20,121,159)	49,517,707	50,910,484
18	4,853,947	804,670	(16,813,707)	11,233,775	86,452,572	(23,579,262)	62,873,310	56,195,509
19	6,473,068	1,413,497		19,120,340	86,452,572	(27,037,365)	59,415,208	61,144,259
20	6,754,789	2,124,495	(19,189,264)	8,810,361	105,641,836	(31,263,038)	74,378,798	66,897,003
21	6,063,734	1,180,546		16,054,640	105,641,836	(35,488,711)	70,153,124	72,265,961
22	7,965,569	1,934,621		25,954,830	105,641,836	(39,714,385)	65,927,451	68,040,288
23	5,627,055	932,833	(19,491,694)	13,023,024	125,133,530	(44,719,726)	80,413,804	73,170,627
24	7,504,060	1,638,631		22,165,715	125,133,530	(49,725,067)	75,408,463	77,911,133
25	7,830,652	2,462,872	(22,245,616)	10,213,623	147,379,146	(55,620,233)	91,758,913	83,583,688
26	7,029,530	1,368,576		18,611,728	147,379,146	(61,515,399)	85,863,747	88,811,330
27	9,234,278	2,242,756		30,088,762	147,379,146	(67,410,565)	79,968,581	82,916,164
28	6,523,299	1,081,409	(22,596,216)	15,097,254	169,975,362	(74,209,579)	95,765,783	87,867,182
29	8,699,263	1,899,622		25,696,138	169,975,362	(81,008,594)	88,966,768	92,366,275
30	9,077,872	2,855,143	(25,788,766)	11,840,388	195,764,127	(88,839,159)	106,924,969	97,945,868

Schedule IVa

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CONSTRUCTION

Cost of each increment of plant	$3.90 / MGD capacity
Inflation rate	3.0%
Capacity of each increment of plant	2.500 MGD
Depreciable Life of Plant	25

All plant expansions are placed in service six months before demand would otherwise exceed capacity.

Cost of construction for each increment of Plant				
Year	% Complete	$ Spent	AFUDC	Total
1	5.0%	$487,500	$26,203	$513,703
2	15.0%	$1,462,500	131,016	1,593,516
3	26.6%	$2,593,500	349,026	2,942,526
4	26.7%	$2,603,250	628,351	3,231,601
5	26.7%	$2,603,250	908,200	3,511,450
Total	100.0%	$9,750,000	$2,042,796	$11,792,796

	a	b	c	d	e	f	g	h	i	j	k	l
YEAR	CWIP											
	1st Increment		2nd Increment		3rd Increment		4th Increment		5th Increment		6th Increment	
	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC
1	487,500	26,203										
2	1,462,500	131,016										
3	2,593,500	349,026	517,189	27,799								
4	2,603,250	628,351	1,551,566	138,994								
5	2,603,250	908,200	2,751,444	370,281	282,573	15,188						
6			2,761,788	666,618	1,130,292	91,130						
7			2,761,788	963,510	2,351,008	278,250						
8					3,012,229	566,524	599,564	32,227				
9					3,017,880	890,642	1,798,691	161,133				
10					1,508,940	1,133,959	3,189,678	429,257	327,580	17,607		
11							3,201,669	772,792	1,310,318	105,644		
12							3,201,669	1,116,972	2,725,462	322,568		
13									3,491,999	656,756	695,058	37,359
14									3,498,550	1,032,498	2,085,175	186,797
15									1,749,275	1,314,569	3,697,711	497,627
16											3,711,612	895,878
17											3,711,612	1,294,876
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
Total		11,792,796		12,510,977		14,278,614		14,503,651		16,552,827		16,813,707

Schedule IVb

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CONSTRUCTION

a	b	c	d	e	f	g	h	i	j	k	l	m	o
7th Increment		8th Increment		9th Increment		10th Increment		11th Increment		12th Increment		13th Increment	
$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC
379,755	20,412												
1,519,018	122,471												
3,159,558	373,944												
4,048,184	761,360	805,763	43,310										
4,055,779	1,196,948	2,417,290	216,549										
2,027,889	1,523,946	4,286,660	576,886	440,240	23,663								
		4,302,776	1,038,568	1,760,958	141,977								
		4,302,776	1,501,117	3,662,794	433,504								
				4,692,954	882,625	934,100	50,208						
				4,701,759	1,387,591	2,802,301	251,039						
				2,350,880	1,766,671	4,969,414	668,769	510,358	27,432				
						4,988,096	1,203,985	2,041,433	164,591				
						4,988,096	1,740,206	4,246,182	502,550				
								5,440,420	1,023,205	1,082,878	58,205		
								5,450,627	1,608,599	3,248,635	291,024		
								2,725,314	2,048,055	5,760,913	775,287	591,645	31,801
	19,189,264		19,491,694		22,245,616		22,596,216		25,788,766		11,216,942		623,446

Schedule V

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF USED & USEFUL %

a	b	c	d	e	f	g	h
YEAR	Year-end Capacity MGD	Year-end Capacity ERC's	Year-end Connections (ERCs)	Average Connections (ERCs)	Margin Reserve (ERCs)	Total ERCs in Rate Base	Used & Useful %
1							
2							
3							
4							
5							
6	2.500	9,091	3,636	1,818	5,455	7,273	80%
7	2.500	9,091	7,273	5,455	3,636	9,091	100%
8	5.000	18,182	10,909	9,091	5,455	14,545	80%
9	5.000	18,182	14,545	12,727	5,455	18,182	100%
10	7.500	27,273	18,182	16,364	5,455	21,818	80%
11	7.500	27,273	21,818	20,000	5,455	25,455	93%
12	7.500	27,273	25,455	23,636	3,636	27,273	100%
13	10.000	36,364	29,091	27,273	5,455	32,727	90%
14	10.000	36,364	32,727	30,909	5,455	36,364	100%
15	12.500	45,455	36,364	34,545	5,455	40,000	88%
16	12.500	45,455	40,000	38,182	5,455	43,636	96%
17	12.500	45,455	43,636	41,818	3,636	45,455	100%
18	15.000	54,545	47,273	45,455	5,455	50,909	93%
19	15.000	54,545	50,909	49,091	5,455	54,545	100%
20	17.500	63,636	54,545	52,727	5,455	58,182	91%
21	17.500	63,636	58,182	56,364	5,455	61,818	97%
22	17.500	63,636	61,818	60,000	3,636	63,636	100%
23	20.000	72,727	65,455	63,636	5,455	69,091	95%
24	20.000	72,727	69,091	67,273	5,455	72,727	100%
25	22.500	81,818	72,727	70,909	5,455	76,364	93%
26	22.500	81,818	76,364	74,545	5,455	80,000	98%
27	22.500	81,818	80,000	78,182	3,636	81,818	100%
28	25.000	90,909	83,636	81,818	5,455	87,273	96%
29	25.000	90,909	87,273	85,455	5,455	90,909	100%
30	27.500	100,000	90,909	89,091	5,455	94,545	95%

Schedule VI

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF IMPUTED CIAC IN RATE BASE

a	b	c	d	e	f	g	h
	Calculated Imputed CIAC					Limitation	
YEAR	Service Avail. Charge	Margin Res. ERC's	Gross Imputed CIAC	Amortization	Calc. Net Imputed CIAC	MR Plant in RateBase	Imputed CIAC in Rate Base
1							
2							
3							
4							
5							
6	$923.32	5,455	($5,036,291)	$100,726	($4,935,565)	$6,934,164	($4,935,565)
7	$923.32	3,636	(3,357,527)	67,151	(3,290,377)	4,434,091	(3,290,377)
8	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	4,985,635	(4,935,565)
9	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	6,570,637	(4,935,565)
10	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,556,741	(4,935,565)
11	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	6,675,944	(4,935,565)
12	$923.32	3,636	(3,357,527)	67,151	(3,290,377)	4,244,856	(3,290,377)
13	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,588,232	(4,935,565)
14	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	6,357,490	(4,935,565)
15	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,784,622	(4,935,565)
16	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	6,443,525	(4,935,565)
17	$923.32	3,636	(3,357,527)	67,151	(3,290,377)	4,072,839	(3,290,377)
18	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,619,551	(4,935,565)
19	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	6,114,426	(4,935,565)
20	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,734,029	(4,935,565)
21	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	6,194,225	(4,935,565)
22	$923.32	3,636	(3,357,527)	67,151	(3,290,377)	3,888,016	(3,290,377)
23	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,487,797	(4,935,565)
24	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,843,335	(4,935,565)
25	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,572,246	(4,935,565)
26	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,920,755	(4,935,565)
27	$923.32	3,636	(3,357,527)	67,151	(3,290,377)	3,685,163	(3,290,377)
28	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,272,031	(4,935,565)
29	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,541,977	(4,935,565)
30	$923.32	5,455	(5,036,291)	100,726	(4,935,565)	5,342,502	(4,935,565)

Schedule VII

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CIAC BALANCES

a	b	c	d	e	f	g
	New	CIAC	CIAC - Year End Balance			Average Net
YEAR	ERCs	Collected	Gross	Acc. Amort	Net	CIAC
1		$0				
2		0				
3		0				
4		0				
5		0				
6	3,636	3,357,527	3,357,527	(67,151)	3,290,377	1,645,188
7	3,636	3,357,527	6,715,054	(268,602)	6,446,452	4,868,414
8	3,636	3,357,527	10,072,581	(604,355)	9,468,226	7,957,339
9	3,636	3,357,527	13,430,108	(1,074,409)	12,355,700	10,911,963
10	3,636	3,357,527	16,787,635	(1,678,764)	15,108,872	13,732,286
11	3,636	3,357,527	20,145,162	(2,417,419)	17,727,743	16,418,307
12	3,636	3,357,527	23,502,689	(3,290,377)	20,212,313	18,970,028
13	3,636	3,357,527	26,860,216	(4,297,635)	22,562,582	21,387,447
14	3,636	3,357,527	30,217,743	(5,439,194)	24,778,550	23,670,566
15	3,636	3,357,527	33,575,270	(6,715,054)	26,860,216	25,819,383
16	3,636	3,357,527	36,932,798	(8,125,215)	28,807,582	27,833,899
17	3,636	3,357,527	40,290,325	(9,669,678)	30,620,647	29,714,114
18	3,636	3,357,527	43,647,852	(11,348,441)	32,299,410	31,460,028
19	3,636	3,357,527	47,005,379	(13,161,506)	33,843,873	33,071,641
20	3,636	3,357,527	50,362,906	(15,108,872)	35,254,034	34,548,953
21	3,636	3,357,527	53,720,433	(17,190,538)	36,529,894	35,891,964
22	3,636	3,357,527	57,077,960	(19,406,506)	37,671,453	37,100,674
23	3,636	3,357,527	60,435,487	(21,756,775)	38,678,712	38,175,083
24	3,636	3,357,527	63,793,014	(24,241,345)	39,551,669	39,115,190
25	3,636	3,357,527	67,150,541	(26,860,216)	40,290,325	39,920,997
26	3,636	3,357,527	70,508,068	(29,613,389)	40,894,679	40,592,502
27	3,636	3,357,527	73,865,595	(32,500,862)	41,364,733	41,129,706
28	3,636	3,357,527	77,223,122	(35,522,636)	41,700,486	41,532,610
29	3,636	3,357,527	80,580,649	(38,678,712)	41,901,938	41,801,212
30	3,636	3,357,527	83,938,176	(41,969,088)	41,969,088	41,935,513

Schedule VIIa

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF SERVICE AVAILABILITY CHARGES

A	Gross Book Value	$11,792,796
B	Land	0
C	Depreciable Assets	$11,792,796
D	Accumulated Depreciation to Date	0
E	Accumulated Depreciation at Design Capacity	1,179,280
F	Net Plant at Design Capacity	10,613,516
G	Transmission & Distribution Mains	0
H	Minimum Level of CIAC	0.00%
I	CIAC to Date	0
J	Accumulated Amortization of CIAC to Date	0
K	Acc. Amort. of CIAC at design capacity	0
L	Future Customers	9,091
M	Composite Depreciation Rate	4.00%
N	Number of Years to Design Capacity	2.5
O	Existing Service Availability Charge per ERC	0
P	Level of CIAC at Design Capacity	0.00%
Q	Requested Service Availability Charge per ERC	$923.32
R	Level of CIAC at Design Capacity	75.00%
S	Minimum Service Availability Charge per ERC	0
T	Level of CIAC at Design Capacity	0.00%
U	Maximum Service Availability Charge per ERC	$923.32
V	Level of CIAC at Design Capacity	75.00%
W	No. of Customers at Design Capacity	0
X	Current No. of Customers	0
Y	Annual Growth	3,636
Z	Depreciation/Amortization multiplier	469.696970
AA	Number of Years	
AB	Depreciation rate	4.00%

Schedule VIII

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
Projected AFPI Collections

a YEAR	b New ERC's	c ERC's paying AFPI	d Avg AFPI	e AFPI Colected (k * l)
1	0	0	0.00	$0
2	0	0	0.00	0
3	0	0	0.00	0
4	0	0	0.00	0
5	0	0	0.00	0
6	3,636	1,818	56.29	102,347
7	3,636	0	0.00	0
8	3,636	1,818	40.47	73,587
9	3,636	1,818	109.85	199,736
10	3,636	0	0.00	0
11	3,636	3,636	83.76	304,577
12	3,636	1,818	201.57	366,493
13	3,636	1,818	45.36	82,481
14	3,636	1,818	123.13	223,878
15	3,636	0	0.00	0
16	3,636	3,636	87.19	317,067
17	3,636	1,818	209.90	381,641
18	3,636	1,818	45.62	82,943
19	3,636	1,818	123.82	225,132
20	3,636	0	0.00	0
21	3,636	3,636	86.43	314,294
22	3,636	1,818	208.05	378,278
23	3,636	1,818	44.55	80,999
24	3,636	1,818	120.92	219,854
25	3,636	0	0.00	0
26	3,636	3,636	83.99	305,426
27	3,636	1,818	202.14	367,523
28	3,636	1,818	42.80	77,814
29	3,636	1,818	116.17	211,210
30	3,636	0	0.00	0

Schedule VIIIa

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	1st Increment	2nd Increment (based on Year 8 figures)
Cost of Qualifying Asset	$2,311,388	$3,323,757
Divided by Future ERCs	1,818	3,636
Cost / ERC	$1,271.39	$914.12
Rate of Return	10.75%	10.75%
Annual Return per ERC	$136.67	$98.27
Annual Reduction in Return per ERC	$5.47	$3.93
Annual Depreciation Expense	$92,456	$132,950
Divided by Future ERCs	1,818	3,636
Annual Depreciation per ERC	$50.86	$36.56
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Return	40.00%	40.00%

	1st Increment			2nd Increment		
	Year 6	Year 7	Year 8a	Year 8b	Year 9	Year 10
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	50.86	50.86	50.86	36.56	36.56	36.56
Unfunded Exp - Prior Year						
Total Unfunded Expense	50.86	101.71	152.57	36.56	73.13	109.69
Unfunded Returns						
Return on Expense - Crnt Yr.	5.47	5.47	5.47	3.93	3.93	3.93
Return on Expense - Prior Yr.	0.00	5.47	10.93	0.00	3.93	7.86
Return on Plant - Current Yr.	136.67	131.21	125.74	98.27	94.34	90.41
Earnings - Prior Year	0.00	136.67	267.88	0.00	98.27	192.61
Compound Earnings - Prior Yr	0.00	14.69	28.80	0.00	10.56	20.71
Total Compound Earnings	142.14	293.51	438.82	102.20	211.03	315.51
Year-end AFPI Charge (net of taxes)	193.00	395.22	591.39	138.76	284.16	425.21
Jan	16.08	209.85	411.57		80.95	223.58
Feb	32.17	226.70	427.91		92.51	235.70
Mar	48.25	243.55	444.26		104.07	247.81
Apr	64.33	260.40	460.61		115.64	259.93
May	80.42	277.26	476.96		127.20	272.04
Jun	96.50	294.11	493.30		138.76	284.16
Jul	112.58	310.96		11.56	150.88	295.92
Aug	128.66	327.81		23.13	163.00	307.67
Sep	144.75	344.66		34.69	175.11	319.42
Oct	160.83	361.52		46.25	187.23	331.18
Nov	176.91	378.37		57.82	199.35	342.93
Dec	193.00	395.22		69.38	211.46	354.68
AVG	104.54	302.53	>>>>>	246.45	145.51	289.58
New ERC's	3,636	3,636	1,818	1,818	3,636	3,636
Limitation	1,818	1,818	1,818	3,636	3,636	3,636
# of ERC's to pay AFPI:						
Jan	303	0	0	0	303	0
Feb	303	0	0	0	303	0
Mar	303	0	0	0	303	0
Apr	303	0	0	0	303	0
May	303	0	0	0	303	0
Jun	303	0	0	0	303	0
Jul	0	0	0	303	0	0
Aug	0	0	0	303	0	0
Sep	0	0	0	303	0	0
Oct	0	0	0	303	0	0
Nov	0	0	0	303	0	0
Dec	0	0	0	303	0	0
Total	1,818	0	0	1,818	1,818	0
Cumulative	1,818	1,818	1,818	1,818	3,636	3,636
AFPI Collected:						
Jan	$4,874	$0	$0	$0	$24,529	$0
Feb	9,747	0	0	0	28,033	0
Mar	14,621	0	0	0	31,537	0
Apr	19,495	0	0	0	35,041	0
May	24,368	0	0	0	38,546	0
Jun	29,242	0	0	0	42,050	0
Jul	0	0	0	3,504	0	0
Aug	0	0	0	7,008	0	0
Sep	0	0	0	10,512	0	0
Oct	0	0	0	14,017	0	0
Nov	0	0	0	17,521	0	0
Dec	0	0	0	21,025	0	0
Total	102,347	0	0	73,587	199,736	0

Schedule VIIIb

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	3rd Increment (based on Year 10 figures)	4th Increment (based on Year 13 figures)
Cost of Qualifying Asset	$5,556,741	$3,725,488
Divided by Future ERCs	5,455	3,636
Cost / ERC	$1,018.65	$1,024.61
Rate of Return	10.75%	10.75%
Annual Return per ERC	$109.50	$110.15
Annual Reduction in Return per ERC	$4.38	$4.41
Annual Depreciation Expense	$222,270	$149,020
Divided by Future ERCs	5,455	3,636
Annual Depreciation per ERC	$40.75	$40.98
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Retur	40.00%	40.00%

	3rd Increment			4th Increment		
	Year 11	Year12	Year13a	Year 13b	Year 14	Year 15
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	40.75	40.75	40.75	40.98	40.98	40.98
Unfunded Exp - Prior Year						
Total Unfunded Expense	40.75	81.49	122.24	40.98	81.97	122.95
Unfunded Returns						
Return on Expense - Crnt Yr.	4.38	4.38	4.38	4.41	4.41	4.41
Return on Expense - Prior Yr.	0.00	4.38	8.76	0.00	4.41	8.81
Return on Plant - Current Yr.	109.50	104.04	98.57	110.15	105.74	101.33
Earnings - Prior Year	0.00	109.50	213.54	0.00	110.15	215.89
Compound Earnings - Prior Y	0.00	11.77	22.96	0.00	11.84	23.21
Total Compound Earnings	113.89	234.08	348.21	114.55	236.54	353.64
Year-end AFPI Charge (net of taxes)	154.63	315.57	470.45	155.54	318.51	476.60
Jan	12.89	168.04	328.47		90.73	250.60
Feb	25.77	181.45	341.38		103.69	264.18
Mar	38.66	194.87	354.29		116.65	277.76
Apr	51.54	208.28	367.19		129.61	291.35
May	64.43	221.69	380.10		142.57	304.93
Jun	77.32	235.10	393.01		155.54	318.51
Jul	90.20	248.51		12.96	169.12	331.68
Aug	103.09	261.92		25.92	182.70	344.86
Sep	115.97	275.33		38.88	196.28	358.03
Oct	128.86	288.74		51.85	209.86	371.20
Nov	141.75	302.16		64.81	223.44	384.38
Dec	154.63	315.57		77.77	237.02	397.55
AVG	83.76	241.80	>>>>>	203.05	163.10	324.59
New ERC's	3,636	3,636	1,818	1,818	3,636	3,636
Limitation	5,455	5,455	5,455	3,636	3,636	3,636
# of ERC's to pay AFPI:						
Jan	303	303	0	0	303	0
Feb	303	303	0	0	303	0
Mar	303	303	0	0	303	0
Apr	303	303	0	0	303	0
May	303	303	0	0	303	0
Jun	303	303	0	0	303	0
Jul	303	0	0	303	0	0
Aug	303	0	0	303	0	0
Sep	303	0	0	303	0	0
Oct	303	0	0	303	0	0
Nov	303	0	0	303	0	0
Dec	303	0	0	303	0	0
Total	3,636	1,818	0	1,818	1,818	0
Cumulative	3,636	5,455	5,455	1,818	3,636	3,636
AFPI Collected:						
Jan	$3,905	$50,922	$0	$0	$27,494	$0
Feb	7,810	54,986	0	0	31,421	0
Mar	11,714	59,050	0	0	35,349	0
Apr	15,619	63,114	0	0	39,277	0
May	19,524	67,178	0	0	43,204	0
Jun	23,429	71,242	0	0	47,132	0
Jul	27,334	0	0	3,928	0	0
Aug	31,239	0	0	7,855	0	0
Sep	35,143	0	0	11,783	0	0
Oct	39,048	0	0	15,711	0	0
Nov	42,953	0	0	19,638	0	0
Dec	46,858	0	0	23,566	0	0
Total	304,577	366,493	0	82,481	223,878	0

Schedule VIIIc

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	5th Increment (based on Year 15 figures)	6th Increment (based on Year 18 figures)
Cost of Qualifying Asset	$5,784,622	$3,746,367
Divided by Future ERCs	5,455	3,636
Cost / ERC	$1,060.43	$1,030.35
Rate of Return	10.75%	10.75%
Annual Return per ERC	$114.00	$110.76
Annual Reduction in Return per ERC	$4.56	$4.43
Annual Depreciation Expense	$231,385	$149,855
Divided by Future ERCs	5,455	3,636
Annual Depreciation per ERC	$42.42	$41.21
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Return	40.00%	40.00%

	5th Increment			6th Increment		
	Year 16	Year17	Year18a	Year 18b	Year 19	Year 20
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	42.42	42.42	42.42	41.21	41.21	41.21
Unfunded Exp - Prior Year						
Total Unfunded Expense	42.42	84.83	127.25	41.21	82.43	123.64
Unfunded Returns						
Return on Expense - Crnt Yr.	4.56	4.56	4.56	4.43	4.43	4.43
Return on Expense - Prior Yr.	0.00	4.56	9.12	0.00	4.43	8.86
Return on Plant - Current Yr.	114.00	108.53	103.06	110.76	106.33	101.90
Earnings - Prior Year	0.00	114.00	222.52	0.00	110.76	217.10
Compound Earnings - Prior Yr	0.00	12.25	23.92	0.00	11.91	23.34
Total Compound Earnings	118.56	243.90	363.19	115.19	237.86	355.63
Year-end AFPI Charge (net of taxes)	160.97	328.73	490.44	156.41	320.29	479.27
Jan	13.41	174.95	342.21		91.24	252.01
Feb	26.83	188.93	355.68		104.27	265.66
Mar	40.24	202.91	369.16		117.31	279.32
Apr	53.66	216.89	382.63		130.34	292.98
May	67.07	230.87	396.11		143.37	306.63
Jun	80.49	244.85	409.59		156.41	320.29
Jul	93.90	258.83		13.03	170.06	333.54
Aug	107.32	272.81		26.07	183.72	346.79
Sep	120.73	286.79		39.10	197.38	360.04
Oct	134.14	300.77		52.14	211.04	373.28
Nov	147.56	314.75		65.17	224.69	386.53
Dec	160.97	328.73		78.20	238.35	399.78
AVG	87.19	251.84	>>>>>	210.76	164.02	326.40
	3,636	3,636	1,818	1,818	3,636	3,636
	5,455	5,455	5,455	3,636	3,636	3,636
Jan	303	303	0	0	303	0
Feb	303	303	0	0	303	0
Mar	303	303	0	0	303	0
Apr	303	303	0	0	303	0
May	303	303	0	0	303	0
Jun	303	303	0	0	303	0
Jul	303	0	0	303	0	0
Aug	303	0	0	303	0	0
Sep	303	0	0	303	0	0
Oct	303	0	0	303	0	0
Nov	303	0	0	303	0	0
Dec	303	0	0	303	0	0
Total	3,636	1,818	0	1,818	1,818	0
Cumulative	3,636	5,455	5,455	1,818	3,636	3,636
Jan	$4,065	$53,016	$0	$0	$27,648	$0
Feb	8,130	57,252	0	0	31,598	0
Mar	12,195	61,489	0	0	35,547	0
Apr	16,260	65,725	0	0	39,497	0
May	20,325	69,961	0	0	43,447	0
Jun	24,390	74,198	0	0	47,396	0
Jul	28,455	0	0	3,950	0	0
Aug	32,520	0	0	7,899	0	0
Sep	36,585	0	0	11,849	0	0
Oct	40,650	0	0	15,799	0	0
Nov	44,715	0	0	19,748	0	0
Dec	48,780	0	0	23,698	0	0
Total	317,067	381,641	0	82,943	225,132	0

Schedule VIIId

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	7th Increment (based on Year 20 figures)	8th Increment (based on Year 23 figures)
Cost of Qualifying Asset	$5,734,029	$3,658,531
Divided by Future ERCs	5,455	3,636
Cost / ERC	$1,051.15	$1,006.20
Rate of Return	10.75%	10.75%
Annual Return per ERC	$113.00	$108.17
Annual Reduction in Return per ERC	$4.52	$4.33
Annual Depreciation Expense	$229,361	$146,341
Divided by Future ERCs	5,455	3,636
Annual Depreciation per ERC	$42.05	$40.25
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Return	40.00%	40.00%

	7th Increment			8th Increment		
	Year 21	Year 22	Year 23a	Year 23b	Year 24	Year 25
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	42.05	42.05	42.05	40.25	40.25	40.25
Unfunded Exp - Prior Year						
Total Unfunded Expense	42.05	84.09	126.14	40.25	80.50	120.74
Unfunded Returns						
Return on Expense - Crnt Yr.	4.52	4.52	4.52	4.33	4.33	4.33
Return on Expense - Prior Yr.	0.00	4.52	9.04	0.00	4.33	8.65
Return on Plant - Current Yr.	113.00	107.53	102.06	108.17	103.84	99.51
Earnings - Prior Year	0.00	113.00	220.53	0.00	108.17	212.01
Compound Earnings - Prior Yr	0.00	12.15	23.71	0.00	11.63	22.79
Total Compound Earnings	117.52	241.72	359.86	112.49	232.29	347.29
Year-end AFPI Charge (net of taxes)	159.56	325.81	486.00	152.74	312.78	468.03
Jan	13.30	173.42	339.16		89.10	246.10
Feb	26.59	187.27	352.51		101.83	259.44
Mar	39.89	201.13	365.86		114.56	272.77
Apr	53.19	214.98	379.21		127.28	286.11
May	66.49	228.83	392.56		140.01	299.45
Jun	79.78	242.69	405.91		152.74	312.78
Jul	93.08	256.54		12.73	166.08	325.72
Aug	106.38	270.39		25.46	179.41	338.66
Sep	119.67	284.25		38.19	192.75	351.60
Oct	132.97	298.10		50.91	206.09	364.53
Nov	146.27	311.96		63.64	219.42	377.47
Dec	159.56	325.81		76.37	232.76	390.41
AVG	86.43	249.61	>>>>>	208.54	160.17	318.75
	3,636	3,636	1,818	1,818	3,636	3,636
	5,455	5,455	5,455	3,636	3,636	3,636
Jan	303	303	0	0	303	0
Feb	303	303	0	0	303	0
Mar	303	303	0	0	303	0
Apr	303	303	0	0	303	0
May	303	303	0	0	303	0
Jun	303	303	0	0	303	0
Jul	303	0	0	303	0	0
Aug	303	0	0	303	0	0
Sep	303	0	0	303	0	0
Oct	303	0	0	303	0	0
Nov	303	0	0	303	0	0
Dec	303	0	0	303	0	0
Total	3,636	1,818	0	1,818	1,818	0
Cumulative	3,636	5,455	5,455	1,818	3,636	3,636
Jan	$4,029	$52,551	$0	$0	$27,000	$0
Feb	8,059	56,749	0	0	30,857	0
Mar	12,088	60,947	0	0	34,714	0
Apr	16,118	65,145	0	0	38,571	0
May	20,147	69,343	0	0	42,428	0
Jun	24,176	73,542	0	0	46,285	0
Jul	28,206	0	0	3,857	0	0
Aug	32,235	0	0	7,714	0	0
Sep	36,265	0	0	11,571	0	0
Oct	40,294	0	0	15,428	0	0
Nov	44,324	0	0	19,285	0	0
Dec	48,353	0	0	23,143	0	0
Total	314,294	378,278	0	80,999	219,854	0

Schedule VIIIe

MODEL WASTEWATER UTILITY
Scenario: WWTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	9th Increment (based on Year 25 figures)	10th Increment (based on Year 28 figures)
Cost of Qualifying Asset	$5,572,246	$3,514,687
Divided by Future ERCs	5,455	3,636
Cost / ERC	$1,021.49	$966.64
Rate of Return	10.75%	10.75%
Annual Return per ERC	$109.81	$103.91
Annual Reduction in Return per ERC	$4.39	$4.16
Annual Depreciation Expense	$222,890	$140,587
Divided by Future ERCs	5,455	3,636
Annual Depreciation per ERC	$40.86	$38.67
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Retur	40.00%	40.00%

	9th Increment			10th Increment		
	Year 26	Year 27	Year 28a	Year 28b	Year 29	Year 30
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	40.86	40.86	40.86	38.67	38.67	38.67
Unfunded Exp - Prior Year						
Total Unfunded Expense	40.86	81.72	122.58	38.67	77.33	116.00
Unfunded Returns						
Return on Expense - Crnt Yr.	4.39	4.39	4.39	4.16	4.16	4.16
Return on Expense - Prior Yr.	0.00	4.39	8.78	0.00	4.16	8.31
Return on Plant - Current Yr.	109.81	104.34	98.88	103.91	99.76	95.60
Earnings - Prior Year	0.00	109.81	214.15	0.00	103.91	203.67
Compound Earnings - Prior Y	0.00	11.80	23.02	0.00	11.17	21.89
Total Compound Earnings	114.20	234.74	349.23	108.07	223.15	333.63
Year-end AFPI Charge (net of taxes)	155.06	316.46	471.81	146.74	300.48	449.63
Jan	12.92	168.51	329.41		85.60	236.42
Feb	25.84	181.96	342.35		97.82	249.23
Mar	38.77	195.41	355.30		110.05	262.05
Apr	51.69	208.86	368.24		122.28	274.86
May	64.61	222.31	381.19		134.51	287.67
Jun	77.53	235.76	394.14		146.74	300.48
Jul	90.45	249.21		12.23	159.55	312.91
Aug	103.38	262.66		24.46	172.36	325.34
Sep	116.30	276.11		36.68	185.17	337.77
Oct	129.22	289.56		48.91	197.99	350.20
Nov	142.14	303.01		61.14	210.80	362.63
Dec	155.06	316.46		73.37	223.61	375.06
AVG	83.99	242.49	>>>>>	202.28	153.87	306.22
	3,636	3,636	1,818	1,818	3,636	3,636
	5,455	5,455	5,455	3,636	3,636	3,636
Jan	303	303	0	0	303	0
Feb	303	303	0	0	303	0
Mar	303	303	0	0	303	0
Apr	303	303	0	0	303	0
May	303	303	0	0	303	0
Jun	303	303	0	0	303	0
Jul	303	0	0	303	0	0
Aug	303	0	0	303	0	0
Sep	303	0	0	303	0	0
Oct	303	0	0	303	0	0
Nov	303	0	0	303	0	0
Dec	303	0	0	303	0	0
Total	3,636	1,818	0	1,818	1,818	0
Cumulative	3,636	5,455	5,455	1,818	3,636	3,636
Jan	$3,916	$51,064	$0	$0	$25,938	$0
Feb	7,831	55,140	0	0	29,643	0
Mar	11,747	59,216	0	0	33,349	0
Apr	15,663	63,292	0	0	37,054	0
May	19,579	67,368	0	0	40,760	0
Jun	23,494	71,443	0	0	44,465	0
Jul	27,410	0	0	3,705	0	0
Aug	31,326	0	0	7,411	0	0
Sep	35,242	0	0	11,116	0	0
Oct	39,157	0	0	14,822	0	0
Nov	43,073	0	0	18,527	0	0
Dec	46,989	0	0	22,233	0	0
Total	305,426	367,523	0	77,814	211,210	0

APPENDIX C

MODEL OF UTILITY COST RECOVERY

Scenario WTP A:
Water treatment plant constructed in 5 year increments

MODEL WATER UTILITY
DESCRIPTION & ASSUMPTIONS

(1) The purpose of this model is to present the financial impacts of proposed rules related to margin reserve and imputation of CIAC on investor-owned utilities in Florida.

(2) Financial impacts are presented over a 30 year projection period, including an initial 5 year construction period.

(3) Rate revenue for return on investment begins in the 6th year - the first year after plant is placed in service

(4) An assumption is made that rate revenues provide 100% reimbursement of operation and maintenance expenses and rate case expense.

(5) Plant additions are made in 5 year increments. Permitting, design and construction takes 5 years. Plant additions are placed in service six months before demand would otherwise exceed capacity.

(6) Customer growth is even and predictable.

(7) AFPI is calculated as of the beginning of the year the plant is placed in service. AFPI charge compounds for 5 years and re-starts when new plant comes on-line.

(8) Capital structure includes only long-term debt and equity.

(9) Capital Structure

	Initial	Ratio	Cost Rate	Weighted Cost
Long Term Debt	$1,900,000	60.0%	10.00%	6.00%
Short Term Debt		0.0%	9.00%	0.00%
Customer Deposits		0.0%	6.00%	0.00%
Deferred ITCs		0.0%	10.00%	0.00%
Deferred Income Taxes		0.0%	0.00%	0.00%
Common Equity	1,266,667	40.0%	11.88%	4.75%
Total Capital	$3,166,667	100.00%		10.75%

(10) AFUDC Rate 10.75%

(11) Inflation on the cost of plant construction is 3.0%

(12) Size of each increment of plant: 1.000 MGD

(13) Cost per MG of plant capacity $1.90 /MG of capacity

(14) Consumption 350 gpd/ERC

(15) New ERC's per Year 571

(16) Margin Reserve allowed 18 months

(17) CIAC Imputed? Yes

MODEL WATER UTILITY
Key Results
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed

(1) Average Cost per ERC / year:

	Rates	Service Availability	AFPI	Total
Five Years	$158	$107	$113	$378
Ten Years	145	54	127	325
Fifteen Years	144	36	134	315
Twenty Years	147	27	139	313
Twenty-five Years	151	21	140	313

Total cost per ERC over twenty-five years $7,829

(2) Net Present Value of Revenue Requirement:

Rates	$3,412,068
CIAC	1,580,416
AFPI	389,568
Total	$5,382,053

(3) Net Present Value of Return to the Utility

Rates	$722,897
AFPI	389,568
Total	$1,112,465

(4) Average Rate of Return on Investment Earned 8.59%

Maximum Rate of Return on Investment Earned 6.16%

MODEL WATER UTILITY
LIST OF SCHEDULES

Schedule I

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED RETURN ON NET INVESTMENT

a YEAR	b CWIP	c Net Plant	d Net CIAC	e Net Investment	f Rate Base	g Allowed Rate of Return	h Net Income at Allowed Rate of Rtn	i AFPI	j Total	k Overall Rate of Return
1	100,106	0	0	100,106	0	10.75%	0	0	0	0.00%
2	410,638	0	0	410,638	0	10.75%	0	0	0	0.00%
3	984,053	0	0	984,053	0	10.75%	0	0	0	0.00%
4	1,613,801	0	0	1,613,801	0	10.75%	0	0	0	0.00%
5	2,356,109	0	0	2,356,109	0	10.75%	0	0	0	0.00%
6	296,046	2,206,160	(300,840)	2,201,366	299,169	10.75%	32,161	37,031	69,192	3.14%
7	808,414	2,114,237	(589,401)	2,333,250	399,739	10.75%	42,972	107,179	150,151	6.44%
8	1,505,812	2,022,313	(865,682)	2,662,443	475,818	10.75%	51,150	177,671	228,822	8.59%
9	2,267,473	1,930,390	(1,129,685)	3,068,178	527,408	10.75%	56,696	0	56,696	1.85%
10	67,267	4,509,666	(1,381,408)	3,195,525	225,210	10.75%	24,210	0	24,210	0.76%
11	343,198	4,306,443	(1,620,852)	3,028,789	1,133,248	10.75%	121,824	26,483	148,307	4.90%
12	937,174	4,103,219	(1,848,017)	3,192,376	1,178,170	10.75%	126,653	76,331	202,984	6.36%
13	1,745,649	3,899,996	(2,062,903)	3,582,742	1,194,727	10.75%	128,433	125,826	254,259	7.10%
14	2,628,622	3,696,773	(2,265,509)	4,059,886	1,182,918	10.75%	127,164	173,176	300,340	7.40%
15	77,981	6,590,201	(2,455,837)	4,212,346	959,958	10.75%	103,195	0	103,195	2.45%
16	397,861	6,257,951	(2,633,885)	4,021,927	2,143,140	10.75%	230,388	28,191	258,579	6.43%
17	1,086,441	5,925,700	(2,799,654)	4,212,488	2,111,553	10.75%	226,992	81,334	308,326	7.32%
18	2,023,685	5,593,450	(2,953,144)	4,663,992	2,047,945	10.75%	220,154	134,242	354,396	7.60%
19	3,047,294	5,261,199	(3,094,354)	5,214,139	1,952,316	10.75%	209,874	185,006	394,879	7.57%
20	90,402	8,518,817	(3,223,286)	5,385,933	1,901,927	10.75%	204,457	0	204,457	3.80%
21	461,230	8,036,989	(3,339,938)	5,158,281	3,303,346	10.75%	355,110	28,340	383,450	7.43%
22	1,259,483	7,555,161	(3,444,311)	5,370,333	3,173,083	10.75%	341,106	81,750	422,856	7.87%
23	2,346,006	7,073,332	(3,536,405)	5,882,934	3,006,916	10.75%	323,244	134,920	458,163	7.79%
24	3,532,649	6,591,504	(3,616,219)	6,507,933	2,804,846	10.75%	301,521	185,945	487,466	7.49%
25	104,800	10,271,317	(3,683,755)	6,692,362	2,981,138	10.75%	320,472	0	320,472	4.79%
26	534,692	9,616,087	(3,739,011)	6,411,768	4,587,815	10.75%	493,190	27,746	520,936	8.12%
27	1,460,086	8,960,857	(3,781,988)	6,638,955	4,333,635	10.75%	465,866	80,012	545,878	8.22%
28	2,719,664	8,305,627	(3,812,686)	7,212,605	4,039,315	10.75%	434,226	131,999	566,225	7.85%
29	4,095,308	7,650,397	(3,831,105)	7,914,600	3,704,856	10.75%	398,272	181,840	580,112	7.33%
30	121,492	11,819,650	(3,837,245)	8,103,897	4,151,585	10.75%	446,295	0	446,295	5.51%
			AVG	4,213,125				AVG	259,688	6.16%
			NPV	22,887,218		NPV	722,897	389,568	1,112,465	4.86%

Schedule II

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED REGULATORY INCOME

a YEAR	b Revenue From Rates	c O&M Expense	d Allowed Depreciation Expense	e Allowed Amortization Expense	f Property Taxes	g Gross Receipts Tax	h Allowed Interest Expense	i Allowed Pretax Profit	j Income Tax	k Allowed Net Profit	l Avg 5 Year Revenue Per ERC
1											
2											
3											
4											
5											
6	128,629	(14,286)	(36,769)	6,140	(22,981)	(5,788)	(17,950)	36,995	(22,784)	14,211	
7	184,281	(42,857)	(55,154)	18,419	(22,981)	(8,293)	(23,984)	49,431	(30,443)	18,988	
8	235,223	(71,429)	(73,539)	30,698	(22,981)	(10,585)	(28,549)	58,839	(36,238)	22,601	$158
9	281,455	(100,000)	(91,923)	42,977	(22,981)	(12,665)	(31,644)	65,218	(40,167)	25,052	
10	300,960	(128,571)	(121,934)	55,256	(50,806)	(13,543)	(13,513)	27,849	(17,152)	10,697	
11	513,927	(157,143)	(142,256)	67,536	(50,806)	(23,127)	(67,995)	140,136	(86,306)	53,829	
12	560,906	(185,714)	(162,579)	79,815	(50,806)	(25,241)	(70,690)	145,691	(89,728)	55,963	
13	602,430	(214,286)	(182,901)	92,094	(50,806)	(27,109)	(71,684)	147,738	(90,989)	56,750	$140
14	638,499	(242,857)	(203,223)	104,373	(50,806)	(28,732)	(70,975)	146,278	(90,089)	56,189	
15	688,789	(271,429)	(243,650)	116,652	(83,063)	(30,996)	(57,597)	118,707	(73,109)	45,598	
16	956,584	(300,000)	(265,800)	128,931	(83,063)	(43,046)	(128,588)	265,017	(163,218)	101,799	
17	990,763	(328,571)	(287,950)	141,211	(83,063)	(44,584)	(126,693)	261,111	(160,813)	100,299	
18	1,018,784	(357,143)	(310,100)	153,490	(83,063)	(45,845)	(122,877)	253,246	(155,968)	97,277	$144
19	1,040,647	(385,714)	(332,250)	165,769	(83,063)	(46,829)	(117,139)	241,420	(148,685)	92,735	
20	1,142,892	(414,286)	(385,463)	178,048	(120,457)	(51,430)	(114,116)	235,189	(144,848)	90,342	
21	1,454,689	(442,857)	(409,554)	190,327	(120,457)	(65,461)	(198,201)	408,487	(251,578)	156,909	
22	1,471,925	(471,429)	(433,645)	202,607	(120,457)	(66,237)	(190,385)	392,378	(241,657)	150,721	
23	1,482,255	(500,000)	(457,737)	214,886	(120,457)	(66,701)	(180,415)	371,831	(229,002)	142,829	$151
24	1,485,681	(528,571)	(481,828)	227,165	(120,457)	(66,856)	(168,291)	346,843	(213,613)	133,230	
25	1,653,833	(557,143)	(550,393)	239,444	(163,808)	(74,422)	(178,868)	368,643	(227,039)	141,604	
26	2,007,321	(585,714)	(576,602)	251,723	(163,808)	(90,329)	(275,269)	567,322	(349,401)	217,921	
27	2,002,943	(614,286)	(602,812)	264,002	(163,808)	(90,132)	(260,018)	535,890	(330,043)	205,848	
28	1,990,846	(642,857)	(629,021)	276,282	(163,808)	(89,588)	(242,359)	499,495	(307,628)	191,867	$159
29	1,971,030	(671,429)	(655,230)	288,561	(163,808)	(88,696)	(222,291)	458,137	(282,156)	175,981	
30	2,217,570	(700,000)	(742,083)	300,840	(214,063)	(99,791)	(249,095)	513,378	(316,178)	197,200	

Net Present Value of Revenue Requirement $3,412,068

Schedule III

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED RATE BASE & ALLOWED RETURN

a	b	c	d	e	f	g	h	i
			Rate Base					
YEAR	Average Net Plant	Used & Useful %	Net Plant U & U	Average Net CIAC	Imputed CIAC	Total	Allowed Rate of Return	Allowed Return on Rate Base
1								
2								
3								
4								
5								
6	$2,252,122	40%	$900,849	($150,420)	($451,260)	$299,169	10.75%	32,161
7	2,160,198	60%	1,296,119	(445,120)	(451,260)	399,739	10.75%	42,972
8	2,068,275	80%	1,654,620	(727,542)	(451,260)	475,818	10.75%	51,150
9	1,976,352	100%	1,976,352	(997,684)	(451,260)	527,408	10.75%	56,696
10	3,220,028	60%	1,932,017	(1,255,546)	(451,260)	225,210	10.75%	24,210
11	4,408,054	70%	3,085,638	(1,501,130)	(451,260)	1,133,248	10.75%	121,824
12	4,204,831	80%	3,363,865	(1,734,435)	(451,260)	1,178,170	10.75%	126,653
13	4,001,608	90%	3,601,447	(1,955,460)	(451,260)	1,194,727	10.75%	128,433
14	3,798,384	100%	3,798,384	(2,164,206)	(451,260)	1,182,918	10.75%	127,164
15	5,143,487	73%	3,771,890	(2,360,673)	(451,260)	959,958	10.75%	103,195
16	6,424,076	80%	5,139,261	(2,544,861)	(451,260)	2,143,140	10.75%	230,388
17	6,091,826	87%	5,279,582	(2,716,769)	(451,260)	2,111,553	10.75%	226,992
18	5,759,575	93%	5,375,604	(2,876,399)	(451,260)	2,047,945	10.75%	220,154
19	5,427,325	100%	5,427,325	(3,023,749)	(451,260)	1,952,316	10.75%	209,874
20	6,890,008	80%	5,512,007	(3,158,820)	(451,260)	1,901,927	10.75%	204,457
21	8,277,903	85%	7,036,218	(3,281,612)	(451,260)	3,303,346	10.75%	355,110
22	7,796,075	90%	7,016,467	(3,392,124)	(451,260)	3,173,083	10.75%	341,106
23	7,314,247	95%	6,948,534	(3,490,358)	(451,260)	3,006,916	10.75%	323,244
24	6,832,418	100%	6,832,418	(3,576,312)	(451,260)	2,804,846	10.75%	301,521
25	8,431,411	84%	7,082,385	(3,649,987)	(451,260)	2,981,138	10.75%	320,472
26	9,943,702	88%	8,750,458	(3,711,383)	(451,260)	4,587,815	10.75%	493,190
27	9,288,472	92%	8,545,394	(3,760,500)	(451,260)	4,333,635	10.75%	465,866
28	8,633,242	96%	8,287,912	(3,797,337)	(451,260)	4,039,315	10.75%	434,226
29	7,978,012	100%	7,978,012	(3,821,896)	(451,260)	3,704,856	10.75%	398,272
30	9,735,024	87%	8,437,020	(3,834,175)	(451,260)	4,151,585	10.75%	446,295
AVG								

Schedule IV

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED CWIP AND PLANT IN SERVICE BALANCES

a	b	c	d	e	f	g	h	i
	Total				Book Value - Utility Plant in Service			Average
YEAR	Total $ Spent	Total AFUDC	Transfers to Plant	CWIP Balance	Gross	Accum. Deprec	Net	Net Plant
1	95,000	5,106		100,106				
2	285,000	25,531		410,638				
3	505,400	68,015		984,053				
4	507,300	122,448		1,613,801				
5	562,366	179,942		2,356,109				
6	220,262	17,759	(2,298,083)	296,046	2,298,083	(91,923)	2,206,160	2,252,122
7	458,145	54,223		808,414	2,298,083	(183,847)	2,114,237	2,160,198
8	586,998	110,399		1,505,812	2,298,083	(275,770)	2,022,313	2,068,275
9	588,100	173,561		2,267,473	2,298,083	(367,693)	1,930,390	1,976,352
10	357,886	224,408	(2,782,499)	67,267	5,080,582	(570,917)	4,509,666	3,220,028
11	255,344	20,587		343,198	5,080,582	(774,140)	4,306,443	4,408,054
12	531,116	62,859		937,174	5,080,582	(977,363)	4,103,219	4,204,831
13	680,492	127,983		1,745,649	5,080,582	(1,180,587)	3,899,996	4,001,608
14	681,769	201,205		2,628,622	5,080,582	(1,383,810)	3,696,773	3,798,384
15	414,888	260,150	(3,225,679)	77,981	8,306,262	(1,716,060)	6,590,201	5,143,487
16	296,014	23,866		397,861	8,306,262	(2,048,311)	6,257,951	6,424,076
17	615,709	72,871		1,086,441	8,306,262	(2,380,561)	5,925,700	6,091,826
18	788,877	148,368		2,023,685	8,306,262	(2,712,812)	5,593,450	5,759,575
19	790,357	233,251		3,047,294	8,306,262	(3,045,062)	5,261,199	5,427,325
20	480,969	301,585	(3,739,446)	90,402	12,045,708	(3,526,890)	8,518,817	6,890,008
21	343,161	27,667		461,230	12,045,708	(4,008,719)	8,036,989	8,277,903
22	713,775	84,478		1,259,483	12,045,708	(4,490,547)	7,555,161	7,796,075
23	914,524	171,999		2,346,006	12,045,708	(4,972,375)	7,073,332	7,314,247
24	916,240	270,402		3,532,649	12,045,708	(5,454,204)	6,591,504	6,832,418
25	557,575	349,620	(4,335,043)	104,800	16,380,751	(6,109,434)	10,271,317	8,431,411
26	397,818	32,074		534,692	16,380,751	(6,764,664)	9,616,087	9,943,702
27	827,461	97,933		1,460,086	16,380,751	(7,419,894)	8,960,857	9,288,472
28	1,060,184	199,394		2,719,664	16,380,751	(8,075,124)	8,305,627	8,633,242
29	1,062,174	313,470		4,095,308	16,380,751	(8,730,354)	7,650,397	7,978,012
30	646,382	405,305	(5,025,503)	121,492	21,406,254	(9,586,604)	11,819,650	9,735,024

Schedule IVa

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED CONSTRUCTION

Cost of each increment of plant	$1.90 / MGD capacity
Capacity of each increment of plant	1.000 MGD
Inflation on cost of plant expansions	3.0%
Depreciable Life of Plant	25
All plant expansions are placed in service the first day of the year	

Cost of construction for each increment of Plant			
% Complete	$ Spent	AFUDC	Total
5.0%	$95,000	$5,106	$100,106
15.0%	$285,000	25,531	310,531
26.6%	$505,400	68,015	573,415
26.7%	$507,300	122,448	629,748
26.7%	$507,300	176,983	684,283
	$1,900,000	$398,083	$2,298,083

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
YEAR	1st Increment		2nd Increment		3rd Increment		4th Increment		5th Increment		6th Increment		7th Increment	
	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC
1	95,000	5,106												
2	285,000	25,531												
3	505,400	68,015												
4	507,300	122,448												
5	507,300	176,983	55,066	2,960										
6			220,262	17,759										
7			458,145	54,223										
8			586,998	110,399										
9			588,100	173,561										
10			294,050	220,977	63,836	3,431								
11					255,344	20,587								
12					531,116	62,859								
13					680,492	127,983								
14					681,769	201,205								
15					340,884	256,172	74,003	3,978						
16							296,014	23,866						
17							615,709	72,871						
18							788,877	148,368						
19							790,357	233,251						
20							395,178	296,974	85,790	4,611				
21									343,161	27,667				
22									713,775	84,478				
23									914,524	171,999				
24									916,240	270,402				
25									458,120	344,274	99,454	5,346		
26											397,818	32,074		
27											827,461	97,933		
28											1,060,184	199,394		
29											1,062,174	313,470		
30											531,087	399,108	115,295	6,197

Schedule V

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF USED & USEFUL %

a	b	c	d	e	f	g	h
	Capacity						
YEAR	MGD	ERC's	Year-end Connections (ERCs)	Average Connections (ERCs)	Margin Reserve (ERCs)	Total ERCs in Rate Base	Used & Useful %
1							
2							
3							
4							
5							
6	1.000	2,857	571	286	857	1,143	40%
7	1.000	2,857	1,143	857	857	1,714	60%
8	1.000	2,857	1,714	1,429	857	2,286	80%
9	1.000	2,857	2,286	2,000	857	2,857	100%
10	2.000	5,714	2,857	2,571	857	3,429	60%
11	2.000	5,714	3,429	3,143	857	4,000	70%
12	2.000	5,714	4,000	3,714	857	4,571	80%
13	2.000	5,714	4,571	4,286	857	5,143	90%
14	2.000	5,714	5,143	4,857	857	5,714	100%
15	3.000	8,571	5,714	5,429	857	6,286	73%
16	3.000	8,571	6,286	6,000	857	6,857	80%
17	3.000	8,571	6,857	6,571	857	7,429	87%
18	3.000	8,571	7,429	7,143	857	8,000	93%
19	3.000	8,571	8,000	7,714	857	8,571	100%
20	4.000	11,429	8,571	8,286	857	9,143	80%
21	4.000	11,429	9,143	8,857	857	9,714	85%
22	4.000	11,429	9,714	9,429	857	10,286	90%
23	4.000	11,429	10,286	10,000	857	10,857	95%
24	4.000	11,429	10,857	10,571	857	11,429	100%
25	5.000	14,286	11,429	11,143	857	12,000	84%
26	5.000	14,286	12,000	11,714	857	12,571	88%
27	5.000	14,286	12,571	12,286	857	13,143	92%
28	5.000	14,286	13,143	12,857	857	13,714	96%
29	5.000	14,286	13,714	13,429	857	14,286	100%
30	6.000	17,143	14,286	14,000	857	14,857	87%

Schedule VI

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF IMPUTED CIAC IN RATE BASE

a	b	c	d	e	f	g	h
	Calculated Imputed CIAC					Limitation	
YEAR	Service Avail. Charge	Margin Res. ERC's	Gross Imputed CIAC	Amortization	Calc. Net Imputed CIAC	MR Plant in RateBase	Imputed CIAC in Rate Base
1							
2							
3							
4							
5							
6	$537.21	857	(460,469)	$9,209	($451,260)	$675,636	($451,260)
7	$537.21	857	(460,469)	9,209	(451,260)	648,059	(451,260)
8	$537.21	857	(460,469)	9,209	(451,260)	620,482	(451,260)
9	$537.21	857	(460,469)	9,209	(451,260)	592,905	(451,260)
10	$537.21	857	(460,469)	9,209	(451,260)	483,004	(451,260)
11	$537.21	857	(460,469)	9,209	(451,260)	661,208	(451,260)
12	$537.21	857	(460,469)	9,209	(451,260)	630,725	(451,260)
13	$537.21	857	(460,469)	9,209	(451,260)	600,241	(451,260)
14	$537.21	857	(460,469)	9,209	(451,260)	569,758	(451,260)
15	$537.21	857	(460,469)	9,209	(451,260)	514,349	(451,260)
16	$537.21	857	(460,469)	9,209	(451,260)	642,408	(451,260)
17	$537.21	857	(460,469)	9,209	(451,260)	609,183	(451,260)
18	$537.21	857	(460,469)	9,209	(451,260)	575,958	(451,260)
19	$537.21	857	(460,469)	9,209	(451,260)	542,732	(451,260)
20	$537.21	857	(460,469)	9,209	(451,260)	516,751	(451,260)
21	$537.21	857	(460,469)	9,209	(451,260)	620,843	(451,260)
22	$537.21	857	(460,469)	9,209	(451,260)	584,706	(451,260)
23	$537.21	857	(460,469)	9,209	(451,260)	548,568	(451,260)
24	$537.21	857	(460,469)	9,209	(451,260)	512,431	(451,260)
25	$537.21	857	(460,469)	9,209	(451,260)	505,885	(451,260)
26	$537.21	857	(460,469)	9,209	(451,260)	596,622	(451,260)
27	$537.21	857	(460,469)	9,209	(451,260)	557,308	(451,260)
28	$537.21	857	(460,469)	9,209	(451,260)	517,995	(451,260)
29	$537.21	857	(460,469)	9,209	(451,260)	478,681	(451,260)
30	$537.21	857	(460,469)	9,209	(451,260)	486,751	(451,260)

Schedule VII

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED CIAC BALANCES

a	b	c	d	e	f	g
	New	CIAC	CIAC - Year End Balance			Average Net
YEAR	ERCs	Collected	Gross	Acc. Amort	Net	CIAC
1		$0				
2		0				
3		0				
4		0				
5		0				
6	571	306,980	306,980	(6,140)	300,840	150,420
7	571	306,980	613,959	(24,558)	589,401	445,120
8	571	306,980	920,939	(55,256)	865,682	727,542
9	571	306,980	1,227,918	(98,233)	1,129,685	997,684
10	571	306,980	1,534,898	(153,490)	1,381,408	1,255,546
11	571	306,980	1,841,877	(221,025)	1,620,852	1,501,130
12	571	306,980	2,148,857	(300,840)	1,848,017	1,734,435
13	571	306,980	2,455,837	(392,934)	2,062,903	1,955,460
14	571	306,980	2,762,816	(497,307)	2,265,509	2,164,206
15	571	306,980	3,069,796	(613,959)	2,455,837	2,360,673
16	571	306,980	3,376,775	(742,891)	2,633,885	2,544,861
17	571	306,980	3,683,755	(884,101)	2,799,654	2,716,769
18	571	306,980	3,990,735	(1,037,591)	2,953,144	2,876,399
19	571	306,980	4,297,714	(1,203,360)	3,094,354	3,023,749
20	571	306,980	4,604,694	(1,381,408)	3,223,286	3,158,820
21	571	306,980	4,911,673	(1,571,735)	3,339,938	3,281,612
22	571	306,980	5,218,653	(1,774,342)	3,444,311	3,392,124
23	571	306,980	5,525,632	(1,989,228)	3,536,405	3,490,358
24	571	306,980	5,832,612	(2,216,393)	3,616,219	3,576,312
25	571	306,980	6,139,592	(2,455,837)	3,683,755	3,649,987
26	571	306,980	6,446,571	(2,707,560)	3,739,011	3,711,383
27	571	306,980	6,753,551	(2,971,562)	3,781,988	3,760,500
28	571	306,980	7,060,530	(3,247,844)	3,812,686	3,797,337
29	571	306,980	7,367,510	(3,536,405)	3,831,105	3,821,896
30	571	306,980	7,674,490	(3,837,245)	3,837,245	3,834,175

Schedule VIIa

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
SERVICE AVAILABILITY CHARGES & CIAC BALANCES

A	Gross Book Value	$2,298,083
B	Land	0
C	Depreciable Assets	$2,298,083
D	Accumulated Depreciation to Date	0
E	Accumulated Depreciation at Design Capacity	459,617
F	Net Plant at Design Capacity	1,838,467
G	Transmission & Distribution Mains	0
H	Minimum Level of CIAC	0.00%
I	CIAC to Date	0
J	Accumulated Amortization of CIAC to Date	0
K	Acc. Amort. of CIAC at design capacity	0
L	Future Customers	2,857
M	Composite Depreciation Rate	4.00%
N	Number of Years to Design Capacity	5
O	Existing Service Availability Charge per ERC	0
P	Level of CIAC at Design Capacity	0.00%
Q	Requested Service Availability Charge per ERC	$537.21
R	Level of CIAC at Design Capacity	75.00%
S	Minimum Service Availability Charge per ERC	0
T	Level of CIAC at Design Capacity	0.00%
U	Maximum Service Availability Charge per ERC	$537.21
V	Level of CIAC at Design Capacity	75.00%
W	No. of Customers at Design Capacity	2,857
X	Current No. of Customers	0
Y	Annual Growth	571
Z	Depreciation/Amortization multiplier	290.476190
AA	Number of Years	
AB	Depreciation rate	4.00%

Schedule VIII

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
PROJECTED AFPI COLLECTIONS

Projected AFPI Collections:

a YEAR	b New ERCs	c ERC's paying AFPI	d Average AFPI Charge	e AFPI Colected (k * l)
1	0	0	$0.00	$0
2	0	0	0.00	0
3	0	0	0.00	0
4	0	0	0.00	0
5	0	0	0.00	0
6	571	571	64.81	37,031
7	571	571	187.56	107,179
8	571	571	310.92	177,671
9	571	0	430.53	0
10	571	0	546.39	0
11	571	571	46.35	26,483
12	571	571	133.58	76,331
13	571	571	220.20	125,826
14	571	571	303.06	173,176
15	571	0	382.17	0
16	571	571	49.34	28,191
17	571	571	142.33	81,334
18	571	571	234.92	134,242
19	571	571	323.76	185,006
20	571	0	408.84	0
21	571	571	49.60	28,340
22	571	571	143.06	81,750
23	571	571	236.11	134,920
24	571	571	325.40	185,945
25	571	0	410.94	0
26	571	571	48.56	27,746
27	571	571	140.02	80,012
28	571	571	231.00	131,999
29	571	571	318.22	181,840
30	571	0	401.69	0

Schedule VIIIa

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	1st Increment
Cost of Qualifying Asset	$1,351,273
Divided by Future ERCs	1,714
Cost / ERC	$788.37
Rate of Return	10.75%
Annual Return per ERC	$84.75
Annual Reduction in Return per ERC	$3.39
Annual Depreciation Expense	$54,051
Divided by Future ERCs	1,714
Annual Depreciation per ERC	$31.53
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Retur	40.00%

	Year 6	Year 7	Year 8	Year 9	Year 10
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	31.53	31.53	31.53	31.53	31.53
Unfunded Exp - Prior Year					
Total Unfunded Expense	31.53	63.07	94.60	126.14	157.67
Unfunded Returns					
Return on Expense - Crnt Yr.	3.39	3.39	3.39	3.39	3.39
Return on Expense - Prior Yr.	0.00	3.39	6.78	10.17	13.56
Return on Plant - Current Yr.	84.75	81.36	77.97	74.58	71.19
Earnings - Prior Year	0.00	84.75	166.11	244.08	318.66
Compound Earnings - Prior Y	0.00	9.11	17.86	26.24	34.26
Total Compound Earnings	88.14	182.00	272.11	358.46	441.06
Year-end AFPI Charge (net of taxes)	119.68	245.07	366.71	484.60	598.73
Jan	9.97	130.09	255.17	376.50	494.08
Feb	19.94	140.54	265.31	386.32	503.59
Mar	29.91	150.99	275.45	396.15	513.10
Apr	39.88	161.44	285.58	405.97	522.61
May	49.85	171.89	295.72	415.80	532.12
Jun	59.82	182.34	305.86	425.62	541.63
Jul	69.79	192.79	315.99	435.44	551.14
Aug	79.76	203.24	326.13	445.27	560.65
Sep	89.73	213.69	336.27	455.09	570.16
Oct	99.70	224.14	346.40	464.92	579.67
Nov	109.67	234.59	356.54	474.74	589.19
Dec	119.64	245.04	366.68	484.56	598.70
AVG	64.81	187.56	310.92	430.53	546.39
New ERC's	571	571	571	571	571
Limitation	1,714	1,714	1,714	1,714	1,714
# of ERC's to pay AFPI:					
Jan	48	48	48	0	0
Feb	48	48	48	0	0
Mar	48	48	48	0	0
Apr	48	48	48	0	0
May	48	48	48	0	0
Jun	48	48	48	0	0
Jul	48	48	48	0	0
Aug	48	48	48	0	0
Sep	48	48	48	0	0
Oct	48	48	48	0	0
Nov	48	48	48	0	0
Dec	48	48	48	0	0
Total	571	571	571	0	0
Cumulative	571	1,143	1,714	1,714	1,714
AFPI Collected:					
Jan	$475	$6,195	$12,151	$0	$0
Feb	950	6,692	12,634	0	0
Mar	1,424	7,190	13,116	0	0
Apr	1,899	7,688	13,599	0	0
May	2,374	8,185	14,082	0	0
Jun	2,849	8,683	14,565	0	0
Jul	3,323	9,180	15,047	0	0
Aug	3,798	9,678	15,530	0	0
Sep	4,273	10,176	16,013	0	0
Oct	4,748	10,673	16,495	0	0
Nov	5,222	11,171	16,978	0	0
Dec	5,697	11,668	17,461	0	0
Total	37,031	107,179	177,671	0	0

Schedule VIIIb

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

2nd Increment (based on Year 10 figures)

Cost of Qualifying Asset	1,288,011
Divided by Future ERCs	2,286
Cost / ERC	$563.43
Rate of Return	10.75%
Annual Return per ERC	$60.57
Annual Reduction in Return per ERC	$2.42
Annual Depreciation Expense	$51,520
Divided by Future ERCs	2,286
Annual Depreciation per ERC	$22.54
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Return	40.00%

		Year 11	Year 12	Year13	Year14	Year 15
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp		22.54	22.54	22.54	22.54	22.54
Unfunded Exp - Prior Year						
Total Unfunded Expense		22.54	45.07	67.61	90.15	112.69
Unfunded Returns						
Return on Expense - Crnt Yr.		2.42	2.42	2.42	2.42	2.42
Return on Expense - Prior Yr.		0.00	2.42	4.85	7.27	9.69
Return on Plant - Current Yr.		60.57	57.18	53.79	50.40	47.01
Earnings - Prior Year		0.00	60.57	117.75	171.54	221.94
Compound Earnings - Prior Yr		0.00	6.51	12.66	18.44	23.86
Total Compound Earnings		62.99	129.11	191.46	250.07	304.92
Year-end AFPI Charge (net of taxes)		85.53	174.18	259.08	340.22	417.60
	Jan	7.13	92.95	181.29	265.87	346.70
	Feb	14.26	100.34	188.36	272.63	353.15
	Mar	21.39	107.72	195.43	279.39	359.60
	Apr	28.52	115.11	202.51	286.15	366.04
	May	35.65	122.50	209.58	292.92	372.49
	Jun	42.78	129.89	216.66	299.68	378.94
	Jul	49.91	137.27	223.73	306.44	385.39
	Aug	57.04	144.66	230.81	313.20	391.84
	Sep	64.17	152.05	237.88	319.96	398.29
	Oct	71.30	159.44	244.96	326.72	404.74
	Nov	78.43	166.82	252.03	333.49	411.19
	Dec	85.56	174.21	259.11	340.25	417.64
	AVG	46.35	133.58	220.20	303.06	382.17
New ERC's		571	571	571	571	571
Limitation		2,286	2,286	2,286	2,286	2,286
# of ERC's to pay AFPI:						
	Jan	48	48	48	48	0
	Feb	48	48	48	48	0
	Mar	48	48	48	48	0
	Apr	48	48	48	48	0
	May	48	48	48	48	0
	Jun	48	48	48	48	0
	Jul	48	48	48	48	0
	Aug	48	48	48	48	0
	Sep	48	48	48	48	0
	Oct	48	48	48	48	0
	Nov	48	48	48	48	0
	Dec	48	48	48	48	0
	Total	571	571	571	571	0
	Cumulative	571	1,143	1,714	2,286	2,286
AFPI Collected:						
	Jan	$340	$4,426	$8,633	$12,660	$0
	Feb	679	4,778	8,970	12,982	0
	Mar	1,019	5,130	9,306	13,304	0
	Apr	1,358	5,481	9,643	13,626	0
	May	1,698	5,833	9,980	13,948	0
	Jun	2,037	6,185	10,317	14,270	0
	Jul	2,377	6,537	10,654	14,592	0
	Aug	2,716	6,889	10,991	14,914	0
	Sep	3,056	7,240	11,328	15,236	0
	Oct	3,395	7,592	11,665	15,558	0
	Nov	3,735	7,944	12,002	15,880	0
	Dec	4,074	8,296	12,338	16,202	0
	Total	26,483	76,331	125,826	173,176	0

Schedule VIIIc

MODEL WATER UTILITY

Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed

CALCULATION OF AFPI

3rd Increment (based on Year 15 figures)

Cost of Qualifying Asset	1,371,597
Divided by Future ERCs	2,286
Cost / ERC	$600.00
Rate of Return	10.75%
Annual Return per ERC	$64.50
Annual Reduction in Return per ERC	$2.58
Annual Depreciation Expense	$54,864
Divided by Future ERCs	2,286
Annual Depreciation per ERC	$24.00
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Retur	40.00%

	Year 16	Year 17	Year18	Year19	Year 20
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	24.00	24.00	24.00	24.00	24.00
Unfunded Exp - Prior Year					
Total Unfunded Expense	24.00	48.00	72.00	96.00	120.00
Unfunded Returns					
Return on Expense - Crnt Yr.	2.58	2.58	2.58	2.58	2.58
Return on Expense - Prior Yr.	0.00	2.58	5.16	7.74	10.32
Return on Plant - Current Yr.	64.50	61.11	57.72	54.33	50.94
Earnings - Prior Year	0.00	64.50	125.61	183.33	237.66
Compound Earnings - Prior Y	0.00	6.93	13.50	19.71	25.55
Total Compound Earnings	67.08	137.70	204.57	267.69	327.05
Year-end AFPI Charge (net of taxes)	91.08	185.70	276.57	363.69	447.05
Jan	7.59	98.97	193.28	283.83	370.63
Feb	15.18	106.85	200.85	291.09	377.58
Mar	22.77	114.74	208.42	298.35	384.53
Apr	30.36	122.62	215.99	305.61	391.47
May	37.95	130.51	223.57	312.87	398.42
Jun	45.54	138.39	231.14	320.13	405.37
Jul	53.13	146.28	238.71	327.39	412.31
Aug	60.72	154.16	246.28	334.65	419.26
Sep	68.31	162.05	253.86	341.91	426.21
Oct	75.90	169.93	261.43	349.17	433.15
Nov	83.49	177.82	269.00	356.43	440.10
Dec	91.08	185.70	276.57	363.69	447.05
AVG	49.34	142.33	234.92	323.76	408.84
New ERC's	571	571	571	571	571
Limitation	2,286	2,286	2,286	2,286	2,286
# of ERC's to pay AFPI:					
Jan	48	48	48	48	0
Feb	48	48	48	48	0
Mar	48	48	48	48	0
Apr	48	48	48	48	0
May	48	48	48	48	0
Jun	48	48	48	48	0
Jul	48	48	48	48	0
Aug	48	48	48	48	0
Sep	48	48	48	48	0
Oct	48	48	48	48	0
Nov	48	48	48	48	0
Dec	48	48	48	48	0
Total	571	571	571	571	0
Cumulative	571	1,143	1,714	2,286	2,286
AFPI Collected:					
Jan	$361	$4,713	$9,204	$13,516	$0
Feb	723	5,088	9,564	13,862	0
Mar	1,084	5,464	9,925	14,207	0
Apr	1,446	5,839	10,285	14,553	0
May	1,807	6,215	10,646	14,899	0
Jun	2,169	6,590	11,007	15,244	0
Jul	2,530	6,966	11,367	15,590	0
Aug	2,891	7,341	11,728	15,936	0
Sep	3,253	7,717	12,088	16,281	0
Oct	3,614	8,092	12,449	16,627	0
Nov	3,976	8,468	12,810	16,973	0
Dec	4,337	8,843	13,170	17,318	0
Total	28,191	81,334	134,242	185,006	0

Schedule VIIId

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

4th Increment (based on Year 20 figures)

Cost of Qualifying Asset	1,378,002
Divided by Future ERCs	2,286
Cost / ERC	$602.80
Rate of Return	10.75%
Annual Return per ERC	$64.80
Annual Reduction in Return per ERC	$2.59
Annual Depreciation Expense	$55,120
Divided by Future ERCs	2,286
Annual Depreciation per ERC	$24.11
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Return	40.00%

	Year 21	Year 22	Year 23	Year 24	Year 25
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	24.11	24.11	24.11	24.11	24.11
Unfunded Exp - Prior Year					
Total Unfunded Expense	24.11	48.22	72.34	96.45	120.56
Unfunded Returns					
Return on Expense - Crnt Yr.	2.59	2.59	2.59	2.59	2.59
Return on Expense - Prior Yr.	0.00	2.59	5.18	7.78	10.37
Return on Plant - Current Yr.	64.80	61.41	58.02	54.63	51.24
Earnings - Prior Year	0.00	64.80	126.21	184.23	238.86
Compound Earnings - Prior Yr	0.00	6.97	13.57	19.81	25.68
Total Compound Earnings	67.39	138.36	205.58	269.04	328.74
Year-end AFPI Charge (net of taxes)	91.51	186.59	277.91	365.49	449.30
Jan	7.63	99.48	194.25	285.27	372.53
Feb	15.26	107.41	201.86	292.56	379.51
Mar	22.89	115.33	209.47	299.86	386.49
Apr	30.52	123.25	217.08	307.16	393.48
May	38.15	131.18	224.69	314.46	400.46
Jun	45.78	139.10	232.30	321.75	407.45
Jul	53.41	147.02	239.92	329.05	414.43
Aug	61.04	154.95	247.53	336.35	421.42
Sep	68.67	162.87	255.14	343.65	428.40
Oct	76.30	170.79	262.75	350.94	435.39
Nov	83.93	178.72	270.36	358.24	442.37
Dec	91.56	186.64	277.97	365.54	449.36
AVG	49.60	143.06	236.11	325.40	410.94
	571	571	571	571	571
	2,286	2,286	2,286	2,286	2,286
Jan	48	48	48	48	0
Feb	48	48	48	48	0
Mar	48	48	48	48	0
Apr	48	48	48	48	0
May	48	48	48	48	0
Jun	48	48	48	48	0
Jul	48	48	48	48	0
Aug	48	48	48	48	0
Sep	48	48	48	48	0
Oct	48	48	48	48	0
Nov	48	48	48	48	0
Dec	48	48	48	48	0
Total	571	571	571	571	0
Cumulative	571	1,143	1,714	2,286	2,286
Jan	$363	$4,737	$9,250	$13,584	$0
Feb	727	5,115	9,612	13,932	0
Mar	1,090	5,492	9,975	14,279	0
Apr	1,453	5,869	10,337	14,627	0
May	1,817	6,247	10,700	14,974	0
Jun	2,180	6,624	11,062	15,322	0
Jul	2,543	7,001	11,425	15,669	0
Aug	2,907	7,378	11,787	16,017	0
Sep	3,270	7,756	12,149	16,364	0
Oct	3,633	8,133	12,512	16,712	0
Nov	3,997	8,510	12,874	17,059	0
Dec	4,360	8,888	13,237	17,407	0
Total	28,340	81,750	134,920	185,945	0

Schedule VIIIe

MODEL WATER UTILITY
Scenario: Water Treatment Plant - 60 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

5th Increment (based on Year 25 figures)

Cost of Qualifying Asset	1,349,026
Divided by Future ERCs	2,286
Cost / ERC	$590.12
Rate of Return	10.75%
Annual Return per ERC	$63.44
Annual Reduction in Return per ERC	$2.54
Annual Depreciation Expense	$53,961
Divided by Future ERCs	2,286
Annual Depreciation per ERC	$23.60
Weighted Cost of Equity	4.30%
Divided by Rate of Return	10.75%
Percentage of Equity in Retur	40.00%

	Year 26	Year 27	Year 28	Year 29	Year 30
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	23.60	23.60	23.60	23.60	23.60
Unfunded Exp - Prior Year					
Total Unfunded Expense	23.60	47.21	70.81	94.42	118.02
Unfunded Returns					
Return on Expense - Crnt Yr.	2.54	2.54	2.54	2.54	2.54
Return on Expense - Prior Yr.	0.00	2.54	5.08	7.61	10.15
Return on Plant - Current Yr.	63.44	60.05	56.66	53.27	49.88
Earnings - Prior Year	0.00	63.44	123.49	180.15	233.41
Compound Earnings - Prior Y	0.00	6.82	13.27	19.37	25.09
Total Compound Earnings	65.98	135.38	201.03	262.93	321.07
Year-end AFPI Charge (net of taxes)	89.58	182.59	271.85	357.35	439.10
Jan	7.47	97.39	190.09	279.03	364.22
Feb	14.94	105.14	197.53	286.16	371.03
Mar	22.41	112.89	204.96	293.28	377.85
Apr	29.88	120.64	212.40	300.41	384.66
May	37.35	128.39	219.84	307.53	391.47
Jun	44.82	136.15	227.28	314.66	398.28
Jul	52.29	143.90	234.72	321.78	405.09
Aug	59.76	151.65	242.15	328.91	411.91
Sep	67.23	159.40	249.59	336.03	418.72
Oct	74.70	167.15	257.03	343.16	425.53
Nov	82.17	174.90	264.47	350.28	432.34
Dec	89.64	182.65	271.91	357.41	439.16
AVG	48.56	140.02	231.00	318.22	401.69
	571	571	571	571	571
	2,286	2,286	2,286	2,286	2,286
Jan	48	48	48	48	0
Feb	48	48	48	48	0
Mar	48	48	48	48	0
Apr	48	48	48	48	0
May	48	48	48	48	0
Jun	48	48	48	48	0
Jul	48	48	48	48	0
Aug	48	48	48	48	0
Sep	48	48	48	48	0
Oct	48	48	48	48	0
Nov	48	48	48	48	0
Dec	48	48	48	48	0
Total	571	571	571	571	0
Cumulative	571	1,143	1,714	2,286	2,286
Jan	$356	$4,638	$9,052	$13,287	$0
Feb	711	5,007	9,406	13,627	0
Mar	1,067	5,376	9,760	13,966	0
Apr	1,423	5,745	10,114	14,305	0
May	1,779	6,114	10,469	14,644	0
Jun	2,134	6,483	10,823	14,984	0
Jul	2,490	6,852	11,177	15,323	0
Aug	2,846	7,221	11,531	15,662	0
Sep	3,201	7,590	11,885	16,002	0
Oct	3,557	7,959	12,240	16,341	0
Nov	3,913	8,329	12,594	16,680	0
Dec	4,269	8,698	12,948	17,019	0
Total	27,746	80,012	131,999	181,840	0

APPENDIX D

MODEL OF UTILITY COST RECOVERY

Scenario WTP B:
Water treatment plant constructed in 2 ½ year increments

MODEL WATER UTILITY
DESCRIPTION & ASSUMPTIONS

(1) The purpose of this model is to present the financial impacts of proposed rules related to margin reserve and imputation of CIAC on investor-owned utilities in Florida.

(2) Financial impacts are presented over a 30 year projection period, including an initial 5 year construction period.

(3) Rate revenue for return on investment begins in the 6th year - the first year after plant is placed in service

(4) An assumption is made that rate revenues provide 100% reimbursement of operation and maintenance expenses and rate case expense.

(5) Plant additions are made in 2.5 year increments. Permitting, design and construction takes 5 years. Plant additions are placed in service six months before demand would otherwise exceed capacity.

(6) Customer growth is even and predictable.

(7) AFPI is calculated as of the beginning of the year the plant is placed in service. AFPI charge compounds for 2.5 years and re-starts when new plant comes on-line.

(8) Capital structure includes only long-term debt and equity.

(9) Capital Structure

	Initial	Ratio	Cost Rate	Weighted Cost
Long Term Debt	$3,400,000	60.0%	10.00%	6.00%
Short Term Debt		0.0%	9.00%	0.00%
Customer Deposits		0.0%	6.00%	0.00%
Deferred ITCs		0.0%	10.00%	0.00%
Deferred Income Taxes		0.0%	0.00%	0.00%
Common Equity	2,266,667	40.0%	11.88%	4.75%
Total Capital	$5,666,667	100.00%		10.75%

(10)	AFUDC Rate	10.75%	
(11)	Inflation on the cost of plant construction is	3.0%	
(12)	Size of each increment of plant:	0.500	MGD
(13)	Cost per MG of plant capacity	$3.40	/MG of capacity
(14)	Consumption	350	gpd/ERC
(15)	New ERC's per Year	571	
(16)	Margin Reserve allowed	18	
(17)	CIAC Imputed?	Yes	

MODEL WATER UTILITY
Key Results
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed

(1) Average Cost per ERC / year:

	Rates	Service Availabilty	AFPI	Total
Five years	$209	$205	$23	$414
Ten years	197	102	41	300
Fifteen years	201	68	48	269
Twenty years	209	51	51	260
Twenty-five years	218	41	53	259

Total cost per ERC over twenty-five years $6,472

(2) Net Present Value of Revenue Requirement

Rates	$4,776,445
CIAC	3,013,879
AFPI	137,487
Total	$7,927,811

(3) Net Present Value of Return to the Utility

Rates	$1,169,760
AFPI	137,487
Total	$1,307,247

(4) Maximum Return on Investment to Utility 5.30%

Maximum Return on Investment to Utility 7.46%

MODEL WATER UTILITY
LIST OF SCHEDULES

Schedule I

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED NET INVESTMENT

a	b	c	d	e	f	g	h	i	j	k
	Net Investment				Return on Investment					
YEAR	CWIP	Net Plant	Net CIAC	Total (b+c+d)	Rate Base	Allowed Rate of Return	Allowed Return (f * g)	AFPI	Total (h+j)	Overall Rate of Return (j / e)
1	89,569	0	0	89,569	0		0	0	0	0.00%
2	367,413	0	0	367,413	0		0	0	0	0.00%
3	975,492	0	0	975,492	0		0	0	0	0.00%
4	1,833,715	0	0	1,833,715	0		0	0	0	0.00%
5	3,042,186	0	0	3,042,186	0		0	0	0	0.00%
6	1,796,745	1,973,933	(573,707)	3,196,971	464,632	10.75%	49,948	17,825	67,773	2.12%
7	2,904,719	1,891,685	(1,123,997)	3,672,408	510,251	10.75%	54,852	0	54,852	1.49%
8	1,457,464	3,903,583	(1,650,870)	3,710,177	70,114	10.75%	7,537	12,839	20,376	0.55%
9	2,480,662	3,734,080	(2,154,327)	4,060,415	1,055,673	10.75%	113,485	34,848	148,333	3.65%
10	1,143,051	5,954,597	(2,634,367)	4,463,281	620,564	10.75%	66,711	0	66,711	1.49%
11	2,082,920	5,685,510	(3,090,991)	4,677,439	1,708,811	10.75%	183,697	53,119	236,816	5.06%
12	3,367,365	5,416,422	(3,524,198)	5,259,590	1,669,665	10.75%	179,489	63,918	243,407	4.63%
13	1,689,600	7,575,023	(3,933,989)	5,330,634	1,256,497	10.75%	135,073	14,391	149,464	2.80%
14	2,875,768	7,204,782	(4,320,362)	5,760,187	2,402,167	10.75%	258,233	39,060	297,293	5.16%
15	1,325,110	9,605,229	(4,683,320)	6,247,019	2,034,004	10.75%	218,655	0	218,655	3.50%
16	2,414,675	9,119,543	(5,022,860)	6,511,358	3,274,241	10.75%	351,981	55,297	407,278	6.25%
17	3,903,699	8,633,857	(5,338,985)	7,198,571	3,122,071	10.75%	335,623	66,560	402,182	5.59%
18	1,958,709	10,962,526	(5,631,692)	7,289,543	2,799,080	10.75%	300,901	14,471	315,372	4.33%
19	3,333,803	10,359,575	(5,900,983)	7,792,395	4,034,153	10.75%	433,671	39,279	472,951	6.07%
20	1,536,165	12,968,611	(6,146,857)	8,357,919	3,779,833	10.75%	406,332	0	406,332	4.86%
21	2,799,271	12,231,827	(6,369,315)	8,661,783	5,121,567	10.75%	550,568	54,814	605,382	6.99%
22	4,525,458	11,495,043	(6,568,356)	9,452,144	4,820,893	10.75%	518,246	65,973	584,219	6.18%
23	2,270,681	14,020,868	(6,743,980)	9,547,569	4,603,330	10.75%	494,858	14,132	508,990	5.33%
24	3,864,791	13,148,142	(6,896,188)	10,116,745	5,903,861	10.75%	634,665	38,358	673,023	6.65%
25	1,780,837	15,998,990	(7,024,980)	10,754,847	5,780,851	10.75%	621,441	0	621,441	5.78%
26	3,245,122	14,971,115	(7,130,354)	11,085,882	7,202,713	10.75%	774,292	53,267	827,559	7.46%
27	5,246,246	13,943,240	(7,212,312)	11,977,173	6,712,137	10.75%	721,555	64,098	785,652	6.56%
28	2,632,342	16,697,624	(7,270,854)	12,059,111	6,605,471	10.75%	710,088	13,576	723,665	6.00%
29	4,480,352	15,512,154	(7,305,979)	12,686,528	7,955,913	10.75%	855,261	36,850	892,111	7.03%
30	2,064,478	18,643,328	(7,317,687)	13,390,119	7,973,835	10.75%	857,187	0	857,187	6.40%
			AVG	6,652,273				AVG	352,901	5.30%
			NPV	33,803,955		NPV	1,169,760	137,487	1,307,247	3.87%

Schedule II

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED REGULATORY INCOME

a YEAR	b Revenue From Rates	c O&M Expense	d Allowed Depreciation Expense	e Allowed Amortization Expense	f Property Taxes	g Gross Receipts Tax	h Allowed Interest Expense	i Allowed Pretax Profit	j Income Tax	k Allowed Net Profit	l Avg 5 Year Revenue Per ERC
1											
2											
3											
4											
5											
6	182,482	(14,286)	(65,798)	11,708	(20,562)	(8,212)	(27,878)	57,456	(35,386)	22,070	
7	213,878	(42,857)	(82,247)	35,125	(20,562)	(9,624)	(30,615)	63,097	(38,860)	24,237	
8	213,343	(71,429)	(135,603)	58,541	(42,376)	(9,600)	(4,207)	8,670	(5,340)	3,330	$209
9	443,774	(100,000)	(169,503)	81,958	(42,376)	(19,970)	(63,340)	130,543	(80,398)	50,144	
10	439,487	(128,571)	(215,270)	105,375	(67,272)	(19,777)	(37,234)	76,738	(47,261)	29,477	
11	691,737	(157,143)	(251,148)	128,791	(67,272)	(31,128)	(102,529)	211,309	(130,140)	81,169	
12	708,391	(185,714)	(269,087)	152,208	(67,272)	(31,878)	(100,180)	206,468	(127,159)	79,309	
13	727,963	(214,286)	(333,217)	175,624	(92,560)	(32,758)	(75,390)	155,376	(95,693)	59,684	$193
14	992,456	(242,857)	(370,241)	199,041	(92,560)	(44,661)	(144,130)	297,048	(182,945)	114,103	
15	1,017,129	(271,429)	(427,404)	222,458	(121,422)	(45,771)	(122,040)	251,522	(154,906)	96,615	
16	1,301,726	(300,000)	(466,259)	245,874	(121,422)	(58,578)	(196,454)	404,887	(249,361)	155,526	
17	1,298,202	(328,571)	(485,686)	269,291	(121,422)	(58,419)	(187,324)	386,070	(237,772)	148,298	
18	1,352,882	(357,143)	(562,755)	292,707	(150,738)	(60,880)	(167,945)	346,130	(213,173)	132,956	$204
19	1,637,890	(385,714)	(602,951)	316,124	(150,738)	(73,705)	(242,049)	498,857	(307,235)	191,622	
20	1,703,424	(414,286)	(673,631)	339,541	(184,196)	(76,654)	(226,790)	467,408	(287,866)	179,542	
21	2,010,940	(442,857)	(715,733)	362,957	(184,196)	(90,492)	(307,294)	633,325	(390,050)	243,274	
22	1,980,557	(471,429)	(736,784)	386,374	(184,196)	(89,125)	(289,254)	596,144	(367,152)	228,992	
23	2,076,357	(500,000)	(829,090)	409,790	(218,182)	(93,436)	(276,200)	569,240	(350,582)	218,658	$219
24	2,377,556	(528,571)	(872,726)	433,207	(218,182)	(106,990)	(354,232)	730,062	(449,629)	280,433	
25	2,490,618	(557,143)	(959,350)	456,624	(256,969)	(112,078)	(346,851)	714,851	(440,260)	274,590	
26	2,817,293	(585,714)	(1,005,033)	480,040	(256,969)	(126,778)	(432,163)	890,676	(548,547)	342,129	
27	2,752,265	(614,286)	(1,027,875)	503,457	(256,969)	(123,852)	(402,728)	830,012	(511,186)	318,827	
28	2,893,771	(642,857)	(1,138,050)	526,873	(296,367)	(130,220)	(396,328)	816,822	(503,062)	313,760	$234
29	3,208,529	(671,429)	(1,185,469)	550,290	(296,367)	(144,384)	(477,355)	983,816	(605,910)	377,906	
30	3,374,811	(700,000)	(1,290,857)	573,707	(341,332)	(151,866)	(478,430)	986,032	(607,275)	378,757	

Net Present Value of Revenue Requirement $4,776,445

Schedule III

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED RATE BASE & ALLOWED RETURN

a	b	c	d	e	f	g	h	i
			Rate Base					
YEAR	Average Net Plant	Used & Useful %	Net Plant U & U	Average Net CIAC	Imputed CIAC	Total	Allowed Rate of Return	Allowed Return on Rate Base
1								
2								
3								
4								
5								
6	$2,015,056	80%	$1,612,045	($286,853)	($860,560)	$464,632	10.75%	49,948
7	1,932,809	100%	1,932,809	(848,852)	(573,707)	510,251	10.75%	54,852
8	2,897,634	80%	2,318,107	(1,387,433)	(860,560)	70,114	10.75%	7,537
9	3,818,832	100%	3,818,832	(1,902,599)	(860,560)	1,055,673	10.75%	113,485
10	4,844,339	80%	3,875,471	(2,394,347)	(860,560)	620,564	10.75%	66,711
11	5,820,053	93%	5,432,050	(2,862,679)	(860,560)	1,708,811	10.75%	183,697
12	5,550,966	100%	5,550,966	(3,307,595)	(573,707)	1,669,665	10.75%	179,489
13	6,495,723	90%	5,846,150	(3,729,093)	(860,560)	1,256,497	10.75%	135,073
14	7,389,902	100%	7,389,902	(4,127,176)	(860,560)	2,402,167	10.75%	258,233
15	8,405,006	88%	7,396,405	(4,501,841)	(860,560)	2,034,004	10.75%	218,655
16	9,362,386	96%	8,987,891	(4,853,090)	(860,560)	3,274,241	10.75%	351,981
17	8,876,700	100%	8,876,700	(5,180,923)	(573,707)	3,122,071	10.75%	335,623
18	9,798,191	93%	9,144,978	(5,485,338)	(860,560)	2,799,080	10.75%	300,901
19	10,661,050	100%	10,661,050	(5,766,337)	(860,560)	4,034,153	10.75%	433,671
20	11,664,093	91%	10,664,313	(6,023,920)	(860,560)	3,779,833	10.75%	406,332
21	12,600,219	97%	12,240,213	(6,258,086)	(860,560)	5,121,567	10.75%	550,568
22	11,863,435	100%	11,863,435	(6,468,835)	(573,707)	4,820,893	10.75%	518,246
23	12,757,956	95%	12,120,058	(6,656,168)	(860,560)	4,603,330	10.75%	494,858
24	13,584,505	100%	13,584,505	(6,820,084)	(860,560)	5,903,861	10.75%	634,665
25	14,573,566	93%	13,601,995	(6,960,584)	(860,560)	5,780,851	10.75%	621,441
26	15,485,052	98%	15,140,940	(7,077,667)	(860,560)	7,202,713	10.75%	774,292
27	14,457,177	100%	14,457,177	(7,171,333)	(573,707)	6,712,137	10.75%	721,555
28	15,320,432	96%	14,707,614	(7,241,583)	(860,560)	6,605,471	10.75%	710,088
29	16,104,889	100%	16,104,889	(7,288,416)	(860,560)	7,955,913	10.75%	855,261
30	17,077,741	95%	16,146,228	(7,311,833)	(860,560)	7,973,835	10.75%	857,187
AVG								

Schedule IV

MODEL UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CWIP AND PLANT IN SERVICE BALANCES

a	b	c	d	e	f	g	h	i
	Total				Book Value - Utility Plant in Service			Average
YEAR	Total $ Spent	Total AFUDC	Transfers to Plant	CWIP Balance	Gross	Accum. Deprec	Net	Net Plant
1	85,000	4,569		89,569				
2	255,000	22,844		367,413				
3	542,377	65,703		975,492				
4	724,430	133,794		1,833,715				
5	982,908	225,563		3,042,186				
6	678,619	132,120	(2,056,180)	1,796,745	2,056,180	(82,247)	1,973,933	2,015,056
7	891,462	216,512		2,904,719	2,056,180	(164,494)	1,891,685	1,932,809
8	629,748	104,397	(2,181,401)	1,457,464	4,237,581	(333,998)	3,903,583	2,897,634
9	839,812	183,386		2,480,662	4,237,581	(503,501)	3,734,080	3,818,832
10	876,363	275,631	(2,489,605)	1,143,051	6,727,185	(772,588)	5,954,597	4,844,339
11	786,706	153,163		2,082,920	6,727,185	(1,041,676)	5,685,510	5,820,053
12	1,033,449	250,997		3,367,365	6,727,185	(1,310,763)	5,416,422	5,550,966
13	730,051	121,025	(2,528,842)	1,689,600	9,256,027	(1,681,004)	7,575,023	6,495,723
14	973,573	212,595		2,875,768	9,256,027	(2,051,245)	7,204,782	7,389,902
15	1,015,945	319,532	(2,886,134)	1,325,110	12,142,161	(2,536,932)	9,605,229	8,405,006
16	912,007	177,558		2,414,675	12,142,161	(3,022,618)	9,119,543	9,362,386
17	1,198,050	290,974		3,903,699	12,142,161	(3,508,305)	8,633,857	8,876,700
18	846,329	140,301	(2,931,621)	1,958,709	15,073,782	(4,111,256)	10,962,526	9,798,191
19	1,128,638	246,456		3,333,803	15,073,782	(4,714,207)	10,359,575	10,661,050
20	1,177,758	370,425	(3,345,820)	1,536,165	18,419,602	(5,450,991)	12,968,611	11,664,093
21	1,057,266	205,839		2,799,271	18,419,602	(6,187,775)	12,231,827	12,600,219
22	1,388,868	337,318		4,525,458	18,419,602	(6,924,559)	11,495,043	11,863,435
23	981,127	162,648	(3,398,552)	2,270,681	21,818,154	(7,797,286)	14,020,868	12,757,956
24	1,308,400	285,710		3,864,791	21,818,154	(8,670,012)	13,148,142	13,584,505
25	1,365,344	429,424	(3,878,723)	1,780,837	25,696,877	(9,697,887)	15,998,990	14,573,566
26	1,225,662	238,623		3,245,122	25,696,877	(10,725,762)	14,971,115	15,485,052
27	1,610,079	391,045		5,246,246	25,696,877	(11,753,637)	13,943,240	14,457,177
28	1,137,396	188,553	(3,939,853)	2,632,342	29,636,730	(12,939,106)	16,697,624	15,320,432
29	1,516,794	331,216		4,480,352	29,636,730	(14,124,575)	15,512,154	16,104,889
30	1,582,808	497,820	(4,496,503)	2,064,478	34,133,232	(15,489,905)	18,643,328	17,077,741

Schedule IVa

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CONSTRUCTION

Cost of each increment of plant	$3.40 / MGD capacity
Inflation rate	3.0%
Capacity of each increment of plant	0.500 MGD
Depreciable Life of Plant	25

All plant expansions are placed in service six months before demand would otherwise exceed capacity.

Cost of construction for each increment of Plant				
Year	% Complete	$ Spent	AFUDC	Total
1	5.0%	$85,000	$4,569	$89,569
2	15.0%	$255,000	22,844	277,844
3	26.6%	$452,200	60,856	513,056
4	26.7%	$453,900	109,559	563,459
5	26.7%	$453,900	158,353	612,253
Total	100.0%	$1,700,000	$356,180	$2,056,180

a	b	c	d	e	f	g	h	i	j	k	l	m
YEAR	1st Increment		2nd Increment		3rd Increment	CWIP	4th Increment		5th Increment		6th Increment	
	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC
1	85,000	4,569										
2	255,000	22,844										
3	452,200	60,856	90,177	4,847								
4	453,900	109,559	270,530	24,235								
5	453,900	158,353	479,739	64,562	49,269	2,648						
6			481,543	116,231	197,077	15,889						
7			481,543	167,997	409,919	48,515						
8					525,209	98,778	104,539	5,619				
9					526,195	155,291	313,618	28,095				
10					263,097	197,716	556,149	74,845	57,116	3,070		
11							558,240	134,743	228,466	18,420		
12							558,240	194,754	475,209	56,243		
13									608,861	114,511	121,190	6,514
14									610,004	180,025	363,569	32,570
15									305,002	229,207	644,729	86,766
16											647,153	156,204
17											647,153	225,773
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
Total		2,056,180		2,181,401		2,489,605		2,528,842		2,886,134		2,931,621

Schedule IVb

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CONSTRUCTION

a	b	c	d	e	f	g	h	i	j	k	l	m	n
7th Increment		8th Increment		9th Increment		10th Increment		11th Increment		12th Increment		13th Increment	
$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC	$ Spent	AFUDC
66,214	3,559												
264,854	21,354												
550,897	65,201												
705,837	132,750	140,492	7,551										
707,161	208,699	421,476	37,757										
353,581	265,714	747,418	100,585	76,760	4,126								
		750,228	181,084	307,039	24,755								
		750,228	261,733	638,641	75,585								
				818,259	153,894	162,869	8,754						
				819,794	241,939	488,606	43,771						
				409,897	308,035	866,462	116,606	88,986	4,783				
						869,719	209,926	355,942	28,698				
						869,719	303,420	740,360	87,624				
								948,586	178,405	188,810	10,149		
								950,366	280,474	566,429	50,743		
								475,183	357,097	1,004,467	135,178	103,159	5,545
	3,345,820		3,398,552		3,878,723		3,939,853		4,496,503		1,955,774		108,703

Schedule V

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF USED & USEFUL %

a	b	c	d	e	f	g	h
YEAR	Year-end Capacity MGD	Year-end Capacity ERC's	Year-end Connections (ERCs)	Average Connections (ERCs)	Margin Reserve (ERCs)	Total ERCs in Rate Base	Used & Useful %
1							
2							
3							
4							
5							
6	0.500	1,429	571	286	857	1,143	80%
7	0.500	1,429	1,143	857	571	1,429	100%
8	1.000	2,857	1,714	1,429	857	2,286	80%
9	1.000	2,857	2,286	2,000	857	2,857	100%
10	1.500	4,286	2,857	2,571	857	3,429	80%
11	1.500	4,286	3,429	3,143	857	4,000	93%
12	1.500	4,286	4,000	3,714	571	4,286	100%
13	2.000	5,714	4,571	4,286	857	5,143	90%
14	2.000	5,714	5,143	4,857	857	5,714	100%
15	2.500	7,143	5,714	5,429	857	6,286	88%
16	2.500	7,143	6,286	6,000	857	6,857	96%
17	2.500	7,143	6,857	6,571	571	7,143	100%
18	3.000	8,571	7,429	7,143	857	8,000	93%
19	3.000	8,571	8,000	7,714	857	8,571	100%
20	3.500	10,000	8,571	8,286	857	9,143	91%
21	3.500	10,000	9,143	8,857	857	9,714	97%
22	3.500	10,000	9,714	9,429	571	10,000	100%
23	4.000	11,429	10,286	10,000	857	10,857	95%
24	4.000	11,429	10,857	10,571	857	11,429	100%
25	4.500	12,857	11,429	11,143	857	12,000	93%
26	4.500	12,857	12,000	11,714	857	12,571	98%
27	4.500	12,857	12,571	12,286	571	12,857	100%
28	5.000	14,286	13,143	12,857	857	13,714	96%
29	5.000	14,286	13,714	13,429	857	14,286	100%
30	5.500	15,714	14,286	14,000	857	14,857	95%

Schedule VI

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF IMPUTED CIAC IN RATE BASE

a	b	c	d	e	f	g	h
	Calculated Imputed CIAC					Limitation	
YEAR	Service Avail. Charge	Margin Res. ERC's	Gross Imputed CIAC	Amortization	Calc. Net Imputed CIAC	MR Plant in RateBase	Imputed CIAC in Rate Base
1							
2							
3							
4							
5							
6	$1,024.48	857	($878,122)	$17,562	($860,560)	$1,209,034	($860,560)
7	$1,024.48	571	(585,415)	11,708	(573,707)	773,124	(573,707)
8	$1,024.48	857	(878,122)	17,562	(860,560)	869,290	(860,560)
9	$1,024.48	857	(878,122)	17,562	(860,560)	1,145,649	(860,560)
10	$1,024.48	857	(878,122)	17,562	(860,560)	968,868	(860,560)
11	$1,024.48	857	(878,122)	17,562	(860,560)	1,164,011	(860,560)
12	$1,024.48	571	(585,415)	11,708	(573,707)	740,129	(573,707)
13	$1,024.48	857	(878,122)	17,562	(860,560)	974,358	(860,560)
14	$1,024.48	857	(878,122)	17,562	(860,560)	1,108,485	(860,560)
15	$1,024.48	857	(878,122)	17,562	(860,560)	1,008,601	(860,560)
16	$1,024.48	857	(878,122)	17,562	(860,560)	1,123,486	(860,560)
17	$1,024.48	571	(585,415)	11,708	(573,707)	710,136	(573,707)
18	$1,024.48	857	(878,122)	17,562	(860,560)	979,819	(860,560)
19	$1,024.48	857	(878,122)	17,562	(860,560)	1,066,105	(860,560)
20	$1,024.48	857	(878,122)	17,562	(860,560)	999,779	(860,560)
21	$1,024.48	857	(878,122)	17,562	(860,560)	1,080,019	(860,560)
22	$1,024.48	571	(585,415)	11,708	(573,707)	677,911	(573,707)
23	$1,024.48	857	(878,122)	17,562	(860,560)	956,847	(860,560)
24	$1,024.48	857	(878,122)	17,562	(860,560)	1,018,838	(860,560)
25	$1,024.48	857	(878,122)	17,562	(860,560)	971,571	(860,560)
26	$1,024.48	857	(878,122)	17,562	(860,560)	1,032,337	(860,560)
27	$1,024.48	571	(585,415)	11,708	(573,707)	642,541	(573,707)
28	$1,024.48	857	(878,122)	17,562	(860,560)	919,226	(860,560)
29	$1,024.48	857	(878,122)	17,562	(860,560)	966,293	(860,560)
30	$1,024.48	857	(878,122)	17,562	(860,560)	931,513	(860,560)

Schedule VII

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
PROJECTED CIAC BALANCES

a	b	c	d	e	f	g
			CIAC - Year End Balance			
YEAR	New ERCs	CIAC Collected	Gross	Acc. Amort	Net	Average Net CIAC
1		$0				
2		0				
3		0				
4		0				
5		0				
6	571	585,415	585,415	(11,708)	573,707	286,853
7	571	585,415	1,170,830	(46,833)	1,123,997	848,852
8	571	585,415	1,756,245	(105,375)	1,650,870	1,387,433
9	571	585,415	2,341,660	(187,333)	2,154,327	1,902,599
10	571	585,415	2,927,075	(292,707)	2,634,367	2,394,347
11	571	585,415	3,512,490	(421,499)	3,090,991	2,862,679
12	571	585,415	4,097,905	(573,707)	3,524,198	3,307,595
13	571	585,415	4,683,320	(749,331)	3,933,989	3,729,093
14	571	585,415	5,268,735	(948,372)	4,320,362	4,127,176
15	571	585,415	5,854,150	(1,170,830)	4,683,320	4,501,841
16	571	585,415	6,439,565	(1,416,704)	5,022,860	4,853,090
17	571	585,415	7,024,980	(1,685,995)	5,338,985	5,180,923
18	571	585,415	7,610,395	(1,978,703)	5,631,692	5,485,338
19	571	585,415	8,195,810	(2,294,827)	5,900,983	5,766,337
20	571	585,415	8,781,225	(2,634,367)	6,146,857	6,023,920
21	571	585,415	9,366,640	(2,997,325)	6,369,315	6,258,086
22	571	585,415	9,952,055	(3,383,699)	6,568,356	6,468,835
23	571	585,415	10,537,470	(3,793,489)	6,743,980	6,656,168
24	571	585,415	11,122,884	(4,226,696)	6,896,188	6,820,084
25	571	585,415	11,708,299	(4,683,320)	7,024,980	6,960,584
26	571	585,415	12,293,714	(5,163,360)	7,130,354	7,077,667
27	571	585,415	12,879,129	(5,666,817)	7,212,312	7,171,333
28	571	585,415	13,464,544	(6,193,690)	7,270,854	7,241,583
29	571	585,415	14,049,959	(6,743,980)	7,305,979	7,288,416
30	571	585,415	14,635,374	(7,317,687)	7,317,687	7,311,833

Schedule VIIa

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF SERVICE AVAILABILITY CHARGES

A	Gross Book Value	$2,056,180
B	Land	0
C	Depreciable Assets	$2,056,180
D	Accumulated Depreciation to Date	0
E	Accumulated Depreciation at Design Capacity	205,618
F	Net Plant at Design Capacity	1,850,562
G	Transmission & Distribution Mains	0
H	Minimum Level of CIAC	0.00%
I	CIAC to Date	0
J	Accumulated Amortization of CIAC to Date	0
K	Acc. Amort. of CIAC at design capacity	0
L	Future Customers	1,429
M	Composite Depreciation Rate	4.00%
N	Number of Years to Design Capacity	2.5
O	Existing Service Availability Charge per ERC	0
P	Level of CIAC at Design Capacity	0.00%
Q	Requested Service Availability Charge per ERC	$1,024.48
R	Level of CIAC at Design Capacity	75.00%
S	Minimum Service Availability Charge per ERC	0
T	Level of CIAC at Design Capacity	0.00%
U	Maximum Service Availability Charge per ERC	$1,024.48
V	Level of CIAC at Design Capacity	75.00%
W	No. of Customers at Design Capacity	0
X	Current No. of Customers	0
Y	Annual Growth	571
Z	Depreciation/Amortization multiplier	73.809524
AA	Number of Years	
AB	Depreciation rate	4.00%

Schedule VIII

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
Projected AFPI Collections

a YEAR	b New ERC's	c ERC's paying AFPI	d Avg AFPI	e AFPI Colected (k * l)
1	0	0	0.00	$0
2	0	0	0.00	0
3	0	0	0.00	0
4	0	0	0.00	0
5	0	0	0.00	0
6	571	286	62.39	17,825
7	571	0	0.00	0
8	571	286	44.94	12,839
9	571	286	121.97	34,848
10	571	0	0.00	0
11	571	571	92.96	53,119
12	571	286	223.71	63,918
13	571	286	50.37	14,391
14	571	286	136.71	39,060
15	571	0	0.00	0
16	571	571	96.77	55,297
17	571	286	232.96	66,560
18	571	286	50.65	14,471
19	571	286	137.48	39,279
20	571	0	0.00	0
21	571	571	95.92	54,814
22	571	286	230.91	65,973
23	571	286	49.46	14,132
24	571	286	134.25	38,358
25	571	0	0.00	0
26	571	571	93.22	53,267
27	571	286	224.34	64,098
28	571	286	47.52	13,576
29	571	286	128.98	36,850
30	571	0	0.00	0

Schedule VIIIa

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	1st Increment	2nd Increment (based on Year 8 figures)
Cost of Qualifying Asset	$403,011	$579,527
Divided by Future ERCs	286	571
Cost / ERC	$1,409.13	$1,014.93
Rate of Return	10.75%	10.75%
Annual Return per ERC	$151.48	$109.11
Annual Reduction in Return per ERC	$6.06	$4.36
Annual Depreciation Expense	$16,120	$23,181
Divided by Future ERCs	286	571
Annual Depreciation per ERC	$56.37	$40.60
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Return	40.00%	40.00%

	1st Increment			2nd Increment		
	Year 6	Year 7	Year 8a	Year 8b	Year 9	Year 10
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	56.37	56.37	56.37	40.60	40.60	40.60
Unfunded Exp - Prior Year						
Total Unfunded Expense	56.37	112.73	169.10	40.60	81.19	121.79
Unfunded Returns						
Return on Expense - Crnt Yr.	6.06	6.06	6.06	4.36	4.36	4.36
Return on Expense - Prior Yr.	0.00	6.06	12.12	0.00	4.36	8.73
Return on Plant - Current Yr.	151.48	145.42	139.36	109.11	104.74	100.38
Earnings - Prior Year	0.00	151.48	296.90	0.00	109.11	213.85
Compound Earnings - Prior Yr	0.00	16.28	31.92	0.00	11.73	22.99
Total Compound Earnings	157.54	325.31	486.36	113.47	234.30	350.30
Year-end AFPI Charge (net of taxes)	213.91	438.04	655.46	154.07	315.50	472.10
Jan	17.83	232.58	456.16		89.87	248.24
Feb	35.65	251.26	474.27		102.71	261.69
Mar	53.48	269.94	492.39		115.55	275.14
Apr	71.30	288.62	510.51		128.39	288.59
May	89.13	307.29	528.63		141.23	302.05
Jun	106.95	325.97	546.75		154.07	315.50
Jul	124.78	344.65		12.84	167.52	328.55
Aug	142.60	363.33		25.68	180.97	341.60
Sep	160.43	382.00		38.52	194.42	354.65
Oct	178.25	400.68		51.36	207.88	367.70
Nov	196.08	419.36		64.19	221.33	380.75
Dec	213.91	438.04		77.03	234.78	393.80
AVG	115.87	335.31	>>>>>	273.19	161.56	321.52
New ERC's	571	571	286	286	571	571
Limitation	286	286	286	571	571	571
# of ERC's to pay AFPI:						
Jan	48	0	0	0	48	0
Feb	48	0	0	0	48	0
Mar	48	0	0	0	48	0
Apr	48	0	0	0	48	0
May	48	0	0	0	48	0
Jun	48	0	0	0	48	0
Jul	0	0	0	48	0	0
Aug	0	0	0	48	0	0
Sep	0	0	0	48	0	0
Oct	0	0	0	48	0	0
Nov	0	0	0	48	0	0
Dec	0	0	0	48	0	0
Total	286	0	0	286	286	0
Cumulative	286	286	286	286	571	571
AFPI Collected:						
Jan	$849	$0	$0	$0	$4,280	$0
Feb	1,698	0	0	0	4,891	0
Mar	2,546	0	0	0	5,502	0
Apr	3,395	0	0	0	6,114	0
May	4,244	0	0	0	6,725	0
Jun	5,093	0	0	0	7,337	0
Jul	0	0	0	611	0	0
Aug	0	0	0	1,223	0	0
Sep	0	0	0	1,834	0	0
Oct	0	0	0	2,446	0	0
Nov	0	0	0	3,057	0	0
Dec	0	0	0	3,668	0	0
Total	17,825	0	0	12,839	34,848	0

Schedule VIIIb

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	3rd Increment (based on Year 10 figures)	4th Increment (based on Year 13 figures)
Cost of Qualifying Asset	$968,868	$649,572
Divided by Future ERCs	857	571
Cost / ERC	$1,130.53	$1,137.60
Rate of Return	10.75%	10.75%
Annual Return per ERC	$121.53	$122.29
Annual Reduction in Return per ERC	$4.86	$4.89
Annual Depreciation Expense	$38,755	$25,983
Divided by Future ERCs	857	571
Annual Depreciation per ERC	$45.22	$45.50
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Retur	40.00%	40.00%

	3rd Increment			4th Increment		
	Year 11	Year12	Year13a	Year 13b	Year 14	Year 15
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	45.22	45.22	45.22	45.50	45.50	45.50
Unfunded Exp - Prior Year						
Total Unfunded Expense	45.22	90.44	135.66	45.50	91.01	136.51
Unfunded Returns						
Return on Expense - Crnt Yr.	4.86	4.86	4.86	4.89	4.89	4.89
Return on Expense - Prior Yr.	0.00	4.86	9.72	0.00	4.89	9.78
Return on Plant - Current Yr.	121.53	115.47	109.41	122.29	117.40	112.51
Earnings - Prior Year	0.00	121.53	237.01	0.00	122.29	239.69
Compound Earnings - Prior Y	0.00	13.06	25.48	0.00	13.15	25.77
Total Compound Earnings	126.39	259.79	386.48	127.18	262.62	392.64
Year-end AFPI Charge (net of taxes)	171.62	350.24	522.15	172.69	353.63	529.16
Jan	14.30	186.50	364.56		100.73	278.24
Feb	28.60	201.39	378.89		115.13	293.32
Mar	42.90	216.27	393.21		129.52	308.40
Apr	57.21	231.16	407.54		143.91	323.47
May	71.51	246.04	421.86		158.30	338.55
Jun	85.81	260.93	436.19		172.69	353.63
Jul	100.11	275.81		14.39	187.77	368.26
Aug	114.41	290.70		28.78	202.85	382.89
Sep	128.71	305.58		43.17	217.92	397.51
Oct	143.01	320.47		57.56	233.00	412.14
Nov	157.31	335.35		71.95	248.08	426.77
Dec	171.62	350.24		86.34	263.16	441.39
AVG	92.96	268.37	>>>>>	225.37	181.09	360.38
New ERC's	571	571	286	286	571	571
Limitation	857	857	857	571	571	571
# of ERC's to pay AFPI:						
Jan	48	48	0	0	48	0
Feb	48	48	0	0	48	0
Mar	48	48	0	0	48	0
Apr	48	48	0	0	48	0
May	48	48	0	0	48	0
Jun	48	48	0	0	48	0
Jul	48	0	0	48	0	0
Aug	48	0	0	48	0	0
Sep	48	0	0	48	0	0
Oct	48	0	0	48	0	0
Nov	48	0	0	48	0	0
Dec	48	0	0	48	0	0
Total	571	286	0	286	286	0
Cumulative	571	857	857	286	571	571
AFPI Collected:						
Jan	$681	$8,881	$0	$0	$4,797	$0
Feb	1,362	9,590	0	0	5,482	0
Mar	2,043	10,299	0	0	6,167	0
Apr	2,724	11,007	0	0	6,853	0
May	3,405	11,716	0	0	7,538	0
Jun	4,086	12,425	0	0	8,223	0
Jul	4,767	0	0	685	0	0
Aug	5,448	0	0	1,371	0	0
Sep	6,129	0	0	2,056	0	0
Oct	6,810	0	0	2,741	0	0
Nov	7,491	0	0	3,426	0	0
Dec	8,172	0	0	4,112	0	0
Total	53,119	63,918	0	14,391	39,060	0

Schedule VIIIc

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	5th Increment (based on Year 15 figures)	6th Increment (based on Year 18 figures)
Cost of Qualifying Asset	$1,008,601	$653,213
Divided by Future ERCs	857	571
Cost / ERC	$1,176.90	$1,143.98
Rate of Return	10.75%	10.75%
Annual Return per ERC	$126.52	$122.98
Annual Reduction in Return per ERC	$5.06	$4.92
Annual Depreciation Expense	$40,344	$26,129
Divided by Future ERCs	857	571
Annual Depreciation per ERC	$47.08	$45.76
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Return	40.00%	40.00%

	5th Increment			6th Increment	
	Year 16	Year17	Year18a	Year 18b	Year 19
Unfunded Expenses:					
Depreciation Expense:					
Unfunded Ann. Deprec. Exp	47.08	47.08	47.08	45.76	45.76
Unfunded Exp - Prior Year					
Total Unfunded Expense	47.08	94.15	141.23	45.76	91.52
Unfunded Returns					
Return on Expense - Crnt Yr.	5.06	5.06	5.06	4.92	4.92
Return on Expense - Prior Yr.	0.00	5.06	10.12	0.00	4.92
Return on Plant - Current Yr.	126.52	120.46	114.40	122.98	118.06
Earnings - Prior Year	0.00	126.52	246.97	0.00	122.98
Compound Earnings - Prior Yr	0.00	13.60	26.55	0.00	13.22
Total Compound Earnings	131.58	270.70	403.10	127.90	264.10
Year-end AFPI Charge (net of taxes)	178.65	364.85	544.33	173.66	355.61
Jan	14.89	194.17	379.80		101.30
Feb	29.78	209.69	394.76		115.77
Mar	44.66	225.20	409.72		130.24
Apr	59.55	240.72	424.68		144.71
May	74.44	256.23	439.63		159.18
Jun	89.33	271.75	454.59		173.66
Jul	104.21	287.27		14.47	188.82
Aug	119.10	302.78		28.94	203.98
Sep	133.99	318.30		43.41	219.15
Oct	148.88	333.81		57.89	234.31
Nov	163.77	349.33		72.36	249.47
Dec	178.65	364.85		86.83	264.63
AVG	96.77	279.51	>>>>>	233.92	182.10
	571	571	286	286	571
	857	857	857	571	571
Jan	48	48	0	0	48
Feb	48	48	0	0	48
Mar	48	48	0	0	48
Apr	48	48	0	0	48
May	48	48	0	0	48
Jun	48	48	0	0	48
Jul	48	0	0	48	0
Aug	48	0	0	48	0
Sep	48	0	0	48	0
Oct	48	0	0	48	0
Nov	48	0	0	48	0
Dec	48	0	0	48	0
Total	571	286	0	286	286
Cumulative	571	857	857	286	571
Jan	$709	$9,246	$0	$0	$4,824
Feb	1,418	9,985	0	0	5,513
Mar	2,127	10,724	0	0	6,202
Apr	2,836	11,463	0	0	6,891
May	3,545	12,202	0	0	7,580
Jun	4,254	12,940	0	0	8,269
Jul	4,963	0	0	689	0
Aug	5,672	0	0	1,378	0
Sep	6,380	0	0	2,067	0
Oct	7,089	0	0	2,756	0
Nov	7,798	0	0	3,446	0
Dec	8,507	0	0	4,135	0
Total	55,297	66,560	0	14,471	39,279

Schedule VIIId

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	7th Increment (based on Year 20 figures)	8th Increment (based on Year 23 figures)
Cost of Qualifying Asset	$999,779	$637,898
Divided by Future ERCs	857	571
Cost / ERC	$1,166.60	$1,117.16
Rate of Return	10.75%	10.75%
Annual Return per ERC	$125.41	$120.09
Annual Reduction in Return per ERC	$5.02	$4.80
Annual Depreciation Expense	$39,991	$25,516
Divided by Future ERCs	857	571
Annual Depreciation per ERC	$46.66	$44.69
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Return	40.00%	40.00%

	7th Increment			8th Increment		
	Year 21	Year 22	Year 23a	Year 23b	Year 24	Year 25
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	46.66	46.66	46.66	44.69	44.69	44.69
Unfunded Exp - Prior Year						
Total Unfunded Expense	46.66	93.33	139.99	44.69	89.37	134.06
Unfunded Returns						
Return on Expense - Crnt Yr.	5.02	5.02	5.02	4.80	4.80	4.80
Return on Expense - Prior Yr.	0.00	5.02	10.03	0.00	4.80	9.61
Return on Plant - Current Yr.	125.41	119.35	113.29	120.09	115.29	110.49
Earnings - Prior Year	0.00	125.41	244.76	0.00	120.09	235.39
Compound Earnings - Prior Yr	0.00	13.48	26.31	0.00	12.91	25.30
Total Compound Earnings	130.43	268.27	399.41	124.90	257.90	385.59
Year-end AFPI Charge (net of taxes)	177.09	361.60	539.41	169.58	347.28	519.65
Jan	14.76	192.47	376.42		98.92	273.24
Feb	29.52	207.84	391.24		113.06	288.05
Mar	44.27	223.22	406.05		127.19	302.85
Apr	59.03	238.59	420.87		141.32	317.66
May	73.79	253.97	435.69		155.45	332.47
Jun	88.55	269.35	450.50		169.58	347.28
Jul	103.30	284.72		14.13	184.39	361.64
Aug	118.06	300.10		28.26	199.20	376.00
Sep	132.82	315.48		42.40	214.01	390.37
Oct	147.58	330.85		56.53	228.82	404.73
Nov	162.33	346.23		70.66	243.62	419.10
Dec	177.09	361.60		84.79	258.43	433.46
AVG	95.92	277.03	>>>>>	231.46	177.83	353.90
	571	571	286	286	571	571
	857	857	857	571	571	571
Jan	48	48	0	0	48	0
Feb	48	48	0	0	48	0
Mar	48	48	0	0	48	0
Apr	48	48	0	0	48	0
May	48	48	0	0	48	0
Jun	48	48	0	0	48	0
Jul	48	0	0	48	0	0
Aug	48	0	0	48	0	0
Sep	48	0	0	48	0	0
Oct	48	0	0	48	0	0
Nov	48	0	0	48	0	0
Dec	48	0	0	48	0	0
Total	571	286	0	286	286	0
Cumulative	571	857	857	286	571	571
Jan	$703	$9,165	$0	$0	$4,711	$0
Feb	1,405	9,897	0	0	5,384	0
Mar	2,108	10,629	0	0	6,057	0
Apr	2,811	11,362	0	0	6,730	0
May	3,514	12,094	0	0	7,403	0
Jun	4,216	12,826	0	0	8,075	0
Jul	4,919	0	0	673	0	0
Aug	5,622	0	0	1,346	0	0
Sep	6,325	0	0	2,019	0	0
Oct	7,027	0	0	2,692	0	0
Nov	7,730	0	0	3,365	0	0
Dec	8,433	0	0	4,038	0	0
Total	54,814	65,973	0	14,132	38,358	0

Schedule VIIe

MODEL WATER UTILITY
Scenario: WTP - 30 month increments / 18 month MR / CIAC Imputed
CALCULATION OF AFPI

	9th Increment (based on Year 25 figures)	10th Increment (based on Year 28 figures)
Cost of Qualifying Asset	$971,571	$612,817
Divided by Future ERCs	857	571
Cost / ERC	$1,133.69	$1,073.24
Rate of Return	10.75%	10.75%
Annual Return per ERC	$121.87	$115.37
Annual Reduction in Return per ERC	$4.87	$4.61
Annual Depreciation Expense	$38,863	$24,513
Divided by Future ERCs	857	571
Annual Depreciation per ERC	$45.35	$42.93
Weighted Cost of Equity	4.30%	4.30%
Divided by Rate of Return	10.75%	10.75%
Percentage of Equity in Retur	40.00%	40.00%

	9th Increment			10th Increment		
	Year 26	Year 27	Year 28a	Year 28b	Year 29	Year 30
Unfunded Expenses:						
Depreciation Expense:						
Unfunded Ann. Deprec. Exp	45.35	45.35	45.35	42.93	42.93	42.93
Unfunded Exp - Prior Year						
Total Unfunded Expense	45.35	90.70	136.04	42.93	85.86	128.79
Unfunded Returns						
Return on Expense - Crnt Yr.	4.87	4.87	4.87	4.61	4.61	4.61
Return on Expense - Prior Yr.	0.00	4.87	9.75	0.00	4.61	9.23
Return on Plant - Current Yr.	121.87	115.81	109.75	115.37	110.76	106.14
Earnings - Prior Year	0.00	121.87	237.68	0.00	115.37	226.13
Compound Earnings - Prior Y	0.00	13.10	25.55	0.00	12.40	24.31
Total Compound Earnings	126.75	260.53	387.61	119.99	247.76	370.43
Year-end AFPI Charge (net of taxes)	172.09	351.23	523.65	162.92	333.62	499.22
Jan	14.34	187.02	365.60		95.03	262.49
Feb	28.68	201.95	379.97		108.61	276.72
Mar	43.02	216.88	394.34		122.19	290.95
Apr	57.36	231.81	408.70		135.76	305.17
May	71.71	246.73	423.07		149.34	319.40
Jun	86.05	261.66	437.44		162.92	333.62
Jul	100.39	276.59		13.58	177.14	347.42
Aug	114.73	291.52		27.15	191.37	361.22
Sep	129.07	306.45		40.73	205.59	375.02
Oct	143.41	321.37		54.31	219.82	388.82
Nov	157.75	336.30		67.88	234.04	402.62
Dec	172.09	351.23		81.46	248.27	416.42
AVG	93.22	269.13	>>>>>	224.52	170.84	339.99
	571	571	286	286	571	571
	857	857	857	571	571	571
Jan	48	48	0	0	48	0
Feb	48	48	0	0	48	0
Mar	48	48	0	0	48	0
Apr	48	48	0	0	48	0
May	48	48	0	0	48	0
Jun	48	48	0	0	48	0
Jul	48	0	0	48	0	0
Aug	48	0	0	48	0	0
Sep	48	0	0	48	0	0
Oct	48	0	0	48	0	0
Nov	48	0	0	48	0	0
Dec	48	0	0	48	0	0
Total	571	286	0	286	286	0
Cumulative	571	857	857	286	571	571
Jan	$683	$8,906	$0	$0	$4,525	$0
Feb	1,366	9,617	0	0	5,172	0
Mar	2,049	10,328	0	0	5,818	0
Apr	2,732	11,038	0	0	6,465	0
May	3,415	11,749	0	0	7,111	0
Jun	4,097	12,460	0	0	7,758	0
Jul	4,780	0	0	646	0	0
Aug	5,463	0	0	1,293	0	0
Sep	6,146	0	0	1,939	0	0
Oct	6,829	0	0	2,586	0	0
Nov	7,512	0	0	3,232	0	0
Dec	8,195	0	0	3,879	0	0
Total	53,267	64,098	0	13,576	36,850	0