# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Application for a staff- ) assisted rate case in Duval ) County by SHADOWROCK UTILITIES, ) INC. ) DOCKET NO. 900565-WS ORDER NO. 24224 ISSUED: 3-11-91

The following Commissioners participated in the disposition of this matter:

THOMAS M. BEARD, Chairman BETTY EASLEY GERALD L. GUNTER J. TERRY DEASON MICHAEL MCK. WILSON

# FINAL ORDER GRANTING TEMPORARY RATES IN EVENT OF PROTEST

AND

# NOTICE OF PROPOSED AGENCY ACTION ORDER APPROVING INCREASED RATES AND CHARGES

BY THE COMMISSION:

NOTICE IS HEREBY GIVEN by the Florida Public Service Commission that the actions discussed herein, except the granting of increased rates on a temporary basis in the event of a protest, are preliminary in nature, and as such, will become final unless a person whose interests are substantially affected files a petition for a formal proceeding pursuant to Rule 25-22.029, Florida Administrative Code.

#### CASE BACKGROUND

Shadowrock Utilities, Inc. (Shadowrock or utility) is a Class "C" water and wastewater utility located in Duval County. The utility provides service to approximately 645 single-family homes, a fifty-unit apartment complex and a church. The gross annual revenues for 1989 were \$70,804 for the water system and \$85,457 for the wastewater system.

Shadowrock was granted its original certificate by this Commission in Order No. 6498, issued on February 6, 1975. The utility has received price index rate adjustments for 1982 through 1988 and received one pass-through rate adjustment in 1986.

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FPSC-RECORDS/REPORTING.

On June 20, 1990, Shadowrock applied for this staff-assisted rate case and submitted the correct filing fee. We have reviewed the utility's books and records and conducted an engineering investigation. The test period for setting rates is the average twelve-month period ended June 30, 1990.

#### TRANSFER OF MAJORITY ORGANIZATIONAL CONTROL

Commission Order No. 6498, issued February 6, 1975, granted a certificate to Shadowrock Utilities, Inc., and stated there were six Directors, including Hugh F. Culverhouse. In August, 1990, the Secretary of State's listing of the officers and directors of the utilities listed Hugh F. Culverhouse as the sole director. In January 1981, Mr. Culverhouse elected Subchapter S status with the This election stated that Hugh F. Culverhouse was the sole IRS. stockholder with 250 shares of stock. The utility agrees there was a change in majority organizational control on January 1, 1981. Section 367.071, Florida Statutes, requires that a utility apply for authorization of a transfer of certificate, facilities, or majority organizational control prior to its occurrence. Shadowrock did not comply with this requirement, however, we believe that no action should be taken to penalize the utility for this failure because the utility was apparently unaware of the requirement to request approval of such a transfer. The transfer took place almost 10 years ago and appears to have had no harmful effects. Thus, we will recognize the transfer. However, the utility is placed on notice that any future transfers should be completed only after the utility has filed for and received approval from the Commission.

## QUALITY OF SERVICE

Our staff conducted a customer meeting on December 20, 1990, in Jacksonville, Florida. Eighteen customers attended and nine made service related comments.

Five customers commented about water pressure. One customer experienced a noticeable pressure fluctuation once a month, when pressure would weaken for approximately 2 hours and then would totally disappear for 30 minutes. Another customer indicated that generally that problem occurred between 4 and 9 p.m. A third customer said the pressure was low even in the mornings. Four customers said their irrigation sprinklers would not operate because of poor pressure.

universally throughout located These customers are Shadowrock's system. Therefore, it appears that occasional pressure problems exist throughout the system. Review of the distribution system uncovered no significant problems with dead ends or insufficient pipe sizing. Heavy irrigation may be responsible. Because of drought conditions, watering restrictions have been imposed by the local water management district. Irrigation is allowed only at certain times of the week. We consider this to be the single most important reason why pressure may be a problem during certain times of the day. It is during these times that peak flows are usually experienced and the system is over-burdened.

A subsequent investigation was conducted on January 9, 1990, and no pressure problems were identified. The utility has increased pressure at the plant by 5 to 7 pounds per square inch. A greater increase would risk damage to equipment and piping. Time will tell if any improvements will be noticed. We will not require further adjustments at this time.

Extremely cold weather during the winter of 1990 caused many problems, such as customers being without service for an extended period of time. The Commission was aware that the utility had problems at that time, but the utility appeared to do its best to make corrections.

Two customers have experienced problems with fluctuations of chlorine. One noted that the water has a heavy chlorine smell and taste, and the other, a neighbor, said that the water tasted like pure chlorox. At the time of the follow-up investigation, test results showed no abnormalities. Although one customer insisted that the chlorine problem is recurring, the other customer indicated no recent incidence. These customers are centrally located within the utility's distribution system. If the problem were prevalent, other customers located closer to the water treatment plant would notice chlorine fluctuations as well, but there have been no such complaints. We suspect that something other than the utility's water might be causing the problem. One customer has automatic sprinklers with no backflow prevention devices. Contaminated water may be siphoning back into the system.

One customer commented that due to an incorrect meter reading, he was improperly charged. This customer incurred a plumbing bill and lost wages only to find that the problem was on the utility's 230

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side of his meter. It was suggested to the customer that he request that the utility review the matter. Our staff will monitor this situation.

Two customers complained that the utility is difficult to contact by telephone. Our review found no significant problem. The utility's emergency phone number is listed on the customer's bill and directory assistance has the correct telephone numbers.

Although one customer indicated that there might be a problem with the way meters are read, review of the utility's meter reading procedure uncovered no significant problems.

One customer complained that Shadowrock's percolation pond area looked like a junk yard. It has been a constant problem for the utility to keep this area cleaned. Security of the area has been difficult. The ponds are located in a remote area of the development and this property, along with neighboring property not owned by the utility, has been a dumping ground for years. The utility has installed a fence several times, only to have it stolen or torn down.

Overall, the problems complained of by the customers are currently being properly addressed. In addition, our Division of Consumer Affairs has recently processed a complaint made by a customer of the utility concerning a billing problem. Although it appears that the utility has acted properly, the customer still refuses to pay the bill. The Division of Consumer Affairs is currently monitoring the situation.

In a service related problem that apparently has not affected the customers directly, on October 30, 1989, the utility was issued a citation by the City of Jacksonville's Department of Health, Welfare and Bio-Environmental Services. That citation dealt with violations at the wastewater treatment facility, as follows:

- a. Violations of effluent limits.
- b. Violation of the requirement to limit access to the wastewater treatment plant.
- c. Violation of equipment maintenance requirements.
- d. Violations of permit conditions.
- e. Violations of operator attendance requirements.
- f. Violations of monitoring and reporting requirements.

These violations occurred primarily from September 1, 1988 through May 20, 1990. A stipulation was recently agreed upon whereby the utility acknowledged the violations, agreed to full compliance of the regulations and to pay a \$15,000 civil penalty. No penalties or legal expenses incurred as a result of the citation are allowed in calculating the utility's new rates resulting from this staff-assisted rate case.

We believe that the utility is currently doing all it can to make sure that compliance is achieved. There are no current outstanding violations and the service provided to the water and wastewater customers is generally good. After considering the totality of circumstances noted above, we find Shadowrock's quality of service to be satisfactory.

#### RATE BASE

Our calculation of the appropriate rate base for the water system is depicted on Schedule No. 1-A and for the wastewater system is depicted on Schedule No. 1-B. Our adjustments are itemized on Schedule No. 1-C. Those adjustments which are selfexplanatory or which are essentially mechanical in nature are reflected on those schedules without further discussion in the body of this Order. The major adjustments are discussed below.

## Used and Useful

The utility's water treatment plant has a rated capacity of 450,000 gallons per day (gpd). The individual pumping capacity of the wells and high service pumps can produce much more capacity than the plant's overall rating. The utility's engineer has indicated that the limiting factors which affect the plant are due to the restrictive rate of flow through the aeration device, and the necessary storage capacity of the reservoir. Since the point of most restrictive flow through a plant is the controlling factor, we will use the 450,000 gpd plant capacity rating to determine the used and useful percentage. Using the average of the five highest maximum daily flows, which occurred in May 1990, plus fire flow capacity, and a 21,732 gpd margin reserve consideration for customer growth, we find that the treatment plant is 100 percent

The utility's wastewater treatment facility is composed of three steel, activated sludge treatment plants with a combined 232

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treatment capacity of 450,000 gpd (two at 100,000 gpd and one at 250,000 gpd). The utility recently converted the wastewater treatment process of one of the three treatment plants from contact stabilization to extended aeration. As a result, overall wastewater treatment plant capacity was down-rated from 450,000 gpd to 350,000 gpd. Apparently the main reason for this conversion was to change the Florida Department of Environmental Regulation's (DER) classification, which in turn reduced the required plant staffing time for that facility.

As mentioned below, one plant is out of service and is not planned to be put back on line, which will further down-rate the facility another 50,000 gpd to a total plant capacity of 300,000 gpd. We will use this adjusted capacity to determine the used and useful percentage. Using the average daily flow of the highest use month of the test year, September 1989, plus a 21,732 gpd margin reserve consideration for customer growth, we find that the treatment plant is 66.3 percent used and useful.

Both the water distribution and wastewater collection system can currently serve approximately 705 equivalent residential connections (ERCs). Considering 624 ERCs, the average of the test year connections, plus 81 ERCs as a margin reserve, we find that the distribution and collection systems are 100 percent used and useful.

#### Plant-in-Service

As of June 30, 1990, the utility's accounts showed water plant in the amount of \$686,594 and wastewater plant in the amount of \$1,282,372. Shadowrock does not have original invoices to document plant additions between 1975 and 1981, but has financial statements prepared in those years. The financial statement for the year ended December 31, 1981 includes a schedule of fixed assets and depreciation. This schedule includes a brief description of each item of plant, the date of installation, and the accumulated This schedule, plus the tax returns, the trial depreciation. balance, and the individual plant components were reviewed. The utility's records are well-maintained and the various documents reflect the same balances. Because of the state of the records and the fact the plant balances appear reasonable, we accept the December 31, 1981 balances as shown in Shadowrock's financial statement. After considering all of the above, we find that as of

December 31, 1981, the appropriate plant balance for the water system is \$493,857 and for the wastewater system is \$687,275.

Shadowrock's documentation supporting the plant additions subsequent to 1981 has been reviewed. Based on our review, we find that the utility plant balance at June 30, 1990 is properly supported. However, the utility expended substantial funds during the test year on repairs and maintenance of the plant. We conclude that some of these items should be capitalized. These items are discussed more fully later in this Order. The total adjustment to the June 30, 1990 plant balance for the capitalized items is \$1,442 for the water system and \$21,521 for the wastewater system.

The utility's fixed asset schedule includes a parcel of contributed land valued at \$32,343. We find that this item should be reclassified as "land" and should be removed from "utility plant in service." These adjustments result in an adjusted year-end balance of \$688,036 for the water system and \$1,271,550 for the wastewater system.

Because several items of plant were added during the test year, the year-end balance of plant has been adjusted to reflect the averaging of the plant additions. Incorporating the averaging adjustment results in a test year average balance of water plant of \$651,823 and a test year average balance of wastewater plant of \$1,191,816.

### Projected Plant Improvements

One of the utility's wells has not been used regularly because of misalignment due to ground settling. Although the well could function, it was not used to avoid undue equipment stress. The utility has recently corrected the alignment problem at a cost of \$1,547 and the well is in good working order. The utility also replaced some pipe at a cost of \$1,998 and installed additional fencing at a cost of \$545. These plant improvements total \$4,090. We find that these costs should be included in water utility plant in service.

When pro forma plant is included in rate base, our policy is to increase accumulated depreciation by one year's depreciation on that plant. Therefore, following that policy, we find that accumulated depreciation to the proforma plant is \$126 for the water system.

#### Plant Held For Future Use

The utility's wastewater treatment facility is composed of three steel, activated sludge plants. At the time of our engineering investigation, one of the smaller plants was shut down for maintenance. According to the utility's engineer, the out of service plant is not currently needed to meet existing or foreseeable future flow demands. The utility is not currently planning to rehabilitate this plant. Therefore, we find that the dollars associated with this asset shall be transferred to plant held for future use. This plant is almost fully depreciated. The net depreciated value is \$3,235.

Earlier we found that the remaining wastewater treatment plant is 66.3 percent used and useful. Therefore, the non-used and useful portion of the plant is 33.7 percent. The 33.7 percent shall be applied to the adjusted wastewater treatment plant and related accumulated depreciation. These calculations result in non-used and useful plant of \$154,612 and non-used and useful accumulated depreciation of \$73,209. In addition, a portion of the wastewater treatment plant is contributed property. We find that the plant classified as "plant held for future use" must be adjusted to reflect that portion which is contributed. To do otherwise, would, in effect, remove that plant twice from rate base. The portion of the contributed plant and related accumulated amortization which is hereby classified as "plant held for future use" is \$122,211 and \$58,381, respectively. These adjustments result in a net non-used and useful wastewater treatment plant of \$17,573. These two adjustments to the used and useful plant result in a total non-used and useful plant of \$20,808.

During Shadowrock's reconciliation of cash contributions-inaid-of-construction (CIAC), the utility found that it had received prepaid connection fees for 202 connections. These connection fees should be included in the plant held for future use account, which results in a prepaid CIAC amount of \$42,820 in the water system and \$106,050 in the wastewater system. We also find that the accumulated amortization associated with the prepaid CIAC must also be included in the plant held for future use account. Using the same amortization method discussed later in the section on amortization of CIAC, results in an adjustment of \$8,343 for the water system and \$21,610 for the wastewater system.

#### Land

According to the utility's records, it owns three separate parcels of land. The water treatment plant site, consisting of 6.98 acres, is shown on the utility accounts at a value of \$32,368, but this includes property that will not be used by the utility. In fact, only about one-half acre, or 7 percent, is occupied by the existing treatment facility. However, we do recognize that approximately 30 percent, or 2.09 acres, is necessary to allow for well set backs (to guard against possible sanitary hazards) and for service road access to the treatment facility. Shadowrock has also indicated that the excess property will be sold. Therefore, we find that 70 percent, or \$22,658, be reclassified from the land account to the non-utility property account and, as a result, be excluded from rate base.

The wastewater treatment facility is located on 2.09 acres at a cost of \$7,929. We believe that the acreage and the cost are reasonable and are hereby allowed in rate base.

The percolation ponds are located on a 17.96 acres of land. However, the ponds actually occupy only 10.67 acres, or 59 percent of the parcel. The additional 7.29 acres is reserved to accommodate effluent from future treatment plant capacity. There are no existing plans at this time to enlarge the facility. Since this acreage is to be used for future development, we find that the cost of these 7.29 acres (\$32,343) should be placed in plant held for future use. Moreover, since this parcel was contributed to the utility, the related CIAC shall also be transferred to plant held for future use.

Based on all of these adjustments, we find that the land cost to be included in rate base is \$9,710 for the water system and \$82,920 for the wastewater system.

#### Accumulated Depreciation

The utility's accounts as of June 30, 1990 include accumulated depreciation for water of \$203,229 and for wastewater of \$367,908. At one time, the utility was recording depreciation at the IRS accelerated rate of 16.6 percent. However, the utility realized that the Commission's rule specified the appropriate depreciation rates. Shadowrock converted its books and records to come into compliance with the rule. However, in a recent letter, the utility

stated that its understanding of the depreciation rule was that the rates shown depreciation in Chapter 25-30.140, Florida Administrative Code, should only be initially implemented as a result of Commission action, such as a rate proceeding or an overearnings investigation. Shadowrock did not believe that it could unilaterally implement the rule's depreciation rates. Attached to the utility's letter was a schedule recalculating the accumulated depreciation. The recalculation assumed that the original depreciation rates were based on a 40 year life, through the test period reviewed in the overearnings investigation conducted after receipt of its 1987 annual report. After that, the accumulated depreciation is calculated based on the rule's rates.

We do not agree with the utility's calculation. First, the overearnings investigation was not a Commission action. After our informal review of the utility's records, no reason was found to pursue an overearnings investigation and the case was never docketed. Therefore, that review shall not be considered a Commission action. In addition, the utility makes an assumption that the original rates were established using a 40 year life

The rule does not state that a utility cannot implement the rates unilaterally. The rule states that the rates will be determined in a rate case. However, if a utility has never had a rate case, the rule does not state what should be done. It is obvious that the utility should be depreciating its plant using some depreciation rates. Staff Advisory Bulletin No. 17 (1st Revised) states that:

When a company is involved in a rate case before this Commission for the first time, there is a question as to what rate(s) and accrued reserve are applicable to determine their historic rate base position (test year expenses would still be calculated using guideline or staff recommended rates). The depreciation expenses booked by the company, whether or not approved by some other governmental body, have resulted in their current accumulated reserve position. This booked position (with appropriate staff adjustments due to CIAC, used and useful, etc.) should be used as the starting point of the test year. Except that, if these past booking practices have resulted in an obviously flawed reserve position, the staff may choose to recommend an amortization of the apparent historic reserve imbalance.

This excerpt from the Staff Advisory Bulletin (SAB) states recent Commission practice when a utility has not been in for a rate case. In this case, Shadowrock adjusted its reserve balance during the test year as if the rule rates had been used since the inception of the utility. The question is whether the adjusted or unadjusted balance should be used as the starting point in this case. We find that the adjusted balance should be used. Whichever decision is made incorporates an implied depreciation rate from 1976 through June 30, 1990. If the unadjusted balance is accepted, it implies that the tax depreciation rates are the depreciation rates included in the initial rates and charges. If the adjusted balance is accepted, it implies that our rule rates were the rates included in the initial rates and charges. We believe that the policy described in the SAB is conservative and is especially useful in cases where a utility does not have dependable books and However, in this case, the utility has excellent, records. The depreciation schedules include a detailed plant records. description of the plant, the year installed, the account number and the related accumulated depreciation. We believe that it is unlikely that the tax depreciation rates were used to set the initial rates and charges for this utility. Nevertheless, there is no detail available which indicates what rate was used. Therefore, we believe that the adjusted accumulated depreciation balance is a reasonable estimate to include in rate base.

A review of Shadowrock's calculation indicates it is accurate except for two items of wastewater plant which appear to have been depreciated improperly. The first item is the 100,000 gpd plant that was installed in December 1975 at a cost of \$97,058. The average life pursuant to Rule 25-30.140, Florida Administrative Code, is 15 years. Because almost 15 years have elapsed since its installation, the plant should be almost fully depreciated. However, the utility shows an accumulated depreciation balance of only \$59,852. We find that the accumulated depreciation shall be adjusted to reflect an accumulated balance of \$93,823 on this plant, or an increase in depreciation of \$33,971.

The second inaccurate item is the contributed steel sewage plant installed in September 1981 at a cost of \$205,650. The average life pursuant to Rule 25-30.140, Florida Administrative Code, is 15 years. Because almost 9 years have elapsed since its installation, the plant should be more than half depreciated. However, the utility shows an accumulated depreciation balance of \$47,985. We find that the accumulated depreciation shall be

adjusted to reflect an accumulated balance of \$119,963 on this plant, or an increase of \$71,978.

As we noted earlier in this Order, Commission policy is that when pro forma plant is included in rate base, accumulated depreciation on that plant should be increased by one year's depreciation. We find also that the accumulated depreciation shall be increased for the test year depreciation on the adjustments made for the test year expense items which were capital items. Therefore, we find that accumulated depreciation shall be increased by \$126 for the pro forma water plant, \$36 for the test year water plant additions, and \$433 for the test year wastewater plant additions.

After averaging the test year changes, we find that the correct average test year balance is \$191,163 for the water system and is \$446,690 for the wastewater system.

## Contributions-in-Aid-of-Construction (CIAC)

As of June 30, 1990 the utility's accounts show water CIAC in the amount of \$623,158 and wastewater CIAC in the amount of \$1,059,505. As discussed earlier in the section on plant-inservice, the utility does not have original documentation to support CIAC additions between 1975 and 1981. However, the utility had financial statements prepared in those years and the financial statement for the year ended December 31, 1981 including a schedule of fixed assets and depreciation, plus tax returns, the trial balance, and individual plant components. The current records are well-maintained and the documents reflect the same balances. Because of the state of the records and the fact the plant balances appear reasonable, we accept the December 31, 1981 balances as in the financial statement. This results in а shown December 31, 1981 CIAC - contributed property balance for the water system of \$272,751 and for the wastewater system of \$418,299.

The utility records its contributed property and its cash collections in separate accounts. At June 30, 1990, the contributed property account for water and wastewater reconciles to the fixed asset schedule reflecting the contributed property. The cash CIAC account at June 30, 1990 had a balance of \$168,048 for the water system and no balance for the wastewater system. The utility's tariff includes a \$90 meter tap fee and a \$700 plant connection fee (\$175 for water and \$525 for wastewater). The

tariff also includes a \$467 charge per unit for master metered structures. These charges were approved as part of the original tariff in May 1975. Applying these charges to the 661 year-end customers and the 50 apartment units, results in a total cash CIAC of \$545,540.

Several invoices dated from 1976 through 1979, from the utility to various builders, charged less than \$700 per connection. One invoice had a handwritten note "discount" for \$300, from \$790 to \$490. Shadowrock extensively reviewed its records and found that some connections apparently did not pay the full service availability charge. Shadowrock prepared a schedule showing the number of connection by year and the service availability charges collected. The schedule indicated the amount of CIAC which should be imputed to the utility because of these undercharges.

However, this same documentation indicated (1) why the cash CIAC balance does not approximate the number of connections multiplied by the charge, and (2) why there is no cash CIAC balance in the wastewater system. A large portion of the cash CIAC received in the years 1976 through 1986 was applied to plant additions. Based on the IRS rules which required CIAC to be spent on plant or otherwise it would become taxable income, the utility transferred the cash CIAC to its "contributed plant" account. We agree that this is a reasonable method of accounting for the contributions and, as a result, only that amount under-collected should be imputed, which results in an increase of \$10,250 to the water CIAC and an increase of \$30,750 to the wastewater CIAC.

During Shadowrock's reconciliation of cash CIAC to its general ledger, it found three items incorrectly included as CIAC. The first two items were water bills charged to construction sites recorded in 1987 for \$1,312 and in 1989 for \$737. The third item is a \$10,360 deposit on the service availability charges paid in early 1986 and recorded a second time when the balance was paid later in the year. We find that these three items shall be removed from the test year balance of CIAC.

After including the imputed CIAC and the adjustments to remove the incorrect entries to CIAC, the adjusted balance of wastewater CIAC is understated by the same amount as the water CIAC is overstated. Therefore, readjustment requires that \$22,023 must be reallocated from the water CIAC to the wastewater CIAC.

In the used and useful calculation discussed earlier in the rate base section, we found that a margin reserve will be used in calculating the amount of used and useful plant. Commission policy is that when a margin reserve is included in a used and useful calculation, CIAC will be imputed on the number of ERCs included in the margin reserve. The product of the 81 ERCs included in the margin reserve and the \$525 service availability charge results in an imputation of \$42,525. However, inclusion of the margin reserve adds only \$33,033 to used and useful plant. We find that the imputation of CIAC should be limited to the additional plant included in rate base. Accordingly, \$33,033 shall be imputed to the wastewater system. We find that CIAC shall not be imputed on the water system because the water treatment plant is 100 percent used and useful without the margin reserve. Moreover, the utility's lines are contributed plant; therefore, the service availability charges are applicable only to the treatment Therefore, no CIAC shall be imputed for a margin facilities. reserve in the water system.

These adjustments result in a year-end balance of CIAC of \$598,978 in the water system and \$1,145,311 in the wastewater system. Averaging the test year additions results in an average water balance of \$584,537 and an average wastewater balance of \$1,116,011, which we find to be correct.

### Accumulated Amortization of CIAC

Shadowrock's accounts as of June 30, 1990 included accumulated amortization for water of \$190,844 and for wastewater of \$253,870. The utility's calculation appears to be generally accurate. As discussed earlier under accumulated depreciation, we accepted the utility's adjusted test year balance. However, several adjustments should be made which relate to the adjustments made to the CIAC account.

Earlier in the section on CIAC, we decided that CIAC should be imputed for cash charges. Accumulated amortization should also be calculated on these additions. Using a composite depreciation rate of 3.88 percent for the water system and 4.67 percent for the wastewater system, and based on the depreciation expense of the invested plant, we find that the accumulated amortization related to the imputed CIAC is \$15,422 for the water system and is \$21,447 for the wastewater system.

We further find that the accumulated amortization related to the other changes in CIAC shall be recognized. This results in a decrease to the accumulated amortization account of \$7,017 in the water system and an increase of \$5,216 in the wastewater system.

We shall include these adjustments and, by averaging the test year changes, the adjustments result in an average test year balance of \$187,451 for the water system and \$330,897 for the wastewater system.

# Working Capital Allowance

Using the formula method (one-eighth of operation and maintenance expenses) to calculate the working capital allowance, we find that the appropriate amount of working capital to included in rate base is \$8,215 for the water system and \$15,986 for the wastewater system.

#### Test Year Rate Base

After incorporating all adjustments, we find that the average test year rate base is \$120,066 for the water system and \$122,550 for the wastewater system.

#### COST OF CAPITAL

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

Shadowrock had three issues of debt outstanding at the end of the test year, all payable to Coast Federal. These three notes had a year-end balance of \$878,034 and an average test year balance of \$889,620. The utility's books also showed \$100,396 in interest expense for the test year. In addition to the interest expense, the utility is amortizing \$18,634 in prepaid loan costs. The test year amortization was \$2,881. Commission policy is to include the amortization of prepaid loan costs as part of the interest expense and allow an increase in the interest rate related to the debt. The interest plus amortization equals \$103,277. When this total interest expense is compared to the average debt of \$889,620, it

results in an effective interest rate of 11.61 percent. Therefore, we find that the interest rate for the long-term debt is appropriately set at 11.61 percent.

## Cost Rate for Customer Deposits

The utility's books shows a beginning balance of customer deposits of \$3,783 and an ending balance of \$4,724, for an average test year balance of \$4,254. The utility records indicate that the cost rate for customer deposits is 6 percent. Rule 25-30.311(4), Florida Administrative Code, requires utilities to pay 8 percent interest on customer deposits. Therefore, we find the interest rate to include in the capital structure for these deposits is 8 percent.

#### Return on Equity

At the end of the test year, Shadowrock had a \$250 balance in common stock, a \$1,165,188 balance in paid-in capital and a negative retained earnings and adjustment account of \$1,642,948. Commission policy is to include a zero equity balance when the negative retained earnings is larger than investment through stock. Accordingly, we find that a zero equity balance is correct for the test year. Since the utility does not have an equity balance, no return on equity need be established.

#### Overall Rate of Return

Considering all adjustments, the appropriate overall cost of capital is calculated by using the utility's capital structure with each item reconciled to rate base on a pro rata basis. According to our calculations, we find that Shadowrock's overall cost of capital of 11.59 percent.

#### NET OPERATING INCOME

Our calculation of net operating income for the water system is depicted on Schedule No. 3-A and for the wastewater system is depicted on Schedule No. 3-B. Our adjustments are itemized on Schedule No. 3-C. Those adjustments which are self-explanatory or which are essentially mechanical in nature are reflected on those schedules without further discussion in the body of this Order. The major adjustments are discussed below.

Operation and Maintenance Expenses (O & M)

Operation and maintenance expenses reflected in the utility's records were traced to invoices and test year canceled checks for verification of the appropriate account, amount, and reasonableness.

1) <u>Chemicals</u> Shadowrock uses gas chlorine to disinfect its water and wastewater treatment facilities. The amount used during the test year is reasonable and is accepted. However, the utility charged all chemical expense to the water system. The utility does not have records that indicate what expense should have been charged to the wastewater system. Based on discussions with the utility, we find that 50 percent of the expense should be transferred from the water system to the wastewater system, which allows an expense of \$1,169 in each system, for total expenses of \$2,338.

2) Office Supplies and Equipment The utility incurred office supply expense of \$981 in the water system and \$762 in the wastewater system. On May 23, 1990, Shadowrock entered into a new contract with its contract operator whereby the operator will bill Shadowrock \$250 a month for office costs. We find that this expense should be divided between water and wastewater and should be increased to reflect the new contract rate, which results in an increase of \$518 to the water expense and of \$738 to the wastewater expense.

3) <u>Contractual Services</u> The test year contractual services expense was \$11,212 for the water system and \$11,212 for the wastewater system. Shadowrock has a contract with East Coast American Utilities, Inc. (East Coast) to operate and service the water and wastewater plants and lift stations, to be responsible for furnishing a 24-hour telephone answering service, and to provide a service representative on standby call. The current contract details the services included for the following payments:

- 1) \$4,000 per month for operation and maintenance services,
- 2) \$725 per quarter for the quarterly billing of customers,
- 3) \$250 per month for office costs,
- 4) \$.85 per meter for each meter read,
- 5) miscellaneous service charges (discussed later in this Order), and

# reimbursement for the printing of billing statements, envelopes and stationary.

We were initially concerned with what appeared to be high test year payments involved with the East Coast contract. The test year expenses include payments to East Coast in the amount of \$53,848 from the water system and \$32,423 from the wastewater system. However, when these payments are split between operation expense and maintenance expense, the operation portion of the expense does not appear so high. The operation expense paid to East Coast totals \$23,944 for the water system and \$24,748 for the wastewater system.

We were also concerned with the even higher payments involved with the new contract. The largest increase in the new contract is the monthly charge for operation. Shadowrock also expressed concern over the monthly charge for operation of the facilities. However, Shadowrock contacted several contract operators and could not find another willing to provide the required contract services at a lower rate.

Previous to the current contract, the utility was paying \$1,675 per month for operation and maintenance services; the new rate is \$4,000 per month. East Coast attributes its high rate to additional staffing time at the wastewater treatment plant required by a rule of the Jacksonville Environmental Protection Board. The plant is classified by the City of Jacksonville as a "regional sewage treatment facility." Although the facility had a treatment capacity of 450,000 gpd, the rule requires it to be operated in accordance with the DER staffing requirements for a facility with a capacity greater than one million gallons per day. This increases the staffing time to 6 hours per day for 5 days per week, with 1 weekend visit. Normally, staffing for a plant of this size would be for 3 hours per day for 5 days per week, with 1 weekend visit.

When all the related expenses are considered, such as salary, insurance, taxes and vehicle expense, it appears that the utility prudently negotiated the contract. Therefore, we find that the test year expense should be adjusted to include the increased rate. Because the staffing time is the primary basis for the monthly charge and is significantly higher for wastewater than water, we find that the monthly charge should be allocated between water and wastewater based on the staffing time, which results in an annual

expense of \$12,000 for the water system and \$36,000 for the wastewater system, an increase of \$788 to contractual services in the water system and \$24,788 in the wastewater system.

During the test year, Shadowrock charged lab testing fees to the contractual services account. The above adjustment increases the expense to a level which recognizes the current contract for operator services. Thus, the expense should be further increased to include the lab testing fees of \$8,400. We find that the net effect of our adjustments results in a total contractual services expense of \$16,200 for the water system and \$40,200 for the wastewater system.

4) <u>Repairs - Water Mains</u> During the test year Shadowrock charged \$21,187 to this expense account. Two of the items appear to be capital items, not expenses. The first is an invoice from East Coast for \$1,368 that describes the work as "replacement of skimmer line and trough, welded steel converted from contact stabilization to extended aeration, and repaired walkway." This was for work done to the wastewater plant. Therefore, this expense shall be transferred from the water system to the wastewater system. Because this work is primarily a long-term improvement to the treatment plant, we find that it should not be expensed, but should be capitalized.

The second capital item is a \$18,711 invoice for major repair work done at the wastewater plant. The blower broke, the plant became septic, and the manholes sunk and had to be repaired to keep the plant operating. Therefore, we find that this \$18,711 expenditure shall be capitalized and be depreciated over the remaining life of the plant.

During the test year, Shadowrock incurred a \$494 nonrecurring expense to repair damage because of a severe freeze. After removing the two capital invoices and the non-recurring amount, we find the balance of this expense is reduced to \$614, which is reasonable and will be included in the test year expenses.

5) <u>Repair - Collection System</u> The test year balance for this account was \$5,935, which included two journal entries posted to the wrong account. The two entries reduced the expense by \$692 in an attempt to reclassify legal and accounting fees from the outside services account to the proper account. We find that the repair account shall be increased to its original level and the

reclassification be properly recorded in the outside services account. Further, in the following discussion, we conclude that the repair account should be increased to record the amortization of the maintenance of the ponds. This results is an increase of \$642 to this account and results in a total allowed expense of \$7,269.

6) Outside Services The outside services expense for the test year was \$12,633 in the water system and \$34,693 in the wastewater system. The water expense includes \$1,950 for the manager, \$7,500 for the administrative fee, \$3,152 to East Coast and \$31 in fees to the Law Firm of Culverhouse and Botts. The wastewater expense includes the same charges for the manager and administrative fee, \$2,042 to East Coast, \$238 in legal fees, \$455 in accounting fees, \$1,062 in engineering fees, \$21,402 to C&J Construction, and \$45 in fees to Culverhouse and Botts. The manager's fee is \$300 per month. However, the test year expense includes an expense for 13 months. We reduce the expense to a 12 month charge, which decreases the total expense by \$300, or \$150 for each system.

The administrative fee is partially included in this account and partially included in another account labeled "administrative fee." We find that the administrative fee should be removed from the outside services account so the entire yearly expense can be examined in one account. This results in a reduction to the expense by \$7,500 for both the water and wastewater system. We find that these two adjustments plus the reclassification of the engineering fees, discussed immediately below, result in an appropriate outside services expense for the water system of \$6,131.

The wastewater expense includes one invoice which warrants further discussion. This invoice is for \$21,402 to C&J Utilities Construction for the clearing of percolation ponds. There is another related invoice in a wastewater maintenance account for \$4,548. These two invoices total \$25,950. The ponds had not been properly maintained for many years and they were overgrown. If the utility had been continuously maintaining the ponds, the test year expense would have been lower. However, the utility would have been incurring the yearly maintenance expense in prior years. Therefore, we believe this is a charge that has been deferred from previous years. We believe the expense is reasonable, but it should be amortized over five years. The portion expensed in outside services shall be moved to the maintenance account, whereby

the outside services expense will be reduced by \$21,402. The wastewater maintenance expense currently includes the \$4,548 expense. Therefore, we conclude that the maintenance expense shall be increased by \$642, which increases the total expense to \$5,190, or one-fifth of the total of the pond clearing invoices. We find that this adjustment, along with the reclassification from other O&M accounts, results in a wastewater expense of \$4,949.

We further conclude that two additional pro forma items should be considered in the outside services expenses. The first is an invoice for \$170 received after the test year for two hours of engineering work performed during the test year, related to the plant deficiencies. The \$170 is a reasonable and necessary cost and is allowed. The second item is a \$6,570 estimate for mowing the grass around the percolation ponds. While the utility spent a large sum of money on rehabilitating the ponds during the test year, this recent estimate is for future, recurring maintenance of the ponds. We find that the expenses should be increased to allow for future periodic maintenance of the ponds. Therefore, we find that the expense should be increased to \$11,689 to allow these pro forma items.

7) <u>Telephone</u> The test year expense for telephone was \$414 for the water system and \$449 for the wastewater system. However, around June of 1990, the operating company added a telephone at the wastewater treatment plant. We allow this expense for the additional phone line. Shadowrock estimates the annual expense to be \$1,454, which is reasonable. Accordingly, we find that the water expense shall be increased by \$313 and the wastewater expense shall be increased by \$278.

8) Quarterly Billing The test year expense for quarterly billing was \$4,595 for the water system and \$4,465 for the wastewater system. The current contract with East Coast states that the service company shall charge \$725 per quarter for the billing of customers and \$.85 for each meter read at the end of each quarter. For 661 customers, this results in a yearly expense of \$5,147. During the test year, the utility allocated the expense evenly between water and wastewater. Because the meter readings are used to determine the water and wastewater bills, we find the allocation is reasonable. Therefore, we find that the expense shall be adjusted to reflect the new contract. This results in a reduction to the water expense of \$2,021 and to the wastewater expense of \$1,891, for a total expense of \$5,145.

9) <u>Repairs - Treatment Plant</u> The test year expense for this account was \$5,546 in the water system and \$4,364 in the wastewater system. However, one invoice for \$2,884 appears to be a capital item. The invoice states that it is a new 3/4 inch PVC pipe to the chlorinator. The utility has split this invoice evenly between water and wastewater. Therefore, we find that expenses should be reduced by \$2,884 for this item, which results in an adjusted expense of \$4,103 in the water system and \$2,922 in the wastewater system.

After the test year, Shadowrock hired an individual to haul debris off part of the utility's land. Because of the remote location of the subject site, local residents and builders have used the area as an unapproved dumping site. The recent cost to clear the area was \$4,135. This was based on 32 hours of work utilizing a truck, backhoe, and loader. We find that the utility should be allowed to recover this expense but that it should be recovered over a 4 year amortization period and be divided between the water and wastewater systems. Accordingly, this results in a \$517 expense reduction to each system.

Shadowrock will incur another major expense after the test year that should be considered. Shadowrock needs to sandblast and paint the exterior surfaces of its well and tanks at an estimated cost of \$4,393. We find that this is a reasonable and necessary cost and that it should be amortized over a 5 year period. Shadowrock has already completed this work and we find that it is satisfactory. Including one-fifth of this expense results in an increase of \$879. We find that these adjustments result in a total expense of \$5,500 in the water system and \$3,439 in the wastewater system.

10) Administrative Fee The test year expense for this account was \$8,100 in both the water and wastewater systems. In our discussion above regarding contractual services, we decided that \$7,500 should be reclassified from the contractual services account to the administrative fee account, which results in an administrative fee balance of \$15,600 for the test year. This expense is a monthly charge by Mode, Inc. (Mode) for services rendered to Shadowrock. Mode manages approximately 20 entities and allocates its yearly expenses among those entities. In 1989, Mode charged Shadowrock \$2,500 per month. The fee for 1990 is \$2,700 per month. The two primary tasks performed by Mode for Shadowrock are the paying of invoices and maintaining the general ledger. During the test year,

Mode issued approximately 200 checks. These checks required approximately 600 entries to distribute these payments to the proper accounts. Because many of the checks were to East Coast, a typical check was distributed to numerous accounts for the various duties performed by East Coast. Mode is also responsible for recording the billing, daily cash collections, and various customer activity. It also provides various financial functions, such as financing, insurance and computer services.

Initially there was concern that the monthly charge appeared high. However, after review of the calculations that determined the allocation, the allocation appears to be correct. We find that this expense should be allowed to encourage the utility to improve the level of communications between the various "managing" levels involved with the operation of Shadowrock. Although the Commission has not had any problems with the utility, Mode, or any persons involved with this case, we believe the various levels of operation are not coordinated as well as they should be.

During the test year, the utility had a part-time manager who resided in the general area, the service company (East Coast), and Mode, in Tampa. Each of these performs certain duties. However, it appears that no single individual is taking an active role in overseeing the "big picture." We have already discussed that the plant and the ponds had not been regularly maintained and now need major maintenance. While in the long-run, the cost of the catch-up maintenance is approximately equal to what the utility would have paid in yearly maintenance costs, we do not believe it is good management to wait until a problem is out of control before it is corrected. We believe that this is another factor why the utility was given a cease and desist citation by the Department of Health, Welfare & Bio-Environmental Services (BESD). Although many of the items listed in the citation are not in themselves major, the quantity of minor items indicate that no single person has been effectively monitoring the operations of the utility. In recent months, Mode has been reviewing the operations of the utility and We believe that Mode fully has begun considering changes. understands the extent of the communications problem and is working to correct the situation. Therefore, while the administrative fee appears high, it appears to us that it is a reasonable cost for Mode to perform the accounting function, provide various financial functions, and oversee the utility operations. We, therefore, conclude that the test year expense should be increased to allow

the new contract rate of \$2,700 per month, resulting in an increase of \$600 to each system.

11) Legal Fees The test year balance of this account is \$256 for the water system and \$8,377 for the wastewater system. The water expense appears reasonable and no adjustment is necessary. However, the wastewater expense includes \$8,125 in legal fees to address the cease and desist citation issued by BESD on October 30, 1989. The citation lists 6 violations, with many of the violations consisting of several parts. In summary, the violations are: 1) wastewater effluent standards exceeding standards, 2) failure to enclose the facility within a fence, 3) failure to properly maintain the percolation ponds, 4) violation of various monitoring requirements, 5) failure to provide adequate staffing for a regional wastewater facility, and 6) failure to submit monthly operating reports. While some of the violations may be minor, the sheer quantity of the violations is troubling. The utility states that it had no knowledge of the violations until the cease and desist citation was issued. However, the utility response to BESD states that notices of the violations had been delivered to East The utility appears to be drawing an unwarranted Coast. distinction between itself and its contract operator. We find that notice of the violations shall be imputed to the utility, effective upon receipt by East Coast, although the utility did not receive actual notice from either East Coast or BESD.

We believe that this lack of communication regarding the notice is another example of poor communications between the various levels of operations. We believe that the utility consists of three levels of management: the part-time manager, East Coast, and Mode (in Tampa). If one of the three fails to properly perform its responsibilities, then the utility has failed to perform that responsibility. Because the utility incurred \$8,125 in legal fees due to its failure to operate according to the rules of BESD, we also do not believe that the ratepayers should pay for the utility's error.

We note that the invoices supporting the \$8,377 in legal fees include a listing of meetings, telephone calls, research and preparation of responses, but they do not detail the specific tasks or how much time was spent on each task, or what rates were charged. Shadowrock is a sister company to South Broward Utility, Inc. which recently completed a rate case before this Commission. Order No. 22844, issued April 23, 1990, criticized the lack of

detail in the rate case expense for that case, and the rate case expense was reduced by \$10,000 to reflect the overall insufficient detail of the accounting and legal fees were imprudently accepted by that utility. Considering the circumstances in this case, we find that the legal fees in Shadowrock's wastewater system shall be reduced by \$8,125 to delete the fees incurred because of the BESD citation. Along with the reclassification from other accounts, this results in an allowed legal expense of \$252.

12) Regulatory Commission Expense The test year balance in this account was \$3,122 in the water system and \$1,901 in the wastewater The majority of these two accounts is payment to this system. Commission for regulatory assessment fees (RAF). We find that this expense shall be reduced and the RAF payments must be reclassified to "taxes other than income." The remainder of the expense is a payment for \$1,148 to Waitz and Frye for engineering services in response to the cease and desist citation. Because most of the cease and desist citation addresses the wastewater facilities, we conclude that this item shall be reclassified from water to wastewater. Although the legal fees related to the citation have been disallowed, the engineering fees related to the citation will be included in expenses. The utility would not have incurred the legal fees if the utility had not received the citation, but the engineering fees were related to problems which needed to be fixed at the plant in any case. Therefore, we find that the engineering fees shall be included in expenses, but should be reclassified to the contractual services account.

After the test year, the utility was invoiced for \$467.50 for 5-1/2 hours spent by the engineer for rate case expense. This was for his time spent talking with Commission staff and preparing responses to the staff investigation. We will allow this expense. In addition, after the test year, the utility paid an \$1,800 filing fee for this case. This item shall also be included in regulatory commission expense.

In accordance with Section 367.0816, Florida Statutes, the rate case expense shall be amortized over 4 years. The expense shall be split equally between water and wastewater. We find that this results in an expense of \$283 for each of the two systems.

13) <u>Bank Charges</u> The test year expense for bank charges was \$231 for both the water and wastewater systems. \$206 in each system was for a late payment penalty. Following our policy of disallowing

all fines and penalties, we find the appropriate balance in this account to be \$25 for each system.

## Depreciation Expense

The utility's accounts included water depreciation expense of \$17,520 and wastewater depreciation expense of \$48,318. Using the rates prescribed by Chapter 25-30.140, Florida Administrative Code, we calculated depreciation on the adjusted test year plant in the amount of \$24,493 for the water system and \$55,634 for the wastewater system. We find that the test year expense shall be increased by \$7,099 in the water system and \$7,316 in the wastewater system. The rule rates applied to the pro forma plant add an additional \$126 in the water system. Using the same rates, the amortization of CIAC property totals \$14,221 for the water system and \$42,429 for the wastewater system. The amortization expense included in Shadowrock's accounts was \$9,424 for the water system and \$34,973 for the wastewater system. Therefore, we find that the amortization on CIAC property should be increased by \$4,797 for the water system and \$7,456 for the wastewater system.

We find that the used and useful percentage be applied to the depreciation expense related to the wastewater plant, which results in a reduction to the depreciation expense of \$8,174. This adjustment is based on an adjustment to the total non-used and useful plant for \$15,492 minus \$7,318 to deduct the portion attributable to contributed plant.

We find that the amortization related to the imputed cash CIAC shall be included in depreciation expense. Shadowrock's trial balance includes an amortization expense of \$9,513 for the water system and a negative amortization expense of \$3,737 for the wastewater system. Our calculation results in an amortization expense of \$7,158 for the water system and \$2,728 for the wastewater system. Therefore, we find that the amortization on cash CIAC shall be reduced by \$2,355 in the water system and increased by \$6,465 in the wastewater system.

We further conclude that the depreciation expense shall be adjusted for the prepaid CIAC and the imputed CIAC on the margin reserve. This results in an increase to the water expense of \$1,661 and an increase to the wastewater expense of \$2,572.

Based on these adjustments, we find that the appropriate depreciation expense to be included in the revenue requirement is \$5,027 for the water system and is \$4,875 for the wastewater system.

## Taxes Other Than Income Taxes

During the test year the utility charged \$32,538 in expenses for taxes other than income. The expense was for personal property tax, real estate tax, intangible tax, and a DER Water Pollution tax.

We find the intangible tax of \$1,058 is reasonable and shall be divided evenly between water and wastewater.

The personal property tax paid during the test year was \$25,286. If the utility had paid the tax in November, the amount would have been \$25,025. It is prudent management to pay the lowest cost. Therefore, this expense shall be reduced by \$261 and shall be allocated to the water and wastewater system based on the utility plant in service balance at the end of the test year. This results in property tax of \$8,860 for the water system and \$16,166 for the wastewater system.

The real estate tax paid during the test year was \$2,994. Like the personal property taxes, the utility did not pay these bills at their lowest amounts. Therefore, this expense shall be reduced by \$30 to reflect the lost discount. The utility received three real estate tax bills. Two of the bills were for the two percolation pond sites. The third bill was for the water and wastewater plant sites. The third bill shall be allocated between the water and wastewater system based on the acreage of the utility plant sites. This bill is for \$1,176. The water plant site is 6.98 acres and the wastewater plant site is 2.09 acres, which results in \$906 being allocated to the water system and \$270 to be allocated to the wastewater system. The three bills result in a total expense of \$906 for the water system and \$2,056 for the wastewater system.

Earlier in the used and useful portion of this Order, we held that a portion of the water plant site was non-utility property. The real estate tax related to that part of the land shall be removed from expenses. The portion related to non-utility plant was 70 percent of the entire parcel, therefore, we determine that

\$634 shall be removed from taxes other than income. We also found that one of the percolation pond sites will be classified as plant held for future use. The tax related to that pond site shall also be removed from expenses. We calculate that these adjustments result in a reduction of \$731.

The utility paid \$3,200 to the City of Jacksonville for a onetime Water Pollution tax. This is a non-recurring item that should be amortized over a 4 year period, resulting in an allowed yearly expense of \$800.

In our discussion of O&M expenses, we reclassified the RAFs from O&M expenses to taxes other than income. However, the test year expense does not represent 4.5 percent of the revenues. Therefore, we hereby adjust the expense to reflect the higher tax percentage. By our calculation, this results in a test year expense of \$3,064 for the water system and \$4,096 for the wastewater system.

Based on these components of taxes other than income, we conclude that the test year taxes other than income are \$12,726 for the water system and \$22,916 for the wastewater system.

#### Income Tax Expense

Shadowrock Utilities, Inc. is a Subchapter S corporation. No income tax expense should be included in the rates of a Subchapter S corporation as the corporation, as an entity, does not pay income taxes. Therefore, we find that the income tax expense for Shadowrock should be zero.

#### Test Year Operating Loss

Based on the previous adjustments, we find that the test year operating loss is \$15,382 for the water system and \$64,655 for the wastewater system.

#### REVENUE REQUIREMENTS

The annual revenues required as a result of the adjustments discussed above are \$98,770 for the water system and \$173,604 for the wastewater system. This will allow the utility the opportunity to recover its expenses of \$84,851 in the water system and \$159,397

in the wastewater system and an opportunity to earn an 11.59 percent return on its investment in rate base.

#### RATES AND CHARGES

Our approved rates are designed to allow Shadowrock to recover its approved revenue requirements. The utility's current rates are on a quarterly basis and the water base charge includes a minimum usage of 18,000 gallons per quarter. Half of the test year bills never exceeded the minimum usage. The wastewater rate is a flat rate. Flat rates and the inclusion of a high minimum usage in the base rate are not conducive to conservation. We considered changing the utility to bi-monthly billing; however, most of the customers who attended the customer meeting preferred the quarterly billing. Therefore, quarterly billing shall be continued.

We find, however, that the utility snall employ the base facility/gallonage charge rate structure. This rate structure has been used by the Commission for many years and establishes a fixed charge for each customer which recovers a proportionate share of fixed operating costs and a variable gallonage charge which recovers the variable costs of providing the treated water or wastewater treatment.

We find the following rates to be fair, just and reasonable. Schedules of the existing rates and our approved rates are shown below for comparison:

#### WATER

#### QUARTERLY RATES

## Residential

## Existing Rates

Meter Size	<u>Min. Usage</u>	
5/8" x 3/4"	18,000	\$ 15.95
1"	30,000	26.59
1-1/2"	60,000	53.17
2"	96,000	85.08
3"	180,000	159.52
4"	300,000	265.86
6"	600,000	531.74

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> <u>Gallonage Charge</u> Per 1,000 gallons over minimum

\$ 0.80

# Residential

Commission Approved

Base Facility Charge

# Meter Size

5/8" x 3/4"	\$ 11.74
1"	29.36
1-1/2"	58.72
2"	93.95
3"	187.91
4"	293.60
6"	587.21

Gallonage Charge Per 1,000 gallons

\$ 0.94

General Service

# Existing Rates

<u>Meter Size</u>	Min. Usage	
5/8" x 3/4"	18,000	\$ 20.72
1"	30,000	34.53
1-1/2"	60,000	69.07
2"	96,000	110.49
3"	180,000	207.19
4"	300,000	345.30
6"	600,000	690.57
lonage Charge		

<u>Gallonage Charge</u> Per 1,000 gallons over minimum

\$ 1.04

# General Service

Commission Approved

Base Facility Charge

Meter Size

5/8" x 3/4" 1" 1-1/2" 2" 3" 4" 6"

\$ 0.94

\$ 11.74 29.36

> 58.72 93.95

187.91

293.60

587.21

Gallonage Charge Per 1,000 gallons

# Multiple Dwelling Service

# Existing Rates

Minimum Charge:

Each meter times \$10.61 times the number of units

Each meter times 18,000 gallons times number of units = minimum consumption

Excess Charge:

Gallons over minimum consumption = \$.76 per 1,000 gallons

# Commission Approved

The general service rates shall applied to multiple dwelling customers.

# WASTEWATER

# QUARTERLY RATES

# Residential

Base Facility Charge	<u>Existing</u> <u>Rates</u>	<u>Commission</u> Approved
All Meter Sizes	\$ 35.26	\$ 33.22
Gallonage Charge		
Per 1,000 gallons (30,000 gal. maximum)	Flat Rate	\$ 2.50

# General Service

Base Facility Charge

Meter Size	<u>Existing</u> <u>Rates</u>		proved
5/8" x 3/4"	218.28% of	\$	33.22
1"	water bill		83.04
1-1/2"	"		166.08
2"	"		265.72
3"	"		531.45
4"	"		830.39
6"	"	1,	660.78
<u>Gallonage Charge</u> Per 1,000 gallons (No maximum)	"	\$	2.99

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Commingion

# Multiple Dwelling Service

Current Rate: \$23.51 times the number of units

<u>Commission Approved</u>: The general service rates shall be applied to multiple dwelling service.

Previously, the general service customer (the apartment complex), was billed at the residential base facility charge times the number of units. Under the approved rates, the apartment

complex will be billed based on the meter size using the general service rates, which is standard procedure for billing general service customers.

These approved rates shall become effective for meters read on or after 30 days from the stamped approval date on the revised tariff sheets. The tariff sheets will be approved upon staff's verification that the tariffs are consistent with this decision and the proposed customer notice is adequate.

### Rates After Amortization of Rate Case Expenses

The rate case expense incurred by the utility for this was the \$1,800 filing fee, plus engineering costs totalling \$467.50. Following the requirements of Section 367.0816, Florida Statutes, the appropriate recovery period for this fee is 4 years, which allows the utility to recover through its rates approximately \$283 per year per system. This revenue recovery grossed up to account for RAFs results in an annual revenue of \$296 (\$283 x 1.045) per system. Therefore, at the end of four years, the utility's rates for water and wastewater should be reduced by \$296 annually. Based on the existing circumstances, the effect of this rate reduction is an \$.11 reduction in the utility's water base facility charge and an \$.11 reduction in the utility's wastewater gallonage charge. Shadowrock shall file revised tariff sheets no later than one month prior to the actual date of the required rate reduction. It shall also file a proposed customer letter setting forth the lower rates and the reason for the reduction. If the utility files this reduction in conjunction with a price index or pass-through rate adjustment, separate data shall be filed for the price index and/or pass-through increase or decrease and the reduction in the rates due to the amortized rate case expense.

#### Miscellaneous Service Charges

Currently, the utility's tariff includes a reconnection charge of \$5.00 and an after hours reconnection charge of \$10.00. Miscellaneous service charges are designed to provide revenues for services other than the direct provision of potable water and wastewater collection and treatment. These charges are designed to more accurately defray the costs associated with each service and place the responsibility for the cost on the persons creating it rather than the ratepayers as a group. The four types of miscellaneous service charges are as follows:

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(1) <u>Initial Connection</u>: This charge is levied for service initiation at a location where service did not exist previously.

(2) <u>Normal Reconnection</u>: This charge is levied for transfer of service to a new customer account at a previously served location, or reconnection of service following a customer requested disconnection.

(3) <u>Violation Reconnection</u>: This charge is to be levied prior to reconnection of an existing customer after disconnection of service "for cause" according to Rule 25-30.320(2), Florida Administrative Code, including a delinquency in bill payment. (Actual cost is limited to direct labor and equipment rental.)

(4) <u>Premises Visit Charge (in lieu of disconnection)</u>: This charge is levied when a service representative visits a premises for the purpose of discontinuing service for nonpayment of a due and collectible bill, but does not discontinue service because the customer pays the service representative or otherwise makes satisfactory arrangements to pay the bill.

We find the following miscellaneous service charges to be fair, just, and reasonable.

	WATER	WASTEWATER
Initial Connection:	\$15.00	\$15.00
Normal Reconnection	\$15.00	\$15.00
Violation Reconnection	\$15.00	Actual Cost <sup>(1)</sup>
Premises Visit (in lieu	of	
disconnection)	\$10.00	\$10.00

(1) Actual Cost for a wastewater violation reconnection is limited to materials and equipment rental.

When both water and wastewater services are provided, only one charge is appropriate unless circumstances beyond the control of the utility require multiple actions.

## Service Availability Charges

Shadowrock's current tariff includes a water system tapping fee of \$90.00 and a water system plant connection charge of

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\$175.00. The current wastewater system plant connection charge is \$525.

Rule 25-30.580, Florida Administrative Code, states that:

(1) A utility's service availability policy shall be designed in accordance with the following guidelines:

- (a) The maximum amount of contributions-in-aid-ofconstruction, net of amortization, should not exceed 75% of the total original cost, net of accumulated depreciation, of the utility's facilities and plant when the facilities and plant are at their designed capacity; and
- (b) The minimum amount of contributions-in-aid-ofconstruction should not be less than the percentage of such facilities and plant that is represented by the water transmission and distribution and sewage collection systems.

Currently, the utility is 80 percent contributed in the water system and 86 percent contributed in the wastewater system. We believe that a large portion of this high contribution level is because the utility has received a high level of contributed property. We do not believe that the contribution level is intolerably high under the circumstances of this case. Our calculations show over the next five years, with the current service availability charges and with no additional plant investment, the utility will stay near the current contribution levels. We also believe that during the normal course of business over the next few years, the utility will need to add a few improvements to both systems. These small increases will bring the contribution levels down to approximately 75 percent. We are currently unaware of any plans for major plant expansions or additions. If the utility begins such a plan and desires higher service availability charges, it can apply for a service availability case at that time.

Shadowrock has requested that the tapping fee be increased from the current tariff amount of \$90.00. East Coast bills the utility \$95.00 each time it installs a meter. The utility requested that the tariff be increased to at least cover the cost of installing the meters. We agree that the tapping fee should be

raised to recover the meter installation cost plus a small percentage (i.e., 10 percent) to cover administration expenses. A \$100 charge is reasonable; therefore, we find that the tapping fee should be increased to \$100. All other service availability charges remain unchanged.

### Allowance For Funds Prudently Invested

Shadowrock has requested an allowance for funds prudently invested (AFPI) charge for the non-used and useful portion of its plant. An AFPI charge is designed to allow the utility to recover a fair rate of return on the portion of plant facilities which were prudently constructed, but where existing facilities have capacity that exceeds the amount of capacity necessary to serve all existing customers.

In the first part of this Order, we decided that the wastewater treatment facility was 66.3 percent used and useful. We further held that the water treatment plant and the transmission and distribution lines and the collection lines were 100 percent used and useful. Therefore, an AFPI charge is appropriate only for the wastewater treatment facility.

The cost of the qualifying asset is the net plant costs removed from rate base, reduced by the costs related CIAC. The capacity of the qualifying asset is that portion left over after considering test year consumption and margin reserve. The number of future customers is calculated based on the remaining capacity and the average usage of the current customers. The calculation of AFPI is shown on Schedule No. 4-A attached to this Order. The remaining information is from the operating statement and the capital structure schedules, attached to this Order. Commission policy is to cap the charge after a period of 5 years. We find the appropriate AFPI charges resulting from these calculations begin at \$1.48 and accrue after 5 years to \$89.33.

# Customer Deposits

Shadowrock has requested to increase its customer deposits, which are currently \$20.00. The Commission has generally held that a customer deposit should be set at approximately two average monthly bills. Shadowrock is billing on a quarterly basis and the base facility charge is billed in advance. Our practice is to set the deposit to allow the utility to recover any amounts due if a
customer moves without paying the utility bill. Therefore, following this practice, we find that the deposit shall consist of one and one-half the average quarterly gallonage charges plus onethird of the base facility charge. This will allow the utility to recover the past bill and the approximately one month period before service may be discontinued because of nonpayment.

Based on the above calculations, we find that an appropriate residential deposit is approximately \$40.00 for the water system and is \$55.00 for the wastewater system. Therefore, we find that the current deposits should be increased to these amounts.

The utility's tariff currently indicates a 6 percent interest rate. The tariff shall be revised to reflect the current 8 percent rate required by Commission rule.

# EFFECTIVE DATE OF RATES AND CHARGES

The service rates shall be effective for service rendered after the stamped approval date on the revised tariff pages, but in no event shall the new rates be applied to any service rendered prior to the effective date of the new tariffs.

The service availability charges approved herein shall be effective for connections on or after the stamped approval date on the revised tariff pages. Miscellaneous service charges will be effective for service rendered on or after the stamped approval date on the revised tariff pages.

The revised tariff pages will be approved upon Staff's verification that the tariffs are consistent with the Commission's decision and that the proposed customer notice is adequate.

### RATES IN THE EVENT OF PROTEST

This order proposes an increase in water and wastewater rates. A timely protest could delay what may be a justified rate increase, pending a formal hearing and final order in this case, resulting in an unrecoverable loss of revenue to the utility.

Accordingly, in the event a timely protest is filed by anyone other than the utility, we authorize the utility to collect the quarterly service rates approved herein, subject to refund, provided that Shadowrock furnishes security for such a potential

refund. The security should be in the form of a bond or letter of credit in the amount of \$90,000. Alternatively, the utility may establish an escrow account with an independent financial institution pursuant to a written agreement. If this alternative is chosen, all revenue collected under the rate increase will be subject to escrow. Any withdrawals of funds from this escrow account shall be subject to the written approval of the Commission through the Director of Records and Reporting. Should any refund ultimately be required, it shall be paid with interest calculated pursuant to Rule 25-30.360(4), Florida Administrative Code.

In addition, Shadowrock shall file reports with the Water and Wastewater Division no later than the 20th day following the monthly billings, after the increased rates are in effect, indicating the amount of revenue collected under the implemented rates. Shadowrock must also keep an account of all monies received by reason of the increase authorized herein, specifying by whom and in whose behalf such monies were paid.

Shadowrock is authorized to implement the temporary rates only after providing the above discussed security and after Staff's approval of the revised tariff sheets and customer notice.

Based on the foregoing, it is, therefore,

ORDERED by the Florida Public Service Commission that the application of Shadowrock Utilities, Inc., for an increase in its quarterly water and wastewater rates in Duval County is approved as set forth in the body of this Order. It is further

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

ORDERED that all matters contained in the body of this order and in the schedules attached hereto are by reference incorporated herein. It is further

ORDERED that the provisions of this Order issued as proposed agency action shall become final, unless an appropriate petition in the form provided by Rule 25-22.029, Florida Administrative Code, is received by the Director, Division of Records and Reporting at his office at 101 East Gaines Street, Tallahassee, Florida 32399-0870, by the date set forth below in the Notice of Further Proceedings. It is further

ORDERED that the service rates approved herein shall be effective for service rendered after the stamped approval date for the revised tariff pages, but in no event shall the new rates be applied to any service rendered prior to the effective date of the new tariffs. It is further

ORDERED that the miscellaneous service charges approved herein shall be effective for service rendered on or after the stamped approval date on the revised tariff pages. It is further

ORDERED that the increased service availability charge ("tapping fee") shall be effective for connections made on or after the stamped approval date on the revised tariff pages. It is further

ORDERED customer deposits are increased as set forth in the body of this Order. It is further

ORDERED that prior to its implementation of the rates approved herein, Shadowrock Utilities, Inc. shall submit and have approved revised tariff pages and a proposed notice to its customers of the increased rates and charges and the reasons for the increases. The revised tariff pages will be approved upon staff's verification that they are consistent with our decisions herein and that the protest period has expired. The proposed customer notice will be approved upon Staff's determination of its adequacy. It is further

ORDERED that in the event of a protest by any substantially affected person other than Shadowrock Utilities, Inc. the utility is authorized to collect the quarterly rates, but not the charges approved herein, on a temporary basis, subject to refund in accordance with Rule 25-30.360, Florida Administrative Code, provided that Shadowrock Utilities, Inc. has established the required security for any potential refund and provided that it has submitted and Staff has approved revised tariff pages and a proposed customer notice. It is further

ORDERED that this Order shall become final and the docket shall be closed administratively if no timely protest has been filed. 266

ORDER NO. 24224 DOCKET NO. 900565-WS PAGE 40

By ORDER of the Florida Public Service Commission this \_\_\_\_\_h day of \_\_\_\_\_\_\_, 1991.

STEVE TRIBBLE, Director Division of Records and Reporting

(SEAL)

TCP

# NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.59(4), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

As identified in the body of this order, our actions, other than the granting of temporary rates in event of a protest, are preliminary in nature and will not become effective or final, except as provided by Rule 25-22.029, Florida Administrative Code. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, as provided by Rule 25-22.029(4), Florida Administrative Code, in the form provided by Rule 25-22.036(7)(a) and (f), Florida Administrative Code. This petition must be received by the Director, Division of Records and Reporting at his office at 101 East Gaines Street, Tallahassee, Florida 32399-0870, by the close of business on <u>April 1, 1991</u>. In the absence of such a petition, this order shall become effective on the date subsequent to the above date as provided by Rule 25-22.029(6), Florida Administrative Code.

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

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

Any party adversely affected by the Commission's final action in this matter may request: 1) reconsideration of the decision by filing a motion for reconsideration with the Director, Division of Records and Reporting within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water or sewer utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.

SHADOWROCK UTILITIES, INC. SCHEDULE OF WATER RATE BASE TEST YEAR ENDED JUNE 30, 1990

SCHEDULE NO. 1-A DOCKET NO. 900565-WS

	COMPONENT	(A) 6/30/90 TEST YEAR PER UTILITY	(B) ADJUSTMENTS TO THE TEST YEAR	3	(C) ADJUSTED TEST YEAR	(D) PRO FORMA ADJUSTMENT	5	(C) PRO FORMA TEST YEAR
1								
2								
3	UTILITY PLANT IN SERVICE \$	686,594	\$ (34,771)	\$	651,823	\$ 4,090	\$	655,913
4	LAND	32,368	(22,658)		9,710			9,710
5	C.W.LP.	0	0		0			0
6	NON-USED AND USEFUL COMPONENTS	0	34,477		34,477			34,477
7	CIAC.	(623,158)	38,621		(584,537)			(584,537)
	ACCUMULATED DEPRECIATION	(203,229)	12,193		(191,037)	(126)		(191,163)
	AMORTIZATION OF C.I.A.C.	190,844	(3,393)		187,451			187,451
10	ADVANCES FOR CONSTRUCTION	0	0		0			0
11	WORKING CAPITAL ALLOWANCE	0	8,215		8,215			8,215
12								
13	RATE BASE \$	83,418	\$ 32,684	5	116,102	\$ 3,964	\$	120,066
14		********	********					
15								

SHADOWROCK UTILITIES, INC. SCHEDULE OF SEWER RATE BASE TEST YEAR ENDED JUNE 30, 1990

#### SCHEDULE NO. 1-B DOCKET NO. 900565-WS

		(A) 6/30/90		(B) ADJUSTMENTS	5	(C)	(D)	(C)
	COMPONENT	TEST YEAR PER UTILITY		TO THE TEST YEAR		ADJUSTED TEST YEAR	PRO FORMA	PRO FORMA TEST YEAR
2								
3	UTILITY PLANT IN SERVICE \$	1,282,372	\$	(90,556)	\$	1,191,816	\$ 0	\$ 1,191,816
4	LAND	50,577		32,343		82,920		82,920
5	C.W.I.P.	0		0		0		0
	NON-USED AND USEFUL COMPONENTS	0		63,632		63,632		63,632
7	C.I.A.C.	(1,059,505)		(56,506)		(1,116,011)		(1,116,011)
	ACCUMULATED DEPRECIATION	(367,908)		(78,782)		(446,690)	0	(446,690)
	AMORTIZATION OF C.I.A.C.	253,870		77,027		330,897		330,897
10	ADVANCES FOR CONSTRUCTION	0		0		0		0
11	WORKING CAPITAL ALLOWANCE	0		15,986		15,986		15,986
12	RATE BASE \$	159,405	5	(36,855)	\$	122,550	\$ 0	\$ 122,550
14								

	K UTILITIES, INC. N OF THE ADJUSTMENTS TO		DOCKET N		
	CHEDULES NO. 1-A AND 1-B		PAGE 1 OF	3	
ADJUSTM	ENT		WATER		SEWER
	LANT IN SERVICE				
1.1	To reflect the average test year balance.		(36,213)	\$	(79,734
2.1	To reclassify contributed land from utility				
	plant in service to land.		0		(32,34
3.1	To record capital items expensed				
	during the test year.		1,442		21,52
TOTAL	ADJUSTMENTS TO UTILITY PLANT	•	(34,771)	\$	(90,55
LAND					
1.1	To reclassify contributed land.	5	0	\$	32,34
2.1	To reclassify non-utility land.		(22,658)		
TOTAL	ADJUSTMENTS TO LAND				32.34
IUIAL	ADJOSTMENTS TO EAND	•	(22,658)	•	
NON-USE	D AND USEFUL COMPONENTS				
1.1	To include the gross plant cost of the				
	non-used plant.	\$	0	\$	(97,054
	To include the accumulated depreciation				
	related to the non-used plant.		0		93,823
3.1	To recognize the non-used portion				
	of the remaining plant.		0		(154,612
	To recognize the related accumulated deprec.		0		73,206
	teresting and the relative accompanies separate.				10,20
5.1	To recognize the contributed				
1	portion of the non-used plant.		0		122,211
	o recognize the related accumulated amort.		0		(58,381
	o recognize the related accomplated amon.				(00,38)
7.1	o recognize the non-used and useful land.		0		(32,343
	o recognize the contributed portion of				
the second se	non-used and useful land.		0		32,343

ADOWROCK UTILITIES, INC. PLANATION OF THE ADJUSTMENTS TO TE BASE SCHEDULES NO. 1-A AND 1-B	DOCKET N SCHEDULI PAGE 2 OF	E 1-	
ADJUSTMENT	WATER		SEWER
NON-USED AND USEFUL COMPONENTS (CONT'D)			
9. To reflect CIAC on prepaid connections.	42,820		106,050
10. To reflect accumulated amortization			
related to prepaid CIAC.	(8,343)		(21,610
TOTAL ADJUSTMENTS TO NONUSED AND USEFUL COMPON	\$ 34,477	\$	63,63
CONTRIBUTIONS-IN-AID-OF-CONTRUCTION			
1. To reflect the average test year balance.	\$ 14,440	\$	29,30
2. To impute cash collections of CIAC equivalent			
to the tariff charges times the number			
of customers.	(10,250)		(30,75
3. To impute CIAC on the number of ERC's			
included in the margin reserve.	0		(33,03
4. To remove construction water revenue			
included in CIAC.	2,048		
5. To remove 10% deposit recorded twice in 1986.	10,360		
6. To adjust utility's allocation of cash CIAC			
to amounts based on tariff charges.	22,023		(22,02
TOTAL ADJUSTMENTS TO CIAC	\$ 38,621	\$	(56,50
ACCUMULATED DEPRECIATION			
1. To reflect the average test year balance.	\$ 12,229	\$	27,60
2. To adjust book depreciation for two			
items not properly depreciated.	0		(105,94
3. To include test year depreciation on			
test year capital items.	(36)		(43
TOTAL ADJUSTMENTS TO ACCUMULATED DEPRECIATION	\$ 12,193	\$	(78,78

	LITIES, INC. THE ADJUSTMENTS TO ULES NO. 1-A AND 1-B		DOCKET N SCHEDULI PAGE 3 OF	E 1-	
ADJUSTMENT			WATER		SEWER
AMORTIZATION	OFC.LA.C.				
2 3 1. To refi	ect the average test year balance.	\$	(11,798)	\$	(23,157)
	ust book amortization for				
s item n	ot properly depreciated.		0		71,978
3. To incl	ude the amortization related to the				
	ed cash CIAC collections.		15,422		21,447
,					
	nove amortization related to				
t constr 1	uction water revenue.		(193)		0
	nove amortization related to				
s depos	it recorded twice.		(1,608)		0
6. To adj	ust amortization for reallocation				
of CIA			(5,216)		5,216
7. To incl	ude amort, related to margin reserve.		0		1,543
	STMENTS TO AMORTIZATION OF CIAC	\$	(3,393)	\$	77,027
WORKING CAP	TAL ALLOWANCE				
1. To rec	ord the working capital allowance				
	formula method.	5	8,215	\$	15,986
			******		
PRO FORMA PL	ANT				
		\$	1,547	\$	0
2. To incl	ude estimated cost of replacing pipe.		1,998		0
3. To incl	ude the cost to install a fence.		545		0
TOTAL ADJU	STMENTS TO PRO FORMA PLANT	•	4,090	\$	
	CUMULATED DEPRECIATION				
1. To incl	ude one year's depreciation on				
	ma plant.	5	(126)	\$	0

SHADOWROCK UTILITIES, INC. SCHEDULE OF CAPITAL STRUCTURE TEST YEAR ENDED JUNE 30, 1990

# SCHEDULE NO. 2-A DOCKET NO. 900565-WS

	COMPONENT	AVERAGE TEST YEAR	PRO RATA ADJUSTMENTS	ADJUSTED BALANCE	WEIGHT	COST	WEIGHTED
1							
2							
3	LONG-TERM DEBT	889,620	(648,159)	241,462	99.52%	11.61%	11.55%
4	SHORT-TERM DEBT	0	0	0	0.00%	0.00%	0.00%
5	CUSTOMER DEPOSITS	4,254	(3,099)	1,154	0.48%	8.00%	0.04%
	COMMON EQUITY	0	0	0	0.00%	0.00%	0.00%
7	ITC'S	0	0	0	0.00%	0.00%	0.00%
8	DEFERRED INCOME TAXES	0	0	0	0.00%	0.00%	0.00%
	OTHER CAPITAL	0	0	0	0.00%	0.00%	0.00%
10							
11							
12	TOTAL	893,874	(651,258)	242,616	100.00%		11,59%
13			********	********			
14							
15			F	ANGE OF REAS	ONABLENESS:	HIGH	LOW
18							
17				EQUITY		0.00%	0.00%
18							
19				OVERALL RAT	E OF RETURN	11.59%	11.59%
20							*******

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#### SHADOWROCK UTILITIES, INC. SCHEDULE OF CAPITAL STRUCTURE TEST YEAR ENDED JUNE 30, 1990

# SCHEDULE NO. 2-A DOCKET NO. 900565-WS

	COMPONENT	AVERAGE TEST YEAR	PRO RATA ADJUSTMENTS	ADJUSTED BALANCE	WEIGHT	COST	WEIGHTED
1							
2							
3	LONG-TERM DEBT	889,620	(648,159)	241,462	99.52%	11.61%	11.55%
4	SHORT-TERM DEBT	0	0	0	0.00%	0.00%	0.00%
5	CUSTOMER DEPOSITS	4,254	(3,099)	1,154	0.48%	8.00%	0.04%
8	COMMON EQUITY	0	0	0	0.00%	0.00%	0.00%
7	ITC'S	0	0	0	0.00%	0.00%	0.00%
8	DEFERRED INCOME TAXES	0	0	0	0.00%	0.00%	0.00%
9	OTHER CAPITAL	0	0	0	0.00%	0.00%	0.00%
10							
11							
12	TOTAL	893,874	(651,258)	242,616	100.00%		11.59%
13			********	********			******
14							
15			R	ANGE OF REAS	ONABLENESS:	HIGH	LOW
16							
17				EQUITY		0.00%	0.00%
18						*******	
19				OVERALL RAT	TE OF RETURN	11.59%	11.59%
20			and the second			********	

ST	ADOWROCK UTILITIES, INC. ATEMENT OF WATER OPERATIONS ST YEAR ENDED JUNE 30, 1990						SCHEDULE N DOCKET NO.	2.5.4			
			(A)		(B) ADJUSTMENT	3	(C)		(D)		(E)
	DESCRIPTION		TEST YEAR PER UTILITY		TO THE TEST YEAR		ADJUSTED TEST YEAR			T	CONSTRUCTED TEST YEAR
1											
2											
3	OPERATING REVENUES OPERATING EXPENSES:	\$	68,089	\$	0	\$	68,089	\$	30,681	2	98,770
2	OPERATION & MAINTENANCE		85,008		(19,290)		65,718			\$	65,718
	DEPRECIATION	•	(1,417)	•	6,444	•	5,027	•		•	5.027
7	AMORTIZATION		0		0		0				0
	TAXES OTHER THAN INCOME		14,669		(1,943)		12,726		1,381		14,106
	INCOME TAXES		0		0		0		0		0
10											
11	TOTAL OPERATING EXPENSES	\$	98,260	\$	(14,789)	\$	83,471	\$	1,381	\$	84,851
12											
13	OPERATING INCOME	\$	(30,171)	\$	14,789	\$	(15,382)	\$	29 300	\$	13,919
14			********		********						
15	RATE OF RETURN		-36.17%				-13.25%				11.59%
16			********								
17											

SHADOWROCK UTILITIES, INC. STATEMENT OF SEWER OPERATIONS TEST YEAR ENDED JUNE 30, 1990 SCHEDULE NO. 3-B DOCKET NO. 900565-WS

		(A)	(B) ADJUSTMENT	s	(C)	(D)	(E)
	DESCRIPTION	TEST YEAR PER UTILITY	TO THE TEST YEAR		ADJUSTED TEST YEAR	CONSTRUCTE ADJUSTMENT	CONSTRUCTED TEST YEAR
2							
3	OPERATING REVENUES	\$ 91,026	\$ 0	\$	91,026	\$ 82,578	\$ 173,604
4	OPERATING EXPENSES:						
5	<b>OPERATION &amp; MAINTENANCE</b>	\$ 123,198	\$ 4,692	\$	127,890	\$	\$ 127,890
	DEPRECIATION	17,082	(12,207)		4,875		4,875
7	AMORTIZATION	0	0		0		0
	TAXES OTHER THAN INCOME	17,869	5,047		22,916	3,716	26,632
9	INCOME TAXES	0	0		0	0	0
10							
11	TOTAL OPERATING EXPENSES	\$ 158,149	\$ (2,468)	\$	155,681	\$ 3,716	\$ 159,397
12							
13	OPERATING INCOME	\$ (67,123)	\$ 2,468	\$	(64,655)	\$ 78,862	\$ 14,207
14							
15	RATE OF RETURN	0.00%			-52.76%		11.59%
16					********		*********

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PLA	WROCK UTILITIES, INC. NATION OF THE ADJUSTMENTS TO ITING STATEMENTS NO. 3-A AND 3-B		DOCKET NO. 9 SCHEDULE 3- PAGE 1 OF 3	
A	DJUSTMENT		WATER	SEWER
	PERATION AND MAINTENANCE			
2 -	1. To reclassify a portion of the chemical			
5	expense from water to wastewater.	•	(1,023) \$	1,023
	2. To increase the office supply expense			
	to the new contract rate.		519	738
	3. To annualize the contractual services expense			
2	for the 1990 increase.		788	24,788
2	4. To remove addition to wastewater plant.		(1,368)	0
	5. To remove the expense of repairing the damage			
5	from the broken blower.		(18,711)	0
,	6. To remove the non-recurring expense due			
	to freeze damage.		(494)	0
,				
)	7. To adjust the managers fee to include			
1	twelve months, not thirteen.		(150)	(150)
2				
1	8. To amortize costs related to deferred		0	(20,760)
4	maintenance of perc ponds.		•	(20,100)
	9. To allow a pro forma adjustment to include an			
,	annual expense to mow the ponds.		0	6,570
,	10. To adjust quarterly billing expense			
)	to new 1990 contract.		(2,021)	(1,891)
	14 m 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
2	11. To reclassify item expensed which should be classified as plant.		(1,442)	(1.442)
	should be classified as plant.		(1,)	(1,)
5	12. To allow a pro forma adjustmet for hauling			
5	debris from the utility plant site.		517	517
1				
	13. To allow pro forma adjustment to include			
)	sandblasting and painting of the well and tanks,			
2	amortized over 5 years.		879	0
2	14. To adjust administrative fee to staff			
3	calculation.		600	600
5	15. To remove legal expenses related to citation.		0	(8,125)
1	16. To reclassify regulatory assessment fees			
	to taxes other than income.		(1,974)	(1,901)

LAN	ROCK UTILITIES, INC. ATION OF THE ADJUSTMENTS TO ING STATEMENTS NO. 3-A AND 3-B		DOCKET N SCHEDULI PAGE 2 OF	E 3-	
ADJ	USTMENT		WATER		SEWER
OPE	RATION AND MAINTENANCE (CONT'D)				
	17. To include two hours for engineering				
	work related to plant deficiencies.		0		170
	18. To allow 5-1/2 engineering hours for work				
	with staff on rate case, amortized				
	over four years.		58		58
	19. To remove bank penalty for late loan payment.		(206)		(206
	20. To include amortization of filing lee.		225		225
	21. To increase telephone expense.		313		278
	22. To include testing expense in				
	contractual services.		4,200		4,200
	OTAL ADJUSTMENTS TO OPERATION	1000			
'	IND MAINTENANCE	\$	(19,290)	•	4,692
DEF	RECIATION				
	1. To reflect depreciation expense				
	on test year plant.	\$	7,099	\$	7,316
	2. To include depreciation on pro forma plant.		126		C
	3. To reflect amortization on test year				
	CIAC - property.		(4,797)		(7,456
	4. To reflect amortization on CIAC - Cash.		2,355		(6,465
	5. To adjust for non-used and useful				
	depreciation expense.		0		(8,174
	6. To remove amortization of prepaid CIAC.		1,661		4,115
	7. To include amortization related to				
	CIAC imputed on margin reserve.		0		(1,543
	TOTAL ADJUSTMENTS TO DEPRECIATION	\$	6,444	\$	(12,207

DOWROCK UTILITIES, INC. ANATION OF THE ADJUSTMENTS TO RATING STATEMENTS NO. 3-A AND 3-B	SCHEDUL PAGE 3 OF	E 3-	900565-W -C
ADJUSTMENT	WATER		SEWER
TAXES OTHER THAN INCOME			
1. To reclassify test year regulatory assessment			
fees on test year revenues from O&M expenses.	\$ 1,974	\$	1,901
2. To amortize the one-time water pollution tax.	0		(2,400
3. To adjust regulatory assessment fees to 4.5% of			
test year revenues.	1,090		2,19
4. To reduce real estate and property taxes			
to lowest discount amount.	(145)		(14
5. To allocate real estate tax based on acreage.	(575)		571
6. To allocate personal property tax based			
on plant in service.	(3,653)		3,65
7. To remove tax related to non-utility land			
related to the water plant site.	(634)		(
8. To remove tax related to non-use and useful			
land related to perc pond site.	0		(73
TOTAL ADJUSTMENTS TO TAXES OTHER THAN INCOME	\$ (1,943)	\$	5,04
OPERATING REVENUES			
To reflect recommended increase (decrease)			
to allow a fair rate of return.	\$ 30,681	\$	82,578
TAXES OTHER THAN INCOME			
To reflect regulatory assessment			
fees on revenue change.	\$ 1,381	\$	3,716

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Info	mation Needed		
1.	Cost of Qualifying Assets	\$ 24,042	
2.	Capacity of Qualifying Assets	101,189 GPD	
з.	Number of Future Customers	751 ERC	
4.	Annual Depreciation Expense	\$ 8,174	
5.	Rate of Return	11.59%	
6.	Weighted Cost of Equity	0.00%	
7.	Federal Income Tax Rate	0.00%	
8.	State Income Tax Rate	0.00%	
9.	Annual Property Tax	\$ 731	
10.	Other Costs	\$ 0	
11.	Depreciation Rate of Assets	4.88%	
12.	Test Year	1990	

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### SHADOWROCK UTILITIES, INC. 900565-WS

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Allowance for Funds Prudently Invested Calculation of Carrying Costs for Each ERC:

Cost of Quailfying Assets: Divided By Future ERC:	\$	24.042 751		Depreciation Expense: ERC's:	\$	8,174 751
Cost/ERC:	\$	32.01	Annual	Depr. Cost per ERC:	\$	10.88
Multiply By Rate of Return:	11.59%					
Annual Return Per ERC:	\$	3.71	Annual	Propery Tax Expense:	\$	731
	**	********	Future	ERC's:		751
Annual Reduction in Return:	\$	1.26				
(Annual Depreciation Expense		********	Annua1	Prop. Tax per ERC:	\$	0.97
per ERC Times Rate of Return)	ERC Times Rate of Return)				********	
Federal Tax Rate:		0.00%	Weight	ed Cost of Equity:		0.00%
Effective State Tax Rate:		0.00%	Divided by Rate of Return:			11.59%
Total Tax Rate:		0.00%		% of Equity in Return:		0.00%
Effective Tax on Return:		0.00%	Other	Costs:	\$	0
(Equity % Times Tax Rate)		*******	Future	ERC's:		751
Provision For Tax:		0.00%	Cost p	er ERC:	\$	0.00
(Tax on Return/(1-Total Tax Rate))						********

> SHADOWROCK UTILITIES, INC. 900565-WS

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Allowance for Funds Prudently Invested Schedule of Charges:

	90/91	91/92	92/93	93/94	94/95
July	1.48	19.15	36.07	53.63	71.91
August	2.96	20.55	37.53	55.15	73.49
September	4.44	21.96	38.99	56.67	75.08
October	5.91	23.36	40.45	58.19	76.66
November	7.39	24.77	41.90	59.70	78.24
December	8.87	26.18	43.36	61.22	79.83
January	10.35	27.58	44.82	62.74	81.41
February	11.83	28.99	46.28	64.26	82.99
March	13.31	30.39	47.74	65.77	84.58
April	14.78	31.80	49.20	67.29	86.16
May	16.26	33.20	50.66	68.81	87.74
June	17.74	34.61	52.11	70.33	89.33