TRINIDAD AND TOBAGO

ORDER NO. 83

BEFORE THE PUBLIC UTILITIES COMMISSION

IN THE MATTER OF

A REVIEW OF THE RATES AND CHARGES

OF THE

WATER AND SEWERAGE AUTHORITY

CORAM: MR. EDWARD BECKLES - CHAIRMAN) Tribunal of
MRS. JULIE MORTON - COMISSIONER) the Public
MRS. MAJORIE ACKBAR ALI - COMMISSIONER) Utilities
) Commission

ERROL O.C. CUPID.
SECRETARY

PUBLIC UTILITIES COMMISSION

Review of the rates and charges
of the
Water and Sewerage Authority

ORDER No. 83

By Notice dated April 2, 1993, the Public Utilities Commission (PUC) notified the public that hearings would be held on April 21, 1993 of a review of the rates payable for the services provided by the Water and Sewerage Authority (the Authority), pursuant to a request by the Minister of Public Utilities dated 24th March 1993 under section 17(1)(e) of the Public Utilities Commission Act (the Act), Chapter 54:01 of the Laws of Trinidad and Tobago. The public were also invited to submit recommendations and memoranda on the matter before April 19, 1993.

In his letter the Minister explained that the present rates did not cover the costs of the services provided by the Authority, and the Government was no longer able to fund the shortfalls in revenue. Included with the letter was a document, hereafter called the Claim, consisting of detailed historical and projected financial data and testimony in support of a claim for increased rates, and a suggested rate structure which was estimated to generate the revenues requested in the claim.

Hearings began on April 21, 1993 before Commissioners -

E. Beckles	-	Chairman
J. Morton	-	Commissioner
M. Ackbar-Ali	-	Commissioner

The Tribunal ruled that because the hearings were of a review of the rates and not a claim for increased rates, the Claim documents would be used only to provide background information for the review. Because variations of the rate structure were proper matters for determination by a review Tribunal, the deliberations were not limited to the rate structure suggested in the Claim.

The Minister's concern for some urgent relief from the insolvency of the Authority echoed the concerns expressed by previous Tribunals. They summarized the situation on Page 5 of Order No. 77 as follows:-

"The picture presented is that of an insolvent utility, which has difficulty meeting its wage and salary liabilities and providing its crews with the equipment and tools required to do the work for which they are being paid."

That Tribunal was satisfied that on the basis of the testimony submitted up to that point of the hearing that -

(a) The Utility was short of cash required to meet basic liabilities such as the weekly and monthly payroll and to equip its crews;

(b) despite the reduction in operating expenses since Order No. 54, the billings by the utility had never covered its expenses. Its credit rating had already been seriously compromised by this imbalance.

They concluded that the obvious consequence of this was that the Authority would be unable to continue to maintain the existing standard of service. In order to permit it to increase its cash flow to meet its urgent day to day requirements, Order No. 77 granted an interim increase estimated at $17.8M per year mainly on the basis of a revised formula for the calculation of royalties for the abstraction of water.

Later testimony from Mr. Wyke, the then Executive Director of the Authority, indicated that despite the interim revenue increase granted by Order No. 77, further increases would be required to start a programme of preventative maintenance of the major items of plant to ensure that they did not deteriorate to the point of uselessness. He explained that the Authority no longer did preventative maintenance because the stock of spare parts in most of their stores had been completely used up and they had neither the cash nor the credit to replace them. Breakdown maintenance to keep the most critical items of plant working was all that was possible at the time. In addition, they were unable to proceed with the long overdue metering programme because they could not pay for the fittings required to install the meters which were in stock.

Mr. Wyke testified that further reduction of expenses was a limited option because much of the necessary maintenance work was not being carried out due to the lack of funds. He claimed that reductions in staff beyond those already in train would leave the organization with insufficient personnel to carry out routine maintenance work.

After consideration of the necessity for that programme, the Tribunal concluded that the Authority had established a strong prima facia case that delay in its implementation would aggravate the deterioration of the service and delay the realisation of the benefits of metering. Order No.79 therefore granted a 20% increase in the bills of all metered customers, un-metered non-domestic customers and water abstractors to increase revenues by $16.2M per year. It was anticipated that this would permit the Authority to carry out the minimum programme of capital works required to implement the metering programme, restore the critical items of non-working plant, and start preventative maintenance, plant rehabilitation, and leak detection and repair programmes, and provide the modern management information tools required for the new corporate planning group, pending a new claim for increased rates.

The financial reports indicate that very little capital work has been carried out since 1986. On page 42 of the Claim it was reported that some 55% of the funds granted for capital development were used to meet the Authority's day-to-day cash requirements. This was reflected in the erosion of the asset base of the utility since then, and the large number of complaints received by the Commission about intermittent and poor or non-existent supplies of water. Several of the memoranda received in response to the notice for these hearings contain similar complaints. These serve to confirm testimony received in earlier hearings from witnesses for the Authority that it was unable to -

- expand it's transmission and distribution services to previously unserved or poorly served areas;

- replace damaged and corroded distribution and transmission mains particularly in the towns and cities, some of these facilities dating from the last century.

Of particular concern to the Tribunal was the evidence submitted at the hearing of the previous claim for increased rates that although the Authority's Cholera Preparedness Plan which was approved by the Board of Commissioners at it's meeting of May 25,1991 identified 57 malfunctioning wastewater facilities; both privately owned and owned by the National Housing Authority, as one of the greatest threats to public health in the country, almost nothing has been done to repair or upgrade these plants because of lack of funds.

On page 41 of the Claim it was reported that the recent shortfalls in funding by the Government were covered by the non-payment of creditors and the non-remittance of PAYE. Health

Surcharge, Pension and National Insurance deductions to the relevant authorities. This was also testified in the Authority's Evidence in Chief to the 1991 Claim for increased rates.

The testimony received at the two previous hearings indicated that the revenue due from all billed customers and the estimated numbers of unbilled consumers at the current rates were insufficient to cover the Authority's expenses. These shortfalls were reduced but not removed when revenues were enhanced by the interim increases granted by Orders No. 77 and 79, all high volume non-domestic consumers were metered(Ref pg 7 and 8 of Order No. 77), and payroll expenses were reduced by an estimated at $40M per year by the removal of 1,000 workers (ref. page 53 of the Claim).

Finally, as pointed out in the request from the Minister, the Authority was unable to raise commercial loans or float bonds because it was insolvent.

In their examination of the Claim, the Tribunal noted that -

- The revenue increases suggested on pages 45 to 47 assumed the financial restructuring of the Authority at the end of 1992, the implementation of cost reduction and revenue enhancing measures, and no further transfers from the Central Government. The anticipated result was net operating deficits after depreciation of $9.9M in 1993, $15.3M in 1994 and $16.7M in 1995. The total revenue of the Authority was expected to increase by $157.5M or 91.3% to $300M in 1993 and $338.6M by 1995. Water rates (inclusive of charges paid directly by the State) were projected to rise by 94.4% to $290.1M in 1993 and $297.6M by 1995. Sewerage rates were estimated to increase by 73.9% to $35.4M in 1993 and $36.4M by 1995.

- Operating expenses were projected to increase by 5.1% from $303.5M to $355.3M between 1992 and 1995, largely on account of higher financial charges (for loans) and bad debt expense.

- The Authority proposed to implement a capital expenditure programme of approximately $300M between 1993 and 1995. Funding for this programme was expected mainly from external sources.

- The gross revenue requirement of the Authority as authorised by regulation 32 of the PUC Act, was $390.1M in 1993, $397.6M in 1994 and $401.1M in 1995. The projected revenues therefore would only cover 84.6% of the total projected cost of service in 1993, 84.1% in 1994 and 84.4% in 1995.

- The Authority proposed to supplement its deficit during 1993 by the reduction in its accounts receivable. It was planned that this exercise would take place concurrently with the attempts to clarify its true financial picture.

The Tribunal noted that the revenue increases in the new Claim were substantially lower than the $219M (later increased to $332M) requested in the 1991 claim, and was encouraged by the Authority's plans to continue to reduce expenses and to improve the collection of its receivables. They were concerned however by the heavy dependence of these plans on the restructuring of the Authority's debt to the Government as described on pages 48 to 51 of the Claim. They suggested that this matter be settled as soon as possible so that a firm basis would be available for a final determination of the rates. But for this reservation, the Tribunal considered that the generally conservative nature of the assumptions contained in the financial projections provided a fair basis for the determination of a rate increase.

However, they noted that the capital programme in the claim only covered refurbishment and replacement of the water plant and made no provision for similar work on the wastewater plant. In view of our particular concern stated earlier about the state of existing wastewater plant, and the need for such plant in many presently unserved areas, they requested as a matter of urgency that the utility submit its estimates for the required wastewater works.

In the claim, the Authority argued that even though they had

- reduced expenses, collected receivables and generally made itself more cost effective;
- borrowed money: and,
- requested increased equity from its shareholders:

They still found it necessary to increase their prices even to cover their day to day expenses.

The Tribunal admitted that the most worrisome feature of the review was the limited data available for an analysis of the plausibility of these arguments. While the Claim frankly admitted the past inefficiencies and the current deficiencies of the Authority and outlined a reasonable set of programmes and strategies which it claimed would permit it to achieve financial self sufficiency, the detailed financial and operating data required to make a determination of the prudence and cost effectiveness of these plans had not been submitted. The experience of the Commission was that this level of detail was not yet a feature of the data compiled by the Authority.

The promise in the claim was that if the rate increases were granted then customers would be rewarded with higher standards of service. Unfortunately similar unkept promises by the Authority had been a feature of all past hearings for increased rates. Customers who raised this issue therefore had more than enough reason to be skeptical of any promises of improved levels of performance, particularly in the absence of any system of managerial accountability.

As far as was known there was no objective appraisal system in use by the Authority to monitor and respond to unsatisfactory managerial performance. It was also not possible to say whether or to what extent the management was efficient in the discharge of its responsibilities, prudent in its decision making or cost effective in the management of the operations of the Authority because as mentioned before, the data required to make these assessments was not compiled on a routine basis.

The Tribunal observed that accountability and compliance with plans and programmes on which awards were granted was not a requirement for the granting of increased rates under the PUC Act. In the absence of accountability, any increase in rates on the basis of a promise of improved service was an act of faith.

Despite these misgivings, the limitations of the legislation which governs the Commission denied the Tribunal any authority to deny the relief available from temporary rates if they were warranted by the circumstances.

In their ruling of April 21, 1993, the Tribunal declared that it was satisfied that there was a prima facie case that the utility was insolvent and unable to fulfill its statutory obligations, and that this was contrary to Regulation 32 of the PUC Act and to the public interest. The information available to the Tribunal indicated that immediate rate relief was the only reasonable practical mechanism to forestall continued injury to the Authority's plant and business and to the public interest. They concluded that the Authority was therefore entitled to some immediate rate relief beyond that provided by Orders No.77, 78

and 79, pending the completion of hearings. Because the other parties had not yet been heard from, temporary rates as permitted under Section 28 of the PUC Act were considered to be appropriate.

Section 28 permits the Tribunal in proceedings such as the review -

> "if it is of the opinion that the public interests so require, immediately determine temporary rates to be charged by such public utility pending final determination of such matter or proceeding."

In the determination of the public interest the Tribunal was required to balance the public interest that harm should not be done to the nation by the inability of the utility to carry out its statutory obligations, and the public interest that fairness required that all affected parties be given the opportunity to be heard. In the exercise of its jurisdiction, the Tribunal had a particular duty under section 18 (1) of the PUC Act to hear, receive and consider statements, arguments and evidence made presented or tendered by or on behalf of any complainant, or the utility, or on behalf of the Minister.

On the basis of past experience, the additional revenues from any higher final rates which might have been approved as a result of the hearings would probably not be available to the Authority for several months. The Tribunal therefore indicated its intention to grant a temporary rate increase, subject to -

a) the implementation of the system for rebates to unmetered customers whose supply of water was interrupted for 5 or more days as defined in Order No. 78;
b) payment of refund with interest at the current overdraft rate, in the event that a full examination of the issues should establish that any part of the increase was unwarranted.

This course of action was intended to prevent continued impairment of the Authority's financial position while ensuring that customers would not have to pay for services which they did not receive, and that they would be compensated if it was subsequently established that any part of the increases was unwarranted.

Pursuant to sections 18(2) and 18(3) of the PUC Act, the Tribunal also decided that arguments and objections to the granting of these temporary increases in rates should be presented in writing on or before the 14th May 1993. They explained that the temporary rate increase in the proposed Order were estimated to increase revenues by $110.7M made up of -

a) $39.6M from direct billing of the Central Government for services currently provided free of charge or at subsidized rates such as water for fire-fighting, schools, agriculture, old-age pension and public a assistance recipients and standpipe users.

b) $43.4M from domestic customers as defined in Order No.78. These billings were expected to increase as institutions such as schools were metered as discussed in Order No.78.

c) $27.7M from non-domestic customers and water abstractors. As discussed in Order No. 77 these billings were also expected to increase by some $22M, when all of these customers were metered under the proposed metering programme.

In order to assist the parties in framing their objections, the Tribunal explained that the proposed Order would be based on the customer classes defined in Order No.78 and the rates in Order No. 79, and would incorporate the following rate changes -

a) a 50% increase in the water and sewerage rates for unmetered domestic customers;
b) a rate of $2.00 per cubic meter for consumption up to 150 cubic meters per quarter and $3.50 per cubic meter per quarter for consumption beyond this for metered domestic customers. The Sewerage rate would be 50% of the water bill;
c) a 50% increase in the water and sewerage rates for unmetered agricultural customers;
d) a rate of $2.00 per cubic meter for consumption up to 500 cubic meters per month and $3.50 per cubic meter per month for consumption beyond this for metered agricultural customers. The Sewerage rate would be 50% of the water bill;
e) No further increase in the water and sewerage rates for unmetered non-domestic customers;
f) a flat rate of $3.50 per cubic meter per month for metered non-domestic customers. The Sewerage rate would be 50% of the water bill;
g) No change in the charges for services such as connection, reconnection etc., and the charges for unserved properties which were approved in Order No.78;
h) the rates for the services other than those in (g) above and the penalties as requested in Schedule B to the Claim;
i) a royalty of 60 cents per cubic meter per month for the abstraction of water as defined in Order No.77;
j) Changes in the minimum rates.

The Tribunal also explained that while a prima facie case had been made for a rate increase, there was no corresponding justification for the rates suggested in the Claim. There was no explanation as to how the rates were derived or how they would generate the required revenues. Although the text referred to increases of 30% for Domestic customers, 50% for metered non-domestic customers and 60% for very large industrial customers, the metered rates suggested for non-domestic customers would generate percentage increases in revenues far beyond these. This was of particular concern now that the metering programme had finally started.

When hearings resumed on May 26,1993 the Tribunal ruled that on the basis of the objections received to the proposed temporary rate increase, the premise of the Ruling of April 21, 1993 that the Authority was insolvent and in urgent need of a large increase in revenues to permit it "to overcome its tight cash flow problems and embark on capital and other programmes to upgrade its deteriorating plant and its services and improve the overall efficiency of its operations", had not been refuted.

One objector did refer to the absence of audited financial reports, and discrepancies between the financial data submitted to previous hearings and that submitted in the current documentation. However there was no requirement under the PUC Act that the financial reports submitted to the Tribunal be audited. In addition, the experience of the Commission was that the differences between the audited and the unaudited financial statements submitted by the Authority in the past had been too minor to affect the determination of the rates. In the present

claim, the Tribunal found that the discrepancies did not affect the overall conclusion referred to above.

Other objectors claimed that the collection of arrears would restore the Authority to solvency. Because deficits in the financial reports were calculated on an accrual basis collection of all arrears would have a minor influence on this position by reducing the need for overdrafts and loans.

Claims of inefficiency in the performance of crews were not supported by any explanation as to how or to what extent the fixed costs of the permanent staff which make up the majority of these crews would affect the overall financial performance of the Authority. Claims of overstaffing failed to take into account the steady reduction in staff since the mid 1980's and the plans for the voluntary termination of the services of some 1,000 employees which was already in progress.

Other objectors suggested that the potential revenues from unbilled consumers such as squatters would substantially reduce the revenue requirement. One objector suggested the reduction would be as much as 30%. Estimates of these revenues outlined in Order No. 54 and updated in a May 1990 exhibit to the last Review indicated that these revenues would be less than $10M per year, or less than 10% of the requested increase, and hence would have little influence on the overall conclusion.

Those who raised the issues of the unfairness of a flat non-domestic rate or the use of VAT registration as a criterion for non-domestic classification, or the pros and cons of ATV/ARV based charging systems were referred to the analyses in Order No. 78 and the transcript to the hearing of the last Review. It was noted that the only explicit provision in the Water and Sewerage Act for the charging of water rates applied to domestic water rates. The Act did not specify how rates for non-domestic water were to be prescribed.

The majority of the objectors complained about the inequity of increasing the rates for a service that many described as intermittent or poor. Some of these complaints pointed to the unfairness of providing a widely variable quality of the service throughout the country although all customers were subject to the same rates. This Order will address this problem by including a a set of rules for the implementation of a system of rebates consisting of the rules in Order No.78 which were designed to deal with the total lack of water for extended periods of time, and additional rules which cover the regular water shortages caused by the use of the published water supply schedules in effect in many parts of the country.

The other large body of objections concerned the levels of the proposed rates. The Commission was in receipt of documented complaints since Orders No. 78 and 79 about the inability of small unmetered VAT businesses to pay the current rates. That Tribunal was of the view that it would be unreasonable to increase these rates without any investigation of the validity of these claims. Order 78 indicated that revenue increases beyond those available from the unmetered non-domestic flat rate customers should come from metered rates. This Tribunal is also of that view.

The Oilfield Pensioners and a group from the Beetham Estate objected to the increase in domestic rates for low income customers. The Tribunal considered that the increased rates for standpipe and yardtap customers were not unreasonable given the current levels of grants to pensioners and persons on public

assistance. The Tribunal recognized that some low income customers live in relatively high-ARV properties so that water rates may constitute a burden. However such anomalies were inherent in the ATV system of rating which presumed a correlation between ATV and ability to pay. In the absence of meters or any criteria for identifying such groups of customers, the Tribunal will try to ensure that the rates are not more than 5% of the average income of the customers in each ATV group.

The household expenditure tables supplied by the CSO, extracts of which were submitted on Table 2 of the Claim suggest that for the average household, the expenditure on water may be increased to the extent provided in this Order. Notice was also taken that electricity rates for the majority of householders were not increased and in some cases were decreased in Order No. 80, while Telecommunications Services of Trinidad and Tobago had reduced their rates since July 1991.

The authority of the PUC to set rates is limited by the general requirement of Section 24 of the PUC Act that the rates for all customers should neither be unfair nor unreasonable. Fairness however does not require that rates for individual customers be limited to what they can afford. Such social engineering is the function of the elected representatives through the provision of social welfare nets such as the tax concessions recently granted to taxpayers with taxable income below $16,000 per year, or the provision of subsidized rates for individuals or groups of citizens whom the state determines as deserving of such relief.

The Tribunal explained that the translation of the revenue requirement into a specific set of rate schedules had been hampered by the lack of data on the costs of the various services provided by the utility. Efforts by the staff of the PUC to separate the costs of the water and sewerage services revealed that the accounting records of the Authority were not organized in a manner which would permit such costs to be readily separated.

The result was that the rates charged had been based on best judgement of ability to pay rather than costs. It was also not possible to establish whether or to what extent the rates for large users should be reduced for increased consumption as claimed by some industrial customers.

The water which was the major focus of the hearings was treated to meet standards of biological and chemical purity required for domestic consumption. The use of such water for cooling in industrial plants, to wash streets and animal pens, fight fires and irrigate agricultural lands was often a waste of the money spent on the treatment and management for domestic use For such purposes, lower grades of water which were charged at the lower rates to abstractors under the tariff would be more appropriate.

These observations were also relevant to the complaints from several of the large chemical plants in the Pt. Lisas Industrial estate about the effects of the proposed rates on their profitability and competitiveness.

When the textbook evidence of the amounts of water required as a reactant in the chemical processes of these plants, was compared with the claims of the amounts of water actually used per ton of product, it appeared that as much as 60% of the water supplied to these plants was used for non-process operations such

as cooling and washing. The available information was that the majority of this water could be recovered by relatively simple methods. Whether this would be cost effective at the current costs of water was a matter which each company would have to decide for itself.

However when these considerations were combined with the admission by T&T Methanol Co., that some 25% of the water supplied by the Authority was lost or wasted during the process of pre-treatment for entry to their plant, there appeared to be no justification for reducing the rate proposed for such non-domestic use. In addition, because of the inability of the Authority to expand its capacity or keep up with the high leakage rate in its system, it had been forced to resort to scheduling of water supplies in order to maintain some minimum level of supply throughout the system. In such circumstances the promotional effects of declining rate blocks cannot be justified.

The 1982 agricultural census revealed that the overwhelming majority of the water used by farmers was supplied by the rain, surface sources, water collected in ponds and private catchments and from wells and springs. It was also found that the majority of the farms in the country were less than one acre in size. Under such circumstances, the use of drinking water for other than domestic use or possibly the feeding of animals would appear to be minimal for the majority of farmers. In the absence of more detailed information, there appeared to be little justification for the claim that the proposed increases to agricultural users would result in increases in the price of locally grown foodstuff.

The other major irritant to customers was that their bills bore no relationship to their perceived consumption. As pointed out in order No. 54 in 1985 and subsequent Orders, the solution to this problem was the metering of customers. This would not only remove the major source of unfairness claimed by customers, but permit those who wish to do so to manage the size of their bill. While the current metering programme would remove this irritant for most non-domestic customers, the Tribunal recommended that the Authority introduce procedures to permit all customers to install meters supplied by the Authority subject to Authority approval of the completed work. This would free the Authority from much of the expense incurred in installation.

The attention of the Authority was also drawn to the opinion of Commissioner Aboud in Order No.78 on the unsettled matter of the right of customers to demand the installation of meters under section 35(1) of the 4th Schedule of the Water and Sewerage Act, as long as the utility pursued its admitted goal of universal metering.

On July 28, 1993 the Utility submitted a report on a proposed system of rebates for non-supply of water to un-metered customers in response to the original request in Order No. 78, and a further request at the hearing on May 26,1993. In brief, the Tribunal found that the proposal met the basic objectives set out in Order No. 78 and the ruling of May 26.1993.

The Tribunal commented that " a large part of the proposal dealt with the burden of implementing the system, rather than the benefits to management of being able to collect the information required to monitor the quality and delivery of service. The routine surveillance of water pressure and flow throughout the system provided by the proposed system would provide early warning of incipient faults, thus reducing the response times of maintenance crews, and the potential for rebates. "

They observed that the elements of the system such as bulk metering, Porta flow meters and computerized customer supply and location records described in the report appeared to be standard features in a properly designed system. It was therefore difficult to see how such items could be considered as dedicated to the rebate system.

The Rules for Rebates for intermittent supply in Order No.78 limited the relief to periods when the conditions defined in Section 49 of the Water and Sewerage Authority Act, Chapter 54:40 of the Laws of Trinidad and Tobago (the WASA Act) were not in effect. Mr. Charles the witness for the Authority, was of the view was that this section applied to any shortage of water in the system even if caused by leakages and other ineffiencies in the distribution system. The Tribunal disagreed with that interpretation and considered that when Section 49 was read as a whole, that " a serious deficiency of water available for distribution" referred to deficiencies in the production of water, rather than deficiencies in the supply to customers caused by leakages and other inefficiencies in the distribution system. The Tribunal rules that this latter interpretation is the one which shall apply in the Rules for the Rebate System in this Order.

The Tribunal also disagreed with the suggestion contained in the proposal for the Rebate System that customers in arrears should be denied rebates for non-supply, because such punitive action was contrary to the WASA Act which specified at section 74 the means by which the utility could recover water and sewerage rates.

Out of an abundance of caution, objections to the proposed temporary rates received after May 26,1993 were also considered and a number of points raised in the earlier submissions were reexamined. The Tribunal concluded that none of the objections to date refuted their original arguments for granting temporary rates. However, a number of points which were raised about the proposed rates are considered in the following paragraphs.

The first outstanding point was the water used for example for irrigation or for industry, where such water was supplied from a stream or watercourse under a license which required that water be returned in accordance with Part 1 of the 4th Schedule of the WASA Act. In such cases the water from the stream or watercourse flowed across the land being irrigated or the factory or plant, and was returned to the river or watercourse either directly or by the addition of sufficient compensation water, so that the flow of the stream was not materially affected. Under such circumstances, a charge for abstraction of water which assumed that the water which was abstracted was unavailable to other users, was not appropriate.

The Tribunal therefore ruled that the charge for water abstracted as described above would be 10 cents per cubic meter (equivalent to US$ 22.30 per acre-foot), on bills issued on or after November 21, 1992.

The second outstanding point was the pricing of metered water for non-domestic customers. On the basis that all non-domestic customers would soon be metered the price of metered water was adjusted to levels which would generate the revenues requested in the Claim at the present estimated levels of consumption and system losses while limiting the rate increase for Un-metered domestic customers to 35% of the present rates.

One of the responses to the ruling of May 26, 1993 suggested that it could easily be demonstrated that there were significant economies of scale in the supply of water to large users, to which they should be entitled if a fair rate structure was established. The Tribunal observed that the variety of rate schedules for water utilities in other countries suggested that either the claimed economies of scale did not apply to all water utilities or they were not always passed on to large users. In addition, rate schedules were required to serve several aims other than tracking the cost of service. For example, since the 1970's, the electricity supply industry which has well documented economies of scale had deviated from declining block rates as a conservation measure. As pointed out in the ruling of May 26, 1993, the data for cost of service studies for the Authority was unavailable because much of it was not collected. The Tribunal was not prepared to guess the extent of possible economies of scale for the Authority. It was even possible that declining rates were not justified at the consumption levels of even the largest users in Trinidad and Tobago.

The third outstanding matter was the sewerage rates for industrial customers. By section 6 of the 5th. schedule and section 66 of the WASA Act, everyone within 150 feet of a sewer main with a sufficient supply of water was liable for a sewerage charge which was related to their water bill. The premises for this charge were -

(1) By section 66 of the WASA Act, sewer connection was compulsory.

(2) There was a reasonable correlation between the volume of water supplied to the premises and the volume of wastewater discharged into the sewer.

The latter assumption might not be valid in the case of many industrial customers, because the majority of their water was an input to the industrial process or was used for non-domestic purposes such as cooling and was not discharged into the sewer system.

Of concern to the Tribunal was the unfairness of widely varying sewerage rates for industrial customers with similar levels of sewerage because their rates were based entirely on the total volume of water supplied to each industry.

The Tribunal therefore ruled that with effect from January 1,1994 in cases where the supply of water to industrial users for non-domestic and domestic purposes can be separately metered, and the industrial wastewater was not discharged into the sewer system, the sewer charge shall be 50% of the charge for the water used for domestic purposes, all water being charged at the non-domestic rate.

The Tariff Book to this Order includes rules which provide that in the absence of a meter owned by the Authority, the readings of meters owned by the customer, or estimates by the Authority shall be used until the supply is metered by the Authority.

The Tribunal concluded that a general solution to this problem for all non-domestic customers would not be possible until the Authority had the information and systems required to charge for wastewater on the basis of its composition as discussed in Order No. 77. In the meantime the Authority was urged to implement the various provisions of it's Act with respect to the prevention of pollution and to the discharge of wastewater.

The fourth outstanding matter was caused by the wide range of business sizes covered by the non-domestic classification. Order No. 78 separated the un-metered customers in this class for the purpose of charging into Value Added Tax (VAT) registered customers and non-VAT registered customers, the latter being charged the maximum domestic rate.

It was pointed out at the hearings of April 21. 1993 that many VAT registered businesses were only marginally so and that the unmetered water rates in particular, were frequently punitive. One portion of this class which could be easily identified consisted of VAT registered businesses conducted on domestic premises or in a structure which was partly used for business and partly as domestic premises.

This Order defines service to such customers as COTTAGE SERVICE and charges such customers rates which are intermediate between domestic and non-domestic rates.

The revision of the rates for the miscellaneous services in Schedule B of the Claim is deferred pending an analysis of their costs.

Fairness requires that there be some guarantee to customers that the increases contemplated in this Order will be used for the purposes for which they were requested by the Authority. To this end staff of the Commission will be assigned to monitor the use of these revenues, and the overall performance of the utility. and to report on these matters to the Tribunal. The ability of the utility to discharge its responsibilities in an efficient and cost effective manner will be a factor in the final determination of the rates.

As reported in Order No.78, hearings of the 1991 Claim for increased rates and for the Review of the Rates were hampered by the lack of information on many aspects of the operation of the utility, and the poor quality of much of what was available. One striking example of this was the estimate of $14.6M in annual revenues from abstractors of water, and the reality of $105,767 in billings for 1992 in the latest projections submitted to these hearings. Past experience suggests that this will not be an isolated example as the utility moves to extensive metering of its non-domestic customers. Members of the Staff of the Commission will therefore be assigned to work with the staff of the Utility to collect the data required to provide more accurate estimates of the anticipated revenues for 1993 and beyond.

ORDER

The Tribunal hereby orders that by section 28 of the Public Utilities Commission Act the Water and Sewerage Authority is authorised to charge the rates set out in this Order, in accordance with the rules for their application as set out in the Tariff Book which is incorporated in this Order.

The rates in this Order are based on the customer classes defined in Order No.79 and the rates in Order No.79. The changes in rates shall apply only to the amounts actually billed and not to arrears incurred before the change in rate came into effect, as follows -

1) A 35% increase in the water and sewerage rates for unmetered domestic customers and charitable institutions;

2) a rate of $1.75 per cubic meter for consumption up to 150 cubic meters per quarter and $3.50 per cubic meter per quarter for consumption beyond this for metered domestic customers and charitable institutions, with a minimum bill of $30 per quarter. The Sewerage rate will be 50% of the water bill;

3) a 50% increase in the water and sewerage rates for unmetered agricultural customers;

4) a rate of $2.25 per cubic meter and a minimum charge of $20 per month for metered agricultural customers. The Sewerage rate will be 50% of the water bill;

5) a rate of $300.00 per month for un-metered COTTAGE SERVICE customers and metered rates of $2.50 per cubic meter for consumption up to 150 cubic meters per quarter and $3.50 per cubic meter for consumption beyond this. The sewerage rate will be 50% of the water bill. These new rates apply to all bills issued to such customers on or after June 1, 1993

6) a flat rate of $3.50 per cubic meter per month for metered non-domestic customers, except for those subject to rates specified elsewhere. The minimum water bill will be $35 per month. The Sewerage rate will be 50% of the water bill;

7) Unless otherwise indicated, all changes in the rates in this Order apply to bills issued on or after October 1,1993.

8) Water used for irrigation or for industry, where such water is supplied from a stream or watercourse under a license which requires that water be returned in accordance with Part 1 of the 4th Schedule of the WASA Act shall be charged at 10 cents per cubic meter on bills issued on or after November 21, 1992.

9) With effect from January 1, 1994 in cases where the supply of water to industrial users for non-domestic and domestic purposes can be separately metered, and the industrial wastewater is not discharged into the sewer system, the sewer charge shall be 50% of the charge for the water used for domestic purposes, all water being charged at the non-domestic rate.

The temporary rate increase in this Order is granted subject to the following conditions -

1) The Authority shall maintain a record of payments made under this Order available for the inspection of the Commission showing all amounts received, and from whom received by reason of any increased rates which have been granted, and shall show the increased amounts for each customer on their bills.

2) The Authority may be required to refund with interest to its customers such portion of the increased charges as the Tribunal finds not justified upon the final determination.

3) The rebate system described in the proposal submitted by the Authority on April 28, 1993 and the rules for its application in the Tariff Book to this Order, shall be implemented by April 30, 1994. If the rebate system is not in effect by April 30, 1994 or such extended date as may be determined by the Tribunal, then the rates shall revert to the rates established in Order No. 79.

Sgd: . . . . . .
E.A. Beckles
Chairman

Sgd: . . . . . .
J. Morton (Mrs.)
Commissioner

Sgd: . . . . . .
M. Ackbar-Ali (Mrs.)
Commissioner

Made by the Public Utilities Commission on 15 December, 1993

Sgd: . . . . . .
E.O.C. Cupid
Secretary

DATED: 15 DECEMBER, 1993

PUBLIC UTILITIES COMMISSION