

PUBLIC UTILITIES COMMISSION

Order No. 3 of 2005

**In the matter of an application by
Guyana Water Inc. for an increase
in rates.**

CORAM

Justice Prem Persaud, CCH	-	Chairman
Mr Badrie Persaud	-	Commissioner
Mr John Caesar	-	Commissioner
Mr Maurice Solomon	-	Commissioner

With Mr Vidiahar Persaud, Secretary/Legal Officer.

Mr Lancelot Mc Caskey, Financial Analyst.



APPEARANCES

<u>Guyana Water Inc.:</u>	Dr William Wilson	-	Chairman, Board of Directors
	Mr Michael Clark	-	Managing Director
	Mr Sizwe Jackson	-	Head of Operations
	Mr Allan Eaton	-	Customer Services Director
	Mr Tej Naraine Parmessar	-	Financial Director

Consumers:

Mr Wilfred Eleazer	-	Consumers' Advocate
Mr George Seales	-	Co-ordinator, Consumers' Movement of Guyana
Ms Eileen Cox	-	Chairman, Guyana Consumers' Advisory Bureau
Mr R. Trotman, M.P	-	Attorney-at-Law
Mr K. Ramjattan, M.P-		Attorney-at-Law
Ms Sheila Holder	-	Member of Parliament

DECISION

1. On 13th November 2002 the Government of Guyana through the Minister of Housing and Water granted a licence to Guyana Water Inc. to supply Water and Sewerage Services and Advisory Services for public purposes. GWI is a public company incorporated under the Companies Act, 1991. The licence was issued under section 90 of the Water and Sewerage Act No. 5 of 2002, and became effective on the said 13th November 2002.

2. Prior to 2002 the country was supplied with water and related services by two separate and distinct agencies, namely, the Georgetown Sewerage and Water Commission, (GS&WC) and Guyana Water Authority (GUYWA). GUYWA's obligations included the supply and maintenance of water and related services in the rural areas, whereas the Greater Georgetown area was the beneficiary of services from GS&WC.

3. GUYWA, however, was not responsible for the entire rural population nor for the sugar estates nuclear housing areas. The Sugar Industry Labour Welfare Fund

Committee was the agency charged with the responsibility for the supply and maintenance of water and its facilities.

4. The Water and Sewerage Act No. 5 of 2002 came into operation on the 30th May, 2002 and the licence granted to it specifies that it shall supply water, sewerage services and advisory services for public purposes in the **authorised area**. Authorised area shall consist of the Co-operative Republic of Guyana including its territorial waters and lands and structures lying thereon, **but shall not include** the areas or communities set out hereunder until such time as the assets with these areas or communities are transferred to GWI by Order of the Minister. The areas are:

- a) Ocean View, West Coast, Demerara.
- b) Zeeburg, West Coast, Demerara.
- c) Kwakwani, Berbice River.

5. Ocean View and Zeeburg are supplied by systems operated by the Sugar Industry Labour Welfare Fund Committee, and Kwakwani operated by the Mining Company.

6. In effect GS&WC and GUYWA are now merged as GWI.

7. Among the functions of our Public Utilities Commission is to oversee the issues of price and quality of service of a public utility, and in terms of the licence granted to GWI by the Government we are charged with regulating the operations of GWI in the public interest. By virtue of Order No. 26 of 2003 (Water and Sewerage Rates and Service Quality), the Commission has assumed responsibility for monitoring, regulating and enforcing service quality and dealing with consumer complaints, and the fixing of rates to be charged from time to time. We must, of course, be guided by the PUC Act, and the provisions of the licence granted to the utility.

8. The rates to be charged shall not show undue preference for, or unduly discriminate against, any consumer or class of consumers similarly situated, provided that

different rates may be prescribed for different classes of consumers, by reference to the different areas of supply or different parts of such areas or to any other relevant circumstance. Different classes of consumers may be those who are metered and those who are not.

9. Schedule 1 of the licence requires that GWI tariffs should be so determined as to allow GWI to recover 100% of its operation and maintenance costs as well as its depreciation expenses. **The total revenue requirements should therefore be relatively easy to calculate if it is assumed that the projected expenditures reflect efficient management and realistic values for revenue collection.** But more of this as we go along.

10. The current tariff table has in excess of twenty different rate schedules, none of which has apparently been developed with the objective of making consumer prices reflect the costs of supply. As pointed out earlier GWI was established by an amalgamation of GUYWA and GS&WC, but the rates continue to be the same as were paid to the former suppliers. Retention of both schedules appears to us to be illogical since the vast majority of the consumers live in the coastal areas and the supply conditions are therefore similar throughout. What is urgently needed is the development of a rational tariff schedule.

development
of a
rational
tariff schedule

11. In fixing the tariffs to be charged by GWI to consumers for the supply of water we must determine same in accordance with the mechanisms, formulae, principles and procedure set out in Schedule 1 of the licence. We must take into account the following objectives:

- By the last month of 2003 GWI shall have recovered at least 100% of its operation and maintenance costs.
- By the last month of 2004 it should have recovered 100% of its operation, maintenance and depreciation costs through tariffs.

12. Under the licence the Government of Guyana undertook to transfer to GWI for the year 2002, no more than G\$400 million; for the year 2003 no more than G\$250 million and for the year 2004 no more than G\$100 million.

13. The licence also provides certain service standards but they are not in any way to limit the scope of GWI's obligations. By the licence GWI is required to achieve the following:-

Required under the licence

- **Coverage** - It is required to provide 90% of the coastal population with safe water whether through a connection to the network, standpipes, licensed borehole or other means, by no later than 5 years from 2002; and by that same period of time it shall ensure that safe water is available to or supplied to 80% of all settlements in the Hinterland, through sustainable and cost effective locally appropriate means as developed by GWI.
- By no later than four years from the effective date (2002) GWI is required to provide 24 hour continued service of pressurized water supply at a minimum of five meters of consumers' premises to the coastal population including Georgetown.

14. Other standards and customer services are therein set out. It will be the Commission's obligation to monitor and seek to confirm these standards and services. For instance, Water Quality Standards has been defined; and safe water is defined as water produced and distributed by GWI that will meet World Health Organisation standards, with the following permitted relaxations in such standards, namely: **Coastal Population including Georgetown** - Iron Content (Fe) relaxed to a maximum of 0.5 mg/L.

Hinterland Population:

- Iron content (Fe) relaxed to a maximum of 1.0 mg/l.
 - PH relaxed to range between minimum/maximum limits of 5.5 and 8.5.
 - Turbidity relaxed to a maximum of 5 NTU's.
 - Colour relaxed to a maximum of 75 TCU.
15. The Water Quality Standards will be reviewed no later than 31 December 2007.
16. The Standards must be filed with the Commission.
17. The Government has agreed that GWI's tariffs will be as follows:-
- Tariffs of the former GS&WC customers shall be increased to accommodate the increases in energy costs as well as other operational cost elements.
 - Tariffs of the former GUYWA customers shall be increased to accommodate the increases in energy costs as well as other operational cost elements. Tariff increases will shift toward marginal cost based pricing;
- and those are the prices in effect at the present time.
18. GWI has applied for an increase of 10% across the board with effect from 1st July 2005. This application was filed in June 2005.
19. At the public hearing of the application Chairman of the Board of GWI explained that at the inauguration of the company GWI, the GUYWA consumers in the rural areas enjoyed a lower rate than those under the GS&WC umbrella. This was as a result of the different levels of services provided to the two categories of consumers. GWI found the system rather complex but is in the process of restructuring it to make it simple and easy to apply.

Agreed
Govt
10% increase
A/COST

20. He further explained that the company's operational costs are shared by revenues collected and subventions from the Government. And that capital expenditure is funded by the Government through donor agencies. The increase sought by GWI is intended to allow the company to better meet its operational expenses.

21. The Managing Director, claimed that the operating cost of GWI increased by 5% per annum for the past two years and the 10% being sought is necessary to keep the company viable since operating expenses exceeded the revenue collected. An area of grave concern is the expenditure associated with electricity which accounts for about 64% of its operational costs. ☆

22. Our Financial Analyst pointed out that from the figures submitted by GWI its projected revenue for 2005 is \$2.286B with overall expenses projected at \$2.480B, a variance of almost \$200.M. With a cash flow projected at \$1.829B together with 80% or \$400M collection ratio from defaulting customers the utility would still suffer a cash shortfall of \$257M to cover operating and maintenance costs.

23. He reasoned that the actual collection ratio will be nearer 48% and the cash would be \$100M or less. The Finance Director of GWI explained that GWI has no other alternative at the moment but to continue to apply to Government for subvention.

24. Many issues were discussed concerning the quality standard of the water supplied and service quality in terms of the requirements of the licence. GWI acknowledged the need to meet its licence requirements concerning bacteriological standards, and hopes for some relaxation of the standards. The water from boreholes is bacteriologically robust, but its main function is on extractions from surface sources because of the threat of chemical contamination from mining activities etc. The cost and short supply of chlorine impede the maintenance of chlorine residual in the distribution mains.

25. GWI is also undertaking exercises to combat the infiltration problem by fixing leaks in the distribution system.

26. On the question of non revenue water, GWI explained that they first inspect, identify and document the sources and they then do repairs. For the first six months of the year they did 8000 inspections and about 2000 leaks were detected. Repairs were done to some but many are outstanding. There is a leakage prevention programme ongoing in Georgetown, the Essequibo Coast and other parts of Region 2, but because of financial restraints other areas are yet to be covered. The utility is in the process of implementing Systems Metering and have them placed at distributing zones to help gauge leaks.

27. There was a plan to install 13000 meters in the La Bonne Intention metering project but only 3000 installed so far. The recent flooding and contracting hiccups contributed to the delay.

28. Questioned about meters funded by the DFID – (15000), and 48000 from the World Bank, the Managing Director explained that they have received 7500 so far and the 48000 will go towards the unmetered consumers. *from which Agency*

29. It was pointed out that unmetered consumers pay on the average \$25.00 per day for water, whereas the metered ones pay about three times that amount. It was further disclosed that on a comparison with other countries, our rates work out to a little less than US\$0.20; as against Fiji US\$0.15; Trinidad and Tobago US\$0.50; Singapore US\$0.25; St Lucia US\$0.85 and Dominica US\$1.00.

30. Consumers representatives feel that the 10% increase was too steep and suggested 2%. One view, forcibly advanced, was that with the substantial amount not collected, and the very generous leave conditions for management staff GWI should not be granted any increase.

31. In recent years many countries have taken up the task of reforming utilities services which were inefficient and lagging in their response to improved technologies and expanding demand. The primary objective is to get the companies to improve the performance in a sustained manner over an extended period of time. The effort is among others to reduce the cost and at the same time to upgrade and improve customer service. These must have been the considerations which impelled the authorities to create one unit for the supply of the water and sewerage service throughout the country.

32. Incentives in the form of price increases are granted as a means to provide inducements to achieve standards and ultimately to reduce cost of production. This will of course result in more profitability for the utility, and at the same time provide improved customer service.

33. We have taken into account the state of the sector when Severn Trent was recruited by the Government of Guyana to provide management service. The revenue, at present generated from operations, appears inadequate to undertake and fulfil all the obligations demanded by the contract into which they have entered.

34. The percentage of non revenue water is alarming and much effort must be put in place to arrest the slide. One of the causes appears to be the non-metering of a substantial percentage of the consumers. As was pointed out the claim is that the unmetered consumers pay only about a third of what metered consumers pay. When consumers do not have to be careful and prudent in the use of water because there is a fixed charge the tendency will generally be to be carefree of the use and no attempt will be made to conserve.

35. We propose to grant increases. But we do not expect the utility to only collect the increased revenue but it must make great effort to reduce the loss and cut back on the non-revenue water.

36. We will of course monitor the service in relation to the standards set in the licence and seek to ensure that the utility is delivering on its commitments.

37. The Commission considered all that was said at the hearing, and studied all the documents and returns filed and has paid due regard to consumers interests and the integrity of the utility.

38. There seem to be no doubt that GWI is in dire need of finances to effectively discharge its duties and fulfil its obligations set out in the licence. It has apparently not achieved its financial target by the end of 2004 - it has not recovered 100% of its operation and depreciation costs through tariff as required by the licence.

39. We made reference to the shortfall earlier as set out by the Financial Analyst. It appears to us that for GWI to be in a better financial position there must be:

- (a) a strategy that will allow it to cushion or reduce the effects of energy costs on its operation;
- (b) a restructuring of the tariff levels;
- (c) the acceleration of its metering programme; concentrating also on large users of water, e.g. car-wash bays, etc.
- (d) a strategy to combat waste and leakage;
- (e) a strategy for the purchase and storage of chemicals;
- (f) a new billing system;
- (g) innovative mechanism for the collection of all outstanding moneys due;

(h) a strategy to advance purification and production of water in parallel.

40. We find that the operations of the company are very inefficient, and there appears not to be a too harmonious relationship between the Board of Directors and the Management of GWI, and this, of necessity, has lead to a debilitating effect on the operation and management of the company.

41. We recommend an active public relations programme to foster good customer relations to try to contain leaks and waste. Non revenue water accounts for 50% of production at the end of 2004, and it is hoped that this should be reduced to about 39% by the end of this year. *Recommendation*

42. It appears that GWI is more concerned with the quantity of water produced and at present not much emphasis is placed on the quality of water released for public consumption. The Managing Director has conceded that improved quality needs captial investment and that is not on the cards at the moment. He offered that that quality might improve as a consequence of the investments in treatment plants and not as a deliberate act on the part of GWI. It was also pointed out boreholes are usually in excellent condition but the problem lies with the distribution system during low pressure periods when contamination could result from leakage and seepage.

43. We recognise the cost of electricity generally and GWI's bills are about 64% of revenue. GWI has outstanding balances for GPL and the Managing Director explained that GPL is not willing to discuss rates or tariff unless the amounts are paid off. We are also concerned that GPL suffers loss of about 40% of its production but still collects rates on the total amount of electricity generated. At the end of the day the consumer pays twice - directly to GPL for their losses and then through GWI who pays also for GPL losses and passes these on to the consumers. Against this background, GWI should actively pursue with Guyana Power and Light for some concessionary electricity rates to

apply in order to alleviate the burden on consumers. By the same token, GWI should offer GPL a fixed payment schedule to clear the outstanding balance owed to GPL.

ORDER

- Taking into account all that we have hitherto set out we grant an increase of 10% on the rates at present in force for the unmetered consumers, and an increase of 5% on the rates at present in force for the metered consumers.
- Attached hereto is the list setting out the new rates. The increases shall take effect for the supply of water and sewerage service with effect from 1st July 2005.
- GWI is required to:-
 1. Reduce non-revenue water to 39.4% as stipulated in the licence.
 2. Ensure that there is, on average, a 12 hour flow of water to consumers.
 3. Submit to the Commission an aged analysis of the debts inherited from GS&WC and GUYWA and GWI's proposals for their collection or write off.
 4. Ensure compliance with the debt collection efficiency of 80.6% as set out in the licence.
 5. Comply with licence standard of metering coverage of 52.7% of consumers.
 6. All unmetered customers to be billed yearly in advance.
 7. Metered customers to be billed quarterly in advance.
 8. * Install the new billing and accounting systems.
 9. Restructure the tariff bands to allow for uniformity and a smaller number of bands.
 10. Comply with the standards set out in the licence in relation to water quality.

billings

11. If item at 10 cannot be met, submit to the Commission modifications of the standards agreed with the Government and GWI's compliance with those modified standards.
12. Submit to the Commission any agreement with the Government of Guyana regarding subventions to be given to GWI.
13. Submit to the Commission a copy of the annual external standards audit.
14. Submit to the Commission, not later than 45 days after the end of each month, GWI's monthly:
 - i) **Financial Statements.** These should include **the Profit and Loss Statement, the Balance Sheet and the Cashflow Statement** with explanatory notes.
 - ii) Aged analysis of debtors.
 - iii) Analysis of use of electricity.
 - iv) Detailed water production statistics.
 - v) Details of non-revenue water statistics.
 - vi) Progress report on metering programme, and
 - vii) Water quality test results with explanatory notes.
15. Publish in the daily national newspapers the approved rates for the information of consumers; and must post up copies of the rates at its several offices and branches in conspicuous locations throughout the country.

Dated this 12th day of October, 2005.

ORDER No. 3 of 2005,


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Prem Persaud C.C.H.

- **Chairman**


.....
Badrie Persaud

- **Commissioner**


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John Caesar

- **Commissioner**


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Maurice Solomon

- **Commissioner**



RATES APPROVED BY THE PUBLIC UTILITIES COMMISSION



Rates to take effect from July 01, 2005

REF. NO	CUSTOMER CATEGORY			TARIFF (Monthly)				TARIFF (Annual)	
				CURRENT	PROPOSED	\$ CHANGE	% CHANGE	CURRENT	APPROVED
Unmetered - Domestic									
1	Guywa Rural Domestic	-		680	748	68	10	8,160	8,976
2	Guywa Domestic	Low		680	748	68	10	8,160	8,976
3	Guywa Domestic	Medium		1,050	1,155	105	10	12,600	13,860
4	Guywa Domestic	High		1,200	1,320	120	10	14,400	15,840
Non-Domestic Unmetered Customers									
5	Domestic Combined	-		820	902	82	10	9,840	10,824
6	Small Commercial	-		1,247	1,372	124.708	10	14,965	16,462
7	Medium Commercial	-		2,993	3,292	299.25	10	35,910	39,501
8	Large Commercial	-		9,975	10,973	997.50	10	119,700	131,670
9	Small Institutions	-		1,247	1,372	124.708	10	14,965	16,462
10	Medium Institutions	-		2,993	3,292	299.25	10	35,910	39,501
11	Large Institutions	-		9,975	10,973	997.50	10	119,700	131,670
12	Small Industrial	-		2,494	2,743	249.375	10	29,925	32,918
13	Medium Industrial	-		4,988	5,486	498.75	10	59,850	65,835
14	Large Industrial	-		16,625	18,288	1662.50	10	199,500	219,450
Metered Domestic									
15	Guywa Domestic	Rural	per cubic meter	58	60.90	2.90	5		
16	Guywa Domestic	Low	per cubic meter	58	60.90	2.90	5		
17	Guywa Domestic	Medium	per cubic meter	58	60.90	2.90	5		
18	Guywa Domestic	High	per cubic meter	90	94.50	4.50	5		
Metered - Commercial									
19	Guywa Non-Domestic	-	per cubic meter	92	96.60	4.00	5		
20	GS&WC Domestic	Low		900	945	45	5	10,800	11,340
21	GS&WC Domestic	Medium		1,400	1,470	70	5	16,800	17,640
22	GS&WC Domestic	High		1,600	1,680	80	5	19,200	20,160
23	GS&WC Domestic	High		2,500	2,625	125	5	30,000	31,500
24	GS&WC Domestic	Medium	per cubic meter	60	63	3	5		
25	GS&WC Domestic	High	per cubic meter	90	94.50	4.50	5		
26	GS&WC Domestic	-	per cubic meter	107	112.35	5.35	5		
Metered - Commercial									
27	GS&WC Non-Domestic	-	per cubic meter	96	100.80	4.80	5		
Sewerage									
28	Domestic	all		400	420	20	5	4,800	5,040
29	Non-Domestic Metered	all		2,000	2,100	100	5	24,000	25,200
30	Non-Domestic UNmetered	all		2,000	2,200	200	10	24,000	26,400