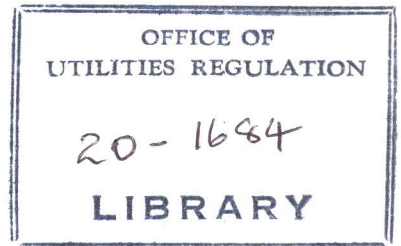




OFFICE OF UTILITIES REGULATION

**REGULATORY FRAMEWORK
FOR THE
NATIONAL WATER COMMISSION
(1999 - 2001)**

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NATIONAL WATER COMMISSION
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Introduction

The National Water Commission (NWC) has been granted a tariff adjustment with effect from 1999 February 1. In order to provide a consistent and transparent regulatory environment, the basis on which the NWC will be monitored, the performance targets that must be attained as well as other operational and financial benchmarks are set out hereunder. These parameters will form the regulatory framework for the NWC for the period 1999 - 2001.

Reporting and Monitoring

As part of the general monitoring, the NWC is required to provide the following information to OUR on an annual and/or quarterly basis:

1. Financial reports
2. Statistical information on operations and customer service
3. Quality of service standards reports
4. Reports relating to performance under tariff regime
 - Monitoring of the K factor
 - Monitoring of capital projects
 - Customer service
 - Procurement of goods and services

In addition, the OUR has specified the minimum filing requirements for a rate application.

New Tariff and Performance Targets

The new tariffs are effective 1999 February 1. These new tariff changes are conditional on NWC committing to the following performance targets:

- Installation of 54,800 meters by 1999 December
- Implementation of sewerage rehabilitation projects totaling \$142.9 million of which \$83.4 million to be committed in fiscal year 1999/2000
- Replacement of one hundred and twenty pumps by 1999 December
- Implementation of water mains replacement projects in the corporate area amounting to \$ 30 million by 2000 March
- Reduction of the number of inactive accounts to 5% of the customer base by 1999 July

- Achievement of the following customer service standards:
Response to customer queries (including metering)
 - ✓ Time to acknowledge enquiry after receipt : 5 working days
 - ✓ Maximum time to complete investigation and respond, from date of receipt of enquiry : 30 working days
 - ✓ Reducing the number of billing related complaints to 10% of total complaints by 2000 March

Under normal circumstances, the OUR will not review NWC's tariff until 2001 April.

Performance Benchmarks

In an effort to secure improvements in the performance of the NWC, in addition to the specific performance targets limited to the new tariff regime, the OUR requires the NWC to attain other performance benchmarks by 2001 April. These are as follows:

Financial

1. NWC shall complete an inventory of all its fixed assets inclusive of those in use but not currently on its books. Valuation of these assets should be completed by 2000 December.
2. The gross receivables at 1998 October were \$2.760B. NWC shall reduce this by at least 50% by 2001 March 31.
3. Projections for the year ending 1999 March show employee costs of 47% of revenues. This is to be reduced to a maximum of 30% of revenues by 2001 March.
4. NWC shall maintain an average monthly collection rate of at least 90% of billing.

Operational

1. At 1999 January, unaccounted for water (UFW) was estimated at 65% of production. This is to be reduced by at least 20 percentage points to 45% by 2001 March.
2. Water quality must show a minimum of at least 99% compliance with Interim Jamaican Standards as developed by the Ministry of Health.
3. Effluent from sewage treatment plants must have a 95% compliance with NRCA standards.
4. At least 85% of customers must have functioning meters.

Customer Service

1. A minimum of 90% of metered accounts are to be read in each billing cycle during the year ending 2000 March and 99% for year ending 2001 March.
2. At least 95% of blocked sewerage mains must be cleared within 24 hours.

Tariff Study

A comprehensive review of the tariff structure has to be done by NWC. This must be completed for consideration at the next tariff review. In this respect, NWC and OUR will jointly develop a terms of reference and agree on a methodology for rate determination.

Introduction of Customer Service Standards

To address the issue of service quality, the OUR intends to introduce a set of quality standards for NWC. The OUR will set a series of overall standards against which NWC's overall performance in terms of customer service will be measured. Also, to encourage commitment to customer service, OUR and NWC will agree on specific Guaranteed Standards against which the utility will be obliged to make payments to customers when those standards are not met.

To establish these standards the OUR has produced a consultative document in which public comment on all aspects of the determination of the standards, is being sought. After the consultation period, which ends in 1999 May, the standards will be implemented in 1999 July. The utility's adherence to these standards will be monitored for a period of one year after which the OUR intends to convert some or all to guaranteed standards.

Capital Works

The OUR recognises that not only is there need for quality of service improvements at NWC but there is also great need for improvements in efficiency. As such, the 1999 tariff increase includes provision for certain capital programmes, which NWC must carry out. These include:

1. The corporate mains replacement programme
2. The metering programme
3. Sewerage rehabilitation
4. Pump replacement programme
5. Plant rehabilitation

To enable the progress of these programmes to be monitored, NWC is required to provide the following information: -

A. Within 3 months of implementation of new tariff

1. Detailed project plans indicating :-

- Specific projects to be implemented
- Timing of activities
- Timing of expenditures

B. Quarterly

1. Actual performance in relation to projections
2. Reasons for variance (if any)
3. Expenditure against physical progress

Prudent Utility Practice

With regard to the capital programmes listed above, the OUR requires that funds are utilised in the most efficient manner and encourages the NWC to utilise prudent utility practices in its operations. In this regard therefore, the NWC must demonstrate that, in all instances, goods and services are procured efficiently and in keeping with the standard procedures for competitive bidding. The NWC will therefore have to submit reports of its procurement process for each project, indicating: -

1. Number of invitations issued
2. Number of bids received
3. Bid prices
4. Contract award value (with appropriate explanations)

Licence Fee

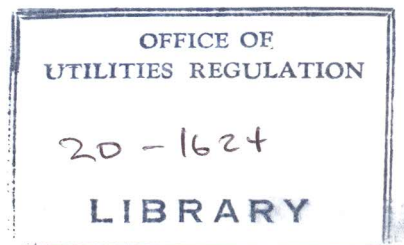
The OUR is to be funded by payment of licence fees from all the regulated utilities. NWC is therefore required to pay to the OUR the amount of OUR's budget, which is equivalent to the ratio of NWC's revenue to the total revenue of the regulated utilities. That is, the licence fee for a particular year will be determined by: -

$$\text{Licence fee} = \{R1/(R1+R2+R3)\} * \text{OUR's Budget}$$

Where R1= NWC's Revenue
 R2= JPS's Revenue
 R3= CWJ's Revenue

APPENDICES

National Water Commission Information Requirements



1. FINANCIAL REPORTS

A. *Initially*

1. Five (5) Year Business Plan
2. Five (5) Year Investment Program-Water and Sewage
3. Planned Financing of Investment Programme (NWC, GOJ, BOT etc.)
4. Copy of Financial Model

B. *Annually*

1. Operational Plan and Budget
2. Capital Expenditure Budget detailing:
 - List of Projects
 - Estimated cost and time for completion
 - Expenditure to date
 - Sources of Financing
 - Areas to be served by these projects
 - Number of customers to be served
 - Incremental amount of water to be produced
 - Estimated amount of water to be saved through rehabilitation
 - Additional sewage treatment capacity
3. Details of Annual Maintenance Programme
4. Details of Water Loss Management Programme
5. Metering Programme
6. Accounting Information:
 - Audited Profit and Loss Account and Balance Sheet
 - Audited Cashflow Statement
 - Operating Expenses and Revenues by:
 - Regions
 - Parishes
 - Major Systems and Plants
7. Separation of expenses including electricity into the following Major Services:
 - Water Production and Treatment
 - Water Distribution and Supply
 - Sewage
 - Collection and Conveyance
 - Treatment
 - Sludge Treatment and Disposal
 - Customer Service
 - Administrative expenses

C. *Quarterly(With Monthly breakout)*

8. Details of Maintenance Programme

- Performance reports
- 9. Details of Water Loss Management Programme
 - Performance reports
- 10. Metering Program
 - Planned and Actual Installation by Parishes
- 11. Water Quality Reports and Statistics by parishes, highlighting non-compliance with standards
- 12. Accounting Information:
 - Profit and Loss Account and Balance Sheet
 - Cashflow Statement
 - Operating Expenses and Revenues by:
 - Regions
 - Parishes
 - Major Systems and Plants
- 13. Separation of expenses in above statements into the following Major Services:
 - Water Production and Treatment
 - Water Distribution and Supply
 - Sewage
 - Collection and Conveyance
 - Treatment
 - Sludge Treatment and Disposal
 - Customer Service
 - Administrative expenses
- 14. Revenue by Major Services
 - Water
 - Sewage
 - Service charge
 - Sludge
- 15. Price Adjustment Mechanism
 - Value of indices used and level of PAM

D. Other

1. Cost Allocation and Apportionment Methods for administrative expenses
2. Planned Programme of Asset Revaluation
3. List and Value of Assets used by NWC and funded by Government which are not recorded in NWC's books.
4. Estimated value and types of assets handed over by developers and not recorded in NWC's books
5. Impact of subsidised charges (Primary Schools, Government, Standpipes etc.)
6. Evaluation of the impact of 'social water' defined as
 - Red areas
 - Standpipes
 - Fire hydrants
 - Trucking to non-NWC customers

2. OPERATIONS AND CUSTOMER SERVICE

(Statistical information)

OPERATIONS

A. Quarterly

Water

1. Monthly production of water by Region, Parish and Major Systems indicating actual and estimated readings
2. Volume of water purchased by Region, Parish
3. Monthly consumption of water by rate categories in bands (Table 1)
4. Number of accounts by rate category per parish
5. Number of metered accounts by rate category per parish
6. Unaccounted for water by parish and Major systems
7. Estimated breakdown of Unaccounted for water by Parish as:-
 - Leaks
 - System use
 - Under estimation of consumption
 - Under registration of meters
 - Unauthorised connections
 - Un-registered supplies
8. Number of new connections by Parish
9. Number of disconnections by Parish
10. Average time to reconnect after payment by Parish
11. Number of reconnections by Parish
12. Unplanned lock-offs in production, transmission and distribution by parish:-
 - Number
 - Reason for lock-off
 - Hours lost
 - Customer-hours lost
13. Planned lock-offs in production, transmission and distribution by parish caused by drought, flood etc.:-
 - Number
 - Hours lost
 - Customer-hours lost
14. Planned lock-offs in production, transmission and distribution by parish caused by maintenance works:-
 - Number
 - Hours lost
 - Customer-hours lost
15. List of communities and number of accounts served by NWC, without water for last month, 3 months, 6 months, year.
16. Number and types of faults reported by Parish
17. Number of faults cleared within 24, 48, 72 hours by Parish

18. Number of employees by Region, Corporate by category
 - Production and treatment of water
 - Transmission and distribution
 - Sewerage
 - Customer service
 - Administration
19. Total number of new service applications
20. Total number of service appointments made
21. Bill summary report:-
 - Number of bills
 - Active accounts
 - Inactive accounts

Sewerage

22. Water consumption of seweraged accounts by rate category by bands
23. Number of new sewage connections by parish
24. Number of sewage disconnections by parish
25. Faults reported in:-
 - Collection and conveyance
 - Treatment
26. Average time taken to clear faults
27. Comparison with PAHO standards for effluent by plant
28. Throughput/capacity ratio by plant
29. Sewerage plants in/out of service and length of time out

B. Annually

30. Production Capacity of water plants
 - Plant type (wells, treatment plants etc.)
 - Installed capacity
 - Actual capacity
 - Availability
 - Water produced
31. Treatment capacity of sewerage plants
 - Plant type (ponds, package etc.)
 - Installed capacity
 - Average throughput
 - Availability

CUSTOMER SERVICE

A. Annually

Customer satisfaction survey

B. Quarterly

1. Number of bills produced
2. Number of bills not delivered within 8 days after production

3. QUALITY OF SERVICE STANDARDS REPORTS

- WOS1 Water quality reports
- WOS3 a) Percentage of planned interruptions, of duration not more than 4 hours, where at least 12 hours notification was not given.
b) Percentage of planned interruptions, of duration more than 4 hours, where at least 24 hours notification was not given.
- WOS4 a) Number of reported flooding from sewers
b) Percentage of reported flooding not corrected within 24 hours after being informed
- WOS5 Sewerage effluent reports
- WOS6 a) Number of meters changed
b) Percentage of customers not informed of the changes to the meter
- WGS1 a) Number of new services connected
b) Percentage of new services not connected within 10 business days
- WGS2 a) Number of bills dispatched
b) Percentage of bills not dispatched within 48 business days after connection
- WGS3 a) Number of appointments
b) Percentage of appointments not kept
- WGS4 a) Number of complaints by category by parish
b) Percentage of written complaints (not billing related) by category, not acknowledged within 5 business days of receipt.
c) Percentage of complaints by category not investigated and responded to within 30 business days of receipt.
- WGS5 a) Percentage of written billing complaints not acknowledged within 5 business days of receipt.
b) Percentage of billing complaints not investigated and responded to within 30 business days of receipt.
- WGS6 a) Number of requested disconnections (account status)
b) Number of requested disconnections in which a minimum of 5 business days notice was given
c) Number of meters not read on requested date of disconnection although a minimum of 5 business days notice was given.
d) Percentage of bills not dispatched within 48 hours of disconnection
- WGS7 a) Number of unplanned lock-offs
b) Percentage of unplanned lock-offs not restored within 24 hours in urban areas
c) Percentage of unplanned lock-offs not restored within 48 hours in rural areas
- WGS8 a) Number of requests for meters
b) Percentage of meters not installed within 30 business days of request
- WGS9 a) Number of faulty meters reported
b) Percentage of meters not repaired within 40 business days of being informed, after verification
- WGS10 a) Number of meters not read within 3 months
b) Number of accounts not billed within 3 months

- WGS11 a) Number of payments for reconnection
b) Percentage of disconnected accounts (for non-payment) not reconnected within 24 hours after payment in urban areas
c) Percentage of disconnected accounts (for non-payment) not reconnected within 48 hours after payment in rural areas

Complaint Categories

1. Billing matters
 - Estimated billing
 - Payment not credited
 - High consumption
 - Billing adjustment (unexplained)
 - Unable to understand bill
2. Bill not received (verified against frank stamp date)
3. Disconnection (wrongful, etc)
4. Re-connection (awaiting, etc)
5. Irregular supply (inconsistent supply)
6. Metering (Defective, absence of, etc)
7. Unscheduled interruption of service (period of extended lock-off)
8. Health and safety
9. Service connection
10. Unavailability of service (service required but not available to applicant)
11. Compensation payment not received (pending discussions - OUR/NWC)
12. Equipment damage
13. Property damage
14. Low or high pressure
15. Blocked sewers

4. REPORTS RELATING TO PERFORMANCE UNDER TARIFF REGIME

I. MONITORING OF THE K FACTOR

A. *Quarterly*

General

1. Total billing of K factor (with monthly breakout)

Metering Programme

1. Inception report - Status at October 1, 1998
2. Number of meters purchased
3. Meters installed and registered on CAS
4. Expenditure against physical progress

Pump Replacement Programme

1. Inception report - status at October 1, 1998
2. List of pumps being replaced
3. Status - engineered, ordered, received, installed
4. Expenditure against physical progress

II. MONITORING OF CAPITAL PROJECTS

A. *Within 3 months of implementation of new tariff*

1. Detailed project plans indicating :-
 - Specific projects to be implemented
 - Timing of activities
 - Timing of expenditures

B. *Quarterly*

1. Actual performance in relation to projections
2. Reasons for variance (if any)
3. Expenditure against physical progress

III. CUSTOMER SERVICE

1. a) Number of complaints by category
b) Percentage of complaints (including metering) by category, not acknowledged within 5 business days of receipt
c) Percentage of complaints by category, not investigated and responded to within 30 business days of receipt
2. a) Number of active accounts
b) Number of inactive accounts
3. a) Number of billing related complaints for 1998/1999

- b) Number of billing related complaints for 1999/2000
- c) Number of billing related complaints for 2000/2001

IV. PROCUREMENT

The OUR requires that funds are utilised in the most efficient manner and encourages the NWC to utilise prudent utility practices in its operations. In this regard therefore, the NWC must demonstrate that, in all instances, goods and services are procured efficiently and in keeping with the standard procedures for competitive bidding. The NWC will therefore have to submit reports of its procurement process for each project, indicating:-

1. Number of invitations issued
2. Number of bids received
3. Bid prices
4. Contract award value (with appropriate explanations)

5. RATE APPLICATION

Minimum Filing Requirements

1. Business Plan indicating
 - Objectives to be achieved in next five years
 - Policy framework
 - Strategies
 - Planned financing
2. Audited Financial Statements
3. Current year budget
5. Year to date Income & Expenditure, Cash Flow and Balance sheet
6. Revenue and Cost separation into the following major services
 - Water production and treatment
 - Water distribution and supply
 - Sewage treatment
 - Customer service
7. Details of all loans and applicable rates of interest and amortisation schedules
8. All foreign exchange denominated loans should be identified
9. Five year Investment programme detailing :-
 - List of projects
 - Estimated cost and time for completion
 - Expenditure to date
 - Sources of financing and terms
 - Areas to be served
 - Number of additional customers to be served
 - Incremental amount of water to be produced
 - Estimated cost savings
 - Additional sewage treatment capacity
10. Maintenance programme
11. Metering programme
12. Water loss management programme
13. Effect of above programmes on unaccounted for water
14. Movement of fixed assets due to revaluation
15. List and value of assets used by NWC, which are not recorded in books
16. Impact of social water
17. At least six months data on the following
 - Monthly production of water by Region, parish and major systems indicating actual and estimated readings
 - Volume of water purchased by Region, Parish
 - Monthly consumption of water by rate categories in bands
 - Number of accounts by rate category per parish
 - Number of metered accounts by rate category per parish
 - Unaccounted for water by parish and Major systems
 - Estimated breakdown of Unaccounted for water by Parish as:-

- Leaks
 - System use
 - Under estimation of consumption
 - Under registration of meters
 - Unauthorised connections
 - Un-registered supplies
18. Number of new connections by Parish
 19. Number of employees by Region, Corporate by category
 - Production and treatment of water
 - Transmission and distribution
 - Sewerage
 - Customer service
 - Administration
 20. Elasticities
 - Price
 - Income

Sewerage

1. Water consumption of seweraged accounts by rate category by bands
2. Number of sewage connections by parish

AMENDMENTS TO THE REGULATORY FRAMEWORK

The following represent changes to the Regulatory Framework, as agreed between OUR and NWC.

New Tariff and Performance Targets

Page 1

The OUR has decided to extend the completion date for the installation of 54,800 meters and replacement of one hundred and twenty (120) pumps from 1999 December to 2000 March.

Page 1

- Reduction of the number of inactive accounts to 5% of customer base by 1999 July

Now reads

- Reduction of the number of inactive accounts to 5% of customer base by 1999 December

Page 2

- ✓ Reducing the number of billing related complaints to 10% of total complaints by 2000 March

The OUR and NWC have agreed that the target should be a percentage of the bills issued instead of a percentage of total complaints. Actual percentage is to be agreed.

Introduction of Customer Service Standards

Page 3

The consultation process regarding the Quality of Service Standards for NWC has been completed. The OUR has issued a statement on the subject and NWC will begin monitoring the standards in 2000 January. NWC is required to start reporting, to the OUR, on the standards in 2000 April.