



OFFICE OF UTILITIES REGULATION

**REGULATORY FRAMEWORK
FOR THE
NATIONAL WATER COMMISSION
(2002 - 2003)**

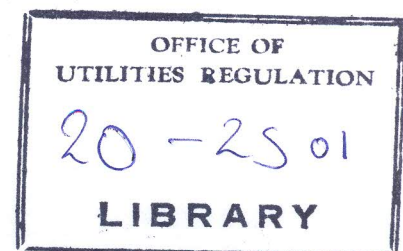
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Introduction

With the objective of achieving a consistent and transparent regulatory environment, the Office of Utilities Regulation (OUR) has developed a regulatory framework for the National Water Commission (NWC) for a one-year period beginning April 2002 to March 2003. This document is separated into two parts.

The first part consists of performance targets, both financial and operational, to be achieved over the one-year period (April 2002 – March 2003). These targets reflect the outcome of the workshop held in March 2002 between the OUR and the NWC. The second part of the document sets out the reporting requirements that are to be complied with by the NWC on a continuing basis i.e. beyond March 2003. These reporting requirements are issued in accordance with Section 4 of the OUR (Amendment) Act 2000.

This document outlines the basis on which the NWC will be monitored and the performance targets that NWC must attain. These targets are not fundamentally different to the previous framework issued for the 1999 – 2001 regulatory period.



PART I - PERFORMANCE TARGETS AND BENCHMARKS

In an effort to secure continued improvements in the Commission's efficiency and overall performance, the following performance targets are to be attained by the NWC over the period April 2002 – March 2003. The OUR will assume that these targets have been achieved at any subsequent review of the rates charged by the Commission and the tariffs will incorporate the deemed efficiency gains.

Operational

1. At September 2001, unaccounted for water (UFW) was estimated at 67% of production. This is to be reduced by at least 9 percentage points to 58% by March 2003
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 comply with National Environment and Planning Agency (NEPA) effluent standards.
4. At least 85% of customers must have functioning meters. These would include customers that are on record with active and temporarily inactive accounts..
5. All disconnected (inactive) accounts are to be revisited within ninety (90) days of any account being disconnected and not reconnected and action taken to ensure that these customers have not illegally reconnected and outstanding balances are being collected.
6. At least 95% of blocked sewerage mains must be cleared within 24 hours.

Customer Service

1. A minimum of 97% of metered accounts is to be read in each billing cycle.
2. Reduce the number of billing related complaints to 5% of total bills printed by March 2003. Thereafter, this target is to be maintained or exceeded.

Financial

1. NWC shall complete an inventory and valuation of all its fixed assets inclusive of those in use but not currently on its books. All assets in use by the Commission are to be brought to the books by March 2003. Valuation of these assets should be completed by March 2003.
2. The gross receivables at September 2001 were \$3.04B. The Office is not only concerned with the continued increase in this balance sheet item but also views it as a very important aspect of the NWC's day-to-day operations which impacts on the cash available to the Commission. Consequently, the Office expects the NWC to reduce gross receivables to and maintain at a level not greater than \$1.5B by March 2003.
3. As at September 2001, employee costs was 42% of revenues. The Office is aware that extraordinary items, such as pension payments, have contributed to this high percentage. Notwithstanding this, the expectation in setting the previous target (30%) was for revenue growth and containment of employee costs. The Office expects the Commission to reduce employee costs as a proportion of revenues by at least six (6) percentage points to 36% by March 2003.
4. NWC shall maintain an average monthly collection rate of at least 90% of billing.
5. NWC shall prepare an Energy Efficiency Improvement Plan by September 2002. This Plan should outline strategies, tasks and resource requirements. The plan should aim at reducing the energy required to produce one million litres of water.

Pursuant to Section 4 (1) (a) of the OUR (Amendment) Act, 2000, the Office shall "... regulate the provision of prescribed utility services by licensees or specified organizations". In order to effectively carry out this function, the Act empowers the Office to "... conduct such research as it thinks necessary or desirable for the purposes of the performance of its functions" In addition, the Office shall undertake such measures¹ to enquire into the nature and extent of the prescribed utility services provided by a licensee or specified organization².

Consequently, as part of the general monitoring of the Commission's performance and in accordance with the OUR (Amendment) Act, 2000, the NWC is required to provide the following information to the Office on an annual and/or quarterly basis. Quarterly reports are to be submitted within 45 days of the end of the relevant quarter.

1. Financial reports
2. Statistical information on operations and customer service
3. Quality of service standards reports (reports are summary of NWC's performance against the standards)
4. Reports relating to performance on Capital projects

The minimum filing requirements for a rate application are also specified.

¹ Prescribing specific information and documents it considers necessary.

² See section 4 (1)(c) and section 4 (2) (e) of the OUR (Amendment) Act, 2000.

1. FINANCIAL REPORTS

A. Initially and revised each year

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

B. Annually

1. Operational Plan and Budget
2. Capital Budget
3. Capital Expenditure Budget detailing:
 - List of Projects
 - Estimated cost and time for completion for each project
 - Expenditure to date
 - Sources of Financing
 - Areas to be served
 - Number of customers to be served
 - Incremental amount of water to be produced by the projects
 - Estimated amount of water to be saved through rehabilitation
 - Additional sewage treatment capacity of the project
4. Details of Collaborative Fund³. Details should include:
 - How projects are transferred to the books of the NWC
 - Terms and conditions for transfer
 - Terms and conditions for usage of funds
 - Total expenditure on completed projects
 - Annual revenue generated from completed projects
 - Year to date expenditure on incomplete projects (with variance report)
 - Annual revenue projections from projects to be undertaken
 - Assets utilized in each project
5. Details of the Economic Development Wastewater Tariff (EDWT). The report should include:
 - The projected and actual revenues generated from the programme
 - List of beneficiaries (companies)
 - Projected impact which existing and additional companies may have on the overall cash flow of the Commission
6. Details of Water Loss Management Programme
7. Conduct study on the estimation procedure used to determine contribution to unaccounted for water (UFW) by the following categories by parish:
 - Leaks
 - Systems use
 - Under estimation of consumption
 - Under registration of meters

³ This is a fund administered by the Ministry of Housing and Water in collaboration with the NWC and the Carib Engineering Corporation Limited (CECL).

- Unauthorized connections
- 8. Details of Annual Maintenance Programme
- 9. Details of Water Quality Report and statistics by parishes, highlighting non-compliance with standards
- 10. Effluent Quality report highlighting areas of non-compliance. It should also include list of all treatment plants (owned/ operated by the NWC) on which testing is not done. Any variances from the standard should be explained.
- 11. Accounting Information:
 - Audited Profit and Loss Account and Balance Sheet
 - Audited Cash flow Statement
 - Operating Expenses and Revenues by:
 - Regions
 - Parishes
 - Major Systems and Plants
- 12. 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
- 13. Revenue by Major Services
 - Water
 - Sewerage
 - Service charge
 - Sludge

C. Quarterly (With Monthly breakout)

1. Details of Maintenance Programme
 - Performance reports
2. Details of Water Loss Management Programme
 - Performance reports
3. Water Quality Reports and Statistics by parishes, highlighting non-compliance with standards
4. Accounting Information:
 - Profit and Loss Account and Balance Sheet
 - Cash flow Statement
 - Operating Expenses and Revenues by:
 - Regions

- Parishes
 - Major Systems and Plants
5. Separation of expenses in the 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
 6. Revenue by Major Services
 - Water
 - Sewerage
 - Service charge
 - Sludge
 7. Detailed Report of the Economic Development Wastewater Tariff (EDWT).
The reports should include:
 - The revenues generated from this programme
 - List of beneficiaries (companies)
 - Projected impact existing and additional companies may have on the overall cash flow of the Commission
 8. Price Adjustment Mechanism
 - Value of indices used and level of PAM by month

D. Other (due by October 2002)

1. Planned Programme of Asset Revaluation
2. List and Value of Assets used in providing water and sewerage services by NWC and funded by Government that are not recorded in NWC's books
3. Estimated value and types of assets handed over by developers and not recorded in NWC's books and any reasons for not recording assets.
4. Procedural plan for acquisition by the NWC of future assets from private developers and other government agencies
5. Impact of subsidized charges for Primary Schools, Government, Standpipes etc. on revenue
6. Evaluation of the impact on revenues of 'social water' defined as
 - Red areas
 - Standpipes
 - Fire hydrants
 - Trucking to non-NWC customers

2. OPERATIONS AND CUSTOMER SERVICE (Statistical information)

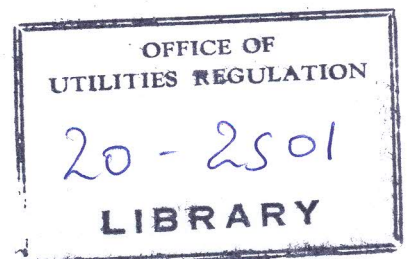
OPERATIONS

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 per region and parish
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
 - Unauthorized connections
8. Number of new connections by Parish
9. Number of disconnections by Parish
10. Average time to reconnect after payment by Parish (included in Guaranteed standards reporting)
11. Number of reconnections by Parish
12. Number of leakages reported and the time it took to be fixed (within 24, 48, 72, and over 168 hours)
13. Unplanned lock-offs in production, transmission and distribution by parish (included in guaranteed standard reporting):
 - Number
 - Reasons for lock-off
 - Customer-hours lost
13. Planned lock-offs in production, transmission and distribution by parish caused by drought, flood, etc⁴: -
 - 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

⁴ Other "Acts of God".



15. List of communities and number of accounts without water for last month, 3 months, 6 months, year and reason for disruption of service
16. Number and types of faults⁵ in the production and distribution system 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 by region
20. Total number of service appointments made (included in guaranteed standards reporting)
21. Bill summary report: by month -
 - Number of bills
 - Active accounts
 - Inactive accounts (temporarily and permanent)
 - Inactive accounts (aged by month) over the last 90 days and actions taken on these accounts.

Sewerage

22. Monthly water consumption of seweraged accounts by rate category by bands (as per rate schedule)
23. Number of new connection to sewage treatment system by parish
24. Number of seweraged accounts disconnected from sewage treatment system parish
25. Faults that may/did result in the discharge of untreated sewage reported in: -
 - Collection and conveyance
 - Treatment
26. Average time taken to clear faults
27. Comparison of effluent quality with PAHO standards for effluent by plant
28. Average throughput/capacity ratio by plant
29. Sewerage plants in/out of service and length of time out
30. Effluent quality report highlighting areas of non-compliance. Any variances from the standard should be explained. It should also include list of all treatment plants (owned/ operated by the NWC) on which testing is not done and the reasons for inattention.

B. Annually

Water

1. Production Capacity of water plants
 - Plant type (wells, treatment plants etc.)

⁵ Faults can be defined as leaks, service disruption due to malfunctioning of plant, etc.

- Installed capacity
- Actual capacity
- Water produced

Sewerage

2. Treatment capacity of sewerage plants
 - Plant type (ponds, package etc.)
 - Installed capacity
 - Average throughput

CUSTOMER SERVICE

A. Annually

1. Customer satisfaction survey
2. Number of billing related complaints for the last three financial years

B. Quarterly

1. Number of bills produced
2. Number of bills not dispatched within 5 days after production
3. Number of billing related complaints received
4. Number of meters to be read (with monthly breakout)
5. Number of meters read (with monthly breakout)

3. Quality of Service Standard Reports

A. Overall Standards Reports (yearly and quarterly)

- WOS3 a) Number and percentage of planned interruptions, of duration not more than 4 hours, where at least 12 hours notification was not given.
b) Number and 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
- WOS6 a) Number of meters changed
b) Percentage of customers not informed of the changes to the meter

B. Guaranteed standards reports (yearly and quarterly)⁶

- WGS1 a) Number of new services connected
b) Percentage of new services not connected within 10 business days
c) Reasons for not connecting new services within 10 business days
- WGS2 a) Number of bills dispatched to new service
b) Percentage of bills not dispatched within 48 business days after connection
- WGS3 a) Number of appointments
b) Percentage of appointments not kept and reasons for breach
- WGS4 a) Number of complaints (not billing related) 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 customer gave a minimum of 5-business days notice
c) Number of meters not read on requested date of disconnection although customer gave a minimum of 5-business days notice
d) Percentage of bills not dispatched within 48 hours of disconnection
- WGS7 a) Number of unplanned lock-offs

⁶ The report should be sent to the OUR by the 15th of the month following the end of each quarter.

- 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 suspected faulty meters reported
 - b) Percentage of meters not repaired within 40 business days of being informed after verification that meter is faulty
- WGS10
 - a) Number of meters not read within 3 months of the last actual reading
 - b) Number of accounts not billed within 3 months of last billing
- WGS11
 - a) Number of reconnection payments
 - 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
- WGS12
 - a) Number of complaints received on breach of each of the guaranteed standards (WGS1 to WGS11)
 - b) Number of standards breached
 - c) Number of payments made
 - d) Number of payments made within 60 working days of due date

Complaint Categories

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

4. OTHER

I. Capital Works

A. *Annually*

- *Operational plan and budget*
- *Capital budget*

B. *Quarterly*

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

II. Collaborative Projects

A. *Annually*

- List of all projects undertaken in the scheme
- Year to date expenditure and revenues
- Areas to be served by the projects
- Number of beneficiaries
- Variance reports
- Expected completion time (for incomplete projects).

B. *Quarterly*

- List of all projects undertaken in the scheme
- Year to date expenditure and revenues
- Areas to be served by the projects
- Number of beneficiaries
- Variance reports
- Expected completion time (for incomplete projects).

III. Rapid Response Programme

A. *Annually*

- Customers/areas served
- Payments made to the programme by the NWC

B. *Quarterly*

- Customers/areas served
- Payments made to the programme by the NWC

5. RATE APPLICATION⁷

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
4. All unaudited financial statements since the last audited accounts including year to date Income & Expenditure, Cash Flow and Balance sheet
5. 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 amortization schedules. All foreign exchange denominated loans should be identified
8. Five year Investment programme detailing: -
 - List of projects
 - Estimated cost and time for completion of each project
 - Expenditure to date
 - Sources and terms of financing
 - 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. Water loss management programme
12. Effect of above programmes on unaccounted for water
13. Movement of fixed assets due to revaluation
14. List and value of assets used by NWC, which are not recorded in books
15. Impact of social water on revenues
16. At least six months historic 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

⁷ **Cost of Service Study** - A comprehensive review of costs, by service type, systems, parishes and regions, shall be done by NWC. This must be completed in time for consideration at the next tariff review.

- 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
 - Unauthorized connections
17. Number of new connections by Parish
18. Number of employees by Corporate and Region by category:
- Production and treatment of water
 - Transmission and distribution
 - Sewerage
 - Customer service
 - Administration
19. Billed water consumption projection by category by band
20. Elasticities
- Price
 - Income

Sewerage

1. Minimum of six months historical billed water consumption of seweraged accounts by rate category by bands
2. Billed water consumption projection of sewerage accounts by category by band
2. Number of sewerage connections to treatment plant by parish

AMENDMENTS TO THE REGULATORY FRAMEWORK

As the specified framework is for twelve months starting April 2002, no amendments to the performance targets and benchmarks are anticipated. The NWC may propose amendments to form the basis of the regulatory framework for the ensuing period.

Note that the reporting requirements are ongoing and amendments and waivers have to be approved by the Office.