

PUBLIC UTILITIES REGULATORY COMMISSION

TEMPLATE FOR FILING

OF

TARIFF PROPOSALS

BY

GHANA WATER COMPANY LIMITED

(TRANSMISSION)

MAY, 2013

PUBLIC UTILITIES REGULATORY COMMISSION
PROPOSALS FOR REVIEW OF AGGREGATE REVENUE REQUIREMENT AND TARIFF

TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
LIST OF TABLES	iii
1 Introduction	1
1.1 Brief Background	1
1.2 Rationale/Objectives Underpinning Tariff Submission	1
1.3 Highlights of Major Issues Which Describe Structure of Tariff Submission).....	1
2 Initiatives Undertaken	1
2.1 Projects Undertaken.....	Error! Bookmark not defined.
2.2 Compliance with Directives of the Commission.....	2
3 Key Policy Issues for Tariff Consideration	2
4 Proposed Service Delivery and Efficiency Improvements During Tariff Period	2
4.1 Service Delivery and Efficiency Targets	2
4.2 Technical / Operating Performance Indicators/Indices.....	2
4.3 Financial Performance Indicators/Indices.....	2
5 Key Challenges Likely to Impact Service Delivery	2
5.1 Electricity Supply.....	2
5.2 Energy Consumption-Production Plants Electricity Usage.....	3
5.3 Availability of Chemicals and Laboratory Reagents.....	3
5.4 Breakdown of Production Facility.....	3
5.5 Expansion of Production Capacity	3
5.6 Production Losses.....	3
5.7 Metering and Accounting.....	3
5.8 Billing and Collection	3
5.9 Organisational Reform and Restructuring	3
5.10 Commercial Customer Complaints and Dispute Resolution.....	3
5.11 Resolution of Court Cases	3
5.12 Government and Public Sector Debts.....	3
5.13 Bad Debts	4
5.14 Surcharge and Subsidies.....	4
5.15 Government Grants	4
5.16 Access to Finance and Repayment of Financing Costs	4
5.17 Tariff Structure and Rates	4
5.18 Independent Water Producers-IWPs.....	4
5.19 Water Purchase from Independent Water Producers	4
5.20 Human Resource-Skilled Manpower	4
5.21 Transmission Infrastructure Constraints	4
6 Strategies to Address Key Challenges	4
7 GWCL WATER PRODUCTION SYSTEM RELATED DATA	5
7.1 Projected Water Transmission Data	5
7.2 Capital Expenditure	5
7.3 Capital Expenditure Financing Plan	6
8 Operation and Maintenance Costs	6
9 Administration and General Costs	6
10 Human Resource Costs- Employee Costs	7
11 Public Education.....	7
12 Financing and Interest Costs:.....	7
13 Return on Equity	7
14 Depreciation.....	7

PUBLIC UTILITIES REGULATORY COMMISSION
PROPOSALS FOR REVIEW OF AGGREGATE REVENUE REQUIREMENT AND TARIFF

15 Projected Water Transmission Revenue Requirement..... 7
16 Proposed Tariff and Rates Structure 8

PUBLIC UTILITIES REGULATORY COMMISSION
PROPOSALS FOR REVIEW OF AGGREGATE REVENUE REQUIREMENT AND TARIFF

LIST OF TABLES

Table-1	GWCL Water Transmission Systems Data 2011-2015.....	5
Table-2	Summary of Water Transmission Related Capital Investment Plan (Million GHS) 2011-2015.....	6
Table-3	Summary of Water Transmission Related Capital Expenditure Financing Plan (Million GHS) 2011-2015.....	6
Table-4	Water Transmission Related Operation and Maintenance Costs (Million GHS) 2011-2015.....	6
Table-5	Water Transmission Related Administration and General Costs (Million GHS) 2011-2015.....	6
Table-6	Water Transmission Related Human Resource Costs (Million GHS) 2011-2015.....	7
Table-7	Summary of Public Education Costs (Million GHS) 2011-2015.....	7
Table-8	Water Transmission Related Financing and Interest Costs (Million GHS) 2011-2015.....	7
Table-9	Water Transmission Related Equity Financing Costs (%) 2011-2015.....	7
Table-10	Depreciation (Million GHS) 2011-2015.....	7
Table-11	Summary of Water Transmission Revenue Requirement (Million GHS) 2011-2015.....	7

1 Introduction

1.1 Brief Background

GWCL, a wholly owned State Enterprise has responsibility for the Production, Transmission and Distribution of Water in the urban communities in Ghana for public, domestic, commercial and industrial use. The Ghana Water and Sewerage Corporation (GWSC) was converted into a limited liability company under the new name Ghana Water Company Limited in July 1999. GWCL, then GWSC was originally charged to operate as a commercial concern and to ensure that its revenues cover fully its cost from year to year.

1.2 Rationale/Objectives Underpinning Tariff Submission

- Recover cost of operations
- Generate internal funds to provide limited infrastructure improvement to water service delivery. This includes repairs and replacement of broken-down plants and machinery which need immediate attention
- Inflation and exchange rate fluctuations have eroded the effect of the last major tariff increase in June, 2010. The US Dollar which was then GH¢1.44 is almost GH ¢2.00.
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1.3 Highlights of Major Issues Which Describe Structure of Tariff Submission)

- Full cost recovery
- Affordability
- Fairness
- Simplicity

2 Initiatives Undertaken

2.1 Projects Undertaken –

2.2 Capital Expenditure (GH¢)

Since the last tariff review in 2010, GWCL has undertaken a number of projects from its own internally generated funds including replacement of air valves and other specials on our transmission lines.

2.3 Compliance with Directives of the Commission

GWCL will continue to comply with the directives from the PURC in respect of :

- Disconnection.
- Billing
- Customer complaints and redress
- Water quality standards as prescribed by Ghana Standard Board.

3 Key Policy Issues for Tariff Consideration

We wish to present the following issues for consideration of the Commission

- Re-categorization of customers - Ports & Harbour, Sachet water producers
- Introduction of service charge
- Sustenance of life line band
- Deletion of unmetered premises flat rate

4 Proposed Service Delivery and Efficiency Improvements During Tariff Period

4.1 Service Delivery and Efficiency Targets

4.2 Technical / Operating Performance Indicators/Indices

4.3 Financial Performance Indicators/Indices

- Cost per cubic meter of water produced
- Collection efficiency ratio
- Profitability
- Connection per staff
- Service coverage
- Number of customers billed
- Number of New Service connections from year to year

5 Key Challenges Likely to Impact Service Delivery

5.1 Electricity Supply

Our operations have been hampered by frequent power outages, low voltage and high voltage. Since the company depends on power from national grid, such interruptions should be reduced to the barest minimum

5.2 Energy Consumption-Production Plants Electricity Usage

Most of our electromechanical equipment at the booster stations are not energy efficient due to their old age thus consuming much energy.

5.3 Availability of Chemicals and Laboratory Reagents

Not Applicable

5.4 Breakdown of Production Facility

Not Applicable

5.5 Expansion of Production Capacity

Not Applicable

5.6 Production Losses

Not Applicable

5.7 Metering and Accounting

Not Applicable

5.8 Billing and Collection

Not Applicable

5.9 Organisational Reform and Restructuring

Not Applicable

5.10 Commercial Customer Complaints and Dispute Resolution

Not Applicable

5.11 Resolution of Court Cases

Not Applicable

5.12 Government and Public Sector Debts

Not Applicable

5.13 Bad Debts
Not Applicable

5.14 Surcharge and Subsidies
Not Applicable

5.15 Government Grants
Not Applicable

5.16 Access to Finance and Repayment of Financing Costs
Not Applicable

5.17 Tariff Structure and Rates
Not Applicable

5.18 Independent Water Producers-IWPs
Not Applicable

5.19 Water Purchase from Independent Water Producers
Not Applicable

5.20 Human Resource-Skilled Manpower
Not Applicable

5.21 Transmission Infrastructure Constraints
The transmission lines very old and are beyond their economic life span. Some of them were constructed as far back as 1920s

6 Strategies to Address Key Challenges

Generation of sufficient funds to implement the following:

- Repairs and gradual replacement of transmission lines.
- Aggressive bulk metering.
- Replacement of plant and equipment at booster stations.

7 GWCL WATER TRANSMISSION SYSTEM RELATED DATA

7.1 Projected Water Transmission Data

Table-1 GWCL Water Transmission Systems Data 2011-2015

Parameter	Unit	2011	2012	2013	2014	2015
A. Gross Transmission Capacity	M ³ /Day					
B. Projected Water Transmission	M ³ /Day					
B1. Target Average Availability of Transmission Pipeline	M ³ /Day					
C. Authorised Water Usage Within Transmission Network	M ³ /Day					
D. Water Available for Distribution	M ³ /Day					

7.2 Capital Expenditure

For purposes of tariff application, GWCL Water Transmission Department must provide production augmentation plan based on Demand Growth Forecast during the tariff review period, which in this case is 2013-2015. The same is required for computation of Revenue Requirement (RR), indicating projected amount of water to be transmitted taking into consideration, estimated growth plan of customers and any plans of new water transmission facilities.

The capital investment plan to be submitted by the Water Transmission Department must contain details of ongoing projects as well as new projects beyond the tariff period.

The Transmission Department must submit Renovation and Modernisation (R&M) plans for purposes of extension of asset life beyond its useful life. Detailed project reports indicating scope, justification, cost– benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure and schedule of completion.

With respect to Annual Performance Review, the Transmission Department must submit capital expenditure incurred and capitalisation during the year under review along side Annual Performance Review.

Outline of the Capital Investment Plan must include but not limited to the following:

- Purpose of Capital Investment Plan
- Replacement of existing assets with a view to meeting demand growth, improvement in quality and reliability of supply
- Capital Structure
- Capitalisation Schedule
- Financing Plan
- Cost – benefit analysis
- Performance improvement envisaged during tariff period

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Table-2 Summary of Water Transmission Related Capital Investment Plan (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Capital Cost					
Initial Spares					
Additional Capitalisation					
Renovation & Modernisation (R&M)					
Rehabilitation & Resettlement (R & R)					

7.3 Capital Expenditure Financing Plan

Table-3 Summary of Water Transmission Related Capital Expenditure Financing Plan (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Accumulated Depreciation					
Retained Earnings					
Commercial Borrowings:					
Domestic					
Foreign					
Additional Equity Contribution By Shareholder(s)					
Grants:					
Domestic					
Foreign					
Tariff Revenue (Revenue from Projected Capacity Charge)					

8 Operation and Maintenance Costs

Table-4 Water Transmission Related Operation and Maintenance Costs (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Fixed O & M Costs					
Variable O & M Cost					

9 Administration and General Costs

Table-5 Water Transmission Related Administration and General Costs (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Fixed O & M Costs					
Variable O & M Cost					

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10 Human Resource Costs- Employee Costs

Table-6 Water Transmission Related Human Resource Costs (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Fixed O & M Costs					
Variable O & M Cost					

11 Public Education

Table-7 Summary of Public Education Costs (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Stakeholder Communication & Sensitisation (Public Education)					

12 Financing and Interest Costs:

Table-8 Water Transmission Related Financing and Interest Costs (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Interest on Foreign Loans					
Interest on Domestic Loans					
Interest on Working Capital Loan					

13 Return on Equity

Table-9 Water Transmission Related Equity Financing Costs (%) 2011-2015

Item	2011	2012	2013	2014	2015
Rate of Return					

14 Depreciation

Table-10 Depreciation (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
Depreciation of Transmission Assets					

15 Projected Water Transmission Revenue Requirement

Table-11 Summary of Water Transmission Revenue Requirement (Million GHS) 2011-2015

Item	2011	2012	2013	2014	2015
A. Capital Recovery Component (CRC)					
B. Fixed O & M Component (FOMC)					
C. Variable O & M Component					

16 Proposed Tariff and Rates Structure

NB: The Target for Non-Revenue Water (NRW) is 46.3%. PURC allows 45% for NRW. Planned Water Sales by GWCL is 139,454,145m³ whereas PURC target results in a higher output of 142,824,414 m³. The under-absorbed output of 3,370,269m³ results in a higher sales figure for tariff calculation.