



LESOTHO ELECTRICITY AND WATER AUTHORITY

**LEWA'S DETERMINATION OF WATER AND SEWERAGE
COMPANY'S (WASCO'S) TARIFF APPLICATION FOR 2018/19
FINANCIAL YEAR**

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IN THE MATTER REGARDING A

DETERMINATION OF WATER AND SEWERAGE COMPANY'S APPLICATION

FOR A TARIFF INCREASE FOR 2018/19 FINANCIAL YEAR

1. DECISION

Based on the summary of the facts and evidence presented to the Authority, The Lesotho Electricity and Water Authority (LEWA) Board, at its meeting held on 26 July, 2018, concluded as follows:

- A. That Water and Sewerage Company (WASCO) be allowed a Revenue of M268.25 million for 2018/19 Financial Year, comprising of M233.64 million for Water Production and Distribution Businesses, and M34.61 million for Sewerage Business.
- B. That the water and sewerage charges for all customer categories be increased as shown in *table 1-1* and *Table 1-2* below:

Table 1-1: Approved Water Services Volumetric Tariff (Inclusive of customer levy of M0.2311/kl and exclusive of VAT)

Customers Category	Old Unit Cost Excluding Levies (M/kl)	Approved Percentage Change (%)	Approved Unit Cost Excluding Levies (M/kl)	Adding Customer Levy @ M0.2311/kl (M/kl)	Approved Unit Cost (M/kl)	Old Approved Unit Cost (M/kl)	Approved Tariff Percentage Increase (%)
Domestic Customers							
Band A (0 - 5 kl)	4.8900	5.1947	5.1440	5.3751	5.3751	5.1200	4.9828
Band B (>5 - 10 kl)	8.4500	5.1947	8.8889	9.1200	9.1200	8.6900	4.9488
Band C (>10 - 15 kl)	15.0300	5.1947	15.8108	16.0419	16.0419	15.2600	5.1236
Band D (>15 kl)	20.8100	5.1947	21.8910	22.1221	22.1221	21.0400	5.1431
Non Domestic customers							
Government	13.6600	5.1947	14.3696	14.6007	14.6007	13.8900	5.1166
(Business, Industry)	13.6600	5.1947	14.3696	14.6007	14.6007	13.8900	5.1166
Schools	13.5400	5.1947	14.2434	14.4745	14.4745	13.7700	5.1159
Religious Institutions	13.5400	5.1947	14.2434	14.4745	14.4745	13.7700	5.1159
Standpipes	6.7100	5.1947	7.0586	7.2897	7.2897	6.9400	5.0384

Table 1-2: Approved Water Services Standing Charges (No customer levy charged and exclusive of VAT)

Customer Category	Old Standing Charges (M/month)	Approved Percentage Change (%)	Approved Standing Charges (M/month)
Domestic Customers			
Band A (0 – 5 kl)	0	0	0
Band B (>5 – 10 kl)	40.90	5.2	43.03
Band C (>10 – 15 kl)	40.90	5.2	43.03
Band D (>15 kl)	40.90	5.2	43.03
Non Domestic Customers			
Government	272.35	5.2	286.51
Business, Industry	393.39	5.2	413.85
Schools	272.35	5.2	286.51
Religious institutions	196.70	5.2	206.93
Standpipes	0	0	0

C. The sewerage services volumetric tariffs should remain unchanged.

D. Other charges (as shown in *Table 10-1 below*) should remain unchanged.

2. INTRODUCTION

The Lesotho Electricity and Water Authority (LEWA) is a statutory body established to regulate the Lesotho Electricity Supply Industry (ESI) and Urban Water and Sewerage Services (UWSS). Amongst other things, LEWA (also referred to as the Authority) is empowered to regulate prices charged to consumers of electricity, and urban water and sewerage services. Consequently, every service provider licensed to carry out a regulated activity is obliged to lodge an application with LEWA for any proposal to review electricity, and urban water and sewerage services prices. Such an application becomes effective three (3) months after filing unless the Authority issues a Notice of Modification or a counter proposal. Consistent with international best practices on regulation, an application filed with the Authority is subjected to public participation processes so that inputs from consumers and interested stakeholders can also be considered when assessing it. In line with the requirements of the law, WASCO has submitted its fourth Single Year Tariff Review application for the financial year 2018/19.

3. WASCO TARIFF APPLICATION

3.1. The Applicant

WASCO is a Government owned company issued with a Composite Water and Sewerage Services License in terms of Section 50 of the Lesotho Electricity Authority's Act as amended.

3.2. Overview of the Application

The Authority received an application for a Tariff Review (Tariff Filing Proposal) from WASCO on 08 May 2018. In line with the Tariff Filing and Review Procedure, the Authority identified data gaps in the application and communicated them during a meeting with WASCO held on the 16 June 2016.

The following are, amongst others things, WASCO's bases for the proposed water and sewerage revenue and its resultant tariff adjustment for the 2018/19 Financial Year:

- a) Addressing the financial burdens of the Metolong dam facility and related infrastructure;
- b) Reducing water losses as a result of increased pressures from Metolong into the old and aging Asbestos Cement Pipes;
- c) Anticipated LEC application of an upward tariff review of around 20%;
- d) Increased service demand to adequately cover the growing urban and peri-urban population;
- e) Increased prices of key material for operations and inputs for treatment of water and wastewater;
- f) Increasing customer base to connect to the network;
- g) Dealing with financial losses from water used by customers along the Metolong Downstream Conveyance System (DCS);
- h) Increased input costs due to proposed improvements in the provision of services (namely, implementing Smart Metering, Prepaid Metering and cash collection improvements programs); and
- i) Offsetting the effects of increased VAT.

The Application stated the following as WASCO's key assumptions for the proposed rates adjustment:

- a) The economy would continue to grow and there would be no shocks in the near future;

- b) The easing of drought situation/conditions in the next Financial Year; and
- c) The water and sewerage services rendering a continuous inflow of customers to connect to the network.

With regard to WASCO's regulated businesses, the Application stated that:-

- a) The company came into being through the Water and Sewerage Act No 13 of 2010 thus making it an independent public company assigned to provide water and sewerage services in designated urban centres;
- b) The Company operates in 16 centres serving close to 94 000 customers of which 4 000 are connected to sewerage network, 2 688 are Non-Domestic customers and 91 220 are Domestic consumers. There are also more than 4 300 Domestic Prepaid connections and more than 4 400 Pre-paid Token holders for the public standpipes; and.
- c) WASCO's business entails abstracting raw water from rivers, dams and boreholes and treating it (Production of potable water), and distribution of water supply to households and other entities. The Company also collects, transport and treat wastewater/sewage for safe disposal into the environment. The Company's regulated businesses are therefore water production and water distribution, and sewerage services

3.3. Review of 2016/17 Outturn on Regulatory Accounts and Budget Estimates

The *Table 3-1* below shows the stated revenue and its components and the expenditure with its contributors as stated in the application.

Table 3-1: 2016/17 Revenue and Total Expenditure

Item	Amounts in Million maloti (M)
Revenue	256.04
Water and Sewerage Billing	192.334
New service connection	13.916
Other income	49.794
Total Expenditure	239.931¹
Manpower costs	94.988
Power	16.581
Reticulation and plant maintenance	14.833
Chemical Usage	3.524

¹ The contributors do not add up to M 239.93 million but to M 129.93 million

The Application stated that the realised revenue of M 192.334² million (as a result of water and sewerage bills) was below the projected revenue of M 234.18 million despite the 8.7% tariffs increase.

Table 2.2 below shows some of the proposed changes to the charges that contributed to the M49.794 million Revenue under "Other Income" in Table 2-1 above

I. Water and Sewerage Service Coverage

The Application stated that for Financial Year 2016/17, WASCO made 5 027 new water connections and 298 new sewerage connections compared against the set target of 6 000 and 4000, respectively. The Application attributed failure to meet set targets to lack of dedicated human resources to do the connections and insufficient stock.

II. Water and Effluent Quality

The Application stated that for 2016-17, WASCO treatment plants managed to maintain residual chlorination levels at 61% pass rates for the quarter, while turbidity levels of 98% were attained achieving the set target of 98% passing rates for all parameters.

The Application indicated that the quality of effluent being disposed to the environment had failed both Chemical Oxygen Demand (COD) and Suspended Solids set parameters. The failure was attributed to the use of old and overloaded waste water treatment facilities in most of the areas. The Application stated building of new³ WWTP in all the areas as the only remedial measure.

III. Water Production, Consumption and Sales Data

The Application stated that for the period that ended in March 2017, total production and consumption recorded were 22.16 million kilolitres and 13.28 million kilolitres respectively. The resultant non-revenue water (NRW) for the period was 40.09 percent while the recorded average NRW was 40.02% and resulting in higher than the set target of 28%.

The Application stated the issues pertaining to data collection at production plants where, in most cases, there were no bulk meters and some reticulation systems not being able to withstand the high pressure from the Metolong system, and resulting in high burst and leakage incidences as factors that attributed to high water losses.

² The allowed revenue was M201.4 million (M9.07 million under-recovery).

³ The Company had earlier proposed the use of a chemical imported from RSA as an interim measure to improve effluent quality.

3.4. Review of the current financial year (2017/18)

I. Expenditure and Revenue

The Application mentioned that the expenditure for the period ending in December 2017 amounted to M 112.70 million against M 159.00 million expected for 2017/18 financial year. It also revealed that for the period ending in December, 2017 revenue of M174.27 million had been generated against the established target of M 198.25 million. The operating profit made for the six months is M 61.6 million.

II. Water Production, Consumption and Sales Data

The total water production for the period ending in December 2017 was 16 777 060 m³. However, in 2017/18 production projection was revised from 19 769 468 m³ to 22 508 629 m³. The original consumption forecast was also revised from 14 234 017 m³ to 12 673 341 m³ while actual consumption was 9 505 005 m³. The resultant NRW was stated as 43% compared to the original projection of 28%. To address the problem of high NRW, WASCO would among others things roll-out pre-paid meters, deal with financial losses emanating from Downstream Conveyance System (DCS) and illegal connections.

III. Water and sewer Service Coverage

The water and sewer connections for the period ending in December 2017 were registered at 3,464 water connections and 139 sewer connections against the annual projections of 6 000 and 1 000, respectively.

IV. Water and Effluent Quality

The Application stated that the quality of water produced and supplied to the public regarding key parameters (residual chlorine, microbiology and turbidity) had been good even though it had not met the required level. It also stated that in almost all treatment plants alkalinity/acidity of treated water remained a challenge.

The Application also stated that the pass rates for the two effluent quality parameters (Chemical Oxygen Demand and suspended Solids) had been good. The positive result had been attributed to the new waste water treatment infrastructure which came in use in Maseru.

3.5. Forecasts for 2018/19 Financial Year

The Application stated the following as the priority initiatives that the Company will implement in 2018/19:

- a) Strengthened debt recovery and collection;
- b) Continued capacity building interventions;
- c) Carrying out a Customer Identification Survey aimed at establishing the exact number of customers the utility has;
- d) Continuing interventions and rehabilitation of offices and service infrastructure;
- e) Actively dealing with Non-Revenue Water (NRW);
- f) Robust service coverage;
- g) Implementation of Pre-paid metering system;
- h) Energy management and reduction endeavours; and
- i) Improved public outreach and marketing activities

I. Operating Costs

The Application stated that the key cost drivers of WASCO comprised of costs of salaries including related emoluments, fees (including consultancies, advertising, training and insurance); chemical usage for water and sewage treatment, power and plant maintenance.

The total expenditure was projected to increase by 17% in 2018/19 from the 2017/18 allocated budget amount of M253.84 million to M 295.87 million.

II. Forecasts of Capital Costs

WASCO is currently implementing three major projects, namely:

- a. **The Five Towns Water Project:-** The project will contribute to the general people's welfare in the affected towns by facilitating access to quality water at an affordable rate;
- b. **The Maseru Waste Water Project:-**The project entails the continuation of construction of on-site sanitation facilities (water closet and pit latrines) in the identified areas; and
- c. **The Greater Maseru Water Supply Project:-** This project entails the design and construction of new water transmission mains, trunk mains, and collection sub mains, and pumping stations with supply of water mainly from the Metolong water treatment works and other existing works.

The Application provided highlights on projects that WASCO is implementing. It stated that it has a combination of externally and internally funded projects. Externally funded projects are funded by the government and the Development Partners. The small projects are funded internally and are mainly focused towards reticulation extensions and small works. Internal funding is estimated at M 50 million⁴ to be collected from debtors.

3.6. The Proposed tariff requirements for 2018/19

The Application mentioned that even though a framework to fully establish and delineate all WASCO assets was carried out, the value of the company's assets as well as its depreciation charge had not been adequately factored into the 2018/19 tariff determination. The Application highlighted that WASCO was undertaking the Cost of Service Study in order to accurately determine the cost related to service provision.

The Application mentioned that, based on the highlighted assessment of costs, the company forecasts total revenue requirement of M 280.95⁵ million from the regulated business, made up of M 246.32 million from water services and M 31.64 million from sewerage services.

The Application proposed tariff reviews as shown described below:

- a) 12% adjustment for domestic volumetric and standing charges; and
- b) 15% adjustment for Non-Domestic Volumetric and standing charges

Public stand pipes tariff, standing charge for Band A and sewerage tariffs would remain unchanged in 2018/19.

The proposed volumetric tariffs are as stated in *Table 3-2* below:-

Table 3-2: WASCO's 2018/19 Proposed Tariffs

Band	Current Tariffs (M/kl)	New tariffs (M/kl)
A: 0 – 5kl	4.89	5.3945
B: >5 – 10kl	8.45	9.1384
C: >10 – 15kl	15.03	16.0519
D: > 15kl	20.81	22.1282
Domestic Standing charge	40.90	44.38
Industrial, business, government	13.66	15.29

⁴ A reduction of about 8% from 2017/18 budget allocation

⁵ The figure is different from M 234.36 Million appearing in table 6b of the application

Band	Current Tariffs (M/kl)	New tariffs (M/kl)
Schools, churches	13.54	15.29
Stand pipes	6.71	6.71
Non domestic Standing charge		
Industrial and business Government and	272.35	299.585
schools	393.39	432.729
Religious institutions	272.35	299.585
Schools		216.37
Standpipes	196.70	0.00
	0.00	
Waterborne sewerage customers		
Sewerage to be charged on 85% of water consumed	9.7	9.7
Low- flush waterborne sewerage customers		
Water closet customers to be charged on 60% of water consumed	9.7	9.7

4. PUBLIC CONSULTATION PROCESS

A public notice was issued in both the print and electronic media from 17 May to 02 June 2018 for stakeholders to provide their comments. It further requested stakeholders who had an interest in making oral presentations before the LEWA Board to indicate in writing, so that appropriate arrangements could be made.

Three public hearings were held on the 2nd July, 5th July and 9th July 2018 in Quthing (this included stakeholders representatives from Mohale's Hoek and Qacha's Nek as well), Butha-Buthe (this included stakeholders representatives from Mokhotlong and Leribe as well) and Maseru (this included stakeholders representatives from Thaba-Tseka, Mafeteng and Berea as well) respectively. WASCO, the stakeholders, Butha-Buthe Business Forum (BBF) and CPA made presentations before the Pricing and Tariffs Committee of the Authority.

5. WASCO'S PUBLIC HEARING PRESENTATION

5.1. WASCO's Presentation

1. Introduction

In its presentation WASCO stated that it operates in 10 district towns of Lesotho including the following urban centres: Roma, Morija, Mapoteng, Peka, Mazenod, and Semonkong.

The presentation stated that WASCO has a staff complement of 600 employees and serves 102, 000 customers of which 4 000⁶ are connected to the sewerage system. It has 4 300 customers on prepaid meter system. It stated that it serves about 400 000 people.

II. WASCO's performance

WASCO presented its average performance from 2011 to 2017 against the 2017 set targets as shown in *Table 5-1* below.

Table 5-1: WASCO's Technical Performance

Key Performance Indicators	2017-18 Targets	WASCO's Performance
Non-revenue water	28%	31.2%
New water Connections	6, 000	5, 500
New Sewerage Connections	1, 000	250
Cost coverage by billing	1	0.94
Staff costs/Total Expenditure	41%	49.0%
Staff/1000 connections	5/1000	6.3/1000
Metering Ratio	100%	100%
Water quality		
Microbiology	99%	94.3%
Residual chlorine	95%	92.03%
Turbidity	99%	90.61%
Effluent quality		
Suspended solids	60%	30.75%
Chemical Oxygen Demand	30%	14.24%

WASCO also presented its revenue and costs performance from 2010/11 to 2016-17. The presentation showed that for all the years, except the last two years, expenditure had been higher than the generated income. Income from services increased from M119 364 000 to M256 044 000 while expenditure increased from M120 596 000 to M239 931 000 which translated into an operational profit increase from -1% to 7%. In 2016/17 a profit of M 16.11 million was realised.

III. Challenges

WASCO mentioned the following as areas of operational challenges:

- a) Effluent quality;
- b) Old infrastructure resulting in frequent bursts;
- c) Increasing NRW, as a result of frequent leakages and bursts;

⁶ Reasons for reduction of more than 3 000 customer from previous years numbers was not given

- d) Debts from customers;
- e) Water shortage in some areas;
- f) Failure to meet new connections target;
- g) Damaging of Metolong DCS resulting in excessive water losses;
- h) Allowed recent tariff adjustments by LEWA below WASCO's requests;
- i) Actual water sales below forecasts;
- j) Presence of manganese and red worms in the treated water; and
- k) Extension of reticulation lines.

2017/18 WASCO Performance as at the end of February 2018 is shown in *Table 5-2* below

Table 5-2: WASCO Financial and Technical Performance

Financial Performance	
Item	Revised Amounts in Million maloti (M)
Revenue (Water and Sewerage Billing)	195.46
Total Expenditure	222.00
Manpower costs	83.68
Power	23.56
Reticulation and plant maintenance	9.69
Chemical Usage	3.76
Technical Performance	
Item	Percentages
Non-revenue water	42.42
New water Connections	4,541
New Sewerage Connections	176
Water quality	
Microbiology	97.7
Residual chlorine	80.8
Turbidity	97%
Effluent quality	
Suspended solids	44.3%
Chemical Oxygen Demand	23.7%

IV. Projections for 2018/19

The Company forecasted its costs, revenue and profit as shown in *Table 5-3* below:

Table 5-3: Forecasted Costs, Revenue and Profit

Financial Performance	
Item	2018/19 Budget Allocation
Expenditure	295,870,625
Manpower	123,689,452
Power	38,046,213
Chemical Usage	8,314,132
Reticulation and Plant Maintenance	10,359,647
Water and Sewerage connections	9,441,862
Depreciation	20,809,505
Total Income	300,192,573
Water and Sewerage Billing	254,915,416
Water and Sewerage Connections	15,402,480
Other income	31,600,539
Operating Profit/Loss	4,324,948

The WASCO presentation mentioned that in order to achieve the Required Revenue, Domestic customers tariffs need to increase by 12% while Non-Domestic tariffs by 15% tariff increase. The presentation further indicated that a) there shall be no Standing Charge for Domestic customers in Band A and public standpipes, and b) the standpipes volumetric charges shall not be affected..

For reporting of illegal connections, leakages and bursts WASCO provided its Toll Free Number (80022011). The Company also encouraged customers to pay their bills once received through the use of cellular phone services (M-Pesa and Eco cash), internet and through the bank, in addition to the WASCO offices payment facilities.

5.2. Issues Raised by Various Stakeholders

Stakeholders in their presentations raised the following issues that needed to be addressed by WASCO:

- a) Poor quality of service regarding time period to effect new customer connections, repair of leakages and pipe bursts and repair of sewer line blockages, meter repairs and meter reading among others;
- b) Unacceptable reception and customer service at WASCO offices;
- c) Prolonged estimated billing resulting from faulty meters;
- d) WASCO's indifference to answering customer queries lodged telephonically;
- e) Unreliable water supply;
- f) Frequent water supply outages;
- g) Inadequate or non-existent information dissemination strategy regarding planned water supply outages;
- h) Billing of water not meeting acceptable standards and usable for households purposes;
- i) Need for sewerage services extensions to other areas in the urban centres in order to increase accessibility; and
- j) Up keeping of treatment plants surroundings.

The Stakeholders stated that WASCO's operational inefficiencies and ineffectiveness results in its ever increasing costs, and advised the utility to put in place strategies that will address its failures before burdening its customers with additional costs. They were concerned that WASCO is not taking initiatives to adequately meet its consumers demand in the growing urban centres. They further advised WASCO to collect and store water that is flowing from different sources upstream in the country (such as springs) in order to augment water supply by gravity and lower the electricity costs that are subsequently transferred to customers through high tariffs. They also pointed out that WASCO is not effective and is not efficient in addressing reported failures especially leakages and bursts which eventually translate into high NRW and increased utility costs. The stakeholders were also concerned that WASCO is complacent such that billed customers are paying for the free water used along Metolong Conveyance system. They stated that, while proposing an increase in tariffs, WASCO disregards the prevailing economic environment. They also indicated that data provided by the utility in its presentation could not be validated, as among others things, costs were not clearly matched to relevant tariff financed cost (not capital costs and not legacy costs). They pointed out that WASCO had obtained adverse audit

opinion on financial statements, information was not benchmarked and the reason of sewerage being charged on 85% of consumed water was not given.

Two groups proposed an increase of 5.5%, with one suggesting that the remaining 6.5% would be generated from improved operational efficiency and effectiveness of the utility. The other group proposed that WASCO be allowed a 6% increase because of their poor workmanship and performance. The other group proposed a 9% increase for domestic customers and 12% for businesses while another suggested 0% for domestic customers and 12% for businesses. The remaining groups objected to an increase and one group advocated for a 20% reduction on the current tariffs. The reasons and recommendations advanced by stakeholders for objecting or proposing increases lower than WASCO's request were as follows:

- a) WASCO's challenges remain the same throughout the years;
- b) WASCO does not give feedback on its performance against its last application proposed plans;
- c) Water is a basic need;
- d) WASCO should approach the government for a subsidy to cover increased costs resulting from its taking over the operations of the Metolong water supply system;
- e) WASCO should approach the government to finance its anticipated increase in costs through the Lesotho Highlands Water Project (LHWP) royalties and ask for a subvention;
- f) An increase in unemployment may result in most people not affording the bills;
- g) WASCO takes too long to attend to leakages and bursts;
- h) WASCO should consider economic environment such as public employees salary increases;
- i) Service provision is poor and WASCO is not effective and efficient in attending reported system problems e.g. leakages and bursts.
- j) WASCO does not adhere to set standards in its works (installation of new connections) and that results in a need to increase tariffs;
- k) The old, the orphaned and unemployed people cannot afford the proposed increase;
- l) Lesotho is endowed with abundant water that is sold to other countries;

- m) Increased theft of connection materials by WASCO's employees; and
- n) WASCO should consider constructing gravity-fed systems in order to reduce costs of pumping and unavailability of water supply when there is a power outage.

I. The Consumer Protection Association (CPA)

The Consumer Protection Association (CPA), in its presentation, mentioned that the economic conditions are not favourable to support a tariff increase and the proposed increase will further erode the dwindling purchasing power of WASCO's customers. CPA stated that the economic environment in which the proposed tariff is to be effected is not conducive, as among others, the government is broke, and there is rampant graduate unemployment, persistent non-growth of real incomes and unaddressed water losses resulting in high Non Revenue Water. The Association further alluded to the fact that water will be expensive to many people because the poor population is growing fast due to high unemployment. The presentation also mentioned that the increase is inflationary and dangerous to the economy of Lesotho as exports would not be competitive in the market, and that would translate into more jobs being lost and more people who cannot afford the services. CPA further maintained that as in the past, WASCO would not realise forecasted revenue because it had no cost containment strategies in place.

CPA further pointed out that affordability indicators used by WASCO are not realistic as among others things Lesotho is largely a poor country and the country's Human Development Indices and Human Poverty Index trends had been worsening.

CPA also mentioned that water is an input to industrial production and an increase in production cost will result in WASCO losing consumers who are firms and individual firm workers. It made the following recommendations:

- a) No increase should be allowed instead tariffs reduction should be considered;
- b) WASCO can increase revenue by connecting villages closer to Metolong infrastructure and the conveyance system so as to stop the free riding;

- c) WASCO must reduce rate of NRW instead of its inefficiencies burdening customers; and
- d) WASCO has to find a cost effective way of effecting infrastructure connections instead of digging through tarred roads.

II. *The Butha-Buthe Business Forum*

The Butha-Buthe Business Forum highlighted that sewerage service connections in Butha-Buthe are discriminatory. The Forum expressed a concern that the reasons for the increase were based on Maseru and Metolong context whereas no reference was made to the Northern region. It mentioned that the replacement of old infrastructure is the sole responsibility of shareholders not WASCO customers. The Butha-Buthe Business Forum pointed to the fact that WASCO being vertically integrated may marginalise some of its chain processes, as such it would benefit from outsourcing some processes to private contractors. It also proposed that customers should be refunded standing charges as they paid for the connection material. It also proposed that WASCO should consider engaging private subcontractors for the Hololo project. The Butha-Buthe Business Forum recommended a 20% reduction in tariffs.

5.3. Analysis of Public Hearings

In all three (3) public hearings conducted in Quthing, Butha-Buthe and Maseru, stakeholders were not satisfied with WASCO's service provision. It was indicated that WASCO's costs increase results from its operational inefficiencies and ineffectiveness. The Stakeholders also stated that WASCO should put in place strategies to address its operational inefficiencies, and should increase its customer base by utilising existing infrastructure in order to benefit from the economies of scale. They also pointed out that WASCO should take advantage of the fact that water is a need and find cost effective ways to expand its service area while also installing (and also gradually replacing already existing post-paid meters) prepaid meters to curb increasing water bill debts. Regarding unbilled water supply along the Metolong conveyance system, it was proposed that WASCO should introduce water purchasing tokens and also effect yard connections. They also emphasised that WASCO should put in place clear strategies for NRW reduction and effective way of installing its infrastructure (instead of digging through tarred roads) rather than burdening customers with increases in tariffs. They also highlighted the fact that WASCO needs

to have cost reduction strategies for the tariff increase to achieve desired result (increased revenue) instead of continually expecting consumers to finance uncontrolled increasing costs. WASCO was advised to review its organisation structure to a lean structure to cut unnecessary costs.

It was evident that most of the stakeholders were not in favour of or in support of the proposed increase. The stakeholders stated that WASCO had been burdening consumers with costs and had never taken initiatives to address its inefficiencies as it still had high NRW, and did not follow up to ensure that its works (e.g. new connections) were efficiently and effectively implemented and there was no close supervision to ensure connection materials are not stolen for private use. They also pointed out that the economic conditions within which the proposed tariff ought to take effect were not favourable because the economy was growing at a very slow pace, and unemployment rate was growing fast. It was emphasised that if WASCO can improve its efficiency there would be no need for tariffs to increase.

Finally, it appeared that most of the stakeholders opposed the tariff increase and recommended that for necessary cost increases the Government should also subsidise customers through a subvention to WASCO. They pointed out that water is a need for all but an increase in tariffs will make it unaffordable. The stakeholders also highlighted that Lesotho is a water rich country and social expectation was that tariffs should be declining instead of increasing. They recommended for WASCO to first improve the quality of service and product it offers, and to restructure for organisational effectiveness before it can raise tariffs.

From the public hearings the public recommended tariffs ranged from -20%, 0%, 4%, 5.5%, 6% up to 12% respectively.

6. ANALYSIS OF WASCO'S APPLICATION

6.1. WASCO's Revenue Requirement

In its budget submission, WASCO's revenue requirement is stated as M268.97⁷ million for water production, distribution and sewerage businesses. WASCO's water supply and distribution businesses proposed budget of M240.57 million would result in tariff increases of 8.95% for volumetric and 5.2% for standing charge. This is contrary to

⁷ This figure is not the same as the budget figure of M240.57 million contained in the submission

the proposed tariffs increases of 12% for domestic and 15% for non-domestic customers. Similarly, WASCO's proposed sewerage budget of M46.11 million would result in a tariff increase of 33.2% as opposed to the proposed 0% change. *Tables 6-1 and 6-2 below show increases in water and sewerage charges as determined from WASCO's proposed budget.*

Table 6-1: Water Units Costs and Standing Charges increase as determined from WASCO's Proposed Budget

Customer category	2017/18 charges		2018/19 charges		Percentage change in Charges		Annual Sales kl/Year	Number of Connections	Total Revenue (M)
	Water unit cost (M/kl)	Standing charge (M/month)	Water unit cost (M/kl)	Standing charge (M/month)	Water unit cost	Standing charge			
Domestic Customers									
Band A (0 - 5kl)	4.89	0.00	5.33	0.00	8.95%	0.0%	3,657,595	59,370	19,485,523.77
Band B (>5 - 10 kl)	8.45	40.90	9.21	43.0268	8.95%	5.2%	1,892,029	29,711	32,758,183.26
Band C (>10 - 15 kl)	15.03	40.90	16.37	43.0268	8.95%	5.2%	581,629	10,290	14,836,801.37
Band D (> 15 kl)	20.81	40.90	22.67	43.0268	8.95%	5.2%	1,104,465	9,146	29,762,123.04
Non Domestic Customers									
Government	13.66	272.35	14.88	286.5122	8.95%	5.2%	1,688,763	584	27,139,875.39
Non Domestic (Business, Industry)	13.66	393.39	14.88	413.8463	8.95%	5.2%	6,594,950	2,094	108,544,499.83
Schools	13.54	272.35	14.75	286.5122	8.95%	5.2%	382,559	288	6,633,376.49
Religious Institutions	13.54	196.70	14.75	206.9284	8.95%	5.2%	53,417	197	1,277,141.63
Standpipes	6.71	0.00	7.31	0.0000	8.95%	0.0%	18,122	119	132,475.71
Total							15,973,529	111,799	240,570,000.50

Table 6-2: Sewerage Unit Costs Increase as determined from WASCO's proposed budget

Customer category	2017/18 Sewerage Unit Costs (M/kl)	2018/19 Sewerage Unit Costs (M/kl)	Percentage change in Sewerage Unit Costs	Annual Sales kl/Year	Total Revenue (M)
Waterborne sewerage customers	9.7	12.9243	33.2%	405,668	5,242,962.36
Standard Non-Domestic	9.7	12.9243	33.2%	2,473,934	31,973,785.36
Lesotho Brewing Company	9.70	12.9243	33.2%	485,403	6,273,473.31

Customer category	2017/18 Sewerage Unit Costs (M/kl)	2018/19 Sewerage Unit Costs (M/kl)	Percentage change in Sewerage Unit Costs	Annual Sales kl/Year	Total Revenue (M)
Likotsi and Qoaling Clinics	48.86	65.1010	33.2%	34,236	2,228,766.06
C & Y Sewer	1.01	1.3457	33.2%	290,560	391,012.92
Total				3,689,799.59	46,110,000.00

7. LEWA'S REVIEW OF WASCO'S COSTS

In line with the Tariff Filing and Review Procedure, WASCO's costs were separated out into three regulated businesses (Water Production, Water Distribution and Sewerage) and non-regulated activities. These costs were further separated into controllable and non-controllable costs, where controllable costs are costs that WASCO can manage or influence to some extent, whereas non-controllable costs are costs that WASCO has a limited or no control over.

7.1. Controllable Costs and corresponding Unit Cost parameters used for Tariff Analysis

The unit cost parameters that have been used for tariff analyses since 2015/16, for Water Treatment and Production, and Water Distribution Regulated Businesses are shown in Table 7-1, Table 7-2 and Table 7-3 below.

Table 7-1: Unit Cost Parameters Used for Analysis of Water Treatment and Production Business

Goods/ services related to Water Production	Costs from the WASCO budget included in unit cost (LSL-Loti)	Item that the costs are divided by to get the unit cost	Units
Volume	Labour, Chemical, Fuel (other than transport), Operating Maintenance Costs (not capital maintenance), Payments for Raw Water (including abstraction licenses) and Doubtful Debt.	Volume of water produced by treatment plants (kilo litre or kl)	M / kl
Volume and Power	Electricity	kWh used per m ³ of water produced	kWh / kl M / kWh
Number of sites WASCO needs to operate	Transport (including fuel for transport), Rent, Security, Insurance and ICT Costs	No. of sites producing water	M / site
Fixed costs	Audit and Compliance, Other Expenses and Stock Adjustment	Nothing (fixed costs are not a unit cost)	M

Table 7-2: Unit Cost Parameters used for Analysis of Water Distribution Business

Goods/services related to Water Distribution	Costs from the WASCO budget included in unit cost (LSL)	Item that the costs are divided by to get the unit cost	Units
Volume	Chemicals, Fuel (other than transport) and Doubtful Debts	Volume of water actually delivered to customers (kilo litre or kl)	M / kl
Volume and Power	Electricity	kWh used per m ³ of water produced	kWh / kl M / kWh
Number of customers WASCO needs to manage	Labour, Transport Costs (incl. fuel for transport), Rent, Security, Insurance, Rates, ICT and Laboratory and Testing	No. of customers in WASCO's billing system	M / customer
The length of network operated	Operating Maintenance Costs (not capital maintenance)	Km of water mains	M / km
The cost of water from the treatment plants	(This value is brought forward from the Water Supply and Treatment Module)	Volume of water produced	M / kl
Non-revenue Water	The model allows the costs of water supply and treatment (above) to be passed through into the distribution model only for water which meets the non-revenue target in the distribution model. If WASCO has more leakage than the target, the costs of producing that water are not allowed in the total distribution budget.	(Volume of water produced – volume of water sold), divided by Volume of water produced	%
Fixed costs	Audit and Compliance Costs Other Expenses	(Nothing (fixed costs are not a unit cost)	M

Table 7-3: Unit Cost Parameters used for Analysis of Sewerage Treatment Business

Goods/ services related to Sewage	Items from the WASCO budget included in unit cost (LSL)	Item that the costs are divided by to get the unit cost	Units
Volume	Chemical, Fuel (other than transport), Payments to Bulk Waste Water Treatment providers and Doubtful Debt Expense	Volume of water produced by treatment plants (kilo litre or kl)	M / kl
Volume and Power	Electricity	kWh used per kl of wastewater treated	kWh / kl M / kWh
Number of customers WASCO needs to manage	Labour, Transport (including fuel for transport), Rent, Security, Insurance, ICT and Laboratory and Testing	Number of sewerage customers	M / customer
The length of network operated	Operating Maintenance Costs (not capital maintenance)	Km length of sewer mains	M / km
Fixed costs	Audit and Compliance Costs Other Expenses	(nothing – fixed costs are not a unit cost)	M

7.2. Approved Efficient Unit Costs for 2018/19

Based on the unit cost parameters outlined in *section 7.1* above, WASCO's proposed budget and approved unit costs for the previous tariff determinations, the efficient unit costs for 2018/19 were determined.

Tables 7-4, 7-5 and 7-6 below show the approved efficient unit costs for 2018/19, together with unit costs based on WASCO's proposed budget for 2018/19 and previously approved unit costs for WASCO in 2017/18.

Table 7-4: Approved Efficient Unit costs for Water Treatment and Production Business

Cost Item	Approved Unit Costs 2017/18	WASCO Budget Unit Costs 2018/19	Approved Efficient Unit Cost 2018/19
Volume Related unit cost (M/kl)	3.30	3.70	3.30
	Justification for the approved unit costs: The allowed unit cost is kept the same as the one in 2017/18. The increase in WASCO's unit costs is mainly due to 95% increase in labour expenses. Operating and maintenance costs have reduced by 64% while chemical expenses have decreased by 7%.		
Power Intensity (kWh/kl)	1.00	0.80	1.00
	Justification for the approved unit costs: The allowed unit cost is kept the same as the one allowed in 2017/18. WASCO is relatively efficient in terms of power usage for kilolitre produced. Therefore the allowed higher unit costs provide incentive for the utility to generate more income as it saves in energy consumption.		
Electricity price (M/kWh)	Dependent on LEC tariff	Dependent on LEC tariff	Dependent on LEC tariff
	Justification for the approved unit costs: The proposed LEC's price will be allowed in full as this is a pass-through costs for WASCO.		
Site Related Cost (M/site)	570 000	502 466	570 000
	Justification for the approved unit costs: WASCO's costs are decreasing and therefore the allowed unit costs for 2017/18 is allowed. The Company is relatively decreasing costs.		
Fixed Cost (M)	10 980 000	5 489 318	10 980 000
	Justification for the approved unit costs: WASCO has reduced costs by almost 45% and therefore the previous year costs are allowed.		

Table 7-5: Approved Efficient Unit Costs for Water Distribution Business

Cost Item	Approved Unit Costs 2017/18	WASCO Budget Unit Costs 2018/19	Approved Efficient Unit Cost 2018/19
Volume Related unit cost (M/kl)	0.102	0.32	0.32
	Justification for the approved unit costs WASCO is allowed the proposed due to increased sales which might also results in an increased in doubtful debts. The increase in bad debts is projected to increase by almost 46% compared to 2017/18 financial year. .		
	1.13	1.17	1.13

Cost Item	Approved Unit Costs 2017/18	WASCO Budget Unit Costs 2018/19	Approved Efficient Unit Cost 2018/19
Power Intensity (kWh/kl)	Justification for the proposed unit costs: The unit costs allowed is the same as last year as there is no justification for increase energy for distribution of a kilolitre.		
Electricity price (M/kWh)	Dependent on LEC tariff	Dependent on LEC tariff	Dependent on LEC tariff
	Justification for the approved unit costs: The LEC's approved tariff will be pass-through to the customers. WASCO will be allowed to recover the costs in the subsequent year.		
Connections Related Cost (M/Connection)	547.47	396.33	435.50
	The proposed WASCO's unit cost has been increased by 9.9% in order to incentivise WASCO to further reduce costs as it has already reduced them by 31% compared to last year.		
Network Related cost (M/km)	2 128	7 489.22	7 052
	Justification for the approved unit costs: WASCO has increased its network operating and maintenance costs by 76% compared to last year. The approved costs is only 6.2% less than what WASCO has requested.		
Non-Revenue Water (NRW)	28%	34%	28%
	Justification for the approved unit costs: WASCO needs to reduce its NRW from 34% to 28% set target.		
Fixed Cost (M)	3 750 000	10 300 000	9 210 000
	Justification for the approved unit costs: WASCO's proposed cost has been reduced by 10.6% and was allowed the unit cost it had requested.		

Table 7-6: Approved Efficient Unit Costs for Sewerage Treatment Business

Cost Item	Approved Unit Costs 2017/18	WASCO Budget Unit Costs 2018/19	Proposed Efficient Unit Cost 2018/19
Volume Related unit cost (M/kl)	0.16	0.16	0.16
	Justification for the approved unit costs WASCO was allowed what it had requested		
Power Intensity (kWh/kl)	0.21	0.21	0.21
	Justification for the approved unit costs WASCO was allowed what it had requested		
Electricity price (M/kWh)	1.02	Dependent on LEC tariff	Dependent on LEC tariff
	Justification for the approved unit costs WASCO was allowed what it had requested		
Connections Related Cost (M/Connection)	3330	3330	3330
	Justification for the approved unit costs WASCO was allowed what it had requested		
Network Related cost (M/km)	84 249	84 249	84 249
	Justification for the approved unit costs WASCO was allowed what it had requested		
Fixed Cost (M)	3 283 049	3 283 049	3 283 049
	Justification for the approved unit costs WASCO was allowed what it had requested		

8. APPROVED REVENUE FOR WATER PRODUCTION, WATER DISTRIBUTION AND SEWERAGE BUSINESSES

Using the unit cost analysis described above, the approved revenue for Water Distribution Business (inclusive of Water Production Business) is M233.64 million as opposed to M240.57 million requested by WASCO, and for the Sewerage Business the approved revenue is M34.61 million as requested by WASCO. The approved revenue for WASCO's businesses is as reflected in *Table 8-1* below.

Table 8-1: Approved Revenue for WASCO – 2018-19

Cost Items	Allowed Revenue in Million (M) per Regulated Business			
	Water Production	Water Distribution	Sewerage	Total
Controllable Costs				
Volume Related Costs	80.37	5.11	0.63	86.11
Volume Related (Power) Costs	24.35	0.10	3.29	27.74
Site Related Costs	13.92	0	0	13.92
Customer Related Operating Costs	0	48.69	23.44	72.13
Network Length Related Costs	0	14.68	1.40	16.09
Fixed Costs	10.98	9.21	1.74	21.93
Sub-Total	104.16	77.79	30.50	237.92
Non-Controllable Costs				
Pass Through Costs	14.91	11.32	4.11	30.34
Total	144.53	89.11	34.61	268.25

9. THE APPROVED TARIFF BY THE AUTHORITY

In order to meet M233.64 million allowed revenue for water distribution business, the tariffs would increase as stated in *Tables 9-1, 9-2 and 9-3* below.

Table 9-1: Approved Water Services Volumetric Tariff (Inclusive of customer levy of M0.2311/kl and exclusive of VAT)

Customers Category	Old Unit Cost Excluding Levies (M/kl)	Approved Percentage Change (%)	Approved Unit Cost Excluding Levies (M/kl)	Adding Customer Levy @ M0.2311/kl (M/kl)	Approved Unit Cost (M/kl)	Old Approved Unit Cost (M/kl)	Approved Tariff Percentage Increase (%)
Domestic Customers							
Band A (0 - 5 kl)	4.8900	5.1947	5.1440	5.3751	5.3751	5.1200	4.9828
Band B (>5 - 10 kl)	8.4500	5.1947	8.8889	9.1200	9.1200	8.6900	4.9488
Band C (>10 - 15 kl)	15.0300	5.1947	15.8108	16.0419	16.0419	15.2600	5.1236
Band D (>15 kl)	20.8100	5.1947	21.8910	22.1221	22.1221	21.0400	5.1431

Customers Category	Old Unit Cost Excluding Levies (M/kl)	Approved Percentage Change (%)	Approved Unit Cost Excluding Levies (M/kl)	Adding Customer Levy @ M0.2311/kl (M/kl)	Approved Unit Cost (M/kl)	Old Approved Unit Cost (M/kl)	Approved Tariff Percentage Increase (%)
Non Domestic customers							
Government	13.6600	5.1947	14.3696	14.6007	14.6007	13.8900	5.1166
(Business, Industry)	13.6600	5.1947	14.3696	14.6007	14.6007	13.8900	5.1166
Schools	13.5400	5.1947	14.2434	14.4745	14.4745	13.7700	5.1159
Religious Institutions	13.5400	5.1947	14.2434	14.4745	14.4745	13.7700	5.1159
Standpipes	6.7100	5.1947	7.0586	7.2897	7.2897	6.9400	5.0384

Table 9-2: Approved Water Services Standing Charges (No customer levy charged and exclusive of VAT)

Customer Category	Old Standing Charges (M/month)	Approved Percentage Change (%)	Approved Standing Charges (M/month)
Domestic Customers			
Band A (0 – 5 kl)	0	0	0
Band B (>5 – 10 kl)	40.90	5.2	43.03
Band C (>10 – 15 kl)	40.90	5.2	43.03
Band D (>15 kl)	40.90	5.2	43.03
Non Domestic Customers			
Government	272.35	5.2	286.51
Business, Industry	393.39	5.2	413.85
Schools	272.35	5.2	286.51
Religious institutions	196.70	5.2	206.93
Standpipes	0	0	0

Table 9-3: Total Approved Revenue to be generated from the Water Distribution Business

Customer Category	Approved Water Unit Costs (M/kl)	Standing Charge (M/month)	Annual Sales kl/Year	Number of Connections	Total Revenue (M)
Domestic Customers					
Band A (0 - 5 kl)	5.1440	0.00	3,657,595	59,370	18,814,737.22
Band B (>5 - 10 kl)	8.8889	43.03	1,892,029	29,711	32,158,579.47
Band C (>10 - 15 kl)	15.8108	43.03	581,629	10,290	14,508,944.04
Band D (>15 kl)	21.8910	43.03	1,104,465	9,146	28,900,129.69
Non Domestic Customers					
Government	14.3696	286.51	1,688,763	584	26,274,709.72

Customer Category	Approved Water Unit Costs (M/kl)	Standing Charge (M/month)	Annual Sales kl/Year	Number of Connections	Total Revenue (M)
Non Domestic (Business, Industry)	14.3696	413.85	6,594,950	2,094	105,165,858.08
Schools	14.2434	286.51	382,559	288	6,439,110.42
Religious Institutions	14.2434	206.93	53,417	197	1,250,016.12
Standpipes	7.0586	0.00	18,122	119	127,915.25
Total			15,973,529	111,799	233,640,000.00

WASCO has requested 0% increase in sewerage services volumetric charges (see *Table 9-4* below), and with WASCO's proposed sewerage sales for 2018/19 the company will only generate a revenue of M34.61 million (see *Table 9-5* below).

Table 9-4: Approved Sewerage Services Volumetric Tariff (No customer levy charged and exclusive of VAT)

Customer Category	Old Unit Charges (M/kl)	Approved Percentage Change (%)	Approved Unit Charge (M/kl)
Domestic Customers			
Water borne sewerage customers 1	9.70	0	9.70
Non Water borne sewerage customers 2	9.70	0	9.70
Non Domestic Customers			
Standard Non-Domestic	9.70	0	9.70
Lesotho Brewing Company	9.70	0	9.70
Likotsi and Qoaling Clinics	48.86	0	48.86
C and Y Sewer	1.01	0	1.01

Table 9-5: Total Approved Revenue to be generated from the Sewerage Business

Customer Category	Water Unit Cost (M/kl)	Sales kl/year	Number of Customers	Total Revenue (M)
Water borne sewerage customers	9.70	405 668	2 011	3 934 979.60
Standard Non-Domestic	9.70	2 473 934	1 529	23 997 157.44
Lesotho Brewing Company	9.70	485 403	2	4 708 404.87
Likotsi and Qoaling Clinics	48.86	34 236	3	1 672 746.89
C & Y Sewer	1.01	290 560	2	293 465.36
Total		3 689 800	3 546	34 606 754.16

10. WASCO'S CHARGES

The two (2) parts tariff structure currently used by WASCO is maintained until the Company has completed its Cost of Service Study which is in progress. Other charges such as customer water and sewerage connections should remain the same as in 2017/18 Financial Year, as shown in *Table 10-1* below.

Table 10-1: 2018/19 Other Charges

Description	Current Charges in Maloti (M)
Water Connection Fee	
0 – 25m	1500.00
26 – 50m	2500.00
51 – 100m	3500.00
101 – 150m	4500.00
Sewerage Connection Fee	
0 – 30m	3000.00
31 – 90m	4560.00
Other Charges	
Reconnection Fee	150.00
Prepaid Token Fee	180.00
Meter Security Deposit	75.00 domestic/100.00 business
Meter Test Deposit	30.00
Sewerage Blockage Fee	100.00
Connection Application Fee	50.00
Site Investigation Fee	50.00
Sewer Tanker Emptying to WASCO Ponds	35.00 per load

11. WASCO'S FINANCIAL MANAGEMENT

Major ratio analysis pertaining to WASCO's performance for 2016/17 financial year is detailed below.

11.1 Liquidity

This is a class of financial metrics that is used to determine the company's ability to pay off its short term obligations. Generally, the higher the value of the ratio, the larger the margin of safety the company possess to cover short term debts. A ratio in excess of one (1) is considered ideal. There are three types that are mainly used to measure liquidity.

11.2 Current Ratio (Current Assets/Current Liabilities)

WASCO's current ratio has improved from 1.48 in 2016 to 2.26 in 2017. WASCO has the ability to cover its short term debts. However, this information should be interpreted

with care since the financial statements have been qualified on the basis of Accounts receivables, Inventory, Cash and cash equivalents as well as accounts receivables.

11.3 Quick Ratio (Current Assets less Inventory/Current Liabilities)

The Quick ratio has also improved by 0.66 from that of 1.40 in 2016 to 2.06 in 2017. This ratio indicates that without inventory, which is considered to less liquid, WASCO could still be able to realise cash when selling off its asset to pay for short term debts.

11.4 Cash Flow Ratio (Net cash inflow/Current Liabilities)

The Cash flow ratio is a measure of the number of times a company can pay off current debts with cash generated in the same period.

WASCO's cash flow ratio is below one (1) in 2017 at 0.38 though it rose as compared to that of 2016 which stood at 0.23.

11.5 Profitability

Profitability assess a business ability to generate earnings as compared to its expenses, here we are referring to operating expenses WASCO's profitability is too low though it improved from 1.07% in 2016 to 3.13 in 2017. However, like other ratios care should be taken in Interpreting this ratio as verification of expenditure balances were generally constrained by the unavailability of supporting documents and as a result verification of expenditure amounting to M13.3 million could not be justified.

The revenue requirement for 2018/19 is M257, 304,543m as compared to the revenue given by LEWA amounting to M234.2m in 2016/17.

11.6 Gearing Ratio

The capital gearing is the measure of the proportion of the company's capital that is debt. The threshold is considered 50%. The Gearing ratio for both years is well below the threshold which is 16.8% in 2016 and 15.4% in 2017 respectively. Since both ratios are below 50%, WASCO is considered lowly geared.

11.7 Debt Ratio

This is a financial ratio that measure the extent of a company's leverage. It is defined as the total debt to total assets. A ratio below 50% is considered healthy. WASCO's debt has improved by reducing from 25% in 2016 to 20% in 2017. This is as a result of reduction in long term loans in 2017.

11.8 Debtors days/Debtors collection ratio

The debtors' collection ratio measures how quickly cash is being collected from debtors. The longer it takes for a company to collect, the greater the number of debtor days. WASCO's debtor collection period for both 2015/16 and 2016/17 were 299 days and 150 days, respectively, indicating significantly improvement compared to the Financial Year 2015/16

From the above analysis, WASCO's performance seemed to be healthy except that it has to improve its profitability.

However, this analysis should be read with care because WASCO obtained an Adverse Opinion from the Auditor General. The basis of Adverse Opinion was drawn from material items in the financial statements like PPE, Accounts Receivables, Inventory, Cash and Cash Equivalents, Government Grants and Accounts Payable.

12. WASCO'S ANNUAL PERFORMANCE REVIEW

Table 12-1 below summarises WASCO's performance since 2013/14 until 2016/17 financial year. The performance assessment focuses on the ten Key Performance Indicators (KPIs), namely:

1. **Quality of Service:** *Water Coverage, Sewerage Coverage, Water Quality and Hours of Supply;*
2. **Economic Efficiency:** *O&M Cost Coverage by Billing, Collection Efficiency and Staff Cost; and*
3. **Operational Sustainability:** *Staff/1000 Connections, NRW and Metering Ratio.*

Table 12-1: Key Performance Indicators and Targets for 2017/18

INDICATOR				UNITS	TARGET	Performance since			
QUALITY OF SERVICE						2013/14	2014/15	2015/16	2016/17
1	Water Connections in Year			No.	6000	3804	6834	5413	5027
2	Sewerage Connections in Year			No.	1000	37	460	359	298
3	Quality Tests	Potable	Microbiological	%	99	94	86	94	94
			Chlorine	%	95	96	89	91	77
			Turbidity	%	95	96	98.2	94	97
		Effluent	SS	%	60	30	42	36	38
			COD	%	30	5	17	18	23
4	Hours of supply			Hrs.	20	18	18	18	18

INDICATOR		UNITS	TARGET	Performance since			
ECONOMIC EFFICIENCY							
5	O&M Cost Coverage by billing	Ratio	1	0.99	0.98	1.03	0.90
6	Collection Efficiency	%	90	88	88	81	114
7	Staff Costs as a percentage of O & M costs	%	41	46.67	40.6	39	44.6
OPERATIONAL SUSTAINABILITY							
8	Staff Productivity	Ratio	5	6	5.83	5.56	5.85
9	NRW	%	26	28	27.1	46.9	40.1
10	Metering Ratio	%	100	100	100	100	100

Based on the above assessment, WASCO has to focus on improving its water and effluent quality, increasing its operation and maintenance coverage by billing and reducing its staff costs as a percentage of O & M costs.

13. WASCO'S COMPLIANCE

13.1. Monthly/Quarterly/Annual Reporting

Frequent and reliable reporting is key for monitoring WASCO's compliance with prescribed regulatory instruments such as the QOSSS. However, WASCO's reporting is erratic and needs to be improved. The reporting forms submissions are currently late by three months and this needs to be addressed as a matter of urgency.

14. ISSUES/CONCERNS RAISED BY STAKEHOLDERS

During the public consultation meetings, a number of policy issues requiring consideration by relevant authorities have been raised. These include:

1. Quality of Service and Supply

Most stakeholder expressed concern about the poor quality of service and supply from WASCO, citing instances of delay in service provision, inconsistent and inadequate supply of water, poor water quality, inefficiency and ineffectiveness in attending to leakages and pipe bursts. This growing concern by stakeholders is evidence of continued lack of compliance with Quality of Service and Supply Standards (QOSSS) by WASCO. This may require the Authority to re-examine the measures it use to ensure compliance by WASCO.

II. Free Basic Water Services

As in the previous years, stakeholders still insist that water is a basic need and therefore should be a free commodity.

III. Affordability of water services

Stakeholders repeatedly expressed concern about the prevailing economic environment, including high unemployment rates, and how this has an impact on affordability of water services. A social policy needs to be considered in light of old age, orphanage, disabled and unemployed persons.

15. CONCLUSIONS

Based on the summary of the facts and evidence presented to the Authority, LEWA Board has found justification for a 12% and 15% tariff increase for both volumetric and Standing Charges (except for Band A) for Domestic and Non-domestic customers unreasonable and has therefore concluded as follows:

- E. In order for the Company to finance its proposed budget of M240.57 million for water, the volumetric tariffs needed to increase by 8.95% while the Standing Charge was to increase by 5.2%. On the other hand, sewerage tariffs needed to increase by 33.2% in order to generate the required sewerage revenue of M46.11 million proposed by the Company.
- F. WASCO's reasonable Revenue Requirement is M268.25 million which consists of M233.64 million for Water Production and Distribution businesses, and M34.61 million for Sewerage business.
- G. In order to meet the water revenue requirement, the water volumetric tariffs should increase by 5.19%, except in Band A, while the Standing Charge will increase by 5.2%. There is 0% increase in sewerage services.
- H. WASCO needs to devote its efforts in reducing NRW from the current level above 40% to at least below 30%. This will assist the utility in reducing its production costs and to realise increased sales.
- I. WASCO should develop and implement an energy efficiency management program so as to reduce its energy costs.
- J. Effluent quality remain below acceptable set standards and this requires efficient operations and increased investment in wastewater treatment facilities, especially in districts other than Maseru.

- K. Access to sewerage services is below 10% and effective strategies are needed to connect more customers to the already existing sewerage infrastructure in Maseru.
- L. WASCO has not been regularly reporting to the Authority in line with agreed timelines. For example, current monthly reports are expected by end of the following month however the 2017/18 Monthly reports were submitted to the Authority as follows; October 2017 by February 2018, November 2017 by March 2018, December 2017 by February 2018, January 2018 by April 2018, February 2018 by May 2018 and March 2018 by May 2018.

16. APPROVAL

- A. The Board therefore approves that WASCO's water services volumetric tariffs and standing charges should be increased as shown in *Tables 16-1 and 16-2* below.

Table 16-1 Approved Water Services Volumetric Tariff (Inclusive of customer levy of M0.2311/kl and exclusive of VAT)

Customers Category	Old Unit Cost Excluding Levies (M/kl)	Approved Percentage Change (%)	Approved Unit Cost Excluding Levies (M/kl)	Adding Customer Levy @ M0.2311/kl (M/kl)	Approved Unit Cost (M/kl)	Old Approved Unit Cost (M/kl)	Approved Tariff Percentage Increase (%)
Domestic Customers							
Band A (0 - 5 kl)	4.8900	5.1947	5.1440	5.3751	5.3751	5.1200	4.9828
Band B (>5 - 10 kl)	8.4500	5.1947	8.8889	9.1200	9.1200	8.6900	4.9488
Band C (>10 - 15 kl)	15.0300	5.1947	15.8108	16.0419	16.0419	15.2600	5.1236
Band D (>15 kl)	20.8100	5.1947	21.8910	22.1221	22.1221	21.0400	5.1431
Non Domestic customers							
Government	13.6600	5.1947	14.3696	14.6007	14.6007	13.8900	5.1166
(Business, Industry)	13.6600	5.1947	14.3696	14.6007	14.6007	13.8900	5.1166
Schools	13.5400	5.1947	14.2434	14.4745	14.4745	13.7700	5.1159
Religious Institutions	13.5400	5.1947	14.2434	14.4745	14.4745	13.7700	5.1159
Standpipes	6.7100	5.1947	7.0586	7.2897	7.2897	6.9400	5.0384

Table 16-2: Approved Water Services Standing Charges (No customer levy charged and exclusive of VAT)

Customer Category	Old Standing Charges (M/month)	Approved Percentage Change (%)	Approved Standing Charges (M/month)
Domestic Customers			
Band A (0 – 5 kl)	0	0	0
Band B (>5 – 10 kl)	40.90	5.2	43.03
Band C (>10 – 15 kl)	40.90	5.2	43.03
Band D (>15 kl)	40.90	5.2	43.03
Non Domestic Customers			
Government	272.35	5.2	286.51
Business, Industry	393.39	5.2	413.85
Schools	272.35	5.2	286.51
Religious institutions	196.70	5.2	206.93
Standpipes	0	0	0

B. Other charges as shown in *Table 10.1* on page 30 of 36 should remain unchanged.

17. EFFECTIVE DATE

The effective date for the approved tariffs be 01 August 2018.

18. COMMUNICATION

The decision of the LEWA Board has been communicated to the applicant, WASCO, by a letter dated 27th July 2018, and to the general public through a press conference, press release and via print and electronic media on 26 July 2018.



Date: 31 August 2018

CHAIRPERSON OF THE LEWA BOARD