



LESOTHO ELECTRICITY AND WATER AUTHORITY

**LEWA'S DETERMINATION OF WATER AND SEWERAGE
COMPANY'S (WASCO'S) TARIFF APPLICATION FOR 2019/20
FINANCIAL YEAR**

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IN THE MATTER REGARDING A

DETERMINATION OF WATER AND SEWERAGE COMPANY'S APPLICATION FOR A TARIFF INCREASE FOR 2019/20 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 19 July, 2019, concluded:

- A. That Water and Sewerage Company (WASCO) be allowed a Revenue of M247.25 million for 2019/20 Financial Year, comprising of M212.64 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* and *Table 2* below:

Table 1: Water Services Volumetric Tariff (Inclusive of customer levy of M0.2311/kl)

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)	5.1440	2.9999	5.2983	5.5294	5.5294	5.3751	2.8709
Band B (>5 - 10 kl)	8.8889	2.9999	9.1556	9.3867	9.3867	9.1200	2.9239
Band C (>10 - 15 kl)	15.8108	2.9999	16.2851	16.5162	16.5162	16.0419	2.9567
Band D (>15 kl)	21.8910	2.9999	22.5477	22.7788	22.7788	22.1221	2.9686
Non Domestic customers							
Government	14.3696	2.9999	14.8007	15.0318	15.0318	14.6007	2.9524
(Business, Industry)	14.3696	2.9999	14.8007	15.0318	15.0318	14.6007	2.9524
Schools	14.2434	2.9999	14.6707	14.9018	14.9018	14.4745	2.9520
Religious Institutions	14.2434	2.9999	14.6707	14.9018	14.9018	14.4745	2.9520
Standpipes	7.0586	2.9999	7.2704	7.5015	7.5015	7.2897	2.9048

Table 2: 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)	43.03	4.7	45.05
Band C (>10 – 15 kl)	43.03	4.7	45.05
Band D (>15 kl)	43.03	4.7	45.05
Non Domestic Customers			
Government	286.51	4.7	299.98
Business, Industry	413.85	4.7	433.30
Schools	286.51	4.7	299.98
Religious institutions	206.93	4.7	216.66
Standpipes	0	0	0

C. The sewerage services volumetric tariffs should remain unchanged.

D. Other charges (as shown in *Table 18* 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 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.

3. DECISION MAKING PROCESS

On 03 May, 2019, the Authority published WASCO's application in both print and electronic media with an invitation to stakeholders to submit written comments. The closing date for comments was 31 May, 2019. 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 the application. In line with the requirements of the Act, WASCO has been submitting its applications for tariff reviews over the years and assessment thereof has consistently included consideration of the application, evidence, facts and public input.

4. WASCO TARIFF APPLICATION OVERVIEW

4.1. 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.

4.2. Overview of the Application

The Authority received an application for a Tariff Review (Tariff Filing Proposal) from WASCO on 16 April, 2019. In line with the Tariff Filing and Review Procedure, the Authority identified data gaps in the application and made a modification in respect of the Tariff Review Application communicated through a letter dated 07 May, 2019. Through another letter dated 27 May, 2019, the Authority further communicated to WASCO on the outstanding responses or data.

The following are, among other issues, the basis for the proposed water and sewerage revenue and the resultant tariff alteration for 2019/20 Financial Year:

- Offsetting under-recovery for the 2015-16, 2016-17 and 2017-18 financial years;
- Takeover of Metolong Dam facility and related infrastructure;
- Offsetting the effects of inflation; and
- Addressing financing costs

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

- a) The national economy will continue to grow and no shocks will beset it in the near future;

- b) A large proportion of WASCO's domestic customers will be able to afford the tariffs and are willing to pay for services duly rendered; and
- c) The essential water and sewerage services rendering a constant inflow of customers to connect to the network.

Regarding WASCO's regulated businesses, the Application mentioned that:-

- a) The Company operates in 16 centres serving close to 102 936 customers of which about 5 000 are connected to sewer lines, 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 communal pre-paid token holders.
- b) WASCO's business entails production of water from raw water extracted from rivers, dams and boreholes, and distribution and supply to households and other entities. The Company also collects wastewater/sewage for safe disposal into the environment. The Company's regulated businesses are therefore water production, water distribution and safe sewage disposal.
- c) Almost all of WASCO's activities are regulated and are included in the application. The exceptions are sanitation services (e.g. conservancy tanks, VIPs and pit latrines) undertaken by the WASCO tankering services outsourced in 2011, which still occur in all districts as well as sewerage blockage services within customers' premises.

4.3. Review of 2010-11 to 2017-18 Outturn

4.3.1. Review of 2010-11 to 2017-18 Outturn on Regulatory Accounts

The Application highlighted that the Company experienced a growth in surplus in the last three (3) Financial Years after a backdrop of losses that were recorded in the preceding financial years as shown in Table 3 below.

Table 3: Revenue/Expenditure Outturn for 2010/11 to 2017/18 (in Million Maloti)

Item	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12	2010-11
Total Revenue	289, 098	256, 044	218, 609	198, 666	171, 233	157, 756	139, 705	119, 364
<i>Water and Sewerage Billing</i>	199, 354	192, 334	190, 539	175, 628	151, 452	137, 878	115, 691	103, 555
<i>New Service connections</i>	13, 288	13, 916	15, 458	15, 826	14, 922	15, 878	21, 733	10, 886
<i>Other Income</i>	76, 274	49, 794	27, 037	7, 212	4, 646	4, 000	2, 285	4, 818
<i>Interest Income</i>	-	-	-	-	-	9, 305	-	5, 944
Expenditure	271, 137	239, 931	216, 272	201, 826	173, 014	161, 746	150, 300	120, 596
<i>Manpower</i>	103, 718	94, 988	88, 458	81, 926	80, 743	69, 327	68, 133	65, 053
<i>Power</i>	23, 486	16, 581	17, 172	18, 460	16, 262	13, 622	10, 980	10, 295
<i>Reticulation and Plant Maintenance</i>	10, 126	14, 833	13, 472	9, 579	12, 556	7, 684	9, 545	7, 808
<i>Chemical Usage</i>	3, 671	3, 524	5, 506	7, 683	7, 230	5, 460	6, 688	4, 272
<i>New Connections Materials</i>	10, 876	14, 113	15, 119	13, 682	9, 912	7, 955	10, 110	6, 126
<i>Depreciation</i>	30, 962	27, 076	18, 416	17, 955	15, 086	14, 767	14, 586	13, 751
Operating Profit	17, 961	16, 113	2, 337	(3, 160)	(1, 781)	(3, 990)	(10, 595)	(1, 232)
Operating Profit (%)	6.21	6.29	1.07	-1.59	-1.04	-2.53	-7.58	-1.03

The improvement (operational profit) realised from 2015/16 to the end of 2016/17 is largely attributable to a substantial and steady growth of water and sewerage billing and more cost management initiatives.

For 2017-18, it was highlighted that the contribution of water and sewerage billing has been below the allowed revenue requirement of M232.86 million. The Application stated that the billing performance is indicative of insignificant growth in consumption patterns experienced in the last three years characterised by consumption drops in the big north region centres of Maputsoe, Hlotse and Butha-Buthe as a result of production and infrastructure challenges.

The Application indicated that water and sewerage billing had been the main contributor to revenue growth while expenditure on human resources together with plant and reticulation maintenance immensely influenced expenditure growth for the period.

4.3.2. Operations & Maintenance Cost Coverage Trend Analysis

The Application stated that for a utility to be viable, its billing has to be able to meet expected expenditure for the set period. Table 4 below presents a trend in the ratio of billing to operations and maintenance costs.

Table 4: Billing to Operations and Maintenance Costs/O&M Cost Coverage Ratio

Financial Years	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18¹
Billing to operations and maintenance costs ratio	0.97	0.85	0.94	0.96	0.96	0.96	0.90	0.83

The Application indicated that a fall in the ratio experienced from 2016/17 reflected an unhealthy situation.

4.3.3. Review of Staff costs against Total Expenditure Trends

The Application mentioned that regional and international benchmarks require that staff costs as a percentage of O & M should range between 30 to 40 percent. However LEWA set a target of 41 percent in 2017/18 for the Company.

The performance on staff costs as a percentage of total expenditure is as shown in Table 5 below:

Table 5: Staff Costs as a percentage of Total Expenditure

Financial Years	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
O&M Cost Coverage Ratio	60.9%	50.2%	47.2%	51.1%	44.6%	44.7%	44.6%	43.2%

¹ WASCO realized increase in profit despite the fall in billing due to collection of outstanding debts.

4.3.4. Non-Revenue Water (NRW) Performance

The Application mentioned that despite an increase in water production, consumption had remained largely constant, resulting in continued increase in NRW. The substantial increase in NRW from 2015-16 financial year is attributed to Metolong downward conveyance system pressures which caused numerous pipe bursts in the Maseru area. Table 6 below shows WASCO's performance in NRW.

Table 6: Non-Revenue Water Performance

Financial Years	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Non-Revenue Water (NRW)	30	23.1	24.6	26.3	43	40.1	40.5 ²

The Application stated that data collection at production plants where, in most cases, there are no bulk meters, remained a major challenge for the accuracy of NRW figures.

4.3.5. Water and Sewerage Service Coverage

The Application stated that for Financial Year 2017/18, WASCO made 4,541 new water connections and 176 new sewerage connections against the set target of 6, 000 and 4000, respectively. The Application attributed the failure to meet the set water target to unavailability of connection materials. Inadequate sewerage infrastructure coverage in Maseru, limited or non-existent infrastructure in other centres, and very low number of sewer connections applicants are stated as contributors to failure to meet set sewerage connections target.

4.3.6. Water and Effluent Quality Trends

The Application stated that the performance of key parameters for treated water, namely Residual Chlorine, Microbiology and Turbidity have not been at the required 100 percent level but have largely improved. For 2017/18, the target passing rates for all parameters was set at 98 percent. On average, WASCO treatment plants managed to maintain

² Average of numbers provided in figure 3a of the application

residual chlorination levels at 77.25 percent while turbidity levels achieved was 96.0 percent. Bacteriology Samples pass rate was 93.75 percent. The low Residual Chlorine level pass rate was attributed to initial under dosing at treatment plants (less than 1mg/l), long retention times, and pipe bursts that introduce soil/microbes and therefore increase chlorine demand. The Application also mentioned that a compact dosing kit has been installed in Mafeteng treatment plant and this type will be rolled out to other identified areas.

The Application indicated that performance of effluent quality (both Chemical Oxygen Demand (COD) and Suspended Solids) on set parameters continues to be at very low levels highlighting infrastructural challenges of the system largely due to the old Ratjomose system as well as existing small systems in other areas (which were designed for entities like hospitals), which pulls down performance of the newly constructed systems at MASOWE and Agricultural College.

The Application stated that building of new Waste Water Treatment Plants (WWTP) in all the requisite areas as the only remedial measure. It also highlighted that the Berea Pilot Project on the introduction of new treatment technology was successfully completed, and there are plans to replicate to other districts.

4.3.7. Water Production, Consumption and Sales Data

The Application stated that Total production for the period ending March 2018 amounted to 22.62 million kilolitres while billed consumption was recorded at 13.82 million kilolitres. The resultant average non-revenue water recorded 44 percent³.

4.4. Review of Current Financial Year (2018/19) Performance

4.4.1. Water Production, Consumption and Sales Data

The Application mentioned that the expenditure and revenue for the period ending in September 2018 amounted to M 93.28 million and M 96.86 million respectively against an allowed revenue requirement of M 268.25 million expected for 2018/19 Financial Year.

³ The figure is different from the numbers indicated in figure 2d and average of numbers indicated in figure 3a and table 4b of the application

It also stated that most of the expenditure items have favourable variances due to low spending and deferment of some of the activities. The Application mentioned that there was a huge gap between the cash and budget which calls for control of expenditure.

4.4.2. Water and Sewerage Service Coverage

The recorded water and sewer connections for the period ending in December 2018⁴ were 3,566 water connections and 243 sewer connections against the annual projections of 6 000 and 1 000, respectively. The water and sewerage connections backlogs are 466 and 6 respectively.

4.4.3. Water and Effluent Quality

The Application stated that performance of water produced and supplied to the public on all other quality parameters (residual chlorine, microbiology and turbidity) except for corrosiveness, met the required standards. The low corrosive tests pass rates relating to dosing of lime at treatment plants would be addressed in the next financial year.

The Application also stated that the pass rates for the two effluent quality parameters (Chemical Oxygen Demand and suspended Solids) had been deteriorating and the causes were to be investigated.

4.5. Forecasts for the 2019-20 Financial Year

4.5.1. Priority Initiatives for 2019/20

The Application stated the following as the priority initiatives that the Company will implement in 2019/20:

- Strengthened and continued debt recovery and collection;
- Robust service coverage with extensions to previously non-serviced areas;
- Roll out of Pre-paid metering system;
- Staff empowerment through a retention and succession strategy;
- Actively dealing with recent audit queries;

⁴ There is inconsistency in the period of reporting- is some section reporting is to the end of September

- Improvement of stand-by capacity to improve service reliability;
- Upgrade of reticulation infrastructure through Asbestos Cement (AC) pipe replacements;
- Full operation of the Call centre; and
- Enhanced public outreach and marketing activities

4.5.2. Operating Costs

The Application stated that the key cost drivers of WASCO's expenditure are salaries and related emoluments, fees (including limited consultancies), chemical usage for water and sewer treatment, power, and plant maintenance. The total expenditure was projected to increase by 2% to M302.47 million in 2019/20 in comparison to the 2018/19 allocated budget amount of M295.87 million.

4.6. The proposed Tariff Requirements for 2019/20

The Application mentioned that even though a framework to fully establish and delineate all WASCO assets has been developed, the company has not definitively valued its assets for the past years. The Application highlighted that stock taking and valuation of all WASCO assets still has to take place so that the true value can be incorporated into future tariff applications. The Company will be conducting a cost of service study⁵ in 2019/20 Financial year to accurately determine the cost related to service provision in the various areas of service.

The Application mentioned that the results of the completed cost of service study did not form the basis of the current tariff application. The Company forecasts the total revenue requirement of M 279.04 million from the regulated business, made up of M 246.25 million from water services and M 32.79 million from sewerage services.

The Application proposed tariff reviews as stated below:

- An 8.5% adjustment for all categories volumetric and standing charges
- An introduction of a M10.00 standing charge for Band A

⁵ This was later corrected as such study has been undertaken and completed in October 2018.

- Public stand pipes and sewerage tariffs would remain the same as in 2018-19 for 2019/20 Financial Year.

The proposed volumetric tariffs are as stated in Table 7 below:-

Table 7: WASCO's 2019/20 Proposed Tariffs

Band	Current Tariffs (per kl)⁶	Proposed New Tariffs (Per kl)
Domestic Customers		
A: (0 – 5kl)	5.38	5.58
B: (>5 – 10kl)	9.12	9.65
C: (> 10 – 15kl)	16.04	17.15
D: (> 15kl)	22.12	23.75
Domestic Standing charge (Band A)	43.03 0.00	45.56 10.00
Non-Domestic Customers		
- Industrial, business, Government	14.6	15.29
- Schools, churches	14.47	15.29
- Stand Pipes	7.28	6.71
Non-domestic Standing charge		
- Industrial and Business	413.85	426.83
- Government and Schools	286.51	310.86
- Religious Institutions	206.93	213.42
- Schools	206.93	213.42
- Standpipes	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

⁶ The current tariffs provided are not accurate as they include customer levies which do not form part of WASCO revenue requirement

5. PUBLIC CONSULTATION PROCESS

A public notice was issued in both the print and electronic media from 03 to 31 May 2019 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.

The Authority conducted eight (8) public hearings from 08 May to 07 June 2019 to afford interested and affected stakeholders an opportunity to submit their representations. The following is a list of all public hearings held:

- I. Butha-Buthe: 08 May 2019;
- II. Leribe: 09 May 2019;
- III. Mokhotlong: 15 May 2019;
- IV. Thaba-Tseka: 16 May 2019
- V. Qacha's Nek: 21 May 2019;
- VI. Mohale's Hoek: 23 May 2019 (this included stakeholders representatives from Mafeteng);
- VII. Quthing: 05 June 2019; and
- VIII. Maseru : 07 June 2019 (this included stakeholders representatives from Brea)

WASCO, the stakeholders, Mrs 'Mamabusane Victoria Qheku, Consumer Protection Association (CPA), Lesotho Chamber of Commerce and Industry (LCCI) and Lesotho Textile Exporters Association (LTEA) made presentations before the Pricing and Tariffs Committee of the Authority.

6. WASCO'S PUBLIC HEARING PRESENTATION

6.1. WASCO's Presentation

6.1.1. Introduction

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

The presentation stated that WASCO has a staff complement of 600 employees serving 104, 000⁷ customers of which 4 000⁸ are connected to the sewerage system. It has 4 300 customers on prepaid metering system. It stated that it serves about 400 000⁹ people.

6.1.2. WASCO's performance

WASCO presented its average performance from Financial Years 2011-12 to 2018-19 against the Financial Year 2017/18 set targets as shown in Table 8 below.

Table 8: WASCO's Technical Performance

Indicators Description	2017-18 Targets	Average Performance	2018-19 Performance
Non-revenue water	28%	31.2%	40.2%
New water Connections	6, 000	5, 000	4474
New Sewerage Connections	1, 000	240	319
Cost coverage by billing	1	0.90	1.08
Staff costs/Total Expenditure	41%	49.0%	46%
Staff/1000 connections	5/1000	6/1000	6/1000
Metering Ratio	100%	100%	100%
Water quality			
Microbiology	99%	98%	98%
Residual chlorine	95%	95%	96%
Turbidity	99%	94%	99%
Effluent quality			
Suspended solids	60%	35%	48%
Chemical Oxygen Demand	30%	19%	32%

The presentation showed that for all the years except the last three years expenditure had been higher than the generated income. Income from services increased from M119 364 000 to M289 098 000 while expenditure increased from M120 596 000 to M271 137

⁷ Total number of water connections derived from the MRFs is 104,479

⁸ Total number of sewerage connections derived from MRFs is 7,957, greater than figure mentioned in the application by 3,957

⁹ This has remained the same for more than 2 years irrespective of a change in number of new customers reported in the MRFs

000 which translated into an operational profit increase from -1.03% to 6.21%. For 2017/18 Financial Year a profit of M 17.96 million was realized.

6.1.3. Challenges

WASCO mentioned the following as its area of operational challenges:

- Effluent quality;
- Old infrastructure resulting in frequent breakdowns;
- Increasing NRW as a result of frequent pipe leakages and bursts;
- Debts from customers (others are as old as 5 years);
- Water shortage in some areas;
- Failure to meet new connections target due to unavailability of new connections material;
- Damaging of Metolong conveyance system resulting in great water losses;
- Inability to measure/determine hours of supply; and
- Presence of manganese and red worms in the treated water.

WASCO's performance for the Financial Year 2018/19 as at the end of March 2019 is as shown in Table 9 below:

Table 9: WASCO Financial and Technical Performance

Financial Performance	
Item	Revised Amounts in Million maloti (M)
Revenue (Water and Sewerage Billing)	184,222,903
Total Expenditure	130,346,402
Manpower costs	92,445,601
Power	27,644,634
Reticulation and plant maintenance	6,702,865
Chemical Usage	3,553,302
Technical Performance	
Item	Percentages (%)

Water Losses	
Non-revenue water	40.2
Water quality	
Microbiology	98
Residual chlorine	96
Turbidity	99
Effluent quality	
Suspended solids	48
Chemical Oxygen Demand	32
New Water Connections	Numbers
New water Connections	4,474
New Sewerage Connections	319

6.1.4. Projections for 2019/20


The Company forecasted its costs, revenue and profit as shown in Table 10 below:

Table 10: Forecasted Costs, Revenue and Profit

Financial Performance	
Item	2019/20 Budget Allocation
Expenditure	302,470,990¹⁰
Manpower	138,470,057
Power	33,969,605
Chemical Usage	10,665,335
Reticulation and Plant Maintenance	11,556,815
Water and Sewerage connections	13,897,489
Depreciation	25,010,000
Total Income	303,516,890¹¹
Water and Sewerage Billing	261,547,958

¹⁰ Total expenditure is M 233,569,301 instead of M 302,470,990

¹¹ Total income is M 310,758,701 instead of M 303,516,890

Financial Performance	
Item	2019/20 Budget Allocation
Water and Sewerage Connections	22,861,630
Other income	26,349,113
	
Operating Profit/Loss	1,045,900

The presentation mentioned that in order to achieve the Revenue Requirement of M 279.04 million, domestic customers and non-domestic customers' water tariffs need to increase by 8.5% except for public standpipes. WASCO further proposed an introduction of M10.00 standing charges for domestic customers in Band A and 8.5% increase for the other remaining customers. The charges for standpipes and sewerage to remain the same as in 2018-19 Financial Year.

In all public hearings, the Company provided stakeholders with its toll free number for the reporting of illegal connections, leakages and pipe bursts. It also encouraged customers to pay their bills timely once they receive them through cell phone services (M-Pesa and Eco cash), internet and through the bank, in addition to the WASCO offices payment facilities to avoid penalty charges.

6.2. Issues Raised by Various Stakeholders

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

- Poor quality of service regarding time taken to effect connections, repair of leakages and pipe bursts and repair of sewer line blockages, meter repairs and meter reading among other things;
- Unacceptable reception and customer service at WASCO offices;
- Prolonged estimated billing resulting from faulty meters;
- WASCO's inability to respond or attend to customer calls;
- Unreliable water supply;"

- Frequent and prolonged water supply outages;
- Inadequate information dissemination regarding planned water supply cuts;
- Billing of water not meeting acceptable standards and usable for households purposes;
- Need for sewerage services extensions to other areas in the urban centres in order to increase accessibility; and
- Up keeping of sewerage treatment plants surroundings.

The stakeholders pointed out 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. The Stakeholders were concerned that WASCO is not taking initiatives to adequately meet its consumers demand in the growing urban centres. They mentioned that WASCO is reluctant to extend its services to the growing urban and peri-urban areas which would increase its customer base as well as its revenue. They also pointed out that WASCO is not effective and is not efficient in addressing the reported failures especially leakages and bursts which eventually translate into high Non-Revenue Water and increased utility costs resulting therefrom. They also mentioned that inability of WASCO's to adhere to prescribed construction standards such as the depth of pipe trenches result in increased repair and maintenance costs as well as increased costs due to produced or treated water that is not sold. The stakeholders were also concerned that WASCO is complacent 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 and the fact that there are vulnerable members among its customers who are struggling to afford the current tariffs. They also indicated that the basis for the tariff review application is not reliable as the utility obtained adverse opinion on financial statements. The stakeholders pointed out that WASCO's focus is on increased number of connections while it ignores the quality of the product it produces. They inquired on reasons for taking water consumption as a basis for sewerage volumes. They further proposed that standing charges, especially for Band A, should remain unchanged as there are fees that are paid even when service is not provided.

Stakeholders in public hearings proposal for a tariff increase ranged from -8.5% to 2.5 %. The reasons and recommendations advanced for objecting or proposing increases lower than WASCO's request included amongst other things, the following:

- WASCO's challenges remain the same throughout the years;
- Water is a basic need not a want;
- WASCO has not taken any initiatives to ensure that consumers accessing water along the Metolong conveyance system are billed;
- 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;
- An increase in unemployment may result in most people not affording to pay their water bills;
- WASCO should consider economic environment as the Government was declared broke and public employees' salaries were not increased;
- Service provision is poor and WASCO is not effective and efficient in attending to reported system problems e.g. leakages and bursts.
- The old, the orphaned and unemployed people cannot afford the proposed increase;
- Lesotho is endowed with abundant water that is sold to other countries;
- There are no planned strategies regarding reduction of debts from its customers;
- The basis for the affordability analysis is not reliable as unemployment rate is very high;
- The service provided is not satisfactory and WASCO should improve its service before requesting an increase;
- NRW is very high, and if reduced there would be no need for tariff increases; and
- 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.

6.2.1. Consumer Protection Association (CPA)

CPA, in its presentation mentioned that the environment in which the tariffs are to be effected is not conducive due to the following: unfavourable economic conditions: country being impecunious, no salary increase for public servants which meant salaries reduction

due to the effect of inflation, high dependency burden resulting from rampant graduates unemployment and unaddressed water losses resulting in high Non-Revenue Water. CPA also highlighted that the issue of high NRW had both controllable and non-controllable aspects. In the case of controllable NRW, the presentation mentioned that WASCO, among other things needs to address the issue of unbilled water consumed along the Metolong conveyance line in addition to other attributes such as poor response to bursts and leakages. CPA mentioned that 8.5% is unaffordable for the vulnerable groups such as elderly, pensioners while reintroduction of standing of M10 on Band A category erodes the element of pro-poor previously introduced. It further alluded to the fact that water will be expensive to many people because the poor population is growing fast as for the current year purchasing power adjustment was not effected. 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. It further mentioned that as in the past, WASCO would not realise forecasted revenue because it had no cost minimising strategies in place.

CPA further pointed out that the affordability indicators used by WASCO in its presentation are not realistic because, among other things, in Lesotho the majority of the people are poor 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 costs will cause Lesotho's non-competitive products to be grounded. It further mentioned that grounded products will result in more job losses which will translate into WASCO losing consumers who are firms and individual firm workers. It made the following recommendations:

- No increase should be allowed, instead, tariffs reduction should be considered;
- WASCO can increase revenue by having an arrangement with community councils of villages connected to Metolong infrastructure to stop the free water consumption;

- Make use of excess Metolong supply for farming in order to increase revenue collection;
- WASCO to reduce the rate of NRW which will result in the utility meeting its revenue requirement without its inefficiencies burdening its customers; and
- WASCO to find a cost effective way of effecting infrastructure connections instead of digging through tarred roads.

6.2.2. Lesotho Textile Exporters Association (LTEA)

LTEA in its presentation mentioned that its 64 members' firms have employed approximately 45,000 employees. It mentioned that it exports to the United States of America and South Africa and that Lesotho ranks among top five (5) exporters under African Growth and Opportunity Act (AGOA). It stated that every stage of manufacturing in its sector uses water while water is also used for domestic and sanitary purpose for 45,000 employees daily.

LTEA further highlighted that it is recycling water and has boreholes as measures to address water shortages and cost. It also stated, among other things, the following as the sector related challenges;

- Implementation of textile minimum wages of 37.4% followed by 12% in a year
- Increase in fuel prices
- Inflation rate of 5.6%
- GDP growth of 1.2%
- Short times in most factories resulting from lack of orders
- Retrenchment in some industries
- Closure of some industries
- Telecommunication VAT increase from 5% to 15%

The presentation also highlighted the challenges related to WASCO as poor service, estimated billing and high billing during industry breaks.

In conclusion, the LTEA proposed that there should be no increase in tariffs as the economic performance is not conducive and the request is not even aligned to the

prevailing inflation rate. It also proposed a review of standing charge as that increases the bill more than the volumetric charge while also considering migration to multi-year tariff to enable customers proper financial planning.

6.2.3. Lesotho Chamber of Commerce and Industry (LCCI)

LCCI in its presentation insisted that it is important to observe a demarcation between Rural Water Supply (RWS) and WASCO service territories. The observation will enable WASCO to claim its investments on Metolong assets that are in (RWS) service territory and leave RWS through councillors to supply its service area. Reimbursement would result with WASCO not needing tariff increase. It also advised that there is a need for an optimal Operation rule in order to synchronise Maseru water supply and Metolong supply so that pumping and pressure in the lines is minimised. The presentation mentioned that it is not clear whether Metolong assets had been officially handed over to WASCO and it further inquired if pressure release valves had been installed in WASCO's distribution system. LCCI proposed minimisation of pressure and optimised pumping in WASCO's system.

It also pointed out that information used as a basis for tariff review request must be derived from the Cost of Service Study. It further indicated that for an informed analysis, there is a need for credible data.

LCCI also mentioned that it is not justified for WASCO to base its application on an assumption that LEWA would approve LEC application which, was at the end, not allowed.

LCCI also advised WASCO to take advantage and access funds from the Green Fund of the climate change facility. This will enable WASCO to make necessary improvements and address its problems, while also investing on capital and ending its dependency on Government. It also mentioned that 2016 population has to be allocated to service areas and must be linked to respective supply sources, production rate and reliability of supply in order to accurately adjust tariffs. In conclusion LCCI recommended that non-domestic

customers' tariff categories should be different from one another as the water use is also different.

6.2.4. Mrs 'Mamabusane Victoria Qheku

Mrs Qheku in her presentation mentioned that even though the application requested increases for all customer categories, the United Nations Development Programme (UNDP) 2017 Report stated that poverty level in Lesotho is at 57% while they were aware that 500,000 people will need to be given food hand-outs. She further mentioned that the application is contrary to pro-poor policy and should not be allowed.

The presentation also inquired on the four years old M 80 million Government debt which it stated as a cause of discrepancies for WASCO. It pointed out that the standpipes contribute to significant water losses and suggested that measures such as well managed kiosks be introduced to ensure payment.

The presentation further stated that WASCO seems to have never been ready to absorb Metolong dam facility and related infrastructure. She proposed an institutional arrangement whereby WASCO would only remain with the treatment works and environmental upkeep of the treatment facilities. Regarding water losses that translates to financial losses along the Metolong Downstream Conveyance System (DCS), the presentation emphasised the need for a report to stakeholders highlighting how WASCO is dealing with financial losses, designed mitigation plans, achievements and challenges.

She also emphasised that WASCO should provide feedback, among other things, on the impact of proposed initiatives (that have cost implications) on general performance and tariff adjustment applied for. She mentioned that to enable efficient monitoring WASCO should provide coverage targets in the urban and peri-urban areas. She stated that regarding water losses resulting from Metolong pressures into the old asbestos cement pipes whose effects are adverse to health, a proposal to source funding for their total replacement should be made to donors.

The presentation concluded by emphasising that WASCO needs not to focus on effluent quality only but to also improve management of sewerage treatment systems for their

effective and efficient operation. She also suggested that, in subsequent applications, WASCO should provide an update on progress made on the initiatives it proposed in the application.

6.3. Analysis of Public Hearings

In all eight (8) public hearings conducted in Mokhotlong, Butha-Buthe, Leribe, Thaba-Tseka, Qacha's Nek, Quthing, Mohale's Hoek and Maseru, the stakeholders were not satisfied with WASCO's service provision. It was indicated that WASCO's costs increase results from its operational inefficiencies and ineffectiveness. Stakeholders also stated that WASCO should put in place strategies to address its operational inefficiencies. They also pointed out that WASCO had been allowed tariff increases but had never provided progress on previously proposed initiatives. The stakeholders were in favour of gradual replacement of post-paid meters and installation of prepaid meters in order to curb increasing water bill debts. They proposed that WASCO should find ways to bill water consumption along the Metolong conveyance system. They further suggested that RWS should operate Metolong system in its demarcated areas and WASCO should be reimbursed for the investment it made. 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) and adhering to set standard for new connection rather than burdening customers with increases in tariffs. They also highlighted 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.

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 service provision continues to be poor. They also pointed out that the economic conditions within which the proposed tariff ought to take effect were not favourable. They stated that it is not clear why a tariff increase is needed for a profit making company. They also emphasized that WASCO's improvement on its inefficiency would be a solution to a constant need for tariffs to increase.

Finally, it appeared that most of the stakeholders are opposed to the tariff increase. They mentioned that if WASCO collects its debts it would finance the necessary cost increases without any tariff increase. They pointed out that water is a need for all but an increase in tariffs will make it unaffordable especially to the vulnerable groups. They suggested that WASCO should first improve the quality of service and product it offers, before it can propose raise in tariffs.

In responding to stakeholders concerns and queries, WASCO conceded and undertook to implement correctives measures in some instances.

While WASCO is also affected by economic performance like any other entities, the Company is cognisant of its customers concerns but it requires revenue support through tariff increase in order to address them. WASCO had noted highlighted losses and would look into advices forwarded by stakeholders to address its shortcomings.

The Company explained that it only receives Government subventions (in the form of grants or loans) for capital projects funding as it currently cannot afford the required funding. It also stated that all its operational costs are financed through tariff generated revenue.

WASCO pointed out that the whole of Metolong infrastructure is owned by the Government and the Company operates and incurs all operational costs. It explained that during Financial Year 2016/17, to address the then drought, the villages adjacent to the Metolong Conveyance system (MCS) were, through the Government decision, supplied with water without pay from the system. The free consumption resulted in high Non-Revenue Water (NRW) which WASCO is currently negotiating with the Government to rectify. It further stated that some villages were supplied with prepaid meters while for others consumption is not metered thus making it difficult to measure their consumption.

WASCO also mentioned that institutional arrangement for the Metolong system that is yet to be finalised will clearly indicate how responsibilities are separated (including its operation) among relevant institutions.

Regarding the issue of WASCO and RWS service boundary demarcation, WASCO agreed that in some instances, there is no clear boundary between the two entities' service areas.

WASCO mentioned that it plans to search for illegal connections (non-billed consumers) and put measures in place to reduce illegal consumption in an effort to reduce NRW. The Company further mentioned that it has challenges in performing some measures such as air releasing through water release due to unplanned villages (building constructions and location) and installation of air release valves due to already existing individual connections.

WASCO mentioned that Cost of Service Study was completed in October, 2018 but the Study's results were not used for preparing Financial Year 2019/20 tariff application. It pointed out that the study also indicated that Non-Domestic customers' tariffs should be separated based on consumption. WASCO may consider applying for a multi-year tariff regime in its subsequent tariff reviews.

Regarding estimated billing, WASCO explained that bills are estimated only if meters are not functioning or inaccessible. It further pointed out that industries' meters are read daily and where possible it strives for non-estimation of industrial customers' bills.

7. ANALYSIS OF WASCO'S APPLICATION

7.1. WASCO's Revenue Requirement

In its submission, WASCO's Revenue Requirement (RR) with respect to water production and distribution businesses is stated as M246.25¹² million and in order to realise the RR, volumetric and standing charge will have to increase by 8.5% and Standing Charge for Band A customers of M10.00 per month be re-introduced, irrespective of whether a service is rendered or not. However, the Authority's analysis indicated otherwise, that the required revenue would result in tariff increases of 18.24% for volumetric and 7.21% for

¹² This figure is not the same as the one generated by the proposed tariff increase and sales.

standing charge for all customers. Table 11 below shows increases in water as determined from WASCO's proposed budget.

Table 11 : Water Unit Costs and Standing Charges Increase as Determined from WASCO's Proposed Budget

Customer category	2018/19 charges		2019/20 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)	5.1440	0.00	6.0825	10.7200	18.2449	7.2121	3,771,235	51,626	29,580,525.99
Band B (>5 - 10 kl)	8.8889	43.03	10.5108	46.1334	18.2449	7.2121	1,150,858	25,836	26,399,115.96
Band C (>10 - 15 kl)	15.8108	43.03	18.6955	46.1334	18.2449	7.2121	462,104	8,948	13,592,867.91
Band D (> 15 kl)	21.8910	43.03	25.8850	46.1334	18.2449	7.2121	971,352	7,953	29,546,225.41
Non Domestic Customers									
Government	14.3696	286.51	16.9913	307.1735	18.2449	7.2121	1,403,409	531	25,803,081.62
Non Domestic (Business, Industry)	14.3696	413.85	16.9913	443.6974	18.2449	7.2121	5,966,115	1,904	111,509,771.03
Schools	14.2434	286.51	16.8421	307.1735	18.2449	7.2121	437,210	262	8,329,286.02
Religious Institutions	14.2434	206.93	16.8421	221.8541	18.2449	7.2121	52,560	179	1,361,763.10
Standpipes	7.05860	0.00	8.3464	0.00	18.2449	0.00	15,382	119	128,384.87
Total							14,230,225	97,358	246,251,021.89

8. APPROVED REVENUE FOR WATER PRODUCTION AND DISTRIBUTION

8.1. Approved Revenue Requirement

Based on the Authority's adjustments of WASCO's costs, the approved Company's Revenue Requirement (RR) is M212.64 million, for both water production and distribution as opposed to M246.25 million requested by WASCO. The approved RR is as reflected in Table 12 below.

Table 12: 2019-20 Revenue for WASCO

Cost Items	Allowed Revenue in Million (M) per Regulated Business		
	Water Production	Water Distribution	Total
Controllable Costs			
Volume Related Costs	65.22	2.83	68.05
Volume Related (Power) Costs	21.19	1.21	22.4
Site Related Costs	19.68	0	19.68

Customer Related Operating Costs	0	55.38	55.38
Network Length Related Costs	0	8.59	8.59
Fixed Costs	5.8	3.57	9.37
Sub-Total	111.89	71.58	183.47
Non-Controllable Costs			
Pass Through Costs	7.35	21.82	29.17
Total	119.24	93.40	212.64

8.2. Justification for the Approved Revenue Requirement as Opposed to WASCO Request

8.2.1. Water production Business

- I. **Volume Related costs:** Based on proposed WASCO budget, the resultant unit cost, M/kl, is M3.88/kl. This cost is mainly driven by 333% increases in operation and maintenance, 199% in ICT and 213% in security, rates and insurance. These increases have not been justified and are controlled by the Company, previously approved unit cost of M3.30/kl is allowed for volume related costs. The proposed unit cost results in WASCO's proposed budget of M76.7 million is reduced by 15% to M65.22 million.
- II. **Volume Related (power):** There is no justification for the increase of power costs and WASCO is allowed 2018-19 costs it incurred for power. The Company is further required to prepare an energy management strategy for approval by the Authority.
- III. **Site related Cost:** WASCO's proposed budget of M21.23 million results in the site related cost of M0.88 million per site. These costs are increasing despite non-functioning of some water production sites, mainly in Roma, Mazonod, Morija, Maseru and Berea. It would be expected that these costs are reducing to reflect that they are non-operational. The Company has not provided justification for maintaining and operating these sites. The Company, is therefore allowed a site related cost of M0.82 million thereby reducing WASCO's proposed budget by 7.3% to M19.68 million.

- IV. **Fixed Costs:** The Company's fixed cost of M5.80 million is approved as it represents almost 50% reduction compared to 2018-19 approved cost.
- V. **Pass-through Costs:** WASCO's proposed pass-through costs of M7.35 million are allowed as the Company has no control over them. These are depreciation, LEWA's license fee and financing costs. Whilst the Company is yet to re-value its assets, full depreciation charge is allowed. This is because depreciation funds are ring-fenced and used mainly for capital maintenance.

8.2.2. Water Distribution

- I. **Volume Related Costs:** These costs are mainly driven by minimal chemical budget and doubtful debts. WASCO is expected to attain at least 90% collection efficiency. However, the proposed budget of M5.60 million, doubtful debts, has not been justified. In fact it was omitted from the initial Company's submission. The proposed budget has not been supported with reasons and how it was established. Therefore the WASCO's proposed budget has been reduced by 61% to M2.2 million.
- II. **Volume Related Cost:** This mainly consists of power supply and WASCO's proposed budget of M1.21 million is allowed.
- III. **Customer Related Costs:** The proposed budget of M65.21 million is as a results of 175.4% increase in transport costs and 51% increase in labour expenses. Since it is not clear why the Company is maintaining transport fleet that has no motor plan, and import skilled labour from South Africa, the increase is not allowed. Again, 51% increase in labour expenses is not linked to either inflation of 4.7% or performance. WASCO is therefore allowed M55.38 million as opposed to M65.21 million proposed by WASCO. This constitutes 15.07% reduction in WASCO's budget.
- IV. **Network Length Related Costs:** WASCO needs to increase its customer base by connecting more customers into already existing infrastructure which has under-utilised capacity. This will result in economies of scale thereby reducing costs per connection. The proposed cost per connection of M9.63 million is 36.60% higher compared to the approved budget of M7.05 million for

2018/19. WASCO is proposing an increase of 168% on network maintenance compared to audited costs for 2017-18. Therefore, WASCO's proposed budget is reduced by 10.8% to M8.59 million.

- V. **Fixed Costs:** Whilst the proposed budget is 41% lower compared to the 2018-19 approved budget, the Company's proposed budget is decreased by 37%. WASCO's budget is driven by 94% increase in audit fees, and there is no justification for it.
- VI. **Non-Revenue Water (NRW):** In order to discourage high production cost and low sales by the utility which translate to increasing NRW and operational cost, NRW is set at 28%. This will increase sales from produced water as well as revenue that the utility will make. The figure 1 below shows the increasing trend of the NRW that affect WASCO financial performance adversely.

Figure 1 - 2011-12 to 2018-19 NRW Performance



The Company is required to prepare and submit the Leakage Reduction Programme for review and approval by the Authority.

8.2.3. Reinstatement of Standing Charge for Band A Customers

Currently WASCO uses two parts tariff in which it charges for water use and standing charge for all its customers, except public stand pipes. The standing charge was meant to cover costs related to customer billing and to a large extend fixed Company costs.

Where standing charge is meant to cover fixed costs (labour, interests, insurances, etc.), usage related charges are often related to variable costs, such as chemicals, fuel, electricity and other inputs costs that will only be incurred to produce water and provide sewerage services.

Therefore, standing charge has been maintained in most private utilities as a form of insurance in cases of severe disruption in service delivery. However, companies are nowadays required to have certain reserves in order to cover these fixed costs in case of service disruptions that last longer. This requirement is essential for properly managed companies because companies' financial sustainability is always a priority.

The LEWA Board (in the 2016/17 WASCO Tariff Determination) decided that standing charge for at least Band A customers should be abolished since for WASCO it was not seen as a surety for payment, and it had difficulty in collecting it in cases of no-supply. In addition this would incentivise the Company to ensure reliable supply and further encourage the efficient use of water to ensure sustainable water supply. It is against the foregoing above that standing charge for Band A customers is not reinstated.

9. APPROVED TARIFF BY THE AUTHORITY

In order to meet M212.64 million approved RR for water production and distribution, the tariffs would increase as shown in Tables 13 and 14, and their revenue as shown in Table 15 below.

Table 13:- Water Services volumetric Tariff (inclusive of customer levy of M0.2311/kl)

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)	5.1440	2.9999	5.2983	5.5294	5.5294	5.3751	2.8709
Band B (>5 - 10 kl)	8.8889	2.9999	9.1556	9.3867	9.3867	9.1200	2.9239
Band C (>10 - 15 kl)	15.8108	2.9999	16.2851	16.5162	16.5162	16.0419	2.9567
Band D (>15 kl)	21.8910	2.9999	22.5477	22.7788	22.7788	22.1221	2.9686
Non Domestic customers							

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 (%)
Government	14.3696	2.9999	14.8007	15.0318	15.0318	14.6007	2.9524
(Business, Industry)	14.3696	2.9999	14.8007	15.0318	15.0318	14.6007	2.9524
Schools	14.2434	2.9999	14.6707	14.9018	14.9018	14.4745	2.9520
Religious Institutions	14.2434	2.9999	14.6707	14.9018	14.9018	14.4745	2.9520
Standpipes	7.0586	2.9999	7.2704	7.5015	7.5015	7.2897	2.9048

Table 14: Water services Standing Charges

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)	43.03	4.7	45.05
Band C (>10 – 15 kl)	43.03	4.7	45.05
Band D (>15 kl)	43.03	4.7	45.05
Non Domestic Customers			
Government	286.51	4.7	299.98
Business, Industry	413.85	4.7	433.30
Schools	286.51	4.7	299.98
Religious institutions	206.93	4.7	216.66
Standpipes	0	0	0

Table 15: Total Revenue from the Water Distribution Business

Customer Category	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)	5.2983	0.00	3,771,235	51,626	19,981,190.92
Band B (>5 - 10 kl)	9.1556	45.05	1,150,858	25,836	24,504,436.33
Band C (>10 - 15 kl)	16.2851	45.05	462,104	8,948	12,362,961.40
Band D (>15 kl)	22.5477	45.05	971,352	7,953	26,201,383.71
Non Domestic Customers					
Government	14.8007	299.98	1,403,409	531	22,682,123.89
Non Domestic (Business, Industry)	14.8007	433.30	5,966,115	1,904	98,201,056.43

Customer Category	Water Unit Costs (M/kl)	Standing Charge (M/month)	Annual Sales kl/Year	Number of Connections	Total Revenue (M)
Schools	14.6707	299.98	437,210	262	7,357,799.71
Religious Institutions	14.6707	216.66	52,560	179	1,237,215.07
Standpipes	7.2704	0.00	15,382	119	111,832.54
Total			14,230,225	97,358	212,640,000.00

WASCO is allowed zero (0%) tariff increase in sewerage services volumetric charges as shown in Table 16 below, and it will generate revenue equivalent to that of 2018/19 of M34.61 million as indicated in Table 17 below.

Table 16: Sewerage Services Volumetric Tariff (Excluding 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 17: Total 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

Other charges, as shown in Table 18 below, should remain the same as in 2018/19 Financial Year.

Table 18: Unchanged 2018/19 Tariffs

Description	Current Charges (M)
Reconnection Fee	150.00
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
Prepaid Token Fee	180.00
Meter Security Deposit	75 domestic/ 100 business
Meter Test Fee	30.00
Sewerage Blockage Fee	100.00
Connection Application Fee	50.00
Site Investigation Fee	50.00
Sewer Tanker Emptying to WASCO truck	M35.00 per load

11. WASCO'S FINANCIAL MANAGEMENT

11.1. Major Financial Ratios

Major ratio analysis pertaining to WASCO's performance for 2017/18 Financial Year is detailed below.

11.1.1. 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.

WASCO's current ratio has declined from 2.26 in 2017 to 1.8 in 2018. A decline in current ratio poses a threat of liquidity of which a company might have problems in settling its short term debts. This decline is caused by the decrease in cash and cash equivalents

as well as uncollected debts because of poor bookkeeping as stated in the Managements letter

11.1.2. 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.

11.1.3. Quick Ratio (Current Assets less Inventory/Current Liabilities)

The Quick ratio has also declined to 1.6 in 2018 as compared to 2 in 2017. This ratio indicates that WASCO's most liquid assets are declining, this is evidenced by decrease in cash and in bank balances.

11.1.4. Cash Flow Ratio (Net cash inflow/Current Liabilities)

Obviously, a company needs to be earning enough cash from operations to be able to meet its foreseeable debts and future commitments, and the cash flow ratio, and changes in the cash flow from one year to the next, provide a useful indicator of a company's cash position.

WASCO's cash flow ratio slightly increased from 0.1 to 0.23 in 2017 and 2018 respectively.

11.1.5. Profitability

Profitability assess a business ability to generate earnings as compared to its expenses, here we are referring to operating expenses. WASCO's profitability remained constant at 7% throughout the two financial years. However, failure to revalue PPE properly has an effect of misstating the depreciation which will in turn misstate the profit. Care has to be taken in reading this profit.

Cost to revenue for both years is 97% and 95% for 2017 and 2018 respectively. The company seem not to be cost efficient in containing its costs. This is evidenced by the

queries raised by AG on Management letter like expenditure not supported by proper documentation.

The amount of stock is also not accounted for properly and therefore this has the effect on the reported profit.

11.1.6. Gearing Ratio

The capital gearing is the measure of the proportion of the company's capital that is debt. The threshold considered is 50%. WASCO's gearing ratio is constant at 26% for both years. Since both ratios are below 50%, WASCO is considered lowly geared.

From the above analysis, WASCO's performance seemed to be healthy though its liquidity is slightly declining.

11.2. Overall Implication of Adverse Opinion on the Financial Analysis

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.

All this qualifications in the financial statements have the effect on the calculation of tariff in that Revenue is misstated, Inventory is misstated, depreciation as well as the net profit. Also the return on capital will be misstated because of the failure to revalue the PPE. Calculation of WACC will also be misstated because of unclear Grants.

12. WASCO'S ANNUAL PERFORMANCE REVIEW

Table 19 below summarises WASCO's performance for Financial Years 2017/18 and 2018/19 compared to 2017/18 set targets. Financial Statements for the Financial Year 2017/18 had been audited. 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 19: Key Performance Indicators compared to 2017/18 Set Targets

INDICATOR				UNITS	TARGET	PERFORMANCE	
QUALITY OF SERVICE						Audited ¹³	Unaudited
						2017/18	2018/19
1	Water Connections in Year			No.	6000	4541	4474
2	Sewerage Connections in Year			No.	1000	176	319
3	Quality Tests	Potable	Microbiological	%	99	94	98
			Chlorine	%	95	89	96
			Turbidity	%	95	97	99
		Effluent	SS	%	60	44	48
			COD	%	30	24	32
4	Hours of supply			Hrs.	20	20	20
ECONOMIC EFFICIENCY							
5	O&M Cost Coverage by billing			Ratio	1	0.83	1.08
6	Collection Efficiency*			%	90		
7	Staff Costs as a percentage of O & M costs*			%	41	43.18	
OPERATIONAL SUSTAINABILITY							
8	Staff Productivity			Ratio	5	6	6
9	NRW ¹⁴			%	26	44	40.2
10	Metering Ratio			%	100	100	100

*WASCO has not provided Performance results for one (1) Financial Year or both.

Based on the above provided assessment, WASCO has to focus on improving its effluent quality. There is a need to have clear strategies on NRW reduction as that does not translate to water loss only but to financial loss and an increase in operational costs. It is also directed that WASCO should provide quarterly performance reports on the ten set KPIs in order for the regulator and the utility to have similar checking mark.

¹³ Technical data is not audited

¹⁴ WASCO should take note that reduction in leakages will result in increased utility revenue and reduction in a need to increase production and/or production plants

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 QOSSS. Compared to previous Financial Years, WASCO's reporting has improved. WASCO needs to acknowledge that monthly and quarterly reports form basis to assess reliability (checking mark) of data submitted especially for tariff review applications. WASCO needs to improve on consistency and reliability of data provided in its various reporting as well as in the applications.

14. KEY ISSUES/CONCERNS RAISED BY STAKEHOLDERS

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

14.1. Quality of Service and Supply

Most stakeholders 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 uses to ensure compliance by WASCO.

Regarding the concerns of the stakeholders, it can be deduced that customers are concerned with operational inefficiency¹⁵ and allocative inefficiency¹⁶ of the utility. WASCO needs to focus on addressing customers' concerns.

¹⁵ Production inefficiency is where more resources are used but production is low

¹⁶ Allocative inefficiency is where prices are increased to generate high profit while welfare of consumers is compromised.

14.2. 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, orphaned, disabled and unemployed persons.

14.3. Metolong Facility Operations

Stakeholders requested clarity on the operations of Metolong by WASCO and whether the facility has been officially handed over by the Government. There is also a need for establishing clear demarcations between WASCO's operations and the Department of Rural Water Supply.

15. CONCLUSIONS

Based on the summary of the facts and evidence presented to the Authority, LEWA has found justification for an 8.5% tariff increase for both volumetric and standing charges for domestic and non-domestic customers and re-introduction of standing charge for Band A of M10.00 unreasonable and has therefore concluded as follows:

- A.** In order for the Company to finance its proposed budget of M246.25 million for water production and distribution, the volumetric tariffs and standing charges needed to increase by 18.24% and 7.21% respectively.
- B.** There is no justification for the Company to re-introduce Standing Charge for Band A customers.
- C.** In order to meet the water revenue requirement, the water volumetric tariffs should increase by 3.00%, while the standing charge will increase by 4.7%, except for Band A
- D.** WASCO needs to devote its efforts to reducing NRW from the current level above 40.2% to a set 28% target. This will assist the utility in reducing its production costs and to realise increased sales.

- E. WASCO needs to improve its collection efficiency to at least above 90% in order for the Company to cover its O & M costs from its billing.**
- F. WASCO should develop and implement an energy efficiency management program especially for Metolong treatment plant so as to reduce its energy costs.**
- G. WASCO needs to take advantage of abundant water from Metolong, and expand its customer base and benefit from the already existing economies of scale.**
- H. Effluent quality continues to remain below acceptable set standards and this necessitates increased investment in wastewater treatment facilities, especially in districts other than Maseru.**
- I. Access to sewerage services is below 10% and effective strategies are needed to connect more customers to the already existing sewerage infrastructure in Maseru.**
- J. WASCO needs to focus on improving consistency, accuracy and reliability of data provided in its currently timely reports. This is because timely submitted data, if not accurate, defeats the objective of reporting. In addition, in order to enhance performance monitoring it is recommended that WASCO should report quarterly on the set KPIs.**

16. APPROVAL

The Board therefore approved the following:

- A. Volumetric (for water production and distribution) and standing charge tariff be increased as shown in Tables 20 and 21 below.**

Table 20: Water Services Volumetric Tariff (inclusive of customer levy of M02311/kl)

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)	5.1440	2.9999	5.2983	5.5294	5.5294	5.3751	2.8709
Band B (>5 - 10 kl)	8.8889	2.9999	9.1556	9.3867	9.3867	9.1200	2.9239
Band C (>10 - 15 kl)	15.8108	2.9999	16.2851	16.5162	16.5162	16.0419	2.9567
Band D (>15 kl)	21.8910	2.9999	22.5477	22.7788	22.7788	22.1221	2.9686
Non Domestic customers							
Government	14.3696	2.9999	14.8007	15.0318	15.0318	14.6007	2.9524
(Business, Industry)	14.3696	2.9999	14.8007	15.0318	15.0318	14.6007	2.9524
Schools	14.2434	2.9999	14.6707	14.9018	14.9018	14.4745	2.9520
Religious Institutions	14.2434	2.9999	14.6707	14.9018	14.9018	14.4745	2.9520
Standpipes	7.0586	2.9999	7.2704	7.5015	7.5015	7.2897	2.9048

Table 21: Water Services Standing Charges

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)	43.03	4.7	45.05
Band C (>10 – 15 kl)	43.03	4.7	45.05
Band D (>15 kl)	43.03	4.7	45.05
Non Domestic Customers			
Government	286.51	4.7	299.98
Business, Industry	413.85	4.7	433.30
Schools	286.51	4.7	299.98
Religious institutions	206.93	4.7	216.66
Standpipes	0	0	0

B. Sewerage services charges, as shown in Table 16 and other charges as shown in Table 18 should remain the same as in 2018/19 Financial Year.

c. The effective date for the approved tariffs be 01 August, 2019.

17. COMMUNICATION

The decision of the LEWA Board has been communicated to the Applicant, WASCO, by a letter dated 19th July, 2019, and to the general public through a press conference, a press release and via print and electronic media on 19th July 2019.



Date: 29/08/19

CHAIRMAN OF THE LEWA BOARD

