THE NATIONAL ASSEMBLY
THE NATIONAL ASSEMBLY
OCT 2019

WEDNESDAY

TWELFTH PARLIAMENT - THIRD-SESSION - 2019

A SHIBULED

DEPARTMENTAL COMMITTEE ON ENERGY

REPORT ON THE

PUBLIC PETITION REGARDING WATER SUPPLY CONSTRAINTS CAUSED BY KENYA
POWER TARIFFS IN KILIFI COUNTY

CLERK'S CHAMBERS
DIRECTORATE OF COMMITTEE SERVICES
PARLIAMENT BUILDINGS
NAIROBI

OCTOBER, 2019

Table of Contents CHAIRPERSON'S FOREWORD4 EXECUTIVE SUMMARY5 PREFACE......7 1.1 ESTABLISHMENT AND MANDATE OF THE COMMITTEE......7 OVERSIGHT......7 1.2 COMMITTEE MEMBERSHIP 8 1.3 COMMITTEE SECRETARIAT8 1.4 INTRODUCTION.......10 2.0 BACKGROUND......10 2.1 LEGAL PROVISIONS TOUCHING ON THE PETITION......10 2.2 RIGHT TO PETITION PARLIAMENT......10 2.2.1 3.0 SUBMISSIONS ON THE PETITION......12 PETITION BY HON. OWEN YAA BAYA, MP......12 3.1 SUBMISSION BY BARICHO WATER WORKS/PLANT IN KILIFI COUNTY 13 3.2 SUBMISSION BY THE KENYA POWER (KPLC) 15 3.3 SUBMISSION BY THE ENERGY AND PETROLEUM REGULATORY AUTHORITY 3.4 SUBMISSION BY THE MINISTRY OF ENERGY) 18 3.5 5.0 COMMITTEE RECOMMENDATIONS.......20

APPENDICES

Adoption List Minutes Annexures

ABBREVIATIONS/ACRONYMNS

CWWDA - Coast Water Works Development Agency

EPRA - Energy and Petroleum Regulator Authority

ERB - Electricity Regulatory Board

KPLC - Kenya power and Lighting Company

KV - Kilovolt

KVA - kilo-volt-ampere

KWh - kilowatt hour

O&M - Operation and Maintenance

WARA - Water Resources Authority

CHAIRPERSON'S FOREWORD

This report contains Committee's proceedings on the consideration of the Public Petition regarding water supply constraints caused by Kenya Power tariffs in Kilifi County. The Petition by Hon. Owen Yaa Baya, MP and a Member for Kilifi North Constituency and on behalf of the residents of Kilifi County, was presented in the National Assembly on 11th June, 2019. The Petition was subsequently committed to Departmental Committee on Energy for consideration pursuant to Standing order 227(1).

The Committee was required to respond to the Petitioner by way of a report addressed to the Petitioner and laid on the Table of the National Assembly not more than sixty (60) calendar days from the time of reading the prayer.

In processing the Petition, the Committee made visits to the affected institution which is Baricho Water Works responsible for water pumping and supply services to the affected residents. The Committee during the visit also received submissions from various stakeholders including the State Department of Energy, Kenya Power and Energy and Petroleum Regulator Authority (EPRA) with a view to addressing the concerns raised and provide sustainable solutions.

The Committee further deliberated on the Petition and analyzed respective submissions of which its recommendations are contained in this report.

The Committee is grateful to the Offices of the Speaker and the Clerk of the National Assembly for the logistical and technical support accorded to it during the consideration of the Petition. Finally, I wish to express my appreciation to the Honorable Members of the Committee and all the stakeholders who made useful contributions towards the preparation and production of this report.

On behalf of the Departmental Committee on Energy and pursuant to provisions of Standing Order 227(2), it is my pleasant privilege and honour to present to this House the report of the Committee on its consideration of the Public Petition by Hon. Owen Yaa Baya, regarding water supply constraints caused by Kenya power tariffs in Kilifi County.

HON. DAVID GIKARIA, M.P

CHAIRPERSON, DEPARTMENTAL COMMITTEE ON ENERGY

EXECUTIVE SUMMARY

The Public Petition regarding water supply constraints caused by Kenya power tariffs dated 11^h June, 2019 was presented in the National Assembly on 11th June, 2019 by Hon. Owen Yaa Baya, the Member of Parliament, Kilifi North Constituency. The Petition was subsequently committed to Departmental Committee on Energy for consideration pursuant to standing order 227(1).

The Petitioners stated that Article 43 of the constitution safeguards the provision of water as a constitutional right by establishing the right to clean and safe water in adequate quantities. Coast water services board mandated to fulfil this key constitutional function is facing challenges in the coast region such as exorbitant power bills levied by Kenya power. That, whereas the supply of water has remained constant, power bills have significantly increased in recent times. Consequently, state bodies mandated to undertake these functions to supply and make water available are unable to afford economic provision of water services on account of these exorbitant tariffs coupled with other routine operational and maintenance expenses. The Petitioner averred that cost of electricity that Kenya power charges per cubic meter of water is Kshs 25 way above approved tariff of Kshs 20. In addition, the petitioner also submitted that there constant disconnections and disruptions of power since water providers such as Baricho Water Plant in Malindi, which supplies water to Kilifi and Mombasa counties, are unable to meet the high cost of electricity consumed by the providers, among other concerns.

The Petitioners prayed that the National Assembly through the Departmental Committee on Energy inquiries into the outstanding water production power bills owed by Coast Water Services Board to Kenya Power; cconsiders the cost of electricity per cubic meter of water so as to facilitate affordable provision of water supply in the counties; rrecommends the harmonization of power tariffs between the Kenya Power and the Water Resources Authority (WARMA) to ensure affordable production and supply and recommends a review of the cost of water production and supply to guarantee affordable and uninterrupted supply of water.

The Committee observed that the Baricho Water Works which supplies water to towns in both Kilifi and Mombasa Counties uses electricity to pump water to serve residents of the two Counties. That the average retail tariff for Coast Water Service Providers ranged between Kshs 20.34 to 21.68 per kWh between the months of January and July 2019. This is in contrast with rate of Kshs. 25 alleged by the petitioner. The committee noted that the applicable tariffs for the current tariff control period are still high and above the policy targets, which still remains a major source of concern especially as regards its impact on critical sub sectors such as water and sanitation and overall economic growth. Water electricity tariff for water agencies, in this case under the Commercial industrial (CI3) customer category, also includes taxes and levies such as VAT, rural electrification charges, fuel and forex adjustment charges, and regulatory charges, among others. This means that part of the factors contributing to the high cost of power bills are taxes and levies, even for entities that provide critical social and pro-poor services such as water and sanitation services.

The Committee also observed that one of the reasons for electricity disconnections is high cost of electricity bills. The water agency defrays 87% of its revenues to cater for electricity while the remaining component of the revenue - that is 13% - is used for other O&M activities such as payment of salaries and maintenance of the pipeline, among others. The Baricho water works uses electricity to pump water unlike other water works agencies in the County that use and employ gravity system and other related mechanisms for water supply and distribution. The cost associated is also dependent on the adequacy of storage facilities by water agencies as well as the level of water losses through the pipeline systems and how those losses are managed or accounted for by the affected entity. That electricity bills are not metered separately among the water companies. Currently Baricho water works pumps water across the region.

The Committee recommends that the Energy Petroleum and Regulatory Authority (EPRA), as the main convenor, to undertake and engage in a consultative forum with water works development agencies, water companies and various water service boards to come up with non-commercial water pumping and supply tariff(s) for public water utilities including Baricho Water Works and report to the Committee within 90 days. Baricho Water Works Agency and Kenya Power in the coast region, to ensure there is cordial working arrangements before resorting to disconnection or interrupting supply of electricity. The Committee recommends that the same arrangement be subjected to regulatory concurrence that involves the Energy and Petroleum Regulatory Authority (EPRA) and Water Resources Authority to ensure each party meets its obligations as per the working arrangement. Water Resources Authority and EPRA to audit all Water Service Boards and water agencies/companies responsible for supply of water to determine the level of water losses and categorize the type of losses before qualifying for a special non-commercial tariff. This is to ensure that only acceptable water losses in the systems are considered in the design of the tariff. Within three months upon adoption of the petition, each County to apply for separate accounts from Kenya Power and are metered separately. This is to ensure ownership of bills by each entity responsible for supply and distribution of water. The Counties of Kilifi and Mombasa to ensure the necessary water infrastructure are put in place to allow for efficient delivery of water services to the residents of the major towns within their respective counties. Kenya power maintains a working and cordial engagement with the water works agencies and establishes a framework that involves respective regulators in the water and energy sector.

The Committee also recommends that water agencies to ensure prioritization of arrears within an agreed framework that takes into account financial needs of Kenya power while balancing the interest of water users. The Ministry of energy in conjunction with the state department for water and sanitation to initiate an intervention of mapping all public water utilities and facilities so as to be connected with relevant and affordable source of electricity ranging from grid power and innovate solar regimes for off-grid areas while minimizing the use and/or impact of diesel use in parts of the country. That the policy intervention be factored in the 2020/21 policy statement to allow affordable use of clean and safe water

1.0 PREFACE

1.1 ESTABLISHMENT AND MANDATE OF THE COMMITTEE

The Departmental Committee on Energy is one of the fifteen Departmental Committees of the National Assembly established under *Standing Order 216* whose mandates pursuant to the *Standing Order 216* (5) are as follows:

To investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the assigned ministries and departments;

- (i) To study the programme and policy objectives of Ministries and departments and the effectiveness of their implementation;
- (ii) To study and review all the legislation referred to it;
- (iii) To study, access and analyze the relative success of the Ministries and departments as measured by the results obtained as compared with their stated objectives;
- (iv) To investigate and inquire into all matters relating to the assigned Ministries and departments as they may deem necessary, and as may be referred to them by the House;
- (v) To vet and report on all appointments where the Constitution or any law requires the National Assembly to approve, except those under Standing Order No.204 (Committee on appointments);
- (vi) To examine treaties, agreements and conventions;
- (vii) To make reports and recommendations to the House as often as possible, including recommendation of proposed legislation;
- (viii) To consider reports of Commissions and Independent Offices submitted to the House pursuant to the provisions of Article 254 of the Constitution; and
- (ix) To examine any questions raised by Members on a matter within its mandate.

1.2 OVERSIGHT

The Second Schedule to the Standing Orders mandates the Committee to consider matters relating to the Fossils fuels exploration, Development, production, maintenance and regulation of energy. In executing its mandate, the Committee oversights the performance of the following State departments: -

- (i) Energy, and
- (ii) Petroleum.

1.3 COMMITTEE MEMBERSHIP

The Departmental Committee on Energy comprises the following Members-

Chairperson

The Hon. David Gikaria, M.P.
Nakuru Town East Constituency

Jubilee Party

Vice Chairperson

The Hon. (Dr.) Robert Pukose, M.P Endebess Constituency

Jubilee Party

The Hon. Cecily Mbarire, M.P. Nominated Member

Jubilee Party

The Hon. Joseph Wathigo Manje, M.P. Kajiado North Constituency

Jubilee Party

The Hon. Oscar Sudi Kipchumba, M.P. Kapseret Constituency

Jubilee Party

The Hon. Amina Gedow Hassan, M.P. Mandera Women Representative **Economic Freedom Party**

The Hon. Clement Muturi Kigano, M.P Kangema Constituency

Jubilee Party

The Hon. Elsie Muhanda, MP Kakamega Women Representative Orange Democratic Party

The Hon. Julius Musili Mawathe, MP Embakasi South Constituency

Wiper Democratic Movement-Kenya

The Hon Nicholas Tindi Mwale, MP

The Hon. Ekomwa Lomenen James, M.P. Turkana South Constituency

Jubilee Party

The Hon. Lemanken Aramat, M.P Narok East Constituency Jubilee Party

The Hon. (Eng.) Vincent Musyoka, M.P. Mwala Constituency

Maendeleo Chap Chap Party

The Hon. Osman A. Mohamed, M.P Fafi Constituency Kenya Africa National Union

The Hon. Elisha Odhiambo, MP Gem Constituency Orange Democratic Movement

The Hon. Faith Wairimu Gitau, M.P. Nyandarua Women Representative **Jubilee Party**

The Hon. Ken Chonga, MP
Kilifi South Constituency

Orange Democratic Movement

The Hon. Walter Owino, MP

Butere Constituency

Amani National Congress (ANC)

Awendo Constituency

Orange Democratic Movement

The Hon. Mohammed Ali Lokiro, MP Turkana East Constituency Orange Democratic Movement

1.4 COMMITTEE SECRETARIAT

The Committee is resourced with the following technical staff, representing the Office of the Clerk;

Ms. Rose Wanjohi Clerk Assistant I

Mr Douglas Katho Clerk Assistant II

Mr Ronald Walala Legal Counsel I

Mr Abdirahman Gorod Fiscal Analyst II

Mr David Ngeno Research Officer III

Ms Deborah Mpusi Media Relations Officer

1.5 ACKNOWLEDGMENT

The Committee appreciates the assistance provided the Offices of the Speaker and the Clerk of the National Assembly for the logistical and technical support accorded to it during the consideration of the Petition. Finally, I wish to express my appreciation to the Honorable Members of the Committee and all the stakeholders who made useful contributions towards the preparation and production of this report.

On behalf of the Committee, and pursuant to Standing Order, 227 it is my duty to table on the Floor of the House the Report of the Committee on the Petition.

2.0 INTRODUCTION

2.1 BACKGROUND

- 1. The Public Petition regarding water supply constraints caused by Kenya power tariffs dated 11th June, 2019 was presented in the National Assembly by Hon. Owen Yaa Baya, the Member of Parliament for Kilifi North Constituency and on behalf of the residents of Kilifi County. The Petition was subsequently committed to Departmental Committee on Energy for consideration pursuant to standing order 227(1).
- 2. The Petitioners stated that Article 43 of the constitution safeguards the provision of water as a constitutional right by establishing the right to clean and safe water in adequate quantities. Coast water services board mandated to fulfil this key constitutional function is facing challenges in the coast region such as exorbitant power bills levied by Kenya power. That, whereas the supply of water has remained constant, power bills have significantly increased in recent times.
- 3. Consequently, state bodies mandated to undertake these functions to supply and make water available are unable to afford economic provision of water services on account of these exorbitant tariffs coupled with other routine operational and maintenance expenses.
- 4. The petitioner averred that cost of electricity that Kenya power charges per cubic meter of water is Ksh 25 way above approved tariff of kshs 20. In addition, the petitioner also submitted that there are constant disconnections and disruptions of electricity since water providers such as Baricho Water Plant in Malindi, which supplies water to various towns in Kilifi and Mombasa counties, are unable to meet the high cost of electricity consumed by the providers, among other concerns.
- 5. That all efforts to have the matter discussed with relevant bodies and management have been futile and in that regard the Petitioner submitted and prayed that the National Assembly considers the matters raised in the Petition pursuant to the provisions of Standing orders 227 and make recommendations thereof.

2.2 LEGAL PROVISIONS TOUCHING ON THE PETITION

2.2.1 RIGHT TO PETITION PARLIAMENT

6. The right to Petition Parliament is provided for under Article 119 of the Constitution, which provides as follows:

"Every person has a right to Petition Parliament to consider any matter within its authority, including enacting, amending or repealing any legislation. Parliament shall make provision for the procedure for the exercise of this right."

7. The Petition therefore falls under the Committee's mandate under National Assembly Standing Order 227(1). In addition, standing orders 227(2) outlines the procedure for committal of a

- Petition to a Committee and transmission of its decision to the Petitioner. Further, the Petition to Parliament (Procedure) Act, 2012 provides for the procedure to be followed in the submission, processing and consideration of a Petition.
- 8. Articles 94 as read together with Article 95 of the Constitution further provides for the role and by extension the authority of Parliament in general and the National Assembly in particular. Generally, the Houses of Parliament exercise the legislative mandate of the people, deliberate on matters of national interest and oversight the exercise of power by other arms of government.
- 9. Public participation is now a guaranteed process in Kenya. The Constitution in various chapters and clauses require that public participation be undertaken at all levels of government before government officials and body make official decisions.
- 10. Public participation is having an open, accountable and structured process where citizens or people or a segment of a community can interact, exchange views and influence decision making. Actually, public participation is part of a democratic process.

3.0 SUBMISSIONS ON THE PETITION

3.1 PETITION BY HON. OWEN YAA BAYA, MP.

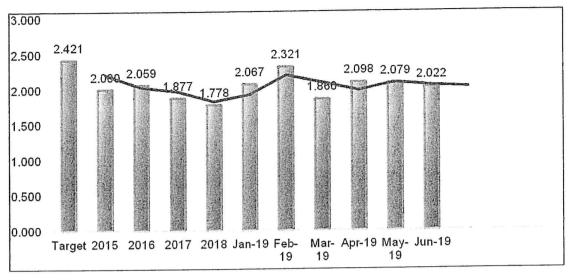
- 11. While appearing before the Committee on 18th June 2019, the Hon. Owen Yaa Baya, The Member of Parliament for Kilifi North Constituency and on behalf of the residents of Kilifi County, submitted THAT:
 - i. Article 43 of the Constitution safeguards the provision of water as a constitutional right by establishing the right to clean and safe water in adequate quantities;
 - ii. Article 21 places an obligation on the State and State organs to take legislative, policy and other necessary measures to progressively realize this right;
 - iii. The Coast Water Services Board which is mandated to fulfil this key constitutional undertaking in the Coast Region is being handicapped by very exorbitant power bills levied by Kenya Power;
 - iv. whereas water production in the Coast region has remained constant over the years, power bills have significantly increased particularly in recent times;
 - v. The cost of electricity that Kenya Power charges per cubic meter of water is Kshs. 25, whereas the approved tariff by the Coast Water Services Board for bulk water is Kshs. 20 for a similar volume of water leading to a negative difference of Kshs. 5 per cubic meter of water;
 - vi. both the Coast Water Service Board and various water service providers are unable to afford economic provision of water since they have to pay this exorbitant rate charged by Kenya Power as well as other routine operational and maintenance expenses;
 - vii. the negative difference in the rates per cubic meter of water charged by Kenya Power and the rates set by the Coast Water Services Board may eventually force Water Service Providers out of business, much to the detriment of ordinary citizens;
 - viii. there are constant disconnections and disruptions of power since water providers such as the Baricho Water Plant in Malindi, which supplies water to Kilifi and Mombasa Counties, are unable to meet the high cost of power;
 - ix. whilst other water plants in the count(r)y supply water using the mechanism of gravity, Baricho Water Plant uses electricity, and hence it is highly affected by the unsustainable power rates charged by Kenya Power;
 - x. constant disruptions of water supply due to electricity disconnections in hotels, schools, hospitals, businesses and government institutions has had a tremendous impact on tourism and businesses, while at the same time exposing residents to a myriad of disease outbreaks;
 - xi. the people of Kilifi face the perennial challenge of being denied their fundamental constitutional right as regards adequate provision of water on account of the stifling, uneconomical and unsustainable electricity charges levied by Kenya Power;
 - xii. efforts to resolve the matter with relevant authorities have been futile; and
 - xiii.the matter in respect of which this petition is made is not pending before any court of law or constitutional body.
- 12. The prayers as contained in the petition were as follows:

- i. Inquires into the outstanding water production power bills owed by Coast Water Services Board to Kenya Power;
- ii. Considers the cost of electricity per cubic meter of water so as to facilitate affordable provision of water supply in the counties;
- iii. Recommends the harmonization of power tariffs between the Kenya Power and the Water Resources Authority (WARA) to ensure affordable production and supply;
- iv. Recommends a review of the cost of water production and supply to guarantee affordable and uninterrupted supply of water; and
- v. Makes any other orders, directions or recommendations that it deems fit in the circumstances of the petition.

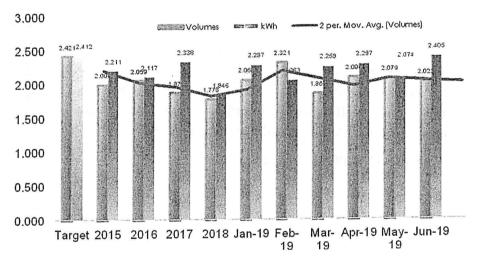
3.2 SUBMISSION BY BARICHO WATER WORKS/PLANT IN KILIFI COUNTY

- 13. Appearing before the Committee on 27th July 2019 and during its field visit to Baricho Water works, the agency made both oral and written submission on the issues raised in the Petition and the possible policy solutions. The written submission indicated that Coast Water Works Development Agency (CWWDA) is one of the 8 Water Works Development Agencies in Kenya. CWWDA's mandate is to develop and maintain sustainable water and sanitation infrastructure within our area of jurisdiction. In addition, the Agency operates the Bulk Water Systems serving four counties (Mombasa, Kilifi, Kwale and Taita Taveta)
- 14. The Bulk Systems are Baricho Water Works, Mzima Springs and Pipeline System, Marere Springs and Pipeline System, Tiwi Borehole System. Baricho Water Works is the biggest water scheme in the region and it is purely a pumping system. Mzima and Marere springs and pipeline systems are purely gravity systems but they are of low capacities.
- 15. CWWDA's Area of Coverage is 83,630 km² (Six Counties) which are the Counties of Mombasa, Kilifi, Kwale, Taita Taveta, Tana River and Lamu. The estimated Current population for the Region is 4.4 million. The current Water Demand for the region is 329,300 m³/day, while the current water production from all sources is 180,000m³/day.
- 16. The total population served with piped water is approximately 56% or 2.4 Million people while the rest rely on unsafe water.
- 17. Baricho Water Works This water supply system is the most important water source in the region and it serves the key towns of Mombasa, Kilifi, Malindi, Mtwapa, Watamu, Gongoni and its environs. The plant is designed to produce 90,000 cubic meters of water per day. This is purely a pumping system; therefore, it relies fully on power supply from Kenya Power. Due to intermittency of Power Supply, mainly resulting from disconnections and poor power quality, the daily production is averagely slightly below 70,000m³/per day

Production Trends (in millions of m3).

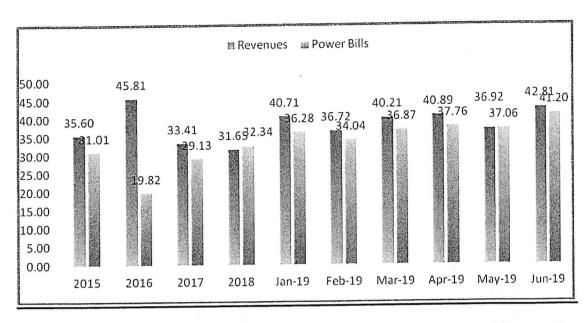


- 18. Disconnections are due to the fact that the cost of electricity is high compared to the bulk water tariff.
- 19. Figure below shows and compares the production in m3 meters and power consumption in kWh.



20. From the above, it clearly indicates that one requires over 1kWh to produce 1 m3 of water. This is primarily due to the two pumping levels (Low lift pumping and the High Lift Pumping).

The table below shows the revenue Generated Vs Power Bills (Millions of Ksh.) from KPLC



- 21. Averagely 87% of the revenue generated from the plant is used to settle power bills. 13% that remains is not sufficient to buy chemicals, pay staff salaries and carry out effective maintenance of the plant and the pipelines. As it is, the plant is not self-sustaining. It has to rely on other water supply systems to cater for the other Operational and maintenance expenses. Therefore adjusting the tariff upwards to cater for the running costs of the plant will hurt the common mwananchi.
- 22. It requested action that to issue special tariffs (non-commercial) to all water pumping stations in the country since water is not a commercial good. To give 12hrs peak and 12 hours off peak tariffs for all pumping stations in the county. To Zero rate the power tariffs since water tariff is zero rated. To provide a fixed power tariff. Water tariff is fixed and any changes leading to upward adjustment of power tariff either due to inflation adjustments, fuel adjustments, etc will have a negative impact on the sustainability of pumping stations.

3.3 SUBMISSION BY THE KENYA POWER (KPLC)

- 23. Appearing before the Committee on 27th July 2019, a representative from Kenya Power accompanied the committee to Baricho Water Works and made oral representations on the issues and the possible policy solutions. Based on the Petition, Kenya Power submitted that Coast water services board is a parastatal created under water Act 2002 to operate in the counties of Mombasa, Taita-Taveta, Lamu and Tana River for water provision. The account is situated at Baricho, the wide outcast of Malindi town metered under 33KV High Voltage.
- 24. The consumption and the maximum demand from May 2018 to July 2019 is as follows:

	Customer			Apparent
Billing Date	No.	Customer Name	TOTAL	Demand(kVA)
May-18	535598	Coast Water Services Board	1242129	3120
Jun-18	535598	Coast Water Services Board	1300791	3060
Jul-18	535598	Coast Water Services Board	1572144	3510
Aug-18	535598	Coast Water Services Board	1822707	3570
Sep-18	535598	Coast Water Services Board	1848834	3540

Oct-18	535598	Coast Water Services Board	1757808	3570
Nov-18	535598	Coast Water Services Board	2025567	3690
Dec-18	535598	Coast Water Services Board	1888710	3690
Jan-19	535598	Coast Water Services Board	2287755	4710
Mar-19	535598	Coast Water Services Board	2297046	4680
Apr-19	535598	Coast Water Services Board	2074920	4470
May-19	535598	Coast Water Services Board	2405652	4590
Jun-19	535598	Coast Water Services Board	2289600	4620
Jul-19	535598	Coast Water Services Board	2150055	4530

Source: Kenya Power

- 25. Kenya Power maintains a cordial relationship with Coast Water services though they have major bill payment challenges. The average billing per months is currently at Kshs. 38 Million. They are on tariff C3 (meaning the category of commercial industrial customer as per and in line with the regulator's submission). The bills are shared among the various water companies since the pump station at Baricho pumps water across the region.
- 26. For separation to be done, a formal application must be done so as to cost and be paid for, for KPLC to effect. The customer has a dedicated 33kv line with an alternate supply line. Thus, no power quality challenges.

3.4 SUBMISSION BY THE ENERGY AND PETROLEUM REGULATORY AUTHORITY (EPRA)

- 27. Appearing before the Committee on 27th July 2019, a representative from EPRA accompanied the Committee to Baricho Water Works and made representation on the issues and the possible policy solutions. In addition, EPRA also submitted written submissions pursuant to the undertakings made during the field visit that, on water supply constraints in Kilifi County caused by Kenya power tariffs the water supply companies in Kilifi County are connected at two (2) voltage levels i.e. at 415V and 33kV. Kenya Power data show that water metering for Coast Water Company is spread across five (5) customer categories. Coast Water Service Board has 25 accounts with Kenya Power.
- 28. In particular, the Baricho Water Plant in Malindi which is the source of this petition is connected at 33kV as a Commercial industrial customer (CI3). The cost of electricity charged by Kenya Power is in KShs/kWh and NOT in KShs/cubic metre
- 29. The table below shows the average unit cost over the last twelve (12) months for the different customer categories.

Average retail tariff for Coast Water Service Providers

Average retail tariff (KShs/kWh)	Aug-18	Sep- 18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr- 19	May-19	Jun-19	Jul-19
DC-L (0- 100kWh)	22.19	22.17	22.10	15.15	15.16	15.41	15.74	15.56	15.57	16.80	16.64	16.75
SC-1(100kWh)	21.95	21.93	21.86	15.15	15.16	15.41	15.74	15.56	15.57	16.80	16.64	16.75
SC-2(1000kWh)	21.95	21.93	21.86	21.93	21.94	22.18	22.52	22.34	22.35	23.57	23.42	23.52
CI-1	20.11	20.09	20.02	20.09	20.10	20.34	20.68	20.50	20.51	21.73	21.58	21.68

CI-3	16.76	16.75	16.67	16.74	16.75	17.00	17.33	17.15	17.16	18.39	18.23	18.34
	1	1			1							

- 30. The Coast Water Services Board and in particular the Baricho Water plant has benefited from the Time of Use tariff since its operationalization and has made total savings of KShs 13,807,007. Coast Water Services Board needs to find innovative ways of doing business to minimize on the water losses and invest in storage.
- 31. The Coast Water Company Board consumed total 45,293,089 kWh between August 2017 and June 2019. 21,840,441kWh were consumed during high rate while 23,452,648kWh were consumed during the low rate. The total bill with Time of Use was KShs. 764.7 Million but it would have been KShs. 778.5 Million in the absence of ToU.
- 32. A keen Analysis on the Cost Water Service Board Financial Reports for the years 2014/2015 and 2015/2016 reveal that one of the Projects i.e. Malindi Water and Sewerage company made an After Tax Loss of KSh (94,418,726) in the Financial Year 2015/2016. This was an increase compared to 2014/2015 FY of KSh (42,959,063). This might have subsequently affected the revenues for the bigger Coast Water Service Board, which declined from KSh 110, 277, 854 to Ksh13, 449, 027 during the same two years analysis.
- 33. Since there were no upward Tariff reviews that would negatively affect the incomes as a result of increase in expenses during the periods above, it can therefore be concluded that the decline in revenues was not necessary attributable to the change in Tariffs as indicated in the question raised in the National Assembly.
- 34. Even before the tariff review was done, the water company was still making losses in the case of the Baricho Water Plant.
- 35. Constraints on Sector revenue requirement did not necessitate a huge decline in tariffs and that the 5% given was sufficient for Commercial and Industrial Consumers where most water companies are metered.
- 36. During the Department Committee on Energy of the National Assembly meeting in Mombasa, the Members of Parliament visited the Baricho Water Pumping Station on the 27th July 2019. They were accompanied by the Ministry of Energy, Energy and Petroleum Regulatory Authority (EPRA) and Kenya Power and Lighting Company Limited.
- 37. The Energy Committee was appraised on the water situation in the Coast Region and discussed on what can be done so that water is availed at an affordable tariff. The Ministry of Energy, EPRA and Kenya Power was requested to continue engaging the water service providers and come with a tariff that will help mitigate the water supply situation at the Coast Region and indeed the other counties in the Republic of Kenya.

Earlier Medium Irrigation Customers (BO) - Water Pumping Tariff

38. In the year 2000, the Electricity Regulatory Board (ERB) had approved a tariff for Medium Irrigation Customers (BO). This tariff was specifically for irrigation purposes. The tariff was not successful as it was being implemented during a time when there was a big drought and

there was load shedding due to lack of supply of electricity. The tariff was for Medium Irrigation Customers consuming 7,001-100,000 kWh per month. There was also an interruptible supply (D) for water heating and irrigation, which was to be charged on the basis of Time of Use.

- 39. The Time of Use program did not work well as industries shifted their load from the day to the night (off peak period). As a result, the tariff was discontinued.
- 40. EPRA and Kenya Power already engaging the Waster Service Providers Association (WASPA). There is a meeting on the 1st of October 2019 to explore the possibility of introducing a tariff for water pumping for public water utilities that supply water to wananchi.

3.5 SUBMISSION BY THE MINISTRY OF ENERGY

The Ministry of Energy in their submissions (annexed) presented similar information to what had been presented by the Energy and Petroleum Regulatory Authority. It is also contains the same policy measures as proposed by the energy sector regulator (EPRA).

4.0 COMMITTEE OBSERVATIONS

growth.

Arising from the submissions by the various witnesses and the Committee visit, the Committee observed the following:

- 1. The Baricho Water Works which supplies water to towns in both Kilifi and Mombasa Counties uses electricity to pump water to serve residents of the two Counties.
- 2. That average retail tariff for Coast Water Service Providers ranged between Ksh 20.34 to 21.68 per kWh between the months of January and July 2019. This is in contrast with rate of Kshs. 25 alleged by the petitioner. However the committee noted that the applicable tariffs for the current tariff control period are still high and above the policy targets, which still remains a major source of concern especially as regards its impact on critical sub sectors such as water and sanitation and overall economic
- 3. Water electricity tariff for water agencies, in this case under the Commercial industrial (CI3) customer category, also includes taxes and levies such as VAT, rural electrification charges, fuel and forex adjustment charges, and regulatory charges, among others. This means that part of the factors contributing to the high cost of power bills are taxes and levies, even for entities that provide critical social and pro-poor services such as water and sanitation services.
- 4. That one of the reasons for electricity disconnections is high cost of electricity bills. The water agency defrays 87% of its revenues to cater for electricity while the remaining component of the revenue that is 13% is used for other O&M activities such as payment of salaries and maintenance of the pipeline, among others.
- 5. The Baricho water works uses electricity to pump water unlike other water works agencies in the County that use and employ gravity system and other related mechanisms for water supply and distribution. The cost associated is also dependent on the adequacy of storage facilities by water agencies as well as the level of water losses through the pipeline systems and how those losses are managed or accounted for by the affected entity.
- 6. That electricity bills are not metered separately among the water companies. Currently Baricho water works pumps water across the region.

5.0 COMMITTEE RECOMMENDATIONS

Arising from the observation and key findings, the Committee recommends-

- 1. That the Energy Petroleum and Regulatory Authority (EPRA), as the main convenor, to undertake and engage in a consultative forum with water works development agencies, water companies and various water service boards to come up with non-commercial water pumping and supply tariff(s) for public water utilities including Baricho Water Works and report to the Committee within 90 days.
- 2. That Baricho Water Works Agency and Kenya Power in the coast region, to ensure there is cordial working arrangements before resorting to disconnection or interrupting supply of electricity. That the same arrangement be subjected to regulatory concurrence that involves the Energy and Petroleum Regulatory Authority (EPRA) and Water Resources Authority to ensure each party meets its obligations as per the working arrangement.
- 3. That Water Resources Authority and EPRA to audit all Water Service Boards and water agencies/companies responsible for supply of water to determine the level of water losses and categorize the type of losses before qualifying for a special non-commercial tariff. This is to ensure that only acceptable water losses in the systems are considered in the design of the tariff.
- 4. That within three months upon adoption of the Petition, each County to apply for separate accounts from Kenya Power and are metered separately. This is to ensure ownership of bills by each entity responsible for supply and distribution of water.
- 5. That the counties of Kilifi and Mombasa to ensure the necessary water infrastructure are put in place to allow for efficient delivery of water services to the residents of the major towns within their respective counties.
- 6. That Kenya power maintains a working and cordial engagement with the water works agencies and establishes a framework that involves respective regulators in the water and energy sector. That water agencies to ensure prioritization of arrears within an agreed framework that takes into account financial needs of Kenya power while balancing the interest of water users.
- 7. That the Ministry of energy in conjunction with the State Department for water and sanitation to initiate an intervention of mapping all public water utilities and facilities so as to be connected with relevant and affordable source of electricity ranging from grid power and innovate solar regimes for off-grid areas while minimizing the use and/or impact of diesel use in parts of the country. That the policy intervention be factored in the 2020/21 policy statement to allow affordable use of clean and safe water.
- 8. That, the counties of Kilifi and Mombasa to ensure and prioritize necessary and critical water infrastructure are put in place to allow for effective, orderly and efficient delivery of water services to the residents in respective counties.

9. That, to ensure sustainable and affordable use of water across the country, the State Department of Energy in consultation with the Ministry of Water and Sanitation to initiate an intervention of mapping all public water utilities and pumping facilities so as to be connected with affordable source of electricity ranging from grid power and innovative alternative energy sources such as solar regimes for off-grid areas. That, the policy intervention therein and strategies be considered in the 2020/21 Medium Term Policy Statement to allow affordable use of clean and safe water in the Country.

Sign. Date 9-1)

THE HON. DAVID GIKARIA, MP

CHAIRPERSON, DEPARTMENTAL COMMITTEE ON ENERGY



ADOPTION LIST



REGARDING WATER SUPPLY CONSTRAINTS CAUSED BY KENYA POWER TARIFFS IN KILIFI COUNTY AND AFFIRM OUR APPROVAL AND CONFIRM ITS ACCURACY, VALIDITY AND AUTHENTICITY TODAY .. 2019: The Hon. David Gikaria, MP. Chairperson..... 1. - Vice Chairperson The Hon. (Dr) Robert Pukose, MP 2. 3. Hon. Cecily Mbarire, MP..... Hon. Ekwoma Lomenen James, MP..... 4. 5. Hon. Joseph Waithigo Manje, MP..... Hon. Lemanken Aramat, MP.... 6. Hon. Oscar Sudi Kipchumba, M..... 7. Hon. (Eng.) Vincent Musyoka Musau, MP..... 8. Hon. Amina Gedow Hassan, MP..... 9. Hon. Abdikahim Osman Mohamed, MP..... 10. Hon. Clement Muturi Kigano, MP..... 11. 12. Hon. Elisha Odhiambo, MP Hon. Elsie Muhanda, MP..... 13. Hon. Gitau Faith Wairimu, MP..... 14. Hon. Julius Musili Mawathe, MP.... 15. Hon. Ken Chonga, MP..... 16. Hon. Mohamed Ali Lokiro, MP.... 17. Hon. Tindi Nicholas Mwale, MP..... 18. thill the 19. Hon. Walter Owino, MP...

WE, THE MEMBERS OF THE DEPARTMENTAL COMMITTEE ON ENERGY, HAVE PURSUANT TO STANDING ORDER 227, ADOPTED THIS REPORT

MINUTES

MINUTES OF THE 170^{TH} SITTING OF THE DEPARTMENTAL COMMITTE ON ENERGY HELD IN CONFERENCE ROOM, B2, ENGLISH POINT, MARINA, MOMBASA COUNTY ON SATURDAY 5^{TH} OCTOBER, 2019 AT 10.00 AM

Chairperson

PRESENT

- 1. The Hon. (Dr.) Robert Pukose, M.P. Vice Chairperson
- 2. The Hon. Amina Gedow Hassan, M.P.
- 3. The Hon. Lemanken Aramat, M.P.
- 4. The Hon. Tindi Nicholas Mwale, MP
- 5. The Hon. Walter Owino, MP
- 6. The Hon. Joseph Wathigo Manje, M.P.
- 7. The Hon. Gitau Faith Wairimu, M.P.
- 8. The Hon. Julius Musili Mawathe, MP
- 9. The Hon. Elisha Odhiambo, MP

APOLOGIES

1. The Hon. David Gikaria, M.P

- 2. The Hon. Cecily Mbarire, M.P.
- 3. The Hon. Abdikhaim Osman Mohamed, M.P.
- 4. The Hon. Clement Muturi Kigano, M.P.
- 5. The Hon. Ekomwa Lomenen James, M.P.
- 6. The Hon. Mohammed Ali Lokiro, MP
- 7. The Hon. Richard Chonga, MP
- 8. The Hon. Elsie Muhanda, MP
- 9. The Hon. Oscar Sudi, Kipchumba, M.P.
- 10. The Hon. Eng. Vincent Musyoka Musau, M.P.

IN ATTENDANCE

COMMITTEE SECRETARIAT

1. Ms. Rose M. Wanjohi - Clerk Assistant I

2. Mr. Abdirahman Gorod - Fiscal Analyst

3. Mr. David Ngeno - Research Officer

4. Ms. Christine Maeri - Audio Officer

5. Ms. Sheila Chebotibin - Serjeant-At-Arms

AGENDA

- 1. Prayers
- 2. Preliminaries/Introductions/Communication from the Chair
- 3. Confirmation of Minutes
- 4. Matters Arising
- 5. Report writing retreat for consideration of draft reports
- 6. Adjournment/ Date of the next meeting

MIN. NO. NA/ENERGY/2019/ 330: PRELIMINARIES AND ADOPTION OF AGENDA

The Chairperson called the meeting to order at ten minutes past ten o'clock and the prayers were said. Self- introductions were made by those present

MIN. NO. NA/ENERGY/2019/331: CONFIRMATION OF MINUTES

The Agenda item was deferred

MIN. NO. NA/ENERGY/2019/332: CONSIDERATION AND ADOPTION OF DRAFT REPORT ON THE PETITION REGARDING WATER SUPPLY CONSTRAINTS CAUSED BY KENYA POWER TARIFFS IN KILIFI COUNTY

The Committee heard that the Public Petition regarding water supply constraints caused by Kenya power tariffs dated 11h June, 2019 was presented in the National Assembly and subsequently committed to Departmental Committee on Energy for consideration pursuant to standing order 227(1).

The Petitioners stated that Article 43 of the constitution safeguards the provision of water as a constitutional right by establishing the right to clean and safe water in adequate quantities. Coast water services board mandated to fulfil this key constitutional function is facing challenges in the coast region such as exorbitant power bills levied by Kenya power. That, whereas the supply of water has remained constant, power bills have significantly increased in recent times. Consequently, state bodies mandated to undertake these functions to supply and make water available are unable to afford economic provision of water services on account of these exorbitant tariffs coupled with other routine operational and maintenance expenses. The petitioner averred that cost of electricity that Kenya power charges per cubic meter of water is Kshs 25 way above approved tariff of Kshs 20. In addition, the petitioner also submitted that there constant disconnections and disruptions of power since water providers such as Baricho Water Plant in Malindi, which supplies water to Kilifi and Mombasa counties, are unable to meet the high cost of electricity consumed by the providers, among other concerns.

The Petitioners prayed that the National Assembly through the Departmental Committee on Energy inquiries into the outstanding water production power bills owed by Coast Water Services Board to Kenya Power; considers the cost of electricity per cubic meter of water so as to facilitate affordable provision of water supply in the counties; recommends the harmonization of power tariffs between the Kenya Power and the Water Resources Authority (WARMA) to ensure affordable production and supply and recommends a review of the cost of water production and supply to guarantee affordable and uninterrupted supply of water.

Committee Observations

The Committee observed that:

1. The Baricho Water Works which supplies water to towns in both Kilifi and Mombasa Counties uses electricity to pump water to serve residents of the two Counties.

- That average retail tariff for Coast Water Service Providers ranged between Kshs 2034 to 21.68 per kWh between the months of January and July 2019. This is in contrast with rate of Kshs. 25 alleged by the petitioner.
 - However the committee noted that the applicable tariffs for the current tariff control period are still high and above the policy targets, which still remains a major source of concern especially as regards its impact on critical sub sectors such as water and sanitation and overall economic growth.
- 3. Water electricity tariff for water agencies, in this case under the Commercial industrial (CI3) customer category, also includes taxes and levies such as VAT, rural electrification charges, fuel and forex adjustment charges, and regulatory charges, among others. This means that part of the factors contributing to the high cost of power bills are taxes and levies, even for entities that provide critical social and pro-poor services such as water and sanitation services.
- 4. That one of the reasons for electricity disconnections is high cost of electricity bills. The water agency defrays 87% of its revenues to cater for electricity while the remaining component of the revenue that is 13% is used for other O&M activities such as payment of salaries and maintenance of the pipeline, among others.
- 5. The Baricho water works uses electricity to pump water unlike other water works agencies in the County that use and employ gravity system and other related mechanisms for water supply and distribution. The cost associated is also dependent on the adequacy of storage facilities by water agencies as well as the level of water losses through the pipeline systems and how those losses are managed or accounted for by the affected entity.
- 6. That electricity bills are not metered separately among the water companies. Currently Baricho water works pumps water across the region.

Committee Recommendations

The Committee recommends-

- That the Energy Petroleum and Regulatory Authority (EPRA), as the main convener, to undertake and engage in a consultative forum with water works development agencies, water companies and various water service boards to come up with non-commercial water pumping and supply tariff(s) for public water utilities including Baricho Water Works and report to the Committee within 90 days.
- 2. That Baricho Water Works Agency and Kenya Power in the coast region, to ensurethere is cordial working arrangements before resorting to disconnection or interrupting supply of electricity. That the same arrangement be subjected to regulatory concurrence that involves the Energy and Petroleum Regulatory Authority (EPRA) and Water Resources Authority to ensure each party meets its obligations as per the working arrangement.
- 3. That Water Resources Authority and EPRA to audit all Water Service Boards and water agencies/companies responsible for supply of water to determine the level of water losses and categorize the type of losses before qualifying for a special non-commercial tariff. This is to ensure that only acceptable water losses in the systems are considered in the design of the tariff.

- 4. That within three months upon adoption of the petition, each County to apply for separate accounts from Kenya Power and are metered separately. This is to ensure ownership of bills by each entity responsible for supply and distribution of water.
- 5. That the counties of Kilifi and Mombasa to ensure the necessary water infrastructure are put in place to allow for efficient delivery of water services to the residents of the major towns within their respective counties.
- 6. That Kenya power maintains a working and cordial engagement with the water works agencies and establishes a framework that involves respective regulators in the water and energy sector. That water agencies to ensure prioritization of arrears within an agreed framework that takes into account financial needs of Kenya power while balancing the interest of water users.
- 7. That the ministry of energy in conjunction with the state department for water and sanitation to initiate an intervention of mapping all public water utilities and facilities so as to be connected with relevant and affordable source of electricity ranging from grid power and innovate solar regimes for off-grid areas while minimizing the use and/or impact of diesel use in parts of the country. That the policy intervention be factored in the 2020/21 policy statement to allow affordable use of clean and safe water.

The draft Report on petition regarding compensation of the Naivasha-Maraigushu land owners by the Kenya Electricity Transmission Company (KETRACO) was unanimously adopted as proposed by Hon. Walter Owino, MP and seconded by Hon. Nicholas Mwale, MP.

MIN. NO. NA/ENERGY/2019/333: ADJOURNMENT/ DATE OF NEXT MEETING

There being no other business	s, the neeting was adjourned at half past eleven o'clock. The next
meeting will held on notice.	
,	
SIGNED	
	(CHAIR ERSON)
D A CVE	17-10-19

MINUTES OF THE 134^{TH} SITTING OF THE DEPARTMENTAL COMMITTEE ON ENERGY HELD IN THE BOARD ROOM OF 8^{TH} FLOOR UKULIMA BUILDING ON TUESDAY 18^{TH} JUNE, 2019 AT 10.00AM

MEMBERS PRESENT

- 1. The Hon. (Dr.) Robert Pukose, M.P. Vice Chairperson
- 2. The Hon. Gitau Faith Wairimu, M.P.
- 3. The Hon. Ekomwa Lomenen James, M.P.
- 4. The Hon. Joseph Wathigo Manje, M.P.
- 5. The Hon. Walter Owino, MP
- 6. The Hon. Ken Chonga, MP
- 7. The Hon. Vincent Musyoka Musau, M.P.
- 8. The Hon. Clement Muturi Kigano, M.P.
- 9. The Hon. Julius Musili Mawathe, MP
- 10. The Hon. Elsie Muhanda, MP
- 11. The Hon. Mohammed Ali Lokiro, MP
- 12. The Hon. Abdikhaim Osman Mohamed, M.P
- 13. The Hon. Elisha Odhiambo, MP

ABSENT WITH APOLOGY

- 1. The Hon. David Gikaria, M.P. Chairperson
- 2. The Hon. Cecily Mbarire, M.P.
- 3. The Hon. Amina Gedow Hassan, M.P.
- 4. The Hon. Lemanken Aramat, M.P.
- 5. The Hon. Tindi Nicholas Mwale, MP
- 6. The Hon. Oscar Sudi, Kipchumba, M.P.

IN ATTENDANCE:

NATIONAL ASSEMBLY

1.	Mr. Benjamin Magut	-	First Clerk Assistant
2.	Mr. Douglas Katho	-	Clerk Assistant III
3.	Mr. David Ngeno		Research Officer
4.	Ms. Sheila Chebotibin		Serjeant –At-Arms
	E -		

5. Mr. Rose Ometere - Audio Officer

MIN. NO. NA/ENERGY/2019/195: PRELIMINARIES AND INTRODUCTIONS

The sitting's proceedings commenced with a word of prayer and thereafter the meeting's agenda was adopted by Members present.

MIN. NO. NA/ENERGY/2019/196:

MEETING WITH THE MANAGING DIRECTOR FOR NATIONAL OIL CORPORATION OF KENYA REGARDINNG ACTIVITIES RELATED TO OIL EXPLORATION PROJECTS IN BLOCK 14T

This agenda item was deferred since the witnesses had requested for more time to prepare the responses on the issues raised.

MIN. NO. NA/ENERGY/2019/197:

PETITION BY HON. OWEN BAYA, MP FOR

KILIFI NORTH REGARDING WATER SUPPLY CONTRAINTS CAUSED BY KEMYA POWER TARRIFS IN KILIFI COUNTY.

The Member of Parliament for Kilifi North appeared before the committee and made a formal submission on the Public Petition regarding water supply constraints caused by Kenya Power tariffs in Kilifi County as follows:-

- i. That the Coast Water Services Board which is mandated to fulfil the key constitutional undertaking in the Coast Region of provision of water; is handicapped by very exorbitant power bills levied by Kenya Power.
- ii. That, whereas water production in the coast region has remained constant over the years, power bills have significantly increased particularly in recent times:
- iii. That the cost of electricity that Kenya Power charges per cubic meter of water is Kshs. 25, whereas the approved tariff by the Coast Water Services Board for bulk water is Kshs. 20 for a similar volume of water leading to a negative difference of Kshs. 5per cubic meter of water.
- iv. That both the Coast Water Services Board and various water Services providers are unable to afford economic provision of water since they have to pay this exorbitant rate charges by Kenya Power as well as other routine operational and maintenance expenses;
- v. That the negative difference in the rates per cubic meter of water charges by Kenya Power and the rates set by the Coast Water Services Board may eventually force water service providers out of business much to the detriment of ordinary citizens.
- vi. That there are constant disconnections and disruptions of power since water providers such as the Baricho Water Plant in Malindi, which supplies water to KIlifi and Mombasa Counties, are unable to meet the high cost of power;
- vii. That, whilst other water plants in the country supply water using the mechanism of gravity, Baricho Water Plant uses electricity, and hence it is highly affected by the unsustainable power rates charged by Kenya Power.;
- viii. That constant disruption of water supply due to electricity disconnections in hotels, schools, hospitals, homes, businesses, government institutions has had a tremendous impact on tourism and businesses, while at the same time exposing residents to a myriad of disease outbreaks;
- ix. That the people of Kilifi face the perennial challenge of being denied their fundamental constitutional right as regards adequate provision of water on account of the stifling, uneconomical and unsustainable electricity charges levied by Kenya Power.

Further the Hon. Member for Kilifi North wanted the committee to inquire into the following-

- i. The outstanding water production power bills owed by the coast water services to Kenya Power;
- ii. considers the cost of electricity per cubic meter of water so as to facilitate affordable provision of water supply in the counties
- iii. Recommends the harmonization of Power tariffs between the Kenya Power and the Water Resources Authority to ensure affordable production and supply.
- iv. Recommends a review of the cost of water production and supply to guarantee affordable and uninterrupted supply of water.

MIN. NO. NA/ENERGY/2019/198:	ADJOURNMENT
There being no Other Business, the C 12Noon.	hairperson adjourned the meeting at 10mins past
SIGNED.	
(CHAIRPE	RSQN)
DATE	17:70-17

.

2

ANNEXURES



REPUBLIC OF KENYA

TWELFTH PARLIAMENT – (THIRD SESSION) U 6

PUBLIC PETITION (No. 038 of 2019)

REGARDING WATER SUPPLY CONSTRAINTS CAUSED BY KENYA POWER TARIFFS IN KILIFI COUNTY

I, the UNDERSIGNED, on behalf of the residents of Kilifi County;

DRAW the attention of the House to the following: -

- 1. THAT, Article 43 of the Constitution safeguards the provision of water as a constitutional right by establishing the right to clean and safe water in adequate quantities;
- 2. THAT, Article 21 places an obligation on the State and state organs to take legislative, policy and other necessary measures to progressively realize this right;
- 3. **THAT**, the Coast Water Services Board which is mandated to fulfill this key constitutional undertaking in the Coast Region is being handicapped by very exorbitant power bills levied by Kenya Power;
- 4. THAT, whereas water production in the Coast region has remained constant over the years, power bills have significantly increased particularly in recent times;
- 5. **THAT**, the cost of electricity that Kenya Power charges per cubic meter of water is Kshs. 25, whereas the approved tariff by the Coast Water Services Board for bulk water is Kshs. 20 for a similar volume of water leading to a negative difference of Kshs. 5 per cubic meter of water;
- 6. THAT, both the Coast Water Services Board and various Water Services providers are unable to afford economic provision of water since they have to pay this exorbitant rate charged by Kenya Power as well as other routine operational and maintenance expenses;
- 7. THAT, the negative difference in the rates per cubic meter of water charged by Kenya Power and the rates set by the Coast Water Services Board may

eventually force Water Service-Providers out of business, much to the detriment of ordinary citizens;

PUBLIC PETITION

REGARDING WATER SUPPLY CONSTRAINTS CAUSED BY KENYA POWER TARIFFS IN KILIFI COUNTY

- 8. **THAT**, there are constant disconnections and disruptions of power since water providers such as the Baricho Water Plant in Malindi, which supplies water to Kilifi and Mombasa Counties, are unable to meet the high cost of power;
- 9. **THAT**, whilst other water plants in the country supply water using the mechanism of gravity, Baricho Water Plant uses electricity, and hence it is highly affected by the unsustainable power rates charged by Kenya Power;
- 10. **THAT**, constant disruptions of water supply due to electricity disconnection in hotels, schools, hospitals, homes, businesses and government institutions has had a tremendous impact on tourism and businesses, while at the same time exposing residents to a myriad of disease outbreaks;
- 11. THAT, the people of Kilifi face the perennial challenge of being denied their fundamental constitutional right as regards adequate provision of water on account of the stifling, uneconomical and unsustainable electricity charges levied by Kenya Power;
- 12. THAT, efforts to resolve the matter with relevant authorities have been futile; and
- 13. **THAT**, the matter in respect of which this Petition is made is not pending before any court of law or constitutional body.

THEREFORE, your humble petitioners pray that the National Assembly through the Departmental Committee on Energy -:

- (i) inquires into the outstanding water production power bills owed by Coast Water Services Board to Kenya Power;
- (ii) considers the cost of electricity per cubic meter of water so as to facilitate affordable provision of water supply in the counties;
- (iii) recommends the harmonization of power tariffs between the Kenya Power and the Water Resources Authority (WARA) to ensure affordable production and supply;
- (iv) recommends a review of the cost of water production and supply to guarantee affordable and uninterrupted supply of water; and

(v) makes any other orders, directions or recommendations that it deems fit in the circumstances of the Petition.

And your **PETITIONERS** will ever pray.

PRESENTED BY
Many
HON. OWEN YAA BAYA, MP
MEMBER FOR KILIFI NORTH CONSTITUENCY
Date $11/6/2019$

PUBLIC PETITION REGARDING WATER SUPPLY CONSTRAINTS CAUSED BY KENYA POWER TARIFFS IN KILIFF COUNTY

We, the undersigned, hereby append our signatures in support of this Petition:

re, are ancering		Mobile	Signature
Name	ID No.	nedons medons	Cagarana .
		Til falidia olok	
		. 7	1
CHILARIO MRIMA	22114553	0712990377	Samo V
EMMANUEL ICARAVINA	13417932	0725621822	Historica VI
CAVACTURE HARUSI	20605663	0727 5002 95	Gtin.
Farma Muidadi	26007857	072005272	
	22515184	0723229787	1 Comme
MUPCH Kiplotelt Complen	4 1293333	0722117291	Mww6.
Fastó Kreva.	24624376	0723004235	Myria
Diccon' 75ala	22778206	0720874678	JAL VA
John R. Claiphat	8390513	07145568	H Mings
LEATT MUPE	27722636	072682042	0
STEPHEN LALOLO	28822285	071568939	
BONIFACE MWASOMBA	21925-1	072414167	n Alexander
ZABRON KAINCH	2\$137966	072334024	1 Hi
ABDALLA OMAL	26140466	07989032	27 2
CHAI BAYA	2209213C	07372893	1111
PHILIP KATUHGO	29014513	071745766	9 (11/1490)
Lucy Mure	29420023	070587830	1 6.



REPUBLIC OF KENYA MINISTRY OF ENERGY

09/07/2019

RESPONSE TO PARLIAMENTARY QUESTION ON WATER SUPPLY CONSTRAINTS IN KILIFI COUNTY CAUSED BY KENYA POWER TRAIFFS

Introduction

- The Departmental Committee of the National Assembly on Energy requested the Energy and Petroleum Regulatory Authority (the Authority) to provide a response to a question raised in National Assembly on;
 - a) The water supply constraints in Kilifi County caused by Kenya Power Tariffs
- 2. The Authority is established under the Energy Act No. 1 of 2019 (the Act) as the single energy sector regulator responsible for technical and economic regulation of upstream, midstream & downstream petroleum, electricity and renewable energy sub-sectors.
- 3. Section 11 (c) of the Energy Act 2019 (The Act) empowers the Authority to set, review and adjust electric power tariffs and tariff structures, and investigate tariff charges, whether or not a specific application has been made for tariff adjustment.

The Development of a Harmonized Electricity Tariff

- 4. Kenya Power & Lighting Company (KPLC) submitted an amended application for tariff review in January 2018 that aimed to address four issues: Enhanced customer connectivity; Loss reduction; Infrastructure development and Network maintenance.
- 5. The Authority reviewed the application and and in compliance with article 2 (10) of the constitution of Kenya, the Authority undertook stakeholder engagement in public hearings in addition to various memoranda, written submissions and oral representations that were received by the Authority. Table 1 below indicates the counties where the stakeholder engagement took place.

Table 1: Counties Classification

Block	Number of Counties		Date of Stakeholder Consultation
Frontier Counties Development Council (FCDC)	6	Garissa, Wajir, Mandera, IsioloMarsabit and Tana River Convening point (Garissa)	2 nd July 2018
North Rift Economic Block (NOREB)	8	Uasin Gishu, Trans Nzoia, Nandi, Elgeyo-Marakwet, West Pokot, Baringo, Turkana, Samburu Convening point Eldoret (UasinGishu)	5 th July 2018
Lake Region Economic Block (LREB)	12	Bungoma, Busia, Homa Bay, Kakamega, Kisii, Kisumu, Migori, Nyamira, Siaya, Vihiga, Bomet and Kericho Convening point (Kisumu)	6 th July 2018
Jumuiya ya Kauntiza Pwani	6	Lamu, Kilifi, Kwale, Mombasa, Tana River and TaitaTaveta Convening point (Mombasa)	9 th July 2018
Mt. Kenya & Aberdare's Economic Block	10	Tharaka-Nithi, Meru, Nyeri, Laikipia, Murang'a, Kiambu, Nakuru, Nyandarua, Embu and Kirinyaga Convening point Naivasha (Nakuru county)	11 th July 2018
Non Regional Economic Bloc Counties & South Eastern Kenya Economic Block (SEKEB)	6	Nairobi, Narok, Kajiado, Makueni, Kitui and Machakos Convening point (Nairobi)	12 th July 2018

- 6. The Authority also received written memoranda from some of the sector utilities being the Kenya Electricity Generating Company (KenGen), Kenya Electricity Transmission Company (KETRACO) and all these comments as well as the ones captured from the public forums were taken into consideration by the Authority in making the final determination.
- 7. It is important to note that water service companies through the Water Services Regulatory Board (WASREB) and Water Service Providers

Association (WASPA) and County Governments also submitted memorandums and they were part of the stakeholders engaged during the tariff review process.

- 8. Areas that were harmonized in the new tariff structure include the following;
 - a) Developed a new life line category of consumers with consumption up to 10 units accounting for about 3.4 Million customers;
 - b) Removed the monthly fixed charges for all consumer categories and harmonized them in the energy charge;
 - c) The Forex and Inflation Adjustments have been embedded in the base energy charge rates using the March 2017 exchange rates effectively reducing them considerably.

New Electricity Tariffs

- 9. The Authority announced new applicable tariffs for Tariff Control Period (TCP) -2018/19 effective 1st July 2018 for post-paid customers and 1st August 2018 for pre-paid customers. The retail tariffs announced took into consideration the Economic and Financial Policy aspects of the electric power utilities.
- 10. Based on the revenue requirements, energy purchase costs, system expansion requirements, social equity objectives and the voice of consumers, the Energy & Petroleum Regulatory Authority approved the retail electricity tariffs for the next TCP.
- 11. While a large section of the Domestic Lifeline Customers, Small Commercial and the Large Manufacturers enjoyed a reduction in their electricity bills, some ordinary Domestic customers' bills increased.

Water Supply Constraints in Kilifi County Caused By Kenya Power Tariffs

- 17. The water supply companies in Kilifi County are connected at two (2) voltage levels i.e. at 33kV and 415V as shown in the attached **Annex I** from data obtained from KPLC and are spread across five (5) customer categories. Coast Water Service Board has 25 accounts with Kenya Power.
- 18. In particular, the Baricho Water Plant in Malindi which is the source of this petition is connected at 33kV as a Commercial industrial (CI3) customer.
- 19. The cost of electricity charged by Kenya power is in KShs/kWh and NOT in KShs/cubic metre
- 20. The table below shows the average unit cost over the last twelve (12) months for the different customer categories.

Table 3: Average retail tariff for Coast Water Service Providers

Average retail tariff (KShs/kWh)	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
DC-L (0-100kWh)	22.19	22.17	22.10	15.15	15.16	15.41	15.74	15.56	15.57	16.80	16.64	16.75
SC-1(100kWh)	21.95	21.93	21.86	15.15	15.16	15.41	15.74	15.56	15.57	16.80	16.64	16.75
SC-2 (1000kWh)	21.95	21.93	21.86	21.93	21.94	22.18	22.52	22.34	22.35	23.57	23.42	23.52
CI-1	20.11	20.09	20.02	20.09	20.10	20.34	20.68	20.50	20.51	21.73	21.58	21.68
CI-3	16.76	16.75	16.67	16.74	16.75	17.00	17.33	17.15	17.16	18.39	18.23	18.34

- 21. The Coast Water Services Board and in particular the Baricho Water plant has benefited from the Time of Use tariff since its operationalisation and has made total savings of KShs 13,807,007. Coast Water Services Board needs to find innovative ways of doing business to minimize on the water losses and invest in storage.
- 22. The Coast Water Company Board has consumed in total 45,293,089 kWh between August 2017 and June 2019. 21,840,441kWh were consumed during high rate while 23,452,648kWh were consumed during the low rate.

- 12. The Authority received numerous complaints and concerns from members of the public, the National Assembly and the Senate with regards to the high electricity costs and the need to spur economic growth by the Small and Medium Enterprises.
- **13.**To this effect, the Authority considered the views from the above-mentioned groups and on the 31st October 2018 made further amendments to the Domestic and Small Commercial consumers.
- 14. A further reduction was done for domestic customers, Small Commercials, and SMEs consuming up to 100 Units. Their tariff was revised to KShs. 10/kWh. This revision benefited about 5.9 Million Customers.
- 15. The commercial and industrial tariffs was in overall reduced by between 4% and 5%. Table 2 below provides a summary of impact of the tariff review for commercial and Industrial customers.

Table 2: Summary of Impact for Commercial Industrial Customers

Customer Category	Metering	No. of Customers	Current Tariffs (July 2018)Bill KShs/kWh	Approved Tariffs (August 2018) Bill KShs/kWh	Change in Tariff KShs/kWh	Change in Tariff %
Commercial Industrial 1	415V	3,096	21.74	20.71	(1.02)	-4.70%
Commercial Industrial 2	11kV	381	18.77	17.92	(0.85)	-4.55%
Commercial Industrial 3	33kV	53	17.60	16.88	(0.72)	-4.11%
Commercial Industrial 4	66kV	38	17.08	16.37	(0.71)	-4.18%
Commercial Industrial 5	132kV	32	16.66	15.93	(0.73)	-4.38%

16. The overall unit cost of power reduced from KShs 23.49/KWh in 2017/18 to KShs 20.18/kWh 2018/19 representing an overall reduction of costs by 14.1% over the TCP.

The total bill with Time of Use was KShs. 764.7 Million but it would have

been KShs. 778.5 Million in the absence of ToU.

23. A keen Analysis on the Cost Water Service Bard Financial Reports for the

years 2014/2015 and 2015/2016 reveal that one of the Projects i.e. Malindi

Water and Sewerage company made an After Tax Loss of KSh (94,418,726)

in the Financial Year 2015/2016. This was an increase compared to

2014/2015 FY of KSh (42,959,063). This might have subsequently affected

the revenues for the bigger Coast Water Service Board, which declined

from KSh 110, 277, 854 to Ksh13, 449, 027 during the same two years

analysis.

24. Since there were no upward Tariff reviews that would negatively affect the

incomes as a result of increase in expenses during the periods above, it can

therefore be concluded that the decline in revenues is not necessary

attributable to the change in Tariffs as indicated in the question raised in

the National Assembly.

25. Even before the tariff review was done, the water company was still

making losses in the case of the Baricho Water Plant.

26. Constraints on Sector revenue requirement did not necessitate a huge

decline in tariffs and that the 5% given was sufficient for Commercial and

Industrial Consumers where most water companies are metered.

7.8

DR. ENG. JOSEPH K. NJOROGE, CBS

PRINCIPAL SECRETARY





COAST WATER WORKS DEVELOPMENT AGENCY

BARICHO WATER WORKS BRIEF



Saturday July 27, 2019

1. Introduction

- Coast Water Works Development Agency is one of the 8 Water Works Development Agencies in Kenya.
- CWWDA's mandate is to develop and maintain sustainable water and sanitation infrastructure within our area of jurisdiction"
- In addition, the Agency operates the Bulk Water Systems serving four counties (Mombasa, Kilifi, Kwale and Taita Taveta) as shown in Fig 1. Below.
- The Bulk Systems are Baricho Water Works, Mzima Springs and Pipeline System, Marere Springs and Pipeline System, Tiwi Borehole System.
- Baricho Water Works is the biggest water scheme in the region and it purely a pumping system.
- Mzima and Marere springs and pipeline systems are purely gravity systems but they are of low capacities.
- CWWDA's Area of Coverage is 83,630 km² (Six Counties), that is Counties of Mombasa, Kilifi, Kwale, Taita Taveta, Tana River and Lamu.
- Estimated Current population for the Region is 4.4 million
- Current Water Demand for the region is 329,300 m³/day.
- Current Water production from all sources180,000m³/day.
- Total Population Served with piped water is approximately 56% or 2.4
 Million people while the rest rely on unsafe water.

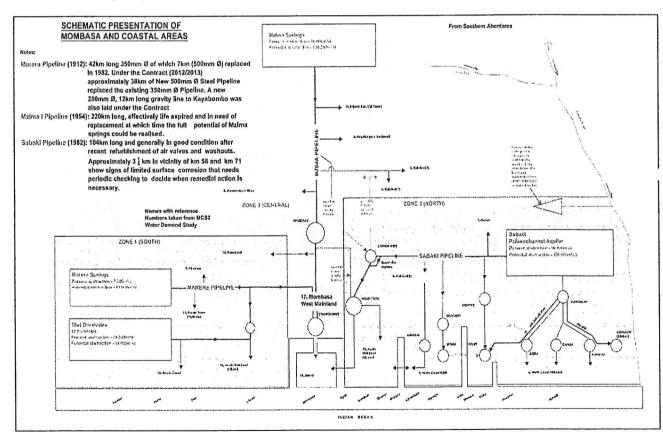


Fig. 1: Connected Bulk Water System

2. Baricho Water Works

This water supply system is the most important water source in the region and it serves the key towns of Mombasa, Kilifi, Malindi, Mtwapa, Watamu, Gongoni and its environs. The plant is designed to produce 90,000 cubic meters of water per day. This is purely a pumping system; therefore, it relies fully on power supply from Kenya Power. Due to intermittency of Power Supply, mainly resulting from disconnections and poor power quality, the daily production is averagely slightly below 70,000m³/per day (*Fig. 2 below*).

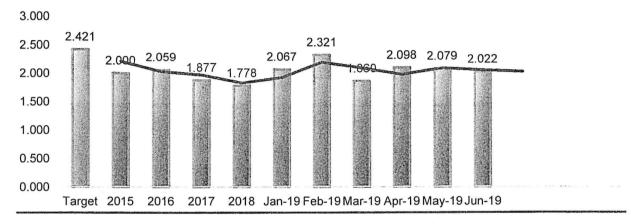


Fig. 2: Production Trends (Millions of m³).

Disconnections are due to the fact that the cost of electricity is high compared to the bulk water tariff. Figure 3 below shows compares the production in m³ meters and power consumption in kWh.

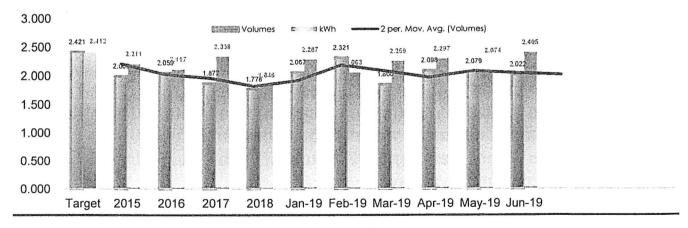
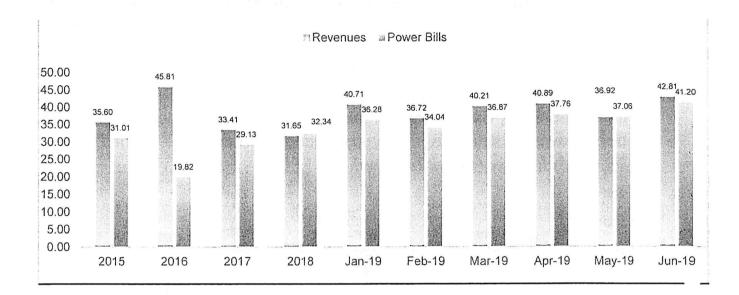


Fig. 3: Volumes and kWh consumption(Millions of Units)

Figure 3 above clearly indicates that one requires over 1kWh to produce 1 m³ of water. This is primarily due to the two pumping levels (Low lift pumping and the High Lift Pumping).

3. Revenue Generated Vs Power Bills (Millions of Ksh.)



Notes

- Averagely 87% of the revenue generated from the plant is used to settle power bills.
- 13% that remains is not sufficient to buy chemicals, pay staff salaries and carry out effective maintenance of the plant and the pipelines.
- As it is, the plant is not self-sustaining. It has to rely on other water supply systems to cater for the other Operational and maintenance expenses.
- Adjusting the tariff upwards to cater for the running costs of the plant will hurt the common mwananchi.

Requested action

- Give special tariffs (non-commercial) to all water pumping stations in the country since water is not a commercial good.
- Give 12hrs peak and 12 hours off peak tariffs for all pumping stations in the county.
- Zero rate the power tariffs since water tariff is zero rated.
- Provide a fixed power tariff. Water tariff is fixed and any changes leading to upward adjustment of power tariff either due to inflation adjustments, fuel adjustments, etc will have a negative impact on the sustainability of pumping stations.

COAST WATER SERVICES BOARD ACCOUNT NO 15355985

INRODUCTION:

Coast water services board is a parastatal created under water Act 2002 to operate in the counties of Mombasa, Taita-Taveta, Lamu and Tana River for water provision. The account is situated at Baricho the wide outcast of Malindi town metered under 33KV High Voltage.

Please find the consumption and the maximum demand from May 2018 to July 2019

Billing Date	Custome r No.	Customer Name	TOTAL	Apparent Demand(kVA)
		COAST WATER SERVICES		
May-18	535598	BOARD	1242129	3120
Jun-18	535598	COAST WATER SERVICES BOARD	1300791	3060
Juli-10	333376	COAST WATER SERVICES	1500771	
Jul-18	535598	BOARD	1572144	3510
		COAST WATER SERVICES		
Aug-18	535598	BOARD	1822707	3570
		COAST WATER SERVICES		
Sep-18	535598	BOARD	1848834	3540
		COAST WATER SERVICES		
Oct-18	535598	BOARD	1757808	3570
		COAST WATER SERVICES		
Nov-18	535598	BOARD	2025567	3690
		COAST WATER SERVICES		2.852
Dec-18	535598	BOARD	1888710	3690
		COAST WATER SERVICES		
Jan-19	535598	BOARD	2287755	4710
		COAST WATER SERVICES		
Mar-19	535598	BOARD	2297046	4680
	1	COAST WATER SERVICES	8	
Apr-19	535598	BOARD	2074920	4470
		COAST WATER SERVICES		
May-19	535598	BOARD	2405652	4590
	-	COAST WATER SERVICES		1600
Jun-19	535598	BOARD	2289600	4620
		COAST WATER SERVICES		4500
Jul-19	535598	BOARD	2150055	4530

- We have a cordial relationship with coast Water services though they have major bill payment challenges.
- The average billing per months is currently at ksh 38Million.
- They are on tariff C3
- The bills are shared among the various water companies since the pump station at Baricho pumps water across the region.

- For separation to be done, a formal application must be done so as to cost and be paid for for KPLC to effect.
- The customer has a dedicated 33 kv line with an alternate supply line. Thus, he does not have power quality challenges.

WATER SUPPLY CONSTRAINTS IN KILIFI COUNTY CAUSED BY KENYA POWER TARIFFS

- 1. The water supply companies in Kilifi County are connected at two (2) voltage levels i.e. at 415V and 33kV. Kenya Power data show that water metering for Coast Water Company is spread across five (5) customer categories. Coast Water Service Board has 25 accounts with Kenya Power.
- 2. In particular, the Baricho Water Plant in Malindi which is the source of this petition is connected at 33kV as a Commercial industrial (CI3) customer.
- 3. The cost of electricity charged by Kenya Power is in KShs/kWh and NOT in KShs/cubic metre
- 4. The table below shows the average unit cost over the last twelve (12) months for the different customer categories.

Table 1: Average retail tariff for Coast Water Service Providers

Average retail tariff (KShs/kWh)	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
DC-L (0-100kWh)	22.19	22.17	22.10	15.15	15.16	15.41	15.74	15.56	15.57	16.80	16.64	16.75
SC-1(100kWh)	21.95	21.93	21.86	15.15	15.16	15.41	15.74	15.56	15.57	16.80	16.64	16.75
SC-2 (1000kWh)	21.95	21.93	21.86	21.93	21.94	22.18	22.52	22.34	22.35	23.57	23.42	23.52
CI-1	20.11	20.09	20.02	20.09	20.10	20.34	20.68	20.50	20.51	21.73	21.58	21.68
CI-3	16.76	16.75	16.67	16.74	16.75	17.00	17.33	17.15	17.16	18.39	18.23	18.34

- 5. The Coast Water Services Board and in particular the Baricho Water plant has benefited from the Time of Use tariff since its operationalisation and has made total savings of KShs 13,807,007. Coast Water Services Board needs to find innovative ways of doing business to minimize on the water losses and invest in storage.
- 6. The Coast Water Company Board consumed in total 45,293,089 kWh between August 2017 and June 2019. 21,840,441kWh were consumed during high rate while 23,452,648kWh were consumed during the low rate. The total bill with Time of Use

was KShs. 764.7 Million but it would have been KShs. 778.5 Million in the absence of ToU.

- 7. A keen Analysis on the Cost Water Service Bard Financial Reports for the years 2014/2015 and 2015/2016 reveal that one of the Projects i.e. Malindi Water and Sewerage company made an After Tax Loss of KSh (94,418,726) in the Financial Year 2015/2016. This was an increase compared to 2014/2015 FY of KSh (42,959,063). This might have subsequently affected the revenues for the bigger Coast Water Service Board, which declined from KSh 110, 277, 854 to Ksh13, 449, 027 during the same two years analysis.
- 8. Since there were no upward Tariff reviews that would negatively affect the incomes as a result of increase in expenses during the periods above, it can therefore be concluded that the decline in revenues is not necessary attributable to the change in Tariffs as indicated in the question raised in the National Assembly.
- 9. Even before the tariff review was done, the water company was still making losses in the case of the Baricho Water Plant.
- 10. Constraints on Sector revenue requirement did not necessitate a huge decline in tariffs and that the 5% given was sufficient for Commercial and Industrial Consumers where most water companies are metered.

VISIT TO THE BARICHO WATER PUMPING STATION

During the Department Committee on Energy of the National Assembly meeting in Mombasa, the Members of Parliament visited the Baricho Water Pumping Station on the 27th July 2019. They were accompanied by the Ministry of Energy, Energy and Petroleum Regulatory Authority (EPRA) and Kenya Power and Lighting Company Limited.

The Energy Committee was appraised on the water situation in the Coast Region and discussed on what can be done so that water is availed at an affordable tariff. The Ministry of Energy, EPRA and Kenya Power was requested to continue engaging the water service providers and come with a tariff that will help mitigate the water supply situation at the Coast Region and indeed the other counties in the Republic of Kenya.

Earlier Medium Irrigation Customers (BO)-Water Pumping Tariff

In the year 2000, the Electricity Regulatory Board (ERB) had approved a tariff for Medium Irrigation Customers (BO). This tariff was speciacally for irrigation purposes. The tariff was not successful as it was being implemented during a time when there was a big drought and there was load shedding due to lack of supply of electricity. The tariff was for Medium Irrigation Customers consuming 7,001-100,000 kWh per month. There was also an interruptible supply (D) for water heating and irrigation, which was to be charged on the basis of Time of Use. The Time of Use program did not work well as industries shifted their load from the day to the night (off peak period). As a result, the tariff was discontinued.

EPRA and Kenya Power already engaging the Waster Service Providers Association (WASPA). There is a meeting on the 1st of October 2019 to explore the possibility of introducing a tariff for water pumping for public water utilities that supply water to wananchi.