

# **PUBLIC UTILITIES REGULATORY COMMISSION**



## **REPORT ON STAKEHOLDER CONSULTATIONS ON TARIFF PROPOSALS FOR THE 2022 – 2027 MULTI YEAR TARIFF REVIEW PERIOD**

### **PART ONE**

**MAY 2022**

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## **1. INTRODUCTION**

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This report narrates proceedings of the first phase of consultations by the Public Utilities Regulatory Commission with the regulated companies and a cross-section of stakeholders on utility tariff proposals for the 2022 – 2027 Multi Year Tariff Review period.

These consultations commenced on 4<sup>th</sup> May 2022, and were carried out in accordance with Sections 3(a) and 3(b) of the PURC Act 538.

The report highlights key issues arising from the consultations with stakeholders between 4<sup>th</sup> May 2022 to 12<sup>th</sup> May 2022. Stakeholders consulted during this period included the Parliamentary Select Committee on Works and Housing, Ministry of Finance, Ministry of Sanitation and Water Resources, Development Partners, Civil Society Organizations (CSOs), Think Tanks, Academia, the Media, and the Association of Ghana Industries (AGI).

## **2. OBJECTIVES/PURPOSE OF STAKEHOLDER ENGAGEMENTS**

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The purpose of the engagements was to provide a platform for the regulated utilities to present their tariff proposals for the 2022 to 2027 Multi Year Tariff Review period to stakeholders.

This platform provided the opportunity for the companies to recount their current investments, project their investments over the five-year period, enumerate their challenges and mitigation strategies, as well as highlight their intended strategies of improving reliability and quality of service to customers.

Stakeholders were in turn expected to interrogate the proposals presented, seek clarifications where necessary, and express their expectations on the tariff regime.

## **3. DURATION OF STAKEHOLDER ENGAGEMENTS – PART ONE**

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This first phase of the stakeholder engagements covered a period of two weeks, ranging from 4<sup>th</sup> May to 12<sup>th</sup> May 2022. Each engagement commenced at 10:00am, and run for about four hours. Some engagements however run for about six hours, owing to the lengthy discussions and the depth of interrogations from stakeholders.

## **4. PARTICIPANTS: UTILITIES AND STAKEHOLDERS**

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The following companies presented their tariff proposals for the 2022 – 2027 Multi-Year Tariff Review period to stakeholders:

- Ghana National Gas Company (GNGC)
- Ghana National Petroleum Company (GNPC)
- Volta River Authority (VRA)
- Ghana Grid Company Limited (GRIDCO)
- Northern Electricity Distribution Company (NEDCO)
- Electricity Company of Ghana (ECG)
- Enclave Power Company (EPC)
- Ghana Water Company Limited (GWCL)

The Commission, together with the utilities, engaged representatives from the following institutions and stakeholder groups between 4<sup>th</sup> May and 12<sup>th</sup> May 2022, at the venues and dates indicated in the table below.

Stakeholder Category	Institutions	Date	Venue
<b>Government Agencies/Legislature</b>	Ministry of Sanitation and Water Resources Ministry of Finance	4 <sup>th</sup> May, 2022	Marriott Hotel
	Parliamentary Select Committee on Works and Housing	6 <sup>th</sup> May, 2022	Marriott Hotel
<b>Development Partners</b>	World Bank GIZ USAID-West Africa Energy Program (WAEP) Swiss State Secretariat for Economic Affairs (SECO)	10 <sup>th</sup> May, 2022	Marriott Hotel
<b>Civil Society Organizations/Think Tanks</b>	Africa Center for Energy Policy Institute of Economic Affairs (IEA) CUTS International Ghana Institute for Oil and Gas Institute for Energy Studies Civil Society Platform for Oil and Gas Consumer Protection Agency SNV KITE IDEG CEPIL COSECA INSTEPR ISODEC	11 <sup>th</sup> May, 2022	Alisa Hotel
<b>Academia</b>	University of Ghana GIMPA UPSA University of Cape Coast	11 <sup>th</sup> May, 2022	Alisa Hotel
<b>Media</b>	Ghana Television (GTV) TV3 JOY TV/JOY NEWS CITI FM/CITI TV METRO TV ADOM TV/FM PEACE FM United Television (UTV) Ghana News Agency (GNA) Ghanaian Times Ghana Web	11 <sup>th</sup> May, 2022	Alisa Hotel
<b>Industry/Business Associations</b>	Association of Ghana Industries	12 <sup>th</sup> May, 2022	Marriott Hotel

## 5. NATURE OF ENGAGEMENTS/METHODOLOGY

The methodology adopted for these engagements commenced with invitations sent to a broad-section of stakeholders, requesting for their presence at a particular venue, date, and time. Each stakeholder that honoured the invitation (as listed in section 4) was given the opportunity to listen to presentations of tariff proposal submissions from the utilities and to engage in discussions afterwards. Several engagement techniques were adopted during these consultations.

These techniques principally involved the use of PowerPoint presentations which enabled the utilities to present a detailed tariff proposal to stakeholders present. The presentations were followed by question and answer sessions, as well as open discussions by all.

The key issues arising from consultations with stakeholders are summarized in Section 8 of this report.

## **6. SUMMARY OF OPENING REMARKS**

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The Executive Secretary of PURC, Dr. Ishmael Ackah, delivered the opening remarks during the stakeholder engagements. In his remarks, Dr. Ackah indicated that by law, once the utilities submit their tariff proposals to PURC, a platform is created for them to present their proposals to stakeholders and the general public.

He noted that this year's major tariff review would be characterized by some new developments. These include, passing on costs that are prudent and efficient, protecting the interests of consumers, while being mindful of the viability of utilities.

The Executive Secretary further indicated that the processes leading to this year's major tariff review would be participatory, transparent, and inclusive. He also emphasized engagements with key stakeholders such as the Ministry of Energy and Finance, the Select Committee on Mines and Energy, CSO's, Academia, Development Partners, the general public, among others.

## **7. SUMMARY OF PRESENTATIONS**

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### **7.1 Presentation of Tariff Proposal by GNGC**

GNGC's presentation focused on the company's existing and planned infrastructure, the Commission's hybrid tariff methodology and proposed tariff. The Commission's hybrid tariff methodology considers the fixed operation expense, return, depreciation, working capital, and corporate taxes as the total cost of service on the expected throughput. The proposal considered the main scenario which excludes China Development Bank (CDB) loans and various sensitivities based on the following scenarios; tariff Based on CDB Asset Inclusion, Tariff Based on no NGL Offsetting, Tariff Based on 50% Condensate Natural Gas Liquids (NGL) Offsetting and Tariff Based on only LPG as Offset. The overall tariff requested by GNGC is \$2.115/MMBtu in 2022 which represents an increase of 199% over the prevailing tariff.

### **7.2 Presentation of Tariff Proposal by GNPC**

GNPC's gas pricing approach focused on gas costs and the multi-year gas commodity costs proposed. GNPC defined the weighted average cost of gas as the sum of the gas commodity cost and the regulated service charges. The Aggregate Service Cost incurred to deliver gas to consumers as considered as WAGP transmission cost (reverse flow), Gas Management Services Cost, VRA Gas Interconnection Cost (VGIF), Western (Prestea)-Kumasi Pipeline Cost, and Gas Intermediation Service Charge. The regulated service charges were explained to be made up of GNGC Processing, Transmission Levy and the PURC Regulatory Levy. The key assumptions underpinning GNPC's tariff proposal included exhaustion of the Jubilee foundation volume and expectations for Liquefied Natural Gas (LNG) by Q3 2022, and an annual growth in demand of 10%. The overall tariff requested by GNPC in 2022 is \$7.9143.

### **7.3 Presentation of Tariff Proposal by VRA**

Tariff proposal presentation by VRA highlighted their key performance improvement projects, tariff proposal and reactive power compensation. VRA discussed strategic operational matters which included relocation of the AMERI Power Plant and the T1 life extension. Key assumptions such as the weighted average cost of gas and the exchange rate, Electricity Market Oversight Panel (EMOP) allocation, projected supply and demand for DISCOs were the basis for tariff adjustment.

With regards to reactive power compensation, VRA used a formula for basic reactive power which incorporated the nameplate power factor. The overall tariff requested by VRA for 2022 is GHp 38.6879/kWh, representing an increase of 37%.

#### **7.4 Presentation of Tariff Proposal by GRIDCO**

GRIDCO's presentation focused on a breakdown of their assets, operational and technical challenges, proposed initiatives and capital investment projects, and their tariff proposal. The transmission operator discussed their network constraints on the NITS and a proposal for reactive power compensation. The company's financial losses due to embedded generation and associated risk of stranded assets were brought to the fore. GRIDCO's tariff proposal included two scenarios with or without corporate tax. The overall tariff requested by GRIDCO is GHp/kWh 8.8308 which represents an increase of 48%.

#### **7.5 Presentation of Tariff Proposal by NEDCO**

Presentation by NEDCO to stakeholders centered on the tariff structure and current tariff, initiatives and projects undertaken, major issues on the tariff submission, company financial performance, challenges and proposed recommendations, and the proposed tariff rates. NEDCO enumerated the reasons for the increase in cost of electricity supply as due to low customer density, exchange rate depreciation, high proportion of residential customers, and a larger proportion of lifeline customers. Proposed and completed projects of NEDCO are targeted at reducing losses, improving reliability, and quality of service. The utility's financial performance between 2017 and 2021 has been saddled with losses. The overall tariff requested by NEDCO for 2022 is GHp/kWh 66.81 which represents a 111.9% increase over the prevailing tariff.

#### **7.6 Presentation of Tariff Proposal by ECG**

The ECG's tariff proposal presentation focused on the utility's regulatory period performance, assumptions underlying the tariff proposal, current, ongoing, and planned investment projects, renegotiation of PPAs, and the proposed tariff rate. ECG enumerated the major challenges impacting their tariff proposal as inflation, exchange rate depreciation, cost of reserve margin or idle capacity, unrecovered pass-through generation costs, re-structure of the prevailing tariff structure, recovery of the cost of only 30% of the street light tariff, recovery of investment cost and inadequate distribution service charge. The overall tariff requested by ECG in 2022 is GHp/kWh 39.95 which represents an increase of 148% over the prevailing tariff.

#### **7.7 Presentation of Tariff Proposal by GWCL**

The water utility presented a summary of their current operational and technical situation and challenges, initiatives undertaken since 2019, the rationale for adjustment in tariff, planned initiatives and revenue requirement. In a bid to increase requests for new service connections whilst reducing the cost, GWCL proposed the meter cost for new service connections as an operations cost to be captured in the tariff. GWCL also proposed reclassification of the tariff bands, to reduce cost and improve cost recovery. GWCL presented three proposals for recovery of cost. The tariff requested by GWCL for full cost recovery in 2022 is GHC28.20/m<sup>3</sup> which represents an increase of 300% over the prevailing tariff.

#### **7.8 Presentation of Tariff Proposal by EPC**

The focus of EPCs tariff proposal was mainly centered on their key performance indicators, projects and initiatives undertaken since the July 2019 tariff review, assumptions underlying tariff proposal, proposed service delivery and efficiency improvements, key policy issues and challenges likely to

impact service delivery, and their proposed tariff rate. The overall tariff requested by EPC is GHp42/kWh which represents an increase of 38% over the prevailing tariff.

## **8. HIGHLIGHTS OF KEY ISSUES**

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This section provides a summary of the key issues arising from stakeholder consultations held between 4<sup>th</sup> May and 12<sup>th</sup> May 2022. The issues are presented in accordance with proceedings after each presentation, and in line with the order of consultation.

### **8.1 FIRST STAKEHOLDER CONSULTATION: MINISTRY OF FINANCE AND THE MINISTRY OF SANITATION AND WATER RESOURCES**

The first stakeholder group consulted by the Commission together with the utilities was the Ministry of Finance and the Ministry of Sanitation and Water Resources. The issues arising based on the presentation by each utility are presented as follows.

#### **8.1.1 Key Issues Arising from VRA's Presentation**

**A. Question:** What is the contribution of VRA to the relocation of AMERI Power Plant?

**Response:** All front-end engineering is carried out by VRA. This also includes carrying out preservation, insurance cover and land acquisition. The arrangement in place is Build Operate and Transfer (BOT) with cost of works totaling about US\$434 million via Line of Credit (LC). Details of VRA's financial contribution can be obtained from VRA's finance department.

**B. Question:** VRA was to clarify whether its thermal plants are operating at the right power factor since VRA is requesting for payment for reactive power compensation from the hydro power plants.

**Response:** VRA indicated that, power factors of thermal plants are set as required by GRIDCo and within limits of the Ghana National Electricity Grid Code. VRA, abides by the set limits in the National Grid Code.

**C. Question:** Update on the Single Point Mooring (SPM) facility in Takoradi.

**Response:** The SPM facility is used to store light crude oil for future use and for running some thermal power plants of VRA. It was noted that, in the past, the facility had been used to store crude oil for about five years without any requirement for use of the stored fuel with all the associated maintenance costs of storage. An analysis carried out on the SPM indicates that it is in good condition although the subsea hoses are deteriorating. Reinstatement of all 24 subsea hoses would cost \$400,000.00 per hose which may not necessarily be used over the next five years. VRA concluded that keeping the SPM facility, remains a business decision for consideration.

**D. Question:** NEDCo and ECG still charge for the power factor surcharge. On what basis is VRA arriving at a tariff for reactive power compensation?

**Response:** The utilities are not the beneficiaries of the current power factor surcharges. These are collected by the Energy Commission and the Ministry of Energy. The reactive power compensation being sought for by VRA is in respect of support given by the power plants to the National Interconnected Transmission system (NITS), to prevent any system collapse. The utilities (generators) would be the beneficiaries of this reactive power compensation if approved.

**E. Question:** Is there market for the T3 Thermal Plant in Aboadze? What are the timelines for commissioning of the T3 plant?



**Response:** There is market for T3 as per demand projections and internal investigations made by VRA. Assessments are often made with demands of the various customers supplied by VRA. Additionally, T3 is required to generate enough to ensure that, VRA maintains the levels of generation to meet the anticipated generation deficit during the imminent shutdown of the Kpone Thermal Power Plant Station (KTPPS) plant for fuel conversion from heavy fuel oil (HFO) to natural gas (NG). T3 is expected to come on stream by the end of 1<sup>st</sup> quarter of 2024. Proposals are currently being received for evaluation.

### 8.1.2 Key Issues Arising from GRIDCo's Presentation

**A. Question:** Why is it that, GRIDCo in its proposal, has not indicated any projects to address radial lines in the Volta Region from Sogakope through Asiekpe to Kadjebi?

**Response:** GRIDCo explained that feasibility studies have been conducted for these lines, however, project execution and commissioning was not expected within the 5-year multi tariff period.

**B. Question:** What plans does GRIDCo have in its proposal to implement projects that will improve on capacity challenges in the NEDCo enclave?

**Response:** GRIDCo explained that there were proposed projects which were not only targeted at improvement in reliability, but also to increase capacity of the transmission network. GRIDCo cited construction of the second 330 kV line from Prestea to Kumasi as one such project to improve capacity of the transmission network to the northern part of Ghana, where NEDCo mostly operates. Additionally, there is the installation of transformers at the Nayagnia Substation, which also addresses capacity issues within NEDCo.

**C. Question:** Is GRIDCo requesting for money to invest in reactive power systems?

**Response:** GRIDCo's requests in the tariff proposal are for the inclusion of costs for deployment of Static Var Compensators (SVCs) to provide some level of reactive power support in the required portions of the grid. GRIDCo explained that the costs for reactive power projects are only recovered through the tariffs with no requirement for charging of reactive power supplied to the grid.

**D. Question:** What is the percentage increase in tariff being requested by GRIDCo?

**Response:** 48% increase in tariff for 2022, and an average of 37.8% for the levelized tariff for the period (2022-2027).

**E. Question:** What does GRIDCo's investments seek to improve upon within the period?

**Response:** GRIDCo seeks to reduce transmission losses from 5.1 to 4.16 averagely over the regulatory period leading to an improvement in reliability and quality of service.

**F. Question:** Aside from the tariff, what is GRIDCo's strategy for financing all proposed investments over the multi-year tariff period?

**Response:** GRIDCo indicated that, it is working with the Ministry of Finance to provide support with finances to deploy planned projects within the regulatory period. GRIDCo cannot execute all these proposed capital projects by relying on their balance sheet alone. GRIDCo, thus, requested for additional support from stakeholders in the acquisition of funds for execution of the projects. It was noted that a loan facility with a significant period of moratorium would be desirable to get the benefits accrued in advance for loan servicing.

### 8.1.3 Key Issues Arising from NEDCo's Presentation

**A. Question:** What kind of customer education and stakeholder engagements are required by NEDCo to change attitudes in the use and payment of electricity, and to address the issues of power theft?

**Response:** NEDCo would rely on the locals/indigenes to deploy some of the strategies in addressing power theft as well as the frequent sensitization on the negative impacts of power theft on its operations.

**B. Comment:** Provide explanation on what accounted for the reduction in losses in 2021.

**Response:** The performance in 2021 is attributed to NEDCo billing the government for street light billing shortfall. This payment was honoured by the government and helped in reducing energy/revenue losses.

**C. Question:** What strategies does NEDCo intend to undertake to reduce losses and power theft?

**Response:** NEDCo intends to continue the installation of prepaid meters and to engage communities to have a change of mindset. Reward systems are also being put in place to reward people who blow the whistle on consumers who engage in power theft.

**D. Comment:** High tariffs would incentivize people to steal. NEDCo needs a more systematic analysis and resolution of their situation than a the proposed 113% increment in tariff to address their challenges.

**Response:** There is the need for NEDCo to address both political and internal issues. An analysis has shown that NEDCo would only break even at the current tariff with the distribution losses reduced to 7%. Considering the costs involved in addressing NEDCo's challenges, PURC is entreated to consider the tariff request.

**E. Question:** Is NEDCo making the request of 113% increment in tariff based on the current system losses of 43% in Tamale which exceeds the PURC benchmark of 22.6%?

**Response:** The projections made were based on the PURC benchmark of 22.6% and not the current 43%

**F. Comment:** To surmount issues of power theft, NEDCO requires a rigorous monitoring regime.

**Response:** NEDCo corroborated this comment that an increase in staffing would be required. NEDCo added that a manpower audit has been conducted, which recommended increment in staffing, however, as a result of financial constraints, NEDCo is unable to increase staffing to perform this monitoring duties and other activities. NEDCo is tackling recruitment in phases.

**G. Question:** Is the 97% improved collection from Techiman within the particular year or from other years (arrears)? Is the 97% inclusive or exclusive of the Ministries Departments and Agencies (MDA) payments?

**Response:** The figure of 97% is a mixture of prepaid and credit payments which is inclusive of the payments from the previous years (arrears) and MDA payments. Outstanding payments on credit meters that were changed to prepaid meters was gradually settled through deductions for every prepaid credit purchased.

#### 8.1.4 Key Issues Arising from ECG's Presentation

**A. Question:** What is the justification for the 148% increment in tariff, and what should consumers expect from ECG if the increment is granted?

**Response:** ECG is undertaking a number of projects to address technical and commercial losses. Whatever increment is being sought for is to improve on reliability benchmarks. ECG needs to undertake the investments to address challenges with respect to reliability and quality of service. The projects are also targeted at increasing collection and reducing commercial and technical losses. These investments and other costs have resulted in the requirement for increased tariff.

**B. Question:** Has the distribution service charge structure changed since there was no mention of DSC1 and DSC2 in the tariff proposal?

**Response:** The structure of distribution service charge has not changed. There is still a DSC1 and DSC2. ECG submitted a proposal for DSC1 which belongs to ECG. DSC2 on the other hand belongs to the generator and not ECG.

**C. Question:** Does ECG have any exemptions on the e-levy, and will customers be made to pay any e-levy charges?

**Response:** Customers who pay their electricity bill through mobile money, will pay the e-levy charge. However, this charge is not payable to ECG but the Telcos.

**D. Question:** Why are meter readers outsourced and not part of the ECG core staff?

**Response:** Recruiting meter readers adds to ECG's administrative costs with the resultant impact on the tariff. Currently, ECG has developed an in-fill app to assess whether meter readers are actually reading the meters, or doing so remotely. This is to ensure meter readers are reporting actual readings of the meter to control accuracy of data submitted by these meters.

**E. Question:** Not all the issues and challenges ECG faces require an increase in tariffs. For some, deliberate and strategic action is needed by ECG to address them. What actions/contingency plans are you taking to minimize the impact of exchange rate fluctuation, inflation etc. on your operations?

**Response:** ECG noted that, macroeconomic issues are national and cannot be controlled by ECG. 70% of materials used are procured offshore and because of cash flow problems ECG depends on suppliers for suppliers' credit. In the case of forex losses, few players have been identified and there are arrangements with the Bank of Ghana to make available some quantum of dollars to help ECG minimize the rising exchange rate variations on its operations. Other stakeholders are being engaged to assist in mitigating the effects of some of these challenges.

**F. Question:** Does ECG have any justification for requesting for increment in tariffs, amidst poor quality of service in some parts of Accra?

**Response:** There are projects ongoing that were not shown in the PowerPoint slides that are earmarked to improve the quality of service in Agbogba and its environs. These projects seek to improve capacity together with interconnecting circuits to improve reliability and reduce outage frequency.

### 8.1.5 Key Issues Arising from EPC's Presentation

**A. Comment:** A 38% increase in tariff is not commensurate with the proposed projects over the regulatory period.

**Response:** The costs considered in the proposal include payments for proposed investment projects and the impacts of macroeconomic indicators as well as the government directive on the payment of legacy debts with VRA until 2024. This has a significant impact on the proposed tariff.

**B. Question:** What efforts are being made by EPCL to increase its customer strength?

**Response:** EPCL is a subsidiary of LMI holdings who mainly invest in lands. LMI therefore brings in investors who automatically become EPCL's customers. EPCL therefore contributes to increasing customer strength by supporting LMI holdings.

**C. Question:** Is EPCL considering DSC1 or DSC2 in the tariff submission?

**Response:** Both DSC 1 AND DSC 2 are being considered.

**D. Question:** EPCL is meeting the regulatory benchmarks, so why is the company requesting for more money through tariffs to improve reliability?

**Response:** EPCL explained that there are a number of annealed conductors as well as requirements for replacement of some insulators with the polymer types. EPCL added that, even though they are performing well, it still costs so much to maintain the level of quality of service with the projected increase in demand.

### 8.1.6 Key Issues Arising from GWCL's Presentation

**A. Question:** What percentage increment is GWCL seeking?

**Response:** GWCL presented 3 scenarios.

1. 180% (for OPEX recovery),
2. 240% (for CAPEX recovery) and
3. 300% (for full cost recovery).

**B. Question:** State owned companies have become a liability to government with their current utility debts. What is the status of payment made on the loans owed to the Desalination Plant?

**Response:** GWCL is expected to pay all of these loans. However, in the event GWCL is unable to pay the Desalination Plant, the Ministry of Finance is expected to pay.

### 8.1.7 Key Issues Arising from GNPC's Presentation

**A. Question:** With LNG coming on stream in Q3 2022, how will GNPC be able to meet contracted volumes from Sankofa?

**Response:** GNPC will be able to meet all contracted volumes from Sankofa, and at the same time get supply of LNG.

**B. Question:** How is GNPC's gas projections aligned with the Gas Master Plan projections?

**Response:** There is alignment between GNPC's gas projections and the Gas Master Plan. Any new information obtained is usually updated in the Gas Master Plan. However, currently, GNPC needs to consult the master plan and update it with whatever new information comes on board.

**C. Comment:** There is the need for GNPC to engage the Ministry of Energy on gas quantity in light of the renegotiations between VRA and TEN Gas. Some clarifications can be obtained from the Ministry of Finance.

**D. Question:** Does GNPC still export gas, and is the country able to utilize the gas being produced internally?

**Response:** GNPC is not yet exporting gas, however, all gas produced internally is used domestically.

## **8.2 SECOND STAKEHOLDER CONSULTATION: PARLIAMENTARY SELECT COMMITTEE ON WORKS AND HOUSING**

The Parliamentary Select Committee on Works and Housing was the second stakeholder group consulted in line with the tariff engagements. The issues arising based on the presentation by each utility are presented as follows.

### **8.2.1 Key Issues Arising from GWCL's Presentation**

#### **A. Question/Comment/Issue:**

- GWCL to educate stakeholders present on the capacity under which the desalination plant is operating, and on GWCL's operational losses.
- Members were of the view that, a full cost recovery of 300% should be considered by PURC, and it is totally supported. It is time for Ghanaians to pay for the actual cost of water supplied. Government cannot be supporting the utility anytime it runs losses.
- The problems of GWCL have persisted for long, and a full cost recovery is supported. If the utility is struggling with cash flows, how would it pay for loans. GWCL must however improve on its services if a full cost recovery is granted, to avoid agitations and complaints from the public. It is important customers are respected and protected in that regard.
- Consideration for a full cost recovery, must be commensurate with efficient operations and improvement in revenue collection and quality of service, so that any tariff increase can be justified. GWCL must demonstrate the capacity to increase the efficiency of its operations.
- How does non-revenue water and other losses in the production line impact on the new tariffs proposed?
- How is the operation of the desalination plant and its associated cost affecting operations of GWCL? The plant has a capacity of 60,000m<sup>3</sup>/d what is the capacity utilization rate, and why is the plant not producing at full capacity? For instance, because the plant is not fully utilized, GWCL has to transmit water from Tema to supply Teshie/Nungua.
- Why has GWCL restricted efforts in distributing bulk meters to only the ten (10) traditional regions, although there are 16 regions?
- How much does it cost GWCL to produce a cubic meter of water, and what is the revenue after production?

**Response:** The GWCL thanks all members for supporting the full cost recovery proposition.

- The capacity utilization of the desalination plant is currently about 15,000m<sup>3</sup> a day instead of 60,000m<sup>3</sup> (i.e. 25% capacity utilization). This underutilization is as a result of clogging of the plant membranes. The desalination plant has not been able to operate at full capacity since its inception.

- The PURC, benchmarks utilities in Ghana with those in the sub-region. Currently, the Commission's allowable rate of losses for GWCL is 45%, as compared to 35% for Uganda. If GWCL gets the required revenue to inject into the system, such high rates of losses could be addressed. If the revenues are however not available to fix both physical and apparent losses, the losses will keep increasing. Some of GWCL's losses are as a result of the use of fire hydrants by the Fire Service Tenders to fight fire. This contributes to the losses recorded.
- Non-revenue water has serious implications on the tariff. It has also become difficult for GWCL to achieve the PURC benchmark because the systems to detect and control losses are currently not in place. GWCL has nevertheless, experienced significant reductions in losses between 2017 to date.
- The GWCL currently serves about 18million urban dwellers with water supplied to about 80% of this number.
- In terms of respecting customers, GWCL is currently working on its water quality systems, by ensuring that water meets the World Health Organization (WHO) guidelines and the Ghana Standards Authority (GSA) standards. GWCL is also partnering PURC on water safety plans, by ensuring a proper methodology is being adhered to in the production and supply of water to ensure customer satisfaction.
- The operational regions of GWCL are different from the political regions. GWCL has three operational regions and one production region in Accra; Tema, Accra West, Accra East and ATMA Production. Meters have been allocated to these regions. There are three regions in Ashanti Region; Ashanti North, Ashanti South, and Ashanti Production, and the northern region, which covers North East Region, Savanna Region, and the Northern Region. In the Western Region, these regions are Western North and Western Region.
- GWCL currently produces at a cost of GHS15.5/m<sup>3</sup>. The company however gets GHS7/m<sup>3</sup> as revenue with about GHS 8.5/m<sup>3</sup> per cubic meter unrecovered.

#### **B. Question/Comment/Issue:**

- What should be expected from GWCL in terms of performance in the short, medium and long term if full cost recovery is considered?
- Provide details on how the cost build up in depreciation of the currency was calculated.
- ECG provides prior notice on shutdowns or black-outs, but GWCL is not doing same for water supply outages. Why is GWCL not adopting a similar approach as ECG to forewarn consumers of plant shutdowns?
- Why should consumers bear the brunt of the water pollutions arising from galamsey activities, as well as GWCL's inefficiencies?
- GWCL should take a cue on the approach of stakeholder consultations with respect to the E-levy, and adopt similar. Consumers are sensitive to costs that reduces their disposable income.
- Has GWCL engaged consumers on efforts being made to improve operations and services, as well as challenges? These should subtly be done to conscientize consumers to help justify any price increase.
- What is GWCL's approach to improve engagements with customers, especially through social media, for customers to understand GWCL's challenges?

- A lot of effort needs to be made by GWCL if losses are to be reduced to 35%.

**Response:**

- Some of the water losses and leakages are not directly the fault of GWCL, but from external factors such as road construction and excavation by consumers which lead to pipe bursts. In addition, because the systems are not in place to check network status in real time, GWCL relies on reported cases and phone calls from customers.
- A telegram account has been created by GWCL to enable customers and the public report cases of pipe bursts and leakages.
- Illegal mining (Galamsey) activities contribute to the pollution of water bodies and affect the quality of fresh water available for treatment and supply. The people who engage in galamsey activities are also consumers who should be educated to stop this action via a collective effort by all stakeholders.
- With respect to depreciation of the cedi, GWCL indicated that it imports all machinery and chemicals in foreign currency. This has resulted in the increase of GWCL's chemical cost by over 60% over the past 4 months. Shipping companies have also limited volumes that can be shipped to Ghana. Even though the water bodies are heavily polluted, water production needs to match both quality and volume.
- The pumps of the water plant at Tema were installed in 1965. The plant is currently not producing the required volumes of water. Its power factor is poor leading to high consumption of electricity. GWCL has imported 4 pumps with control panels to replace the existing ones. These are expected by the end of June 2022.
- Acquisition of the pumps come at a great cost, and tariffs are needed to cater for the cost. Because tariffs are in cedis, and these pumps are purchased with dollars, the currency depreciation becomes a major issue, resulting in forex losses. Increase in tariffs would help address the forex losses. Installation of these pumps would improve GWCL's operations and services by pumping enough water to serve customers.
- Overall, the request for an increase in tariffs is to improve GWCL's operations and services.

### **8.2.2 Key Issues Arising from ECG and NEDCo's Presentation**

**A. Question/Comment/Issue:**

- What efforts are being made by ECG and NEDCo to reduce the front load cost in acquiring new meters in a time when meter acquisition is very expensive?
- How are ECG and NEDCO addressing the issue of one meter connecting multiple households?
- What effort is NEDCO making to improve industrial electricity supply, given that residential customer base is 84% with industry representing 16%?
- How is the 3% street light levy accounted for? Who receives the money? Is there a fund where the monies collected are consolidated to ensure its properly accounted for?
- What informs the quarterly adjustments by PURC? Why is the increment not spread over the quarterly adjustments instead of the upfront high increment?
- Every efficient company invests in operational assets and technology at a cost. Utilities are expected to operate profitably, but their costs are forex and inflation driven. It is important

the public is psyched on the appropriate tariffs to pay for utilities to be able to invest in the needed technologies and deliver quality service. Energy at the right price will spur industrialization.

- Was any cost recovery considered from PDS?
- ECG should address the complex processes customers go through in acquiring new meters.
- ECG should pass through the cost of new service connections in the bills.

**Response:**

- Officially, ECG does not sell meters to customers. For new service connections however, there are costs involved. There are rates applied which excludes the cost of the meter. For instance, the lines, poles, and other cost accessories. The meter is the property of the utility. Only installation fees are charged. Customers resist prepaid meters mostly because they do not want to pay.
- The reason for the 2% RAB is because per the rate setting guidelines, there was the need to separate legacy assets from new assets. ECG was guided by the decision of not using the WACC for new investments but rather use a minimal percentage on RAB on the legacy assets.

### **8.3 THIRD STAKEHOLDER CONSULTATION: DEVELOPMENT PARTNERS**

Development Partners were the third stakeholder group consulted by the Commission together with the utilities in line with the tariff engagements. The issues arising based on the presentation by each utility are presented as follows.

#### **8.3.1 Key Issues Arising from GNGC's Presentation**

**A. Question:** GNGC's operations have been less reliable for some time now. How is this captured in the tariff proposal?

**Response:** GNGC has not had any major issues with its network. The company has 95% reliability on its assets. There had been some reliability issues due to frequent tripping of the compressor which had been newly commissioned and was being calibrated. The calibration is completed and the tripping has also stopped. This has been discussed with stakeholders.

**B. Question:** The compressor tripping is becoming a major issue to some utilities. What is being done to address it?

**Response:** The compressor is currently working. The trips have only been for a few hours. There is enough gas in the system. Going forward, the tripping would not be an issue. Usually when the compressor is new, certain trips are bound to happen, although it doesn't last long.

**C. Question:** What informs the gas transportation price, and why?

**Response:** According to GNGC, the PURC methodology was followed in the determination of the transportation price for gas.

#### **8.3.2 Key Issues Arising from GNPC's Presentation**

**A. Question:** What informs GNPC's projections and the increase in the rates?

**Response:** These projections are what GNPC negotiated with suppliers based on the demand outlook. The volumes indicated have been agreed with the suppliers as the negotiated position



between GNPC and suppliers. The rate therefore can only change downwards. The 10% growth is the rule of thumb growth rate of the sector.

**B. Question:** What is the basis of the 53 MMSCfd of LNG passthrough to the power sector?

**Response:** This figure is based on the demand outlook for the previous year.

**C. Question:** What are the factors that were considered in the determination of the 10% demand growth projections?

**Response:** The demand growth projection was based on an annual growth in electricity demand of 9% in addition to the growth in non-power demand.

**D. Question:** What is the contribution Jubilee Gas to the tariff increase given that it will soon not be free?

**Response:** In the coming years, Jubilee Field's contribution would shrink with respect to the price. From next year (2023), LNG will increase, and GNPC expects PURC to have already factored this in the tariff projection. PURC should therefore incorporate flexibility in pricing using the quarterly adjustments based on updated prices of LNG.

**E. Question:** What is the status of the acquisition of the 14 km gathering pipelines from GNPC by GNGC?

**Response:** The process is still ongoing and the discussions have not been concluded yet.

### 8.3.3 Key Issues Arising from VRA's Presentation

**A. Question:** VRA must present details of the computation of the tariffs with a split of the cost of capacity charges and energy charges for the benefit of stakeholders. How has the split of the value generation charges been done across the value chain?

**Response:** Detailed computations are provided by PURC.

**B. Comment:** Reinforce separating capacity and energy charge associated with energy plants. This is important for tariff structures and in the determination of the distribution service charge.

**C. Question:** Are all quarterly adjustment prices based on nominal price?

**Response:** The tariffs are based on nominal figures. One key indicator however is the exchange rate, and not real figures.

**D. Question:** All VRA solar plants are allocated to NEDCo. Considering the Navrongo solar plant, wouldn't it be prudent to increase the allocation of hydro generation to NEDCo to compensate the requested increment in their tariff?

**Response:** VRA does not have rights to allocate hydro. That is the sole prerogative of EMOP. NEDCo has, however, petitioned PURC to ensure that, the hydro allocation is increased to reduce NEDCo's proposed tariff.

With the solar embedded in NEDCo, the total supply from the Navrongo Solar Plant is 3GWh per year, which is quite insignificant. Once the hydro allocation to NEDCo is increased, it ameliorates the impact on the final price.

**E. Question:** How has VRA captured mini grids in its tariff proposal to handle VRA's operation of the minigrids?

**Response:** Last year, a tariff proposal was submitted to PURC on the mini grid. For this year's however, this was not included. The VRA is currently working with the Ministry of Energy, to revise the document of the mini grid. The cost involved cannot be easily transferred to customers, and some discussions are needed on the best way forward.

**F. Comment:** There is the need for VRA to get an idea of gas price projections before proposing for increment in tariffs.

**G. Question:** How realistic is the move of Ameri Power Plant to Kumasi?

**Response:** Because this is a Multi-Year Tariff, if the Commission does not get Ameri Power Plant operational this year, by next year, it would be available.

#### 8.3.4 Key Issues Arising from ECG's Presentation

**A. Question:** Did ECG's proposal have consideration for the net metering tariffs considering the expected impact on the main tariff proposal?

**Response:** ECG did not make proposals for net metering. Net metering was only mentioned, and the need for it to be reviewed. Currently there are processes in place to review the net metering code.

**B. Question:** What is the collection target for ECG?

**Response:** The PURC's collection target set for ECG is 98%.

**C. Question:** There are low- and high-level assumptions in ECG's proposal but the inflation used considered only the low level. What is the reasoning behind this?

**Response:** ECG mentioned not anticipating worst conditions for inflation due to the interventions being put in place to salvage the situation.

**D. Question:** ECG has not clearly indicated the projects being proposed to target reduction in losses.

**Response:** ECG enumerated a number of projects that had already been discussed in the presentation aimed at targeting technical and commercial losses. These projects were categorized into network upgrade, improvement projects and installation of prepaid meters and boundary metering as well as automatic meter recording for SLT customers.

#### 8.3.5 Key Issues Arising from GRIDCo's Presentation

**A. Question:** Is the power factor surcharge still charged to customers? Who collects that money, and where does the money go?

**Response:** GRIDCo does not collect power factor surcharge. This is charged and collected by VRA.

**B. Question:** Are the investments made in reactive power compensation meant to address reduction in losses?

**Response:** Transmission losses are a function of several factors. Over the years, GRIDCo has developed a program to address reduction in losses, improve quality of supply to customers, and to ensure the grid operates within the voltage band to meet regulatory benchmarks. To keep the grid in good quality, GRIDCo needs to be resourced to continue to supply quality power. Deployment of reactive power compensation projects can help improve system losses.

### 8.3.6 Key Issues Arising from NEDCo's Presentation

**A. Question:** If NEDCo doesn't have a distribution SCADA system in place, why is NEDCO requesting for a disaster recovery site ahead of a SCADA system?

**Response:** Although there is currently no SCADA system in place, there are systems in place which need to be protected, so when there are glitches, the system can address them.

**B. Question:** Nothing has been presented about cost reduction strategies. What is NEDCo's cost reduction strategy?

**Response:** NEDCo is undertaking cost reduction strategies in its operations. Some of the cost issues are in relation to NEDCo's processes. NEDCo is considering digitizing its operations to reduce cost. Distribution losses are one of the highest cost drivers. NEDCO is considering the use of AMRs to target loss reduction in areas where the losses are high.

### 8.3.7 Key Issues Arising from GWCL'S Presentation

**A. Question:** Is GWCL, assuming electricity tariffs would remain same, considering energy as an input?

**Response:** GWCL has made provision of 20% increase per annum as its base energy cost.

**B. Question:** What percentage of OPEX is electricity?

**Response:** 35%

**C. Question:** What is GWCL's direct source of electricity?

**Response:** Generally, ECG, but the Kpong Head Works sources its electricity directly from GRIDCo. GWCL has however made efforts to get direct connection from GRIDCo. There are currently engagements with the Energy Commission and other stakeholders to that effect. This would help reduce GWCL's energy cost.

**D. Question:** There is a general perception that drinking water from the taps are not wholesome. How is GWCL addressing this perception, and what investments have been made to improve water quality?

**Response:** This is a wrong perception. The water flowing from the taps are wholesome and safe to drink. Residual chlorine added to the water addresses any secondary pollution. The water safety plan of households is at their own dispensation.

**E. Comment:** When the waters are polluted as a result of galamsey, GWCL spends a lot of money to treat it. There is the need for customers to spread the word on the harmful impacts of galamsey.

## 8.4 FOURTH STAKEHOLDER CONSULTATION: THINK TANKS, CIVIL SOCIETY ORGANIZATIONS, ACADEMIA, AND MEDIA

Representatives from Think Tanks, Civil Society Organizations, Academia, and the Media were next consulted in the line with the tariff engagements with stakeholders. The issues arising based on the presentation by each utility are presented as follows.

#### 8.4.1 Key Issues Arising from GNGC, GNPC, and VRA's Presentation

##### A. Question/Comment/Issue:

- How much resources do we have as a country? If these resources are enough, then there is no need for an increment in tariffs. Consumers are already overburdened. If these resources are enough, there is the need to recycle it around the utilities, so consumers are not overburdened with increased tariffs.
- What is the value of oil that has been produced as a nation? Out of that total value, what has been Ghana's share vis a vis the share of the partners? Is sharing in line with the provision of the Petroleum Production and Exploration Act? Is the sharing arrangement economically feasible?
- Aside VRA, all other generation companies are privately owned and operated. Therefore, all discussions should be situated around the business case of the utility, and not political or social. Within the electricity value chain, whatever is generated should be paid for by customers in order for the utilities to survive.
- From the onset of oil and gas discovery in Ghana, the understanding of the sector was that, within 10 years from its inception, GNPC would be an operator. What has stopped GNPC from being the operator that was envisaged at the onset, especially now that the free gas is ending.
- Inefficiencies of the companies were not factored in the tariff projections. Why is take or pay still not negotiated, and consumers are forced to pay for such inefficiencies?
- Was PURC involved in the proposition of extending the gas pipeline to Kumasi, or this is arbitrarily being imposed on consumers?
- Moving power plants to Kumasi will not address Kumasi's electricity challenges. Is the amount quoted meant to address capacity or energy charges? A robust cost benefit analysis on the exact situational challenges of Kumasi is needed so consumers are not overburdened unnecessarily.

##### Response: GNPC

- Data on the monetary contribution of the oil and gas sector is not readily available.
- GNPC's role as a gas buyer and seller is different from GNPC's role as an operator in the field. GNPC only buys gas from other partners and sells it downstream. If GNPC becomes an operator and acquires its own stake, that will impact positively on gas price.
- In terms of the take or pay arrangements, the country needs the gas now. GNPC is unable to supply as much gas as required by the power and non-power sector. Gas is needed for Jubilee, TEN and Sankofa. Currently, there is no need for any renegotiation.

##### Response: VRA

- The USc9/kWh quoted is meant to address both capacity and energy charges. The issue of capacity cost is because of Ameri's relocation, which costs almost US\$35 million.
- In terms of efficiency, it has been modeled both as a combined cycle and simple cycle. In addition to hydro plants combined cycle plants which are very efficient. There is also a grid impact study that has been conducted to confirm the importance of the relocation to the stability of the grid in the middle portion of the country.

## **Response: GNGC**

- In the 2018 tariff of delivering gas, there was an allocation for gathering, processing, and transmission. That was 5.3 in total. This dropped in 2019 from 4.32 to 1.064. At the moment GNGC is not running on cost effective tariff and revenue. The company is making losses. GNGC is requesting for a recovery of its existing tariff by 72% increment cumulatively.
- Unlike the transmission of electricity, there are no losses with respect to transmission of gas. It however does not mean there will not be inefficiencies in operations. On transportation, the inefficiencies come as a result of pressure drops which translates into the use of compression fuel gas. If the pipe transporting the gas is inefficient more fuel is used which means increase in operation cost.
- With gas there are no commercial losses. The pipelines are buried deep. As a result, there are hardly gas thefts in transit.
- On processing, GNGC takes raw gas, and separates the liquid from it. But how efficient GNGC is in extracting those liquids is the issue. What is currently used is not optimally efficient. Hence GNGC is looking for other efficient alternatives.
- GNGC needs to minimize its operations and maintenance cost.

### **8.4.2 Key Issues Arising from GRIDCO, ECG, and NEDCo's Presentation**

#### **A. Question/Comment/Issue to ECG:**

- Is there a strategy to improve collection to 98%?
- What is the prepaid penetration rate as compared to post-paid?
- Is the live line aerial device currently operational?
- How much of the losses would reduce over the five-year period if the investments projected are undertaken? And which investments are specifically going to reduce the losses?
- The customer satisfaction survey of 63% is self-reported and unrealistic.
- The 20% system losses by 2026 is still high. If ECG puts in more effort, the company can get more revenue rather than burdening consumers with tariff hike. This would make the country less competitive should utilities escalate cost.
- The assumption of full cost recovery solving the problems of ECG is erroneous. Why was PDS more efficient in revenue collection than ECG? The tariff adjustment burden should not fall on the consumer.
- With the task force in place, why has ECG not increased its revenues?
- Why is the ECG task force collecting 20% of amounts collected?

#### **Response:**

- Being a private company, PDS brought an attitudinal change given that employees were scared of losing their jobs, which helped spur on revenue collections. The trend analysis however shows that ECG from 2019 has collected more revenues than PDS within the same period. PDS debt reduction also started from a zero balance.
- The live line aerial device is available for every operational region, excluding the Low Voltage areas. These devices are meant for overhead line faults.
- ECG's customer satisfaction survey was outsourced to a consultant, and not done by ECG.

- For revenue collection, no commission is being paid to the task force. The taskforce, just like any whistle blower, would be entitled to 6% of the total amount recovered.

**B. Question to GRIDCo:** GRIDCo presents almost the same projects year in year out, with costs always increasing. What financing model would be ideal for GRIDCo given that these projects are needed to enhance the grid?

**Response:** GRIDCo is pleased with Ameri coming on board. When generation is close to one's load, losses are reduced because the power is close to where it is needed. Generators respond in real time to changes in the power system. If the generators are dispersed widely across the transmission system, it helps to ensure stability.

GRIDCo's proposal has not been approved yet, hence the company's financial strategies cannot be divulged to the public.

**C. Question to NEDCo:**

- Why is NEDCo not putting in much efforts to collect debts owed by government agencies? These have not been highlighted in the presentation.
- Why should PURC consider reducing the lifeline from 50 to 30?
- How sure is NEDCo that the projects coming on board will reduce the losses?

**Response:**

- There is a task force in place in the north, which is not much publicized, working on disconnections and ensuring government institutions are settling their debts. For instance, there has been disconnections at the Tamale Teaching Hospital's doctors' bungalows, the Wa Regional Hospital, and the threat of disconnecting the Tamale airport.
- As at the end of 2021, GhC138 million of MDA bills had been set off.
- Current proportion of NEDCo's prepaid to postpaid meters is 49:51
- It was indicated against each project the intended impact and achievement in the proposals. For instance, installation of prepayment meters will reduce commercial losses. Some project investments will reduce technical losses and increase capacity.

#### 8.4.3 Key Issues Arising from GWCL's Presentation

**A. Question:** Does GWCL consider it a good justification to increase tariffs based on increase in chemical cost due to an external effect such as galamsey? The proposed increase in tariff is an indication that the already burdened customers should pay for the irresponsibility of others.

**Response:** Those engaging in galamsey are Ghanaians who consume the water treated by GWCL. To ensure production cost is reduced, then the water bodies must be clean. For instance, GWCL uses 300 bags of alum per day to treat water at the Weija plant as against the usual 200. This is an addition of 100 from last year. If consumers do not pollute the water bodies, that cost, will not be passed on to consumers.

**B. Question:** The desalination plant is not operating efficiently. Why is GWCL not confronting government on the challenges in operating the plant?

**Response:** There is a water purchase agreement with Cabinet. GWCL alone cannot abrogate the contract. The plant is currently working, but not at full capacity.

**C. Comment:** The response time in addressing water leakages and pipe burst is quite slow on the part of GWCL.

**D. Suggestion:** GWCL should employ the use of digital platforms to report water challenges to the public.

**E. Question:** Will GWCL's projected increase in supply keep the taps flowing 24hrs per day?

**Response:** If the demand and supply gap is bridged, consumers would be assured of 24hrs supply of water.

### **8.5 FIFTH STAKEHOLDER CONSULTATION: ASSOCIATION OF GHANA INDUSTRIES (AGI)**

Various firms and industries under the Association of Ghana Industries were lastly consulted during this first phase of the stakeholder consultations by the Commission. The issues arising based on the presentation by each utility are presented as follows.

#### **8.5.1 Key Issues Arising from VRA and GRIDCo's Presentation**

**A. Question – VRA:** How much does VRA charge neighboring West African countries when VRA exports power to them?

**Response:** VRA's relationship with its export customers is bilateral. Bilateral arrangements are confidential. VRA is therefore unable to provide the tariff rate for its export customers.

**B. Question – VRA:** If the reactive power rate is added to the tariff, what would be the total increment in tariff?

**Response:** This is the first time VRA is requesting for compensation for reactive power. PURC will provide some direction on its application.

**C. Question – GRIDCo:** What is GRIDCo's current level of losses?

**Response:** GRIDCo's losses as at December 2021 was 5.1. As at May 2022, the loss figure is 4.6.

**D. Question – GRIDCo:** Are customers expected to pay TSC2 in addition to the tariff increment, or this has already been factored in the tariff?

**Response:** This is exclusive of the losses. Per the arrangement with PURC, customers pay TSC2. It is an efficiency loss for GRIDCo when the company operates above 4.1.

**E. Question – GRIDCo:** Many rural areas are not metered. Who pays for those in the rural areas? Are customers expected to pay the proposed tariff increment?

**Response:** GRIDCo deals with bulk customers and not individuals. ECG is the right utility to address this concern.

#### **8.5.2 Key Issues Arising from ECG, NEDCo, and EPC's Presentation**

**A. Question/Comment/Issue:**

- Clarification needed on how investments are costed in the tariff computations.
- How are investments yet to be made going to be recovered?

- This proposal on tariff increment is coming at very challenging times for industries. The tariff increments are too sudden, and this distorts planning.
- ECG and NEDCo have challenges in revenue collection. What percentage of their debt stock is owed by government?
- There is a proposition for street light tariffs. The electricity bill structure already has street lighting. This should be clarified.
- Is EPC owned by government or privately owned. If private, why is the company requesting for tariffs from PURC.
- What mechanism is NEDCo putting in place to improve on its revenue collection, especially in the North? If these strategies are feasible, then in the next 5 years customers would not expect tariff increments, rather lower tariff rates.
- The contribution of the energy mix has not been factored in the proposals presented. Clarification is needed on the current energy mix and its impact on electricity pricing.
- With the introduction of the flat rate tariff, is the cross subsidy going to be eliminated in the next tariff regime?
- What efforts have ECG made in terms of changing postpaid meters to prepaid meters?
- Times are not normal. There is constant weakening of the country's macroeconomic indicators such as inflation and cedi depreciation, industries are struggling, we are an import dependent country with little value addition to our raw materials, and the country is only coming out of COVID-19. Can the utilities consider minimal increment in tariffs now, for the major tariff review to postponed to 2023, when hopefully conditions would have improved?

#### **Response – ECG:**

- As at December 2021, MDA bills amounted to GHC 1.8billion. However, with the set off arrangement government has in place, government bills have been completely cleared by a significant payment made to IPPs in 2021. Therefore, government does not owe ECG presently.
- With the billing cycle, it takes about 30 days to bill and issue out bills. Customers are given 14 days to settle their bills. As a result, there would always be about 1 or 2 months' bills past due date.
- ECG is putting in adequate measures to improve on its revenue collection on a daily basis in all operational areas. Most postpaid meters are also being replaced with prepaid meters. This however involves a lot of investment.
- ECG's prepayment coverage is 53%. The target is 70% for the next tariff regime. It is not cost effective to provide rural areas with prepayment meters.
- On cross subsidization, ECG has proposed best practices as part of its tariff for consideration by PURC. Residential customers should be made to pay for the true cost of their service.
- The rate setting guidelines allow ECG to factor in feasible projects likely to impact on operations within the tariff regime. These projects are audited by the regulator.

#### **Response – NEDCo:**

- NEDCo's prepaid meter penetration is 49% as against 51% for postpaid meters. Efforts are currently geared towards replacing credit meters of MDAs with prepaid meters.
- NEDCo has a task force in place, assisting with revenue collection.



- Government owes NEDCo about GHC 1billion. There's been assurances from the government to set off the debt soon.
- The hydro component of NEDCo is about 27% of the total energy mix. In the current tariff proposal, NEDCo is considering 33% since hydro is less costly than the other energy sources.

**Response – EPCL:**

- EPCL has regulated customers. Once these customers are in the regulated market, there is the need for PURC to approve their tariffs before EPCL can charge them.

**Response – VRA:**

- In terms of the generation mix, VRA is providing 59% hydro generation for the regulated market and 41% from thermal.
- The hydro price is around Ghp22/kWh and thermal is around Ghp62/kWh.
- Energy mix for 2022: hydro 31%, thermal 68%, and 1% from renewable energy sources.

**B. Question:** Has the proposed elimination of cross subsidization being modeled to determine the estimated rate of relief to industries?

**Response:** The rate of relief has not yet been modeled, although ECG has a fair idea of the amount of relief. SLT's are consuming 32% of energy sales, and it costs ECG less to serve them. Using a gradual approach, residential customers would be made to pay more, so the burden on SLT customers are reduced gradually. The reliefs would however depend on the quantum of the gradual shift.

**C. Comment:** With removal of the cross-subsidization, it is expected that the end user tariff for residential consumers would go up whilst the tariff for industries reduces. The industry must therefore be prepared to help workers/employees especially the lower paid ones with an upward adjustment in remuneration to be able to meet the increase.

**D. Question:** What percentage of revenues is lost to illegal connections. And what is being done to address it?

**Response:** PURC gives a benchmark for system losses, which is 22.6%. ECG intends to continue with the task force exercise, which was dormant in 2020, but picked up in the latter part of 2021. Considerable kWh/cash was recovered.

ECG also intends to intensify its monitoring by engaging more staff. Metering of the regional boundaries has also been instituted to identify areas with high losses.

## **9. CONCLUSIONS**

This first part of the stakeholder consultations has brought to the fore, some pertinent operational and technical challenges, which utility companies need to address going forward to enhance their operations, and to ensure better provision of services to customers. Stakeholders have in turn been adequately informed about these challenges, interrogated the tariff proposals presented, and have also made valuable contributions that would help enhance operations and service delivery to customers.

In all, the objectives set out by the Commission has largely been achieved. In the coming weeks, the Commission intends to continue to engage other stakeholder groups to ensure a fair representation of utility customers and the general public are adequately informed about the tariff proposals submitted by the utilities for the 2022 – 2027 Multi Year Tariff Review period.