



Performance Audit Report of the Auditor-General for the Federation

On



The Role of Nigerian Electricity Regulatory Commission (NERC) in the provision of meters and billing of electricity consumers

(2016-2018)

August, 2020

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AUDITOR GENERAL'S MESSAGE

22nd October, 2020

**The President of the Senate,
The Speaker, House of Representatives**
Federal Republic of Nigeria,
National Assembly Complex,
Abuja.

PERFORMANCE AUDIT ON THE ROLE OF NIGERIAN ELECTRICITY REGULATORY COMMISSION (NERC) IN THE PROVISION OF METERS AND BILLING OF ELECTRICITY CONSUMERS FOR THE PERIOD 2016-2018

In accordance with Section 85 of the Constitution of the Federal Republic of Nigeria, 1999 (as amended) and Financial Regulations 109(1)(d) (Revised edition 2009), I have undertaken a performance audit on the Role of Nigerian Electricity Regulatory Commission in Ensuring Effective Electricity Distribution in Nigeria for the Period 2016-2018, and hereby submit this report.

Performance Audit is an independent, objective and reliable examination to assess whether Government undertakings, systems, operations, programme and activities or organizations are operating in accordance with the principles of economy, efficiency and effectiveness and whether there is room for improvement. The audit seeks to provide new information, analysis, insights and where appropriate, make recommendations for improvement.

Performance Audit together with Financial and Compliance audit form the three-pillar audit assurance framework I have established to the varied and wide scope of Audit work done by my Office. The framework is intended to give assurance to stakeholders, and the Nigeria Citizens that Nation's resources are not only correctly disbursed, and accounted for, but that they also have positive impacts on the lives of all Nigerians.

The overriding goal of this performance audit is to promote efficient and effective distribution of electricity in Nigeria, and to strengthen the perceived weaknesses in the enforcement of compliance with regulations on metering and billing of electricity consumers. This audit responds to the public outcry over the non-metering of electricity customers and the persistent outrageous estimated billing in Nigeria. It examined the factors that are responsible for inadequate compliance with consumer protection regulations set by the Nigerian Electricity Regulatory Commission (NERC) to guide Distribution Companies (DisCos) in the metering and billing of electricity consumers in the country.

My Office intends to carry out a follow-up at an appropriate time, regarding actions taken in relation to the recommendations in this report.

I would like to thank my staff: Adewale Owolo, FCA, Director of Audit, who coordinated the audit activities, Mr. Shaakaa K. Chira, FCNA, Deputy Director who supervised the Team. I appreciate the efforts of the staff who undertook the Audit: Hamza S. Abdullahi, ACA (Team Lead), Azoom D. Japheth, ACA, ACTI, (Member) and Anzaki Hannatu (Member).

I would also like to thank the Management and Staff of the Nigerian Electricity Regulatory Commission (NERC), the 11 Distribution Companies, Federal Ministry of Power (FMOP), National Assembly(NASS), Transmission Company of Nigeria (TCN), Nigerian Electricity Maintenance and Management Service Agency (NEMSA), and the Federal Competition and Consumer Protection Commission(FCCPC) for the assistance offered to my staff during the period of the Audit.

ANTHONY MKPE AYINE, FCA,

Auditor-General for the Federation

TABLE OF CONTENTS

LIST OF CHARTS, FIGURES AND TABLES ii

ABBREVIATIONS iii

DEFINITION OF TERMSv

EXECUTIVE SUMMARYviii

CHAPTER ONE 1

1.0 Introduction 1

1.1 Background to the Audit1

1.2 Motivation for the Audit2

1.3 Audit Objective2

1.4 Audit Questions and Assessment Criteria2

1.5 Focus Area and Audit Questions3

1.6 Scope of Audit3

1.7 Methods of Data Collection4

1.8 Limitation 5

CHAPTER TWO 6

2.0 Description of the metering and billing processes and their enforcement. 6

2.1 Background Information about NERC6

2.2 Process and System Description 10

2.3 Role and Responsibility of other Key Players 15

CHAPTER THREE 19

3.0 Audit Findings 19

3.1 Overseeing the Provision of Meters 19

3.2 Regulating and Ensuring Appropriate Billing of Customers 27

3.3 Ensuring Satisfactory Resolution of Customer Complaints30

CHAPTER FOUR 36

4.0 Conclusion36

4.1 Overseeing the Provision of Meters 36

4.2 Regulating and Ensuring Appropriate Billing of Customers 36

4.3 Ensuring Satisfactory Resolution of Customer Complaints37

5.0 Recommendation.....37

5.1 Overseeing the Provision of Meters 37

5.2 Regulating and Ensuring Appropriate Billing of Customers 38

5.3 Ensuring Satisfactory Resolution of Customer Complaints38

APPENDICES a

LIST OF CHARTS, FIGURES AND TABLES

Charts

1.0 JED New Connections for the period 2016 - 2018..... 24

2.0 IBDCO New Connections for the period 2016-2018.....25

3.0 Extent of Metering and Billing Complaints By Customers..... 29

4.0 Schedule of Customer Complaints Received, Resolved and Unresolved..31

5.0 Complaints sent to NERC for enforcement..... 34

Figures

Processes of enforcing compliance with regulations put in place for the provision of meters and billing of customers for the actual electricity consumed.....13

Tables

1.0 Breakdown of the Interviews Conducted.....4

2.0 Breakdown of the Questionnaire Administered.....5

3.0 Staff strength of NERC.....8

4.0 Funds generated by the Commission from all sources.....9

5.0 Appropriation and Releases for the Commission.....9

6.0 Analysis of the DisCos Metering Performance (2016 to 2018.....20

7.0 Analysis of the Tariff Shortfall Recorded by the 11 DisCos..... 21

8.0 Customer Complaints Received, Resolved and Unresolved by the 11 DisCos.....31

9.0 Data Collated from Forum Offices.....33

ABBREVIATIONS

AEDC	-Abuja Electricity Distribution Company
ANED	-Association of Nigerian Electricity Distributor
ATC & C	-Aggregate, Technical, Commercial and Collection Losses
BPE	-Bureau of Public Enterprises
CAC	-Corporate Affairs Commission
CAPEX	-Capital Expenditure
CAPMI	-Credited Advance Payment for Metering Initiative
CCHSP	-Customer Complaints Handling: Standards and Procedures
CCU	-Customer Complaint Units
CEOs	-Chief Executives
CPC	-Consumer Protection Council of Nigeria
DisCos	-Distribution Companies
ECN	-Electric Corporation of Nigeria
EEDC	- Enugu Electricity Distribution Company
EPSRA	-Electric Power Sector Reform Act
FCCPC	-Federal Competition and Consumer Protection Commission
FCT	-Federal Capital Territory
FGN	-Federal Government of Nigeria
FMOP	-Federal Ministry of Power
GACN	-Gas Aggregation Company of Nigeria
GenCos	-Generating Companies
GSAA	-Gas Sales and Aggregation Agreement
HV	-High Voltage
IBEDC	-Ibadan Electricity Distribution Company
IGR	-Internally Generated Revenue
IKEDC	- Ikeja Electricity Distribution Company
IPPs	-Independent Power Producers
ISSAI	-International Standards on Supreme Audit Institutions
JEDCO	-Jos Electricity Distribution Company
LV	-Low Voltage
MAP	-Meter Asset Provider
MD	-Maximum Demand
MO	-Market Operators
MOU	-Memorandum of Understanding
MYTO	-Multi Year Tariff Order
NAPTIN	-National Power Training Institute of Nigeria
NASS	-National Assembly
NBET	-Nigeria Bulk Electricity Trading Plc
NESCO	-Nigeria Electric Supply Company
NDPHC	-Niger Delta Power Holding Company
NELMCO	-Nigeria Electricity Liability Management Company
NEMSF	-Nigeria Electricity Market Stabilization Facility
NEMSA	-Nigerian Electricity Management Service Agency
NEPA	-National Electric Power Authority
NEPP	-National Electric Power Policy
NERC	-Nigerian Electricity Regulatory Commission
NESI	-Nigerian Electricity Supply Industry
NGMP	-Nigerian Gas Master Plan

NICE	-Notice of Intention to Commence Enforcement
NIPP	-Nigerian Independent Power Producers
NON-MD	-Non- Maximum Demand
OAGF	-Office of the Auditor-General for the Federation
OPEX	-Operational Expenditure
O & M	-Operation and Maintenance
PHCN	-Power Holding Company of Nigeria
PHEDC	-Port Harcourt Electricity Distribution Company
PPAs	-Power Purchase Agreements
P&PAD	-Programme & Performance Audit Department
PwC	-Price Waterhouse Coopers
REA	-Rural Electrification Agency
SMEs	-Small and Medium Scale Enterprises
SPV	-Service Providers
TCN	-Transmission Companies of Nigeria
TSP	-Transmission System Providers
YEDC	-Yola Electricity Distribution Company

DEFINITION OF TERMS

Customer:

Customer means any person or organization supplied with electricity for use by a distribution company or any other person engaged in the business of supply of electricity to the public, and includes any person whose premises are connected for the purpose of receiving electricity from a distribution company.

Electricity Distribution:

Electric power distribution is the final stage in the delivery of electric power; it carries electricity from the transmission system to individual consumers. Distribution substations connect to the transmission system and lower the transmission voltage to medium voltage ranging between 2 kV and 35 kV with the use of transformers. Primary distribution lines carry this medium voltage power to distribution transformers located near the customer's premises. Distribution transformers again lower the voltage to the utilization voltage used by lighting, industrial equipment or household appliances. Often several customers are supplied from one transformer through secondary distribution lines.

Commercial and residential customers are connected to the secondary distribution lines through service drops. Customers demanding a much larger amount of power may be connected directly to the primary distribution level or the sub-transmission level.

Electricity Generation:

Electricity generation is the process of generating electric power from sources of primary energy. For electric utilities in the electric power industry, it is the first stage in the delivery of electricity to end users, the other stages being transmission, distribution, energy storage and recovery, using the pumped-storage method. Electricity in Nigeria is generated through thermal and hydro power sources. The main source of electricity generation comes from fossil fuels especially gas which accounts for 86% of the capacity in Nigeria with the remainder generated from hydro-power sources.

Electricity service:

Electricity service means supply, billing, metering, and maintenance of electricity energy to the customer and all related services.

Electricity Transmission:

Electric power transmission is the bulk movement of electrical energy from a generating site, such as a power plant, to an electrical substation. The interconnected lines which facilitate this movement are known as a transmission network. This is distinct from the local wiring between high-voltage substations and customers, which is typically referred to as electric power distribution. The combined transmission and distribution network is known as the "National Grid".

Multi Year Tariff Order (MYTO)

Multi Year Tariff Order (MYTO) is an ORDER issued by Nigerian Electricity Regulatory Commission (NERC) to address the provision of cost reflective tariffs thus ensuring that prices charged by licensees are fair to electricity consumers, and are sufficient to allow licensees to recover full cost of their activities, including a reasonable return on capital invested in the electricity business.

Cost Reflective Tariff

The tariff is said to be cost reflective if it allows the licensees to recover full cost of their activities, including a reasonable return on capital invested in the electricity business

Maximum and Non-Maximum Demand Customers: Maximum Demand (MD) Customers are the Commercial and Industrial customers who consume high levels of electricity and contribute substantially to the revenue of distribution companies. The consumption threshold for MD customers is 45KVA. The major difference between MD and Non-MD customers is that the MD customers have their own individual transformers. For example, a bank or estate with a dedicated transformer. Unlike Non-MD customers who share transformers with communities. Non-MD customers typically pay higher Fixed charges.

Credited Advance Payment for Metering Initiative (CAPMI)

It is a special metering scheme designed by the Nigerian Electricity Regulatory Commission (NERC) that provides a platform for customers to pay the cost of the meter and installation into a dedicated account. Once payment has been effected, the customer will have the meter installed within 45 days by a distribution company using a NERC accredited vendor/installer

Meter Asset Provider Regulation

Meter Asset Provider (MAP) means a person that is granted a permit by the Commission to provide metering services which may include meter financing, procurement, supply, installation, maintenance and replacement. The Regulation provides for third party financing of meters, under a permit issued by the Commission, and amortization over a period of 10 years.

Capping Order

The Capping order means that unmetered customers cannot be charged more than their metered neighbors. The Order restricts the amount the DisCos charge customers under estimated billing. The essence of the Order is to discourage estimated billing and fast track the roll out of meters by DisCos.

Tariff Classification

The Nigerian Electricity Regulatory Commission (NERC) provides range of customers who fall under different tariff classes which the DisCos bill periodically. The DisCos carry out load assessment of the customer's premises to know the class. This will enable the DisCo to determine how the customer will be billed.

Forum Office

The Forum office performs the Commission's quasi-judiciary functions in redressing customers and operators unresolved disputes as enshrined in the NERC's Customer Complaints Handling Standards and Procedures Regulation. Any customer dissatisfied with the outcome of the handling of his complaints by the customer complaints units of the distribution company or encounters delay/failure in the handling of such complaints may refer his complaint to the Forum.

Aggregate, Technical, Commercial and Collection Losses: Technical and commercial losses is the difference between the energy supplied at the input points and energy billed to consumers in percentage terms for a particular period. While collection losses are the difference between the revenue realized from consumers and energy amount billed for a particular period.

Lifeline Tariff: This is a subsidized tariff aimed at providing support to low income households. The Lifeline Tariff is a tariff charged below cost of electricity supplied

Vesting Contracts: Introduced in 2004 as a regulatory instrument to mitigate the larger generation companies from exercising their market powers. Vesting Contracts mandates a specified amount of electricity (Known as a “vesting contracts level” to be hedged at a specified price, known as a “vesting contract price” which in turn removes the incentives for generation companies to exercise their market power by withholding supply to push up the half-hourly wholesale electricity market.

Power Factor: This is the ratio of active power to apparent power (KW to KVA)

Load Factor: This is the ratio of average load to peak load over a designated period.

EXECUTIVE SUMMARY

Background to the Audit

The issues of inadequate power generation, transmission and distribution infrastructure are recurrent problems, coupled with the inefficient energy metering which is a major problem that results in residential energy consumers being billed unfair energy charges by the Electricity Distribution Companies (DisCos) for unused energy (Iwayemi, 2018).

Out of the customer population of 9,522,600 registered with eleven (11) DisCos in August 2019, only 3,811,729¹ customers were metered representing 40% leaving a metering gap of 5,710,871 million. The general perception is that the use of estimated billing discourage payment of the bills by the customers and encourage electricity theft².

The audit was motivated by the wide metering gap despite the Bureau of Public Enterprise (BPE)'s approval of DisCo's business plan that provided for the closure of the metering gap.

1.0 Summary of key findings

1.1 Overseeing the Provision of Meters to Customers

1.1.1 Ensuring Compliance with DisCos Annual Metering Commitment

Performance Agreement signed in 2013 between the Bureau of Public Enterprise (BPE) and the DisCos envisaged an average deployment of 1,640,811 meters per.

However, a review of the DisCos Metering Position Reports revealed that in the year 2016, out of 1,640,811 annual metering obligations, only a total of 418,807 meters were deployed by all the DisCos leaving a shortfall of 1,222,004 representing 74.47%. In the year 2017, a total of 70,296 meters were deployed leaving a gap of 1,570,515 meters representing 95.71%. Likewise, in 2018, a total of 534,006 meters were deployed by the DisCos leaving a deficit of 1,106,805 meters, representing 67.45%. This brought the total shortfalls recorded by the 11 DisCos during the period under review to 3,899,324 representing 79.21% of the total annual metering obligations (4,922,433).

Responses obtained during interview sessions held with Management Staffs of the DisCos visited attributed the gap to lack of cost reflective tariff during the period under review.

Analysis of the Data on Tariff Shortfalls recorded by the 11 DisCos and Metering Progress Reports however showed that out of the total metering shortfall of 3,899,324 recorded by the DisCos during the period under review, only 1,844,310 was attributed to Tariff Shortfall. According to the analysis, with the Tariff Allowed by the Commission for 2016, 2017 and 2018, the 11 DisCos could have deployed 3,078,123 meters but only a total of 1,023,109 meters were deployed resulting to avoidable shortfall of 2,055,014 meters representing 52.7%.

This was attributed to the following as revealed in the Commission's August 2019 Open Book Review Report;

¹ Customer Population and Metering Progress Report for all DisCos by NERC

² Energy Policy Workshop Report: Nigeria's Electricity Challenges and Policy Bottlenecks 21st May, 2019

- ❖ Most of the DisCos meter procurements were carried out by related parties and the Commission has not issued Corporate Governance Code to guide the transaction between the parties.
- ❖ The meters were mostly procured through a selective tendering process which may lack the required level of transparency and the Commission has not issued Procurement Guideline to address that.
- ❖ The Commission does not carry out regular Open Book Review Exercise, a development that led to arbitrary allocation of market funds to projects with no significant impact on the DisCos revenue.

As a result of the above, DisCos misapplied funds that would have been used to provide meters thus, resulting to unavailability of prepaid meters and consequent exploitation of unmetered customers by the DisCos through estimated billing.

1.2 Regulating and Ensuring Appropriate Billing of Electricity Consumers

1.2.1 Tariff Classification of Customers (Both metered and unmetered)

The Multi Year Tariff Order (MYTO) 2015 requires every Distribution Company to carry out load assessment of customer's premises at the point of connection for proper tariff classification.

It was reported in the Commission's Audit Monitoring Report of DisCos Compliance to Service Standards conducted in the Second Quarter of 2018 that Jos, Benin, Ibadan, Kano and Enugu DisCos wrongly classified some customers as a result of inappropriate load assessment of the customer's premises. According to the Report, some customers were classified wrongly as C2 when they were actually C3 in accordance with MYTO 2015 classes.

Despite the above, the Commission could not produce evidence to show that the erring DisCos were sanctioned to serve as deterrent to others, hence, the DisCos have the impetus to continue business as usual by not properly assessing the load of electricity customers leading to improper tariff classification and billings of customers.

1.2.2 Billing of Unmetered Customers

Section 3.3 Chapter II of the Methodology for Estimated Billing 2012 states that the DisCos shall adopt Commission's approved methodology for estimated billing to bill unmetered customers.

A review of the Data for the Forum Offices nationwide revealed that, out of 10,671 appeals received by the NERC's Forum offices nationwide during the period 2016 to 2018, 6,231 representing 58.3% of the total appeals received centered on outrageous estimated billing.

Similarly, the Commission in its Quarterly Reports for the period 2016, 2017 and 2018 revealed that billing is one of the three issues that dominated customer complaints in each quarter.

This was due to inadequate monitoring as the Commission did not carry out quarterly audit monitoring as required during the period under review. The Commission during interview session cited funding constraints as the reason for not carrying out audit monitoring in 2016, 2017 as well as during the 1st, 3rd and 4th quarter of 2018. However, it was observed from the NERC's Audited Financial Statements that the Commission reported surplus of

₦128,630,000.00 and ₦1,716,651,000.00 in 2016 and 2017, even when it could not carry out audit monitoring due to paucity of funds.

Since DisCos are not closely monitored and sanctions not meted to erring DisCos, they continued to issue arbitrary bills to customers that do not reflect the actual power consumed.

1.3 Ensuring Satisfactory Resolution of Customer Complaints

1.3.1 Resolution of Customer Complaints at the CCU Level

Section 3(8) of the Customer Complaints Handling: Standards and Procedures (CCHSP) 2006 provides that “All complaints shall be resolved and the customer notified expeditiously but, in any case, within fifteen (15) working days of the written complaints being received by the Customer Complaint Unit (CCU)”.

The Commission’s Audit Monitoring Report of DisCos Compliance to Service Standards conducted in 2018 revealed that a number of unresolved or partially resolved complaints were reported as resolved in Ibadan and Ikeja DisCos whereas the cases were still pending before the CCUs of the affected DisCo. Similarly, Enugu DisCo records cases as resolved when they only escalated it to another level for full resolution.

Management staff of the Federal Competition and Consumer Protection Commission (FCCPC) during interview session attributed the above to inadequate training of CCU Officers on customer care issues particularly those at the Business Units of the DisCos.

This causes customer’s annoyance when the complaints are not quickly resolved according to the interview.

1.3.2 Resolution of Customer Complaints at the Forum Office Level

Section 11 of the CCHSP Regulation 2006 provides that “the Distribution Company Licensee shall implement the decision of the Forum within the time specified in the directive of the Forum.

It was observed from the analysis of the Data collected from the Forum Offices nationwide for the period 2016 to 2018, that out of 9,053 appeals resolved by the Forum, only 2,972 were fully complied with by the DisCos, while 6,081 were not complied with and escalated to the Commission for enforcement. The analysis further revealed that out of the 6,081 Forum decisions received by the Commission for enforcement, 3,763 representing 62% were not enforced and complied with.

Despite the huge number of Forum Offices decisions not complied with, there had been no sanctions meted out to the erring DisCos. It was observed during the audit that the Forum Office staff were mostly accommodated by the DisCos. This perceived relationship encourages non-compliance without sanctions thereby making some aggrieved customers to lose confidence in the ability of the Commission to resolve their complaints and as such, approached FCCPC and other Intervening Agencies in a bid to get justice.

2.0 Conclusion

This chapter presents the conclusions drawn based on the findings of the audit.

2.1 Overseeing the Provision of Meters to Customers

Non-issuance of Procurement Guidelines to ensure transparent procurement process, inadequate monitoring and sanctioning of the erring DisCos coupled with the delay in the issuance of Corporate Governance Code by the Commission to guide related party transactions and ensure judicious utilization of funds belonging to the electricity market are responsible for the 52.7% of the total shortfalls recorded by the DisCos during the period covered.

2.2 Regulating and Ensuring Appropriate Billing of Electricity Consumers (Both Metered and Unmetered)

2.2.1 Classification of Customers by DisCos

The Commission's inability to sanction the erring DisCos to deter others coupled with inefficiencies of the DisCos in carrying out load assessments are responsible for the improper tariff classification of electricity customers

2.2.2 Billing of Unmetered Customers

The Commission's inability to closely monitor and sanction the erring DisCos is responsible for the continuous issuance of arbitrary bills to customers that do not reflect the actual power consumed.

2.3 Ensuring Satisfactory Resolution of Customer Complaints

2.3.1 Resolution of Customer Complaints at the CCU Level

Inadequate training of CCU Officers on customer care by the DisCos results to unsatisfactory resolution of customer complaints as the customers' resorts to Forum Offices and other intervening Agencies to seek redress and for appeals.

2.3.2 Resolution of Customer Complaints at the Forum Office Level

The Commission's inability to provide accommodation to her staff in the Forum Office leaving them at the mercy of the DisCos creates an atmosphere for conflict of interest and is responsible for the non-sanctioning of the erring DisCos even when huge number of Forum decisions are not complied with, within the period of the audit, at the expense of the electricity Customers.

3.0 Recommendation

3.1 Overseeing the Provision of Meters to Customers

3.1.1 Ensuring Compliance with DisCos Annual Metering Commitment

3.1.1.1 The Commission should provide Procurement Guidelines in the power sector that will ensure open, transparent and competitive bidding process. The Commission should also provide appropriate Regulations or Corporate Governance Code to guide related party transactions in the power sector. The Open Book Review Exercise should be more frequent pending when the electricity market becomes more efficient. The Commission should regulate technical service contracts and provide alternative for the licensee to improve its collection without necessarily paying so much to collection agents. This will ensure prudence in the management of funds belonging to the market and as such free up funds to provide meters and meet other market obligations (eg payment to NBET and MOs).

3.2 Regulating and Ensuring Appropriate Billing of Electricity Consumers (Both Metered and Unmetered)

3.2.1 Classification of Customers by DisCos

The Commission should ensure that erring DisCos carry out load assessment of each customer at the point of connection for proper classification and appropriate billings to avoid arbitrary charging of customers for power not consumed.

3.2.2 Billing of Unmetered Customers

The Commission should step up the monitoring of DisCos and where possible, apply sanctions to DisCos that flout the Methodology for Estimated Billings. They should also enforce compliance with the recent Order on capping of estimated billing to fast track the roll out of meters and discourage the use of estimated billing.

3.3 Ensuring Satisfactory Resolution of Customer Complaints

5.3.1 Resolution of Customer Complaints at the CCU Level

The Commission should compel DisCos to carry out adequate training of CCU Officers on customer care to ensure satisfactory resolution of customer's complaints. Also step up the monitoring of customer complaints so that customers seeking redress are timely and satisfactorily attended to.

3.3.2 Resolution of Customer Complaints at the Forum Office Level

The Commission should provide accommodation to her staff in the Forum Office to prevent familiarity and conflict of interest so that necessary sanctions should apply where possible, to enforce compliance with the Forum decisions.

CHAPTER ONE

1.0 Introduction

This chapter provides a brief background of the topic and describes the approach used in the conduct of this Performance Audit.

1.1 Background to the Audit

Electricity generation started in Nigeria in 1896 but the first electric utility company, known as the Nigeria Electricity Supply Company (NESCO) was established in 1929. In 1951, the Electric Corporation of Nigeria (ECN) was established to take over the assets of NESCO. In 1962, Nigeria Dams Authority (NDA) was established to develop the hydropower potentials in Nigeria. In 1972, ECN and NDA were merged to form National Electric Power Authority (NEPA). By the year 2000, the National Electric Power Authority (NEPA), was in charge of the generation, transmission and distribution of electric power in Nigeria³. NEPA was later metamorphosed to Power Holding Company of Nigeria (PHCN) in the year 2005 under the Federal Ministry of Power which served as both the policy making body and the regulator; doing the latter mostly through the Electrical Inspectorate Services Department of the Ministry.

The Federal Government enacted the Electric Power Sector Reform Act of 2005, which unbundled the PHCN into generation companies (GenCos), distribution companies (DisCos), and Transmission Company of Nigeria (TCN). The Nigerian Electricity Regulatory Commission (NERC) was formed to take over the regulatory functions of the sector from the Ministry. The Commission is to protect the interests of consumers, issue licenses to operators/investors, set and review electricity tariffs and where possible promote competition.

It is reported that the Federal Government expended a total of ₦5 trillion (\$31.45 billion) from 1999 to 2019 with only 2,500 Megawatts of electricity to show for the enormous amount. The poor electricity supply affected investors in the Nigerian manufacturing sector with attendant negative implications for the sector's contributions to the nation's Gross Domestic Product (GDP)⁴. A loss of output amounting to US\$470 billion (₦71 trillion) measured in terms of Gross Domestic Product (GDP) between 1999 and 2015 was reported (Iwayemi, 2018).

The inadequate provision of meters to electricity customers and inappropriate billing has been a major problem. Out of the customer population of 9,522,600 registered with eleven (11) DisCos in August 2019, only 3,811,729⁵ customers were metered representing 40% leaving a metering gap of 5,710,871 million.

The challenges were aggravated since the period of handover from PHCN to private investors in 2013 as consumers continue to complain over these. The tariff system practiced in Nigeria for the electricity distribution, which is regulated by NERC, is called the Multi – Year Tariff Order (MYTO); a methodology to regulate fair electricity prices between consumers and DisCos for efficient operation costs⁶.

³ https://en.m.wikipedia.org/wiki/Nigerian_Electricity_Regulatory_Commission

⁴ <https://www.power-nigeria.com/en/home.html>

⁵ *Customer Population and Metering Progress Report for all DisCos by NERC*

⁶ *American Journal of Engineering Research 2018*

1.2 Motivation for the Audit

The audit was motivated by the followings:

- i. Price Waterhouse Coopers (PwC) quoted the Nigerian Electricity Regulatory Commission as saying “the electricity customer population stands at 7.48 million of which only 3.39million (45.3% of the identified customer population) are metered, leaving the unmetered population, the metering gap, at 4.09 million customers”. Additionally, at least 50% of the current installed meters are either obsolete or faulty and hence require replacement. Also, as at 2017, Nigeria's population was 190.8 million, and the projected number of households in the country for the same year was 40.6 million. This implies that only 18.4% of Nigerian households are on the distribution network⁷.
- ii. Federal Government approve a loan of N213 billion for DisCos in 2014. This was part of the Nigeria Electricity Market Stabilization Facility (NEMSF) by the CBN. In August, 2019, the Federal Government signed the release of N600bn for the power sector which was meant for the shortfall in the payment of monthly invoices by key stakeholders in the sector. The Federal Executive Council (FEC) also approved N701 billion CBN facility in March 2017 as Power Assurance Guarantee for the NBET for a period of two years⁸.
- iii. Nigeria envisages a transmission wheeling capacity that is at least 20 percent higher than the generation capability and a distribution capability that is at least 20 percent higher than the transmission wheeling capacity. However, the generation companies have an available capacity of about 8,000 megawatts (MW), with a transmission system which can only transmit about 5,000MW and a distribution network only capable of absorbing about 4600 MW⁹.
- iv. Nigeria Electricity Regulatory Commission in its quarterly report for the third quarter of 2018 reported that “Metering, estimated billing and service interruption still remained the most significant areas of concern for customers. It said metering and billing dominated the customer complaints, accounting for 68,749 representing 53 per cent of the total complaints received in the third quarter”.

1.3 Audit Objective

The main Audit objective is to assess whether Nigerian Electricity Commission (NERC) has put in place measures to ensure DisCos provide meters and bill customers for the actual electricity consumed.

1.4 Audit Questions and Assessment Criteria

The Audit problem of “Weak enforcement of compliance with regulations put in place to ensure DisCos provide meters and bill customers for the actual electricity consumed.” was narrowed down to three (3) focus areas upon which key audit questions were raised. The audit assessed NERC against the criteria derived from the Performance Agreement, Electric Sector Power Reform Act 2005, Customer Service Standards of Performance for Distribution Companies, 2007, Multi Year Tariff Order (MYTO) 2015, Estimated Billing Methodology 2012 as well as Customer Complaints Handling: Standards and Procedures 2006.

⁷ *Bridging the Metering Gap Strategies for Success (Part 1)* by Jerry Ehanmo & Ebere Onwuegbule of PWC.

⁸ *Solving the Liquidity crunch in the Nigerian Power Sector*, PWC, September 24, 2019.

⁹ *Fixing Nigeria’s electricity problem* by Olusola Bello, *Business Day Online*, Jan 30, 2019

1.5 Focus Area and Audit Questions

Focus Area 1: Overseeing the Provision of Meters to Customers

Audit Question: Did NERC oversee the provision of meters to customers by the DisCos?

Sub Question 1.1: Did NERC ensure DisCos meet their metering obligation as provided in the Performance Agreement?

Criterion: Performance Agreement signed in 2013 between the DisCos and the BPE envisaged an average deployment of 1,640,811 meters annually by the 11 DisCos.

Sub Question 1.2: Did NERC ensure that DisCos meter new connections?

Criterion: Section 2 of the Customer Service Standards of Performance for Distribution Companies, 2007 states that “Where a Customer makes a request to a Distribution for a new or additional connection, the Distribution shall take measures to fit the meter and connect the power supply within ten working days of receiving the request.

- ❖ The Distribution Company shall inspect and approve the electrical installation
- ❖ The Distribution Company agrees to connect the supply and
- ❖ The Customer has paid any approved charges

Focus Area 2: Regulating and Ensuring Appropriate Billing of Customers

Audit Question. Did NERC take adequate measures to ensure appropriate billing of electricity customers?

Sub Question 2.1: Did NERC ensure that customers are properly classified by DisCos?

Criterion: The Multi Year Tariff Order (MYTO) 2015 provides that with effect from 1st February, 2016, every Distribution Company must carry out load assessment of each customer at the point of connection for proper classification and appropriate billing.

Sub Question 2.2: Did NERC ensure that unmetered customers are not overcharged by DisCos?

Criteria: Section 3.3 Chapter II of the Methodology for Estimated Billing 2012 states that where a Disco Estimate Customer’s usage of electricity, the DisCo shall adopt Commission’s approved methodology for estimated billing and the Customer’s estimated electricity usage shall, under no circumstance be arbitrarily inflated

Focus Area 3: Ensuring Satisfactory Resolution of Customer Complaints

Audit Question 3: Did NERC take measures to ensure adequate resolution of customers’ complaints by DisCos?

Sub Question 3.1 Did NERC ensure that customer complaints are timely and satisfactorily resolved by DisCos?

Criterion: Section 3(8) of the Customer Complaints Handling: Standards and Procedures (CCHSP) 2006 provides that “All complaints shall be resolved and the customer notified expeditiously but, in any case, within fifteen (15) working days of the written complaints being received by the Customer Complaint Unit. Where additional time is required however, for example to test the accuracy of the meter, the customer must be notified within 15 working days of receipt of the complaint of the action(s) being taken and every 15 working days until the complaint is resolved”.

Sub Question 3.2: Did NERC ensure that customer complaints appealed to the Forum offices are timely and satisfactorily resolved?

Criterion: Section 10(2) page 8 of CCHSP 2006 states that “Every compliant shall be heard as expeditiously as possible within 2 months and a decision shall be made within a maximum period of two months from the date of receipt of a complaint by the forum.

Section 11 of the CCHSP 2006 provides that “the Distribution Company Licensee shall implement the decision of the Forum within the time specified in the Directive of the Forum.

1.6 Scope of Audit

The audit examined the role of the NERC in enforcing compliance with regulations put in place to ensure DisCos provide meters and bill customers for the actual electricity consumed. The audit was conducted at the NERC head office, Forum offices and ten (10) DisCos situated in nine (9) states, spread across the six (6) geo-political zones of the country. The audit covered three financial years namely: 2016, 2017 and 2018.

1.7 Methods of Data Collection

The Audit was conducted in accordance with the International Standards of Supreme Audit Institutions (ISSAI). In order to collect sufficient, relevant and reliable audit evidence to support the conclusions and recommendations, different methods of data collection were applied. The methods are documentary review, interviews, questionnaire administration and observations as described below.

1.7.1 Documents reviewed

The audit team collected data mainly through document reviews to have a more insight into the enforcement role of NERC in ensuring compliance with regulations on metering and billing of electricity consumers. Some of the information were obtained from the NERC Official Website while others were obtained directly from Management upon request. The documents were reviewed in order to corroborate information obtained from other sources. Details of document reviewed are contained in Appendix I.

1.7.2 Interviews

The Audit Team employed the use of interviews in order to solicit for a first-hand information in respect of the issues bordering on billing and metering of consumers. The interviews were also meant to corroborate information and data collated using documents, data analysis and observation of activities of hearings and complaints. A total of two hundred and thirty-one (231) interviews were conducted as shown in the table below:

Table 1: Breakdown of the Interviews Conducted

Organization	No. of Interviews
DisCos	95
Officers of the Commission	12
FMOP	7
TCN	5
NEMSA	8
FCCPC	4
Customers	100
Total	231

1.7.3 Questionnaire

A total of three hundred and sixty-five (365) respondents were conveniently and judgmentally sampled and questionnaires were administered to them, out of which a total of three hundred and twenty-seven (327) representing 90% responses were retrieved. The questionnaire administered to enable the team corroborate information from other sources, did not follow any particular criterion in the selection. The breakdown of the questionnaire administered is shown in the table below:

Table 2: Breakdown of the Questionnaire Administered

Respondents	Administered	Retrieved
DisCos Staff	180	169
Forum Secretaries	10	10
Electricity Consumers	175	148
Total	365	327

1.7.4 Observations

During the Main study, the Team also carried out observation of some activities at the Forum Offices and DisCos. The Team was able to attend four (4) Hearings at the Forum Offices to be able to assess the customer complaints and resolution mechanisms as enshrine in the NERC regulations. Additionally, equipment deployed by the Distribution Companies to provide electricity to consumers were observed. Equipment observed include the step-down transformers, meters and distribution lines, low voltage transportation lines etc (Appendix II refers).

1.8 Limitation

The Management of NBET (a key Stakeholder-Chapter II refers) refused to answer any of our questions during the entrance meeting. They also refused to provide documents requested (Appendix III refers for the acknowledged copy of the introductory letter, and the checklist) Additionally, the team was not provided with the necessary data and information requested from the Eko, Ikeja, Yola, Port Harcourt, Enugu, Benin, Kaduna, and Kano DisCos. As a result, Audit depended on data and information supplied from NERC.

Moreover, the team could not secure appointment with two Committees of the National Assembly due to their busy schedules (Appendix IV refers for the acknowledged copy of the letter requesting for meeting/interview). This would have afforded the team the opportunity to discuss areas of funding, interventions and ongoing legislative activities embarked upon by the legislature to improve the power sector.

CHAPTER TWO

2.0 Description of the metering and billing processes and their enforcement.

This chapter describes the processes of enforcing compliance with regulations for the provision of meters and billing of customers for the actual electricity consumed. It also describes the roles and responsibilities of key players.

2.1 Background Information about NERC

The Nigerian Electricity Regulatory Commission is established to undertake technical and economic regulation of the Nigerian Electricity Supply Industry. The Commission's objective is to also protect existing and future consumers' interests in relation to electricity generated and conveyed by distribution or transmission systems. Consumers' interests are their interests taken as a whole, including their interests in affordable tariffs and safe, reliable and available electricity supply, and the reduction of greenhouse gases to them.

2.1.2 Legal Framework

The Nigerian Electricity Regulatory Commission was established through the Electric Power Sector Reform Act (EPSRA) of 2005. All the powers and duties of the Commission are provided by the Act.

2.1.3 Vision

The Vision of NERC is to ensure electricity on demand.

2.1.4 Mission of NERC

The mission is to promote and ensure an investor friendly industry and efficient market structure to meet the needs of Nigeria for safe, adequate, reliable and affordable electricity.

2.1.5 Objects and Functions of NERC

Section 32 (1) and (2) of the EPSR Act 2005 mandate NERC to among others:

- i. Create, promote, and preserve efficient industry and market structures, and to ensure the optimal utilization of resources for the provision of electricity services;
- ii. Maximise access to electricity services, by promoting and facilitating consumer connections to distribution systems in both rural and urban areas;
- iii. Ensure that an adequate supply of electricity is available to consumers;

- iv. Ensure that the prices charged by licensees are fair to consumers and are sufficient to allow the licensees to finance their activities and to allow for reasonable earnings for efficient operations;
- v. Established appropriate consumer rights and obligations regarding the provision and use of electricity services;
- vi. Monitor the operation of electricity market; and

2.1.6 Functions of Key Divisions of NERC

Market, Competition & Rates: The division is responsible for the development of methodologies for determining wholesale, transmission and end user tariff. The division also conducts evaluation of all license applications, and engages in the monitoring of the electricity market in order to prevent abuse of market power.

Consumer Affairs Division: The Consumer Affairs division has the responsibility of developing regulations and ensuring that operators meet the minimum standards of services provided in the Commission's regulations. The division also embarks on consumer enlightenment and has the mandate of ensuring the speedy resolution of consumer disputes and administration of forum offices across the various states of the federation.

Legal, Licensing and Compliance Division: The division is responsible for coordinating the licensing activities of the Commission. In addition, the division provides legal support and advisory services to the Commission and is in charge of hearings, resolution of disputes through alternative dispute mechanisms and the enforcement of all Commission's orders and directives.

2.1.7 Organizational Structure

The Electric Power Sector Reform Act 2005, which gave impetus for the establishment of NERC provided for the tenured appointment of seven Commissioners, with one of them designated as Chairman/Chief Executive Officer and another as Vice Chairman. The Commission is made up of seven Divisions, each with its strategic role in ensuring the smooth running of day to day activities of NERC.

The Organizational chart/structure of NERC is presented in the (Organogram), and is attached herewith as Appendix V.

2.1.8 Staffing

The staff establishment for NERC for the period 2016 to 2018, which is obtained from the Human Resources and Administration Unit of the Finance and Management Services Division is shown in table 3. According to the

Commission, all the staff are involved in the regulatory role of the Commission in making sure that electricity is supplied to consumers.

Table 3: Staff strength of NERC (2016-2018)

Year	Total	Management staff	Principal Managers	Senior Managers	Managers	Assistant managers	Analyst	Junior Staff
2016	166	25	20	32	20	26	19	24
2017	165	29	34	18	25	29	6	24
2018	161	27	34	17	25	29	6	23

Source: Nominal roll from NERC

2.1.9 Budget & Funding of the Commission

According to S.52 of the EPSRA 2005, the Funds of the Commission consists of:

- (a) fees, charges and other income accruing to the Commission from licensees and other things done by it in terms of this Act, excluding any fines or penalties recovered pursuant to this Act; (Table 4 refers).
- (b) funds allocated to the Commission by the National Assembly (NASS), (table 5 refers) pursuant to a request by the Commission for additional funds required to meet its reasonable expenditures; and
- (c) such other moneys as may vest in or accrue to the Commission, whether in the course of its operations or otherwise.

The Commission's Internal Generated Revenue (IGR) for the three (3) financial years starting from 2016 to 2018, as submitted by the Finance and Management Service Division totaled ₦16,279,069,000.00 (Sixteen billion, two hundred and seventy-nine million, sixty-nine thousand naira) as shown in table 4 below:

Table 4: Funds generated by the Commission from all sources, from 2016 to 2018

Source: Documents provided by the NERC

	2016	2017	2018	TOTAL
Income	₦	₦	₦	₦
Internally Generated Revenue (Operating fees)	8,460,853,000.00	9,199,732,000.00	10,850,024,000.00	28,510,609,000.00
	8,460,853,000.00	9,199,732,000.00	10,850,024,000.00	28,510,609,000.00
Other Income	24,334,000.00	960,617,000.00	458,951,000.00	1,443,902,000.00
Sub total	8,485,187,000.00	10,160,349,000.00	11,308,975,000.00	29,954,511,000.00
Less Impairment of Operating fees	4,499,101,000.00	3,861,898,000.00	5,314,443,000.00	13,675,442,000.00
Actual Revenue	3,986,086,000.00	6,298,451,000.00	5,994,532,000.00	16,279,069,000.00

Table 5: Appropriation and Releases to the Commission (2016-2018)

Year	Appropriation	Actual Releases	Variance
	₦	₦	₦
2016	-	-	-
2017	1,800,000,000.00	900,000,000.00	900,000,000.00
2018	3,106,977,234.23	1,255,708,908.91	1,851,268,325.32
Total	4,906,977,234.23	2,155,708,908.91	2,751,268,325.32

Source: GIFMIS Payment Request provided by the NERC

The National Assembly appropriated a total of ₦4,906,977,234.23 for the three years, but only a sum of ₦2,155,708,908.91 representing 43.9% was released to the Commission.

From the above tables 4 and 5, the actual total income available to the Commission for the three years was ₦18,434,777,908.91. This total is arrived at when the total funds generated by the Commission for the three years in the sum of ₦16,279,069,000.00 is added to the NASS Appropriation

and releases to the Commission for the same period in the sum of ₦2,155,708,908.91 is added together.

2.2 Process and System Description

Description of the Processes involved in enforcing compliance with regulations put in place to ensure DisCos provide meters and bill customers for the actual electricity consumed.

2.2.1 Overseeing the Provision of Meters to Customers

The process starts with DisCos proposing their business plan or CAPEX that provided for the closure of the metering gap, network upgrade and loss reduction based on the NERC approved MYTO Tariff. The number of meters to be deployed depends on the BPE's approved DisCos business plan. During the privatization process, successful bidders qualified based on their proposed efficient utilization of the approved CAPEX or business plan. A metering commitment was signed between the BPE and the DisCos based on the NERC approved CAPEX. The CAPEX is not only approved for the DisCos to deploy meters but also to enable them provide for network expansion and loss reduction. The Commission performs its regulatory function by ensuring compliance with the metering commitment signed between the BPE and the DisCos based on the CAPEX approved from the Tariff. The CAPEX is as shown in Appendix VI.

2.2.2 Regulating and Enforcing appropriate billing of electricity consumers (Both Metered and Unmetered)

The billing process depends on whether the customer is a metered or unmetered customer. For a metered customer, the customer gets a receipt or a bill or invoice depending on whether the meter is prepaid or post-paid. An invoice is for postpaid while a receipt is for prepaid. The receipt states what a customer has paid and the quantum of energy given. In the case of invoice, it states how much energy a postpaid customer has consumed with corresponding value (what is expected to be paid). Estimation is done for both metered and unmetered customer.

Estimation for a metered customer

A customer whose meter has developed fault or is out of circuit for any reason is issued estimated bills until when another meter is installed or the meter is repaired back to its circuit. The regulation provides that from the time the meter stops capturing what the customer consumes, the last consumption for a very viable month that is undisputable will be used to bill the customer until another meter is installed. In the absence of that, the Disco can go back retrospectively 12 months or any period that the customer

has been at the supply address, take the average of that period and continue to estimate such customer until another meter is put, replaced or repaired. The procedures are clearly spelt out in the NERC's approved Methodology for Estimated Billing and the Commission as required under the Act monitors to ensure compliance by the DisCos.

Estimation for unmetered customer

Unmetered customers are of two categories/classes namely:

- Estimated Maximum Demand (MD) Customer and
- Non-Estimated Maximum Demand (MD) Customer

The procedures for estimating both MD and Non-MD Customers are clearly spelt out in the NERC's approved Methodology for Estimated Billing 2012.

Right now, to get any MD Customer that is not metered is an offence.

In case the MD customer needs to be estimated as you can never do away with estimation, the process is different from that of the normal conventional Non-MD Customer. The Unmetered MD Customers are billed based on the "Load Measurement Method" which shall be the measurement of the voltage and current on the Customer premises for a specific period (between one to twenty-four hours) during normal operation and the application of the formula provided in the Commission's approved Methodology for Estimated Billing 2012.

The estimation for the Non-MD is more complicated than the MD. MD is a direct process. For Non-MD, you have to consider a lot of parameters which are defined in the methodology. It starts from the feeder, but the Commission modified it because feeders were not metered at that time. Therefore, it starts from the transformer, through the reticulation lines, down to the customer's point of consumption. Classes of customers on that transformers, number of customers on that transformers, the energy injected into the transformer and the one taken out of it, the aggregate technical and commercial losses. All these will have to come into play to get the energy consumption for Non-MD Customers.

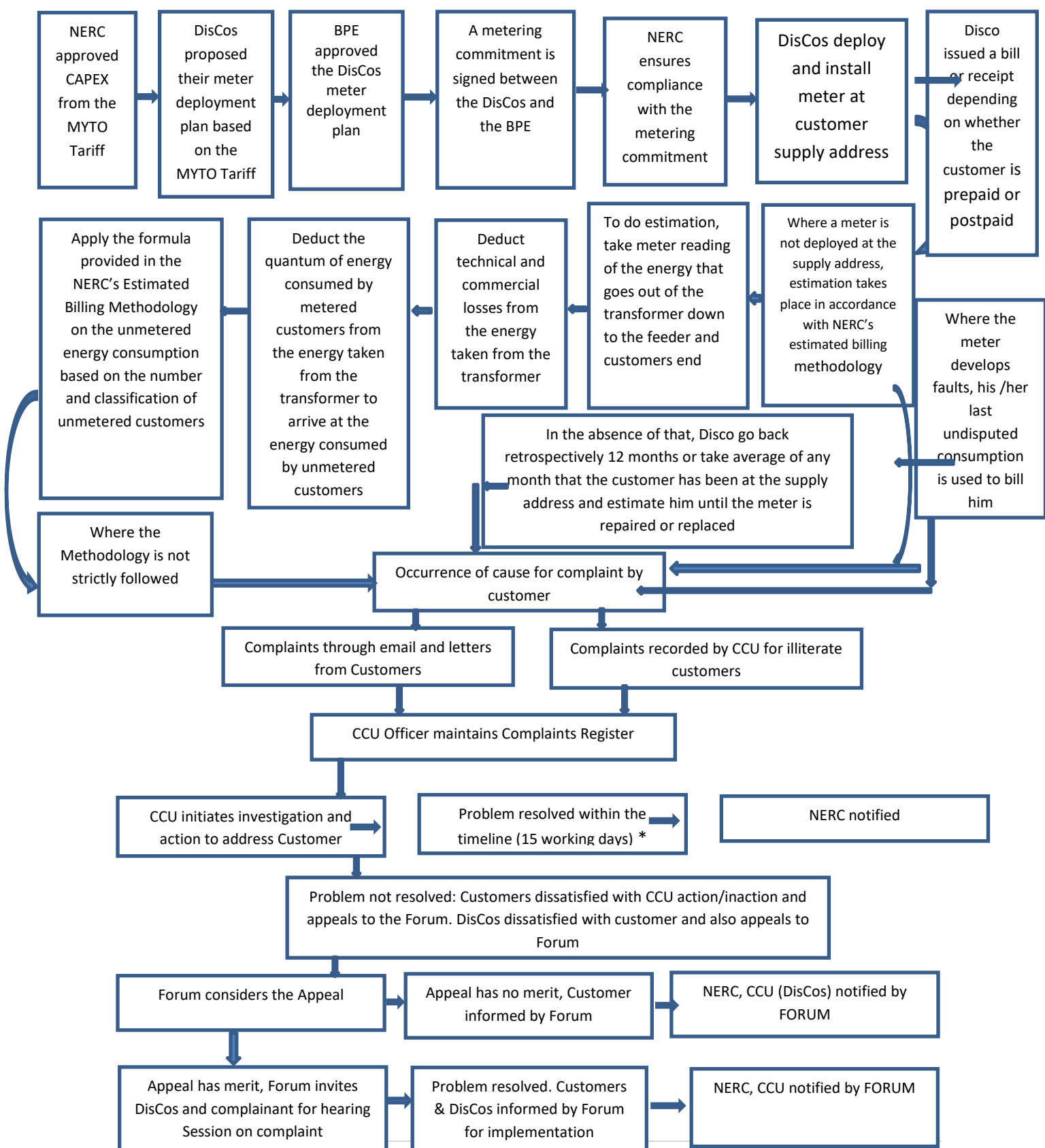
To arrive at the energy consumption for Non-MD Customer, meter reading of the energy is taken from the transformer down to the feeder and to the customer's end. Whatever is coming to the transformer is measured, and whatever is going out is also known, taking cognizance of the reasonable loss level, that is technical and commercial losses, from the quantum of energy that goes out of the distribution transformer, and then, take out the actual metering consumption. Whatever energy that remains after all these deductions have been taken care off will now be subjected to the application of the formulae as enshrined in the NERC's approved methodology for estimated billing and shared among the unmetered customers connected to

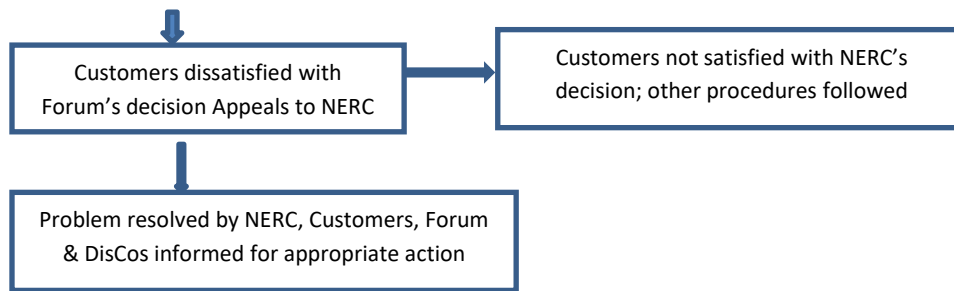
that particular transformer, in accordance with their tariff classification. The Act mandates the Commission to monitor and ensure that the bills charged to unmetered customers by the DisCos reflects the actual power usage and is in line with the NERC's approved Methodology for Estimated Billing.

2.2.3 Ensuring Satisfactory Resolution of Customer Complaints

The procedure of seeking redress is clearly spelt out in the Commission's Customer Complaints Handling Standards and Procedures Regulations 2006. According to the Regulation, the process starts with the occurrence of cause for metering or billing complaint by customer. The customer now files a complaint either through email and letters addressed to the Customer Complaints Unit (CCU) of the respective DisCo, or where the customer is illiterate, the CCU (that is DisCo) records the complaints on their behalf. The CCU maintains a complaint register and initiates investigation and actions to address the customer complaints. Where the problem is resolved within the timeline (15 working days), customers are informed and NERC notified. However, where the problem is not resolved or customers are dissatisfied with CCU action/inaction, they can appeal to the Forum Offices, established by NERC. DisCos can equally appeal to the Forum where they are not satisfied with the customer's action/inaction. Forum considers the appeal. In case the appeal has no merit, customers are informed and NERC and CCU notified to that effect. But where the appeal has merit, Forum invites the CCU and complainant for a hearing session on complaint. When the problem is resolved, Forum informs the customers and DisCos for implementation and NERC is notified accordingly. Moreover, where customers or DisCos are dissatisfied with the Forum's decision, appeal can be made to NERC. If the problem is resolved by NERC, Customers, Forum & DisCos are informed for appropriate action. But where Customers or DisCos are not satisfied with NERC's decision, other procedures follow (e.g some customers may decide to approach other intervening agencies for redress). The Commission as required under the Act ensures satisfactorily resolution of metering and billing complaints by enforcing compliance with the Customer Complaints Handling Standards and Procedures Regulations 2006.

Flow Chart 1: Processes of enforcing compliance with regulations put in place for the provision of meters and billing of customers for the actual electricity consumed





**The timeline depends on the nature of the complaint*

2.2.4 Factors that Determine Electricity Price in Nigeria¹⁰

Formerly, electricity tariff/charge depends on three elements, namely (1) Energy Charge (2) Demand Charge and (3) Fixed Charge. Nowadays, the price for electricity depends on four major factors namely:

1. Location; 2. Tariff Class; 3. Tariff Rate; 4. The quantity of consumed energy (in kWh).

Location

It is not a surprise that there are different electricity distribution companies (DisCos) in Nigeria. They are all located at various regions of the country. There are 11 distribution companies and each of them covers a certain area, with varying tariff plan.

Tariff Class

The amount of money you spend on electricity also depends on your tariff class. Load assessment is to be carried out at the point of connection to determine tariff classification of each customer. Electricity consumers in Nigeria are divided into 5 classes/categories, namely:

Class A - Residential: This category is strictly for residential energy consumers; R1 (life line), R2 (single and three phase), R3 (Low Voltage (LV) maximum demand), R4 (High Voltage (HV) maximum demand)

Class B - Commercial: This category is for consumers, whose premises are used for Small and Medium Scale Enterprises (SMEs) business, for example, offices, beauty parlors etc. C1 (single and three phase), C2 (LV maximum demand), C3 (HV maximum demand).

Class C - Industrial: This category uses their premises for manufacturing and other production processes. For example, Shops and offices. D1 (single and three phase), D2 (LV maximum demand), D3 (HV maximum demand).

Class D - Special tariff: These consumers include the following; religious houses, government buildings, educational establishments, hospitals, agro-allied industries. A1 (single and three phase), A2 (LV maximum demand), A3

¹⁰ American Journal of Engineering Research 2018

(HV maximum demand).

Class E - Street lighting: This category includes S1 (single and three phase)

Tariff Rate and Quantity of Consumed Energy (kWh)

The Tariff Rate depends on class. Main classes are divided by the DisCos to sub-classes. The division is based on the average consumption of electricity by each class. The Tariff Rate is different for each class and the DisCos covering such area. It also depends on the quantity of energy consumed. The tariff for each DisCo and sub-class for the years 2016, 2017 and 2018 is provided in Appendix VII.

2.3 Role and Responsibility of other Key Players

The Nigeria Electricity Supply Industry (NESI) has the following industry participants (Stakeholders):

1. Federal Ministry of Power (FMOP);
2. Electricity Generation Companies (GenCos);
3. Transmission Company of Nigeria (TCN);
4. Electricity Distribution Companies (DisCos);
5. Nigerian Bulk Electricity Trading Plc (NBET);
6. Gas Aggregator Company of Nigeria (GACN);
7. Nigerian Electricity Management Service Agency (NEMSA);
8. Electricity Consumers
9. Federal Competition and Consumer Protection Commission (FCCPC)
10. National Assembly (NASS).

Federal Ministry of Power (FMOP)

The mandate of the Ministry is primarily to formulate and implement the policy of the Federal Government of Nigeria (FGN) with respect to the generation, distribution and transmission of power nation-wide.

The Power Sector of the Ministry formulates policies for the Federal Government on matters dealing with the provision of electricity. The Ministry is mandated to develop and facilitate the implementation of policies for the provision of adequate and reliable power supply to drive the socioeconomic development of the nation. In discharging the mandate, the Ministry is guided by the provisions of National Electric Power Policy (NEPP) of 2001, the Electric Power Sector Reform (EPSR) Act of 2005 and the Road map for Power Sector Reforms of August, 2010.

Generating Companies (GenCos)

The Electric Power Sector Reform (EPSR) Act which was signed into law in March 2005, also enables private companies to participate in electricity generation. The GenCos are charged with the responsibility of generating electricity in Nigeria. The Generating Companies include the privatized PHCN successor companies which the Federal government has fully divested its interest from, the Niger Delta Power Holding Companies, the already existing Independent Power Producers (IPPs) and the new IPPs

The generation sub-sector includes 23 grid-connected generating plants in operation with a total installed capacity of 10,396 MW (available capacity of 6,056 MW) with thermal based generation having an installed capacity of 8,457.6MW (available capacity of 4,996 MW) and hydropower having 1,938.4 MW of total installed capacity with an available capacity of 1,060 MW. This comprises of the privatized GenCos, Independent Power Producers (IPPs) and the generating stations under the National Integrated Power Project (NIPP). IPPs are power plants managed by the private sector prior to the privatization process. These include Shell operated – Afam VI (642MW), Agip operated – Okpai (480MW), Ibom Power, NESCO and AES Barges (270MW).

Transmission Company of Nigeria (TCN)

The TCN emerged from the defunct National Electric Power Authority (NEPA) as a product of the merger of the Transmission and Operations sectors on April 1, 2004. TCN was incorporated in November 2005. Being one of the 18 unbundled Business Units under the Power Holding Company of Nigeria (PHCN), TCN was issued a transmission License on 1st July, 2006. It was subsequently issued two licenses on June 10, 2013 for electricity transmission and system operations.

The Company which is wholly owned by the Federal Government of Nigeria is to among others, perform the following functions:

- i. Operate, expand/upgrade transmission facilities for efficient and effective wheeling of generated electricity.
- ii. Build Transmission Grid that can efficiently evacuate all generated power.
- iii. Create adequate network redundancies to ensure at least 99.9% reliability.
- iv. Reduce transmission losses to less than 5%.

- v. Pursue Inter-connection with neighboring Countries for power exchange with associated cost savings from the sharing of reserve capacity and energy resources.

Distribution Companies (DisCos)

The Distribution Companies (DisCos) were floated to facilitate the supply of power using its distribution network to provide electricity to consumers within its franchise area (area of operations). It is also responsible for ancillary services such as the operations and maintenance of the distribution network, customer connections, installations, maintenance, reading of meters and billing of customers. It also plays the critical role of collecting the revenues associated with the power supply on behalf of all operators within the value chain and subsequently remits to each party its allocated portion. The Federal Government presently owns 40% stake in the ten (10) DisCos, while the Yola Electricity Distribution Company (YELDC) is now wholly owned by the Adamawa State Government.

The list of the DisCos and their catchment area is contained in Appendix VIII.

Nigerian Bulk Electricity Trading (NBET) Plc

The Nigerian Bulk Electricity Trading (NBET) Plc is the manager and administrator of the electricity pool in the Nigerian electricity supply industry (NESI). It is 100% owned by the Federal Government of Nigeria. NBET purchases electricity from the Generating Companies through Power Purchase Agreements (PPAs) and sells to the Distribution Companies through Vesting Contracts.

Gas Aggregation Company of Nigeria (GACN)

The Gas Aggregation Company of Nigeria Limited (GACN) is responsible for providing gas to the generating companies.

Nigeria Electricity Management Services Agency (NEMSA)

The NEMSA is responsible for technical standards and regulations, technical inspection, testing and certification of all categories of electrical installations, electricity meters and instruments to ensure the efficient production and delivery of safe, reliable and sustainable electricity power supply and guarantee safety of lives and property in the Nigerian Electricity Supply Industry (NESI) and for related matters.

Electricity Consumers

Consumers are any end-users of electricity who are customers of distribution licensees. Consumers are classified into residential, commercial, industrial and eligible customers.

Federal Competition and Consumer Protection Commission (FCCPC)

The Federal Competition and Consumer Protection Commission (FCCPC) is the apex consumer protection agency in Nigeria. The overall mandate of the Commission is to protect consumers by taking both preventive and remedial measures.

The Commission, in fulfilment of its statutory mandate, deploys several regulatory tools to monitor and modify behavior of service providers and manufacturers. Some key areas of operation include complaint resolution, surveillance and enforcement, consumer education, as well as research and strategy.

National Assembly (NASS)

The NASS plays an important role in the Nigeria's power sector through law making, oversight functions and budgetary provision.

CHAPTER THREE

3.0 Audit Findings

This chapter describes the findings obtained from the audit and provides answers to the audit questions set out in chapter 1.

3.1 Overseeing the Provision of Meters to Customers

3.1.1 Ensuring Compliance with DisCos Annual Metering Commitment

Performance Agreement signed in 2013 between the Bureau of Public Enterprise (BPE) and the DisCos envisaged an average deployment of 1,640,811 meters per annum in order to close the metering gap by the end of 2018. The breakdown of the yearly target for each DisCo is as shown in Appendix IX

A review of the DisCos Metering Position Reports revealed that in the year 2016, a total of 418,807 meters were deployed by Abuja, Eko, Ikeja, Kaduna, Kano and Port Harcourt DisCos. The other DisCos (Benin, Enugu, Ibadan, Jos and Yola) did not make any deployment during the period as revealed in the Metering Progress Report resulting to a shortfall of 1,222,004 representing 74.47% of the annual metering obligation. Similarly, in the year 2017, a total of 70,296 meters were deployed by Eko, Enugu, Jos, Kaduna, Kano and Yola DisCos. No deployment was reported to have been made by the other DisCos namely Abuja, Benin, Ikeja, Ibadan and Port Harcourt. This resulted to a gap of 1,570,515 meters representing 95.71% of the annual metering obligation. Likewise, in 2018, a total of 534,006 meters were deployed by Abuja, Benin, Enugu, Ibadan, Port Harcourt and Yola DisCos as the remaining DisCos which include Eko, Ikeja, Jos Kaduna and Kano did not provide meter to customers during the period leaving a deficit of 1,106,805 meters, representing 67.45% of the annual metering obligation. This brought the total shortfalls recorded by the 11 DisCos during the period under review to 3,899,324 representing 79.21% of the DisCos total annual metering obligations as shown in the table below:

Table 6: Analysis of the DisCos Metering Performance (2016 to 2018)

Year	A	B	C	D	E
	Metering Obligation Based on Cost Reflective Tariff	No. Of Meters Deployed	Metering Shortfall =Column A Minus Column B	% of Metering Shortfall to Metering Obligation	No. Of DisCos that Deployed Meters During the Period
2016	1,640,811	418,807	1,222,004	74.47%	6
2017	1,640,811	70,296	1,570,515	95.71%	6
2018	1,640,811	534,006	1,106,805	67.45%	6
Total	4,922,433	1,023,109	3,899,324	79.21%	18

Source: Audit extracts from the DisCos Metering Position Report

Additionally, NERC's in its 2018 Fourth Quarterly Reports reported that out of the 8,731,118 registered electricity customers, only 3,793,895 (43.45%) were metered as at the end of the period. Thus, 4,937,223 customers (56.55%) were still on estimated billing.

Responses obtained during interview sessions held with Management Staffs of the DisCos visited attributed the metering gap to lack of cost reflective tariff during the period under review.

The Commission in its August 2019 Open Book Review Report however expressed doubts about the perceived complaints of tariff not being cost reflective as always adduced by the DisCos for not meeting their market responsibilities. This according to the report followed a threat of law suit by the DisCos when the Commission suggested the escrowing of their Principal Collection Accounts in 2016.

To support the above, analysis of the Commission's Data on Tariff Shortfalls recorded by the 11 DisCos, Metering Progress Reports for the period covered as well as DisCos Annual Metering Obligation revealed that out of the metering shortfall of 1,222,004 recorded by the 11 DisCos in the year 2016, as shown in the table above, only 612,440 was attributed to Tariff Shortfall. It was observed that with the Tariff Allowed by the Commission in 2016, DisCos were supposed to deploy a total of 1,028,371 meters but only 418,807 meters were deployed, resulting to a metering gap of 609,564 meters. Further analysis revealed out of the shortfall of 1,570,515 recorded by the 11 DisCos in 2017 as shown in the table, only 581,831 was due to lack of cost reflective tariff. Based on the Allowed Tariff of 2017, the 11

DisCos had the capacity to deploy 1,058,980 meters, but only deployed 70,296 meters, resulting to a shortage of 988,684 meters. In the year 2018, the scenario is not different. Out of the metering shortfall of 1,106,805 recorded by the 11 DisCos during the period as provided in the table, only 650,039 was caused by Tariff Shortfall. It was observed that with the Allowed Tariff of 2018, the DisCos could have deployed 990,772 meters during the period but ended up deploying 534,006 meters resulting to a deficit of 456,766 meters. The table below gives a summary of the above while a detailed analysis is provided in Appendix X, XI and XII

TABLE 7: ANALYSIS OF THE SHORTFALLS RECORDED BY DISCOS (2016 to 2018)

	A	B	C	D	E	F	G	H
Year	DisCos Metering Obligation As Per Performance Agreement	No. of Meters DisCos Should Deploy Based on the Allowed Tariff	Metering Gap Attributed to Tariff Shortfall =Column A Minus Column B	DisCos Actual Metering Gap Based on Cost Reflective Tariff =Column A Minus Column E	No. Of Meters Deployed	Metering Gap Not Caused by Tariff Shortfall (Avoidable) =Column B Minus Column E	% of Metering Gap Not Caused By Tariff Shortfall to Actual Metering Gap Recorded	Reference for Details
2016	1,640,811	1,028,371	612,440	1,222,004	418,807	609,564	49.88%	APPENDIX X
2017	1,640,811	1,058,980	581,831	1,570,515	70,296	988,684	62.95%	APPENDIX XI
2018	1,640,811	990,772	650,039	1,106,805	534,006	456,766	41.26%	APPENDIX XII
Total	4,922,433	3,078,123	1,844,310	3,899,324	1,023,109	2,055,014	52.7%	

Source: Computation based on figures extracted from the DisCos Metering Obligation, Metering Position/ Progress Report as well as Data on Tariff Shortfalls provided by NERC.

The table above showed that out of the total metering shortfall of 3,899,324 meters recorded by the 11 DisCos during the period under review, only 1,844,310 was attributed to Tariff Shortfall. According to the table, with the Allowed Tariff of 2016, 2017 and 2018, the 11 DisCos were supposed to have deployed a total of 3,078,123 meters but only a total of 1,023,109 meters were deployed resulting to avoidable gap of 2,055,014 meters representing 52.7% of the total shortfalls recorded by the 11 DisCos during the period under reference. This was attributed to the following;

1. The Commission has not issued Corporate Governance Guideline to guide related party transaction as revealed in its August 2019 Open Book Review Report for Ibadan Electricity Distribution Company (IBEDC). According to the Report, the DisCos have now turned business activities particularly procurement into a money making venture, even when business is operating at a loss.
2. Additionally, The Commission has not issued standardized procurement guideline for the power sector. It was reported in the 2019 Open Book Review Report in respect of the accounting and financial records of Port Harcourt Electricity Distribution Company (PHED) that the meter procurements were mostly through a selective tendering process which may lack the required level of transparency given the amount involved.
3. It was also revealed on page 13 of the 2019 Open Book Review Report for Abuja Electricity Distribution Company (AEDC) that lack of timely Open Book Reviews Exercise of the DisCos books by the Commission have led to arbitrary allocation of market funds for projects which had no significant impact on their revenue. For instance, KANN gets 2% of AEDC's monthly collection plus Operation and Maintenance (O & M) charges invoiced on a monthly basis for a five-year period of the contract which is automatically renewable for another period of five years. This amounted to the sum of N5,373,390,458.75 paid to the Utility (KANN) during the first phase of the contract (2014 to 2018) while Aurecon Engineering Services gets a minimum of \$8.9m US Dollars over five years' period of the contract. It was observed that there was no difference between the technical services provided by the KANN and Aurecon Engr. Services despite the huge amount expended on the contracts as observed in the Report. Additionally, Port Harcourt Electricity Distribution Company (PHEDC), Enugu Electricity Distribution Company (EEDC) and Abuja Electricity Distribution Company (AEDC), invested a total of N5.86 billion in fixed deposits when they hardly fulfil their obligations as revealed in the Report.

The above phenomena drained the DisCos of much needed funds that would have been used to provide meters and meet other market obligations (eg payment to NBET and MOs). This in turn resulted to unavailability of meters and consequent exploitation of unmetered customers by the DisCos through estimated billing.

Management Comment

- A. *The Corporate Governance has been developed and it is at the completion stage, it will soon be issued by the Commission to guide the DisCos operations.*
- B. *The Procurement guidelines in the power sector have been completed and the Commission is doing all its best to round it up before the year ends.*
- C. *The Open Book Review of DisCos has revealed the financial leakages and appropriate actions will be taken by the Commission to address same.*

Auditors' evaluation of Management comment

- A. The management comment confirmed lack of Corporate Governance as observed in the report. The comment further strengthened the observation raised on page 18 of the Open Book Review Report for the Ibadan Electricity Distribution Company (IBEDC) PLC that the Corporate Governance Guidelines to be issued by the Commission has been delayed beyond necessary and the DisCos have capitalized on this lapse even when the business is operating at a loss.
- B. The management comment suggests lack of Procurement Guidelines in the power sector, a development that resulted to lack of level playing ground in the procurement process as observed in the report.
- C. Management acknowledged the financial leakages. The Commission on page 13 of the AEDC's Open Book Review Report concluded that Disco's O & M and TSA contracts apparently seem like backdoor methods for the core investors to recoup their money while still claiming they had made losses which would prevent them from meeting their obligations. However, despite the Commission's acknowledgement of the magnitude of the DisCos' financial leakages, no action is taken one year after the Open Book Review Exercise.

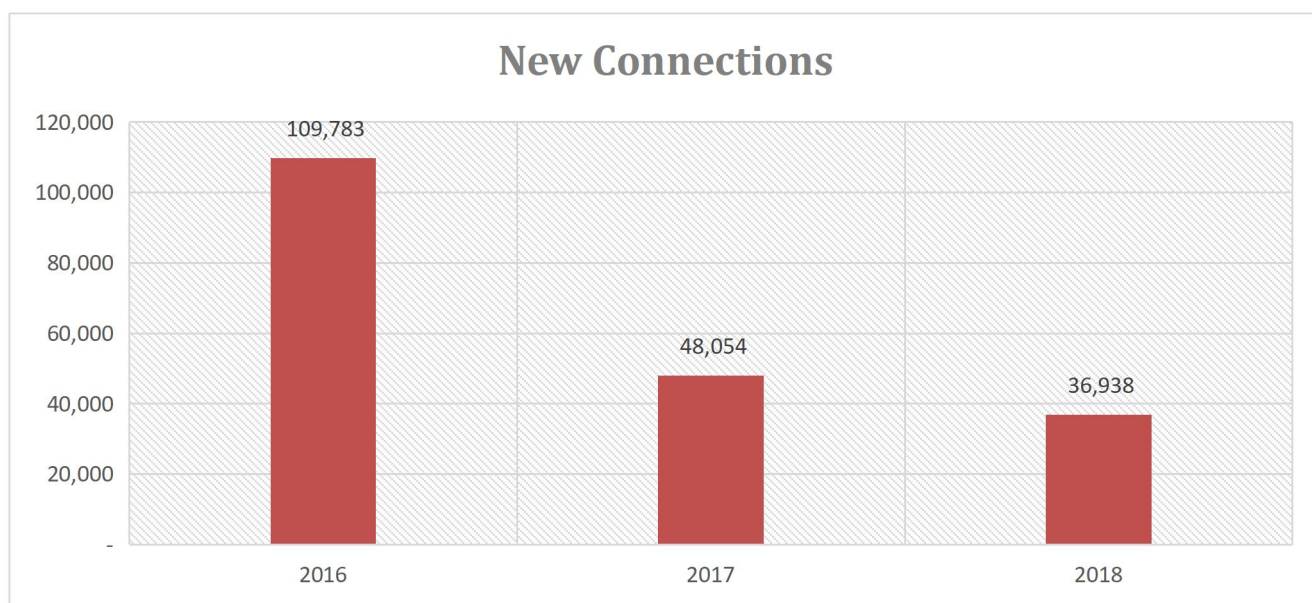
3.1.2 Ensure Provision of Meters for New Connections

Section 2 of the Customer Service Standards of Performance for Distribution Companies, 2007 provides that where a Customer makes a request to a Distribution Company for a new or additional connection, the Distribution Company shall take measures to fit the meter and connect the power supply within ten working days of receiving the request.

Audit review of the Schedule of New Connections submitted to the Team by Jos Electricity Distribution Company (JEDCO) however indicated that from 2016 to 2018, a total of 194,775 new customers were metered. According to the data, 109,783; 48,054; and 36,938 new Customers were provided with meters in year 2016, 2017 and 2018 respectively. Similarly, data provided by Management of the Ibadan Electricity Distribution Company revealed that a total of 1,149,058 new connections were metered for the period 2016, 2017

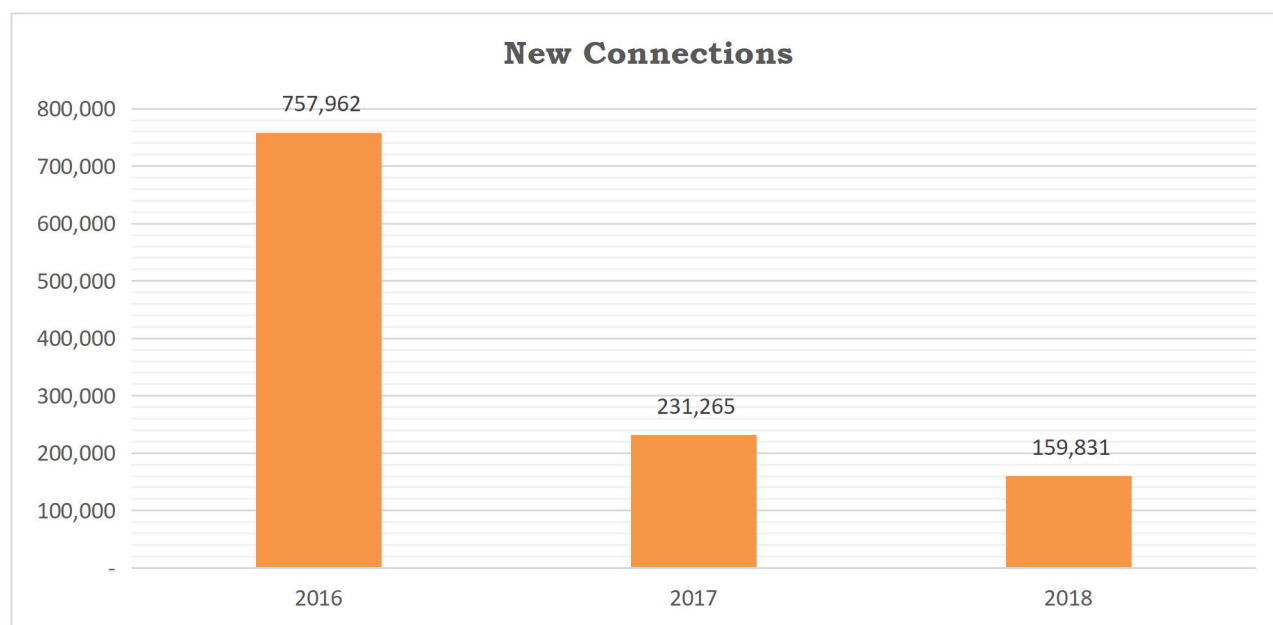
and 2018 comprising of 757,962; 231,265; and 159,831 new customers respectively. See Chart 1 and 2 below.

Chart 1: JED New Connections for the period 2016 to 2018



Source: Documents reviewed from JEDCO

Chart 2: IBDCO New Connections for the period 2016 to 2018



Source: Documents reviewed from IBDCO

The charts above showed that there were more New Connections in year 2016 when the Credited Advance Payment for Metering Initiative (CAPMI) Programme was in existence. However, as the Programme was scrapped, the rate of New Connections for both maximum demand (MD) and non-maximum demand (Non-MD) meters declined as meters were not available to connect new customers.

Furthermore, the Commission in its Audit Monitoring Report of DisCos Compliance to Service Standards conducted in the second quarter of 2018 revealed that Jos, Ibadan, Kano, Yola and Ikeja DisCos did not meter new customers at the point of connection in contravention to Section 2 of the Customer Service Standards of Performance for Distribution Companies, 2007 as mentioned above.

The Commission in its follow up to the audit exercise passed a resolution that henceforth, DisCos should submit their customer complaints reports on monthly basis as revealed by the 2019 First Quarter Report. In addition, the Commission mandated the erring DisCos to correct the anomalies. However, the follow up audit is yet to be carried out two years after the Audit

Monitoring Exercise to confirm full compliance with the recommendations of the Commission. The situation was further compounded by the reported cases of lack of Procurement Guideline to ensure transparency in the DisCos procurement process, non-issuance of Corporate Governance Code to guide related party transaction as well as lack of timely and regular open book review exercise by the Commission leading to arbitrary allocation of electricity market funds to projects which had no significant impact on the DisCos revenue as revealed in the August 2019 Open Book Review Report.

This development starved the DisCos of the funds to provide meters to connect new customers, hence new customers complain due to continuous exploitations associated with estimated billings from DisCos.

Management Comment

- A. CAPMI programme has been replaced with Meter Asset Providers (MAP) Regulations, 2018. The MAP Regulations seek to encourage the development of independent and competitive meter services in NESI, eliminate estimated billing practices in NESI, attract private investment to the provision of metering services in NESI and close the metering gap through accelerated meter roll out in NESI.***
- B. The Commission has been in touch with the DisCos concerned to resolve issues raised in the previous Open Book Exercise, while there is plan to conduct a follow-up Open Book Review as soon as it is safe to do so.***
- C. The follow up audit will soon be carried out by the Commission; the delay was caused by the current pandemic.***

Auditors' evaluation of Management comment

- A. Meter Asset Provider (MAP) Regulation falls outside the scope of the audit as the implementation began on the 1st of May, 2019. The audit assessed the DisCos metering performances based on the metering commitment signed at the point of privatization. According to the data provided by the respective DisCos, there were more New Connections in year 2016 when the Credited Advance Payment for Metering Initiative (CAPMI) Programme was in existence. Under CAPMI, willing customers pay for the purchase of the meter which is contrary to the provision of the Performance Agreement. In 2017 and 2018, it is

expected that DisCos should strictly stick to the provision of Performance Agreement by utilizing their Allowed CAPEX to provide meters. The comparison of the new customers metered between 2016 and 2018 was made in order to show how the DisCos fared during CAPMI and post CAPM period and it is expected that management comment should shed more light on that.

- B. The plan to do follow up on the Open Book Review Exercise as soon as it is safe to do so is a step in the right direction. However, a swift action was expected considering the magnitude and impact of the financial leakages to the industry.
- C. The delay in the follow up audit cannot be attributed to the COVID 19 pandemic. This was due to the fact that the audit was conducted in the second quarter of 2018 and the law mandates NERC to carry out audit monitoring quarterly. It is expected that the Commission should follow up its recommendations before the end of the third quarter. Furthermore, the Corona Virus was declared a pandemic by World Health Organization (WHO) on 11th March 2020 and adopted by the Federal Government on 31st March, 2020.

3.2 Regulating and Ensuring Appropriate Billing of Electricity Consumers (Both Metered and Unmetered)

3.2.1 Classification of Customers by DisCos

The Multi Year Tariff Order (MYTO) 2015 requires every Distribution Company to carry out load assessment of customer's premises at the point of connection for proper classification.

The Commission as revealed in its 2018 Quarterly Report of the Third Quarter, had an on-going litigation on several issues including wrong customers' classification which was as a result of inappropriate customer load assessment carried out by DisCos.

It was also reported in the Commission's Audit Monitoring Report of DisCos Compliance to Service Standards conducted in the Second quarter of 2018 that Jos DisCo wrongly classified some customers as a result of inappropriate load assessment of the customer's premises. According to the Report, St Theresa Church was classified as C1 while Hatman Hotel classified as A1. The Report further revealed that some customers were classified by Benin Disco as C2 when they were actually C3 in accordance

with MYTO 2015 classes. The scenario is not much different with Ibadan DisCo. Of particular note is a situation where an office which is purely commercial was placed on special (A3) class. The situation is the same with Kano and Enugu DisCos where customers were wrongly classified in disregard to MYTO 2015.

The Commission mandated the erring DisCos to correct the anomalies. However, two years after the Audit Monitoring Exercise, there was no follow up to confirm full compliance and neither did the Commission sanctioned the erring DisCos in line with the Enforcement Regulations 2018 to serve as deterrent to others.

Hence, the DisCos have the impetus to continue business as usual by not properly assessing the load of electricity customers and the tariff class is also flouted leading to improper billings at the expense of customers.

Management Comment

The issues of wrong classification that were escalated to the Commission were promptly referred to the relevant DisCos for adjustment.

Auditors' evaluation of Management comment

The management response only repeated what was stated in issue 3.2.1 above. It was reported on paragraph 3 of the same issue that the Commission mandated the erring DisCos to correct the anomalies. The main issue that needed to be addressed was follow up.

3.2.2 Billing of Unmetered Customers

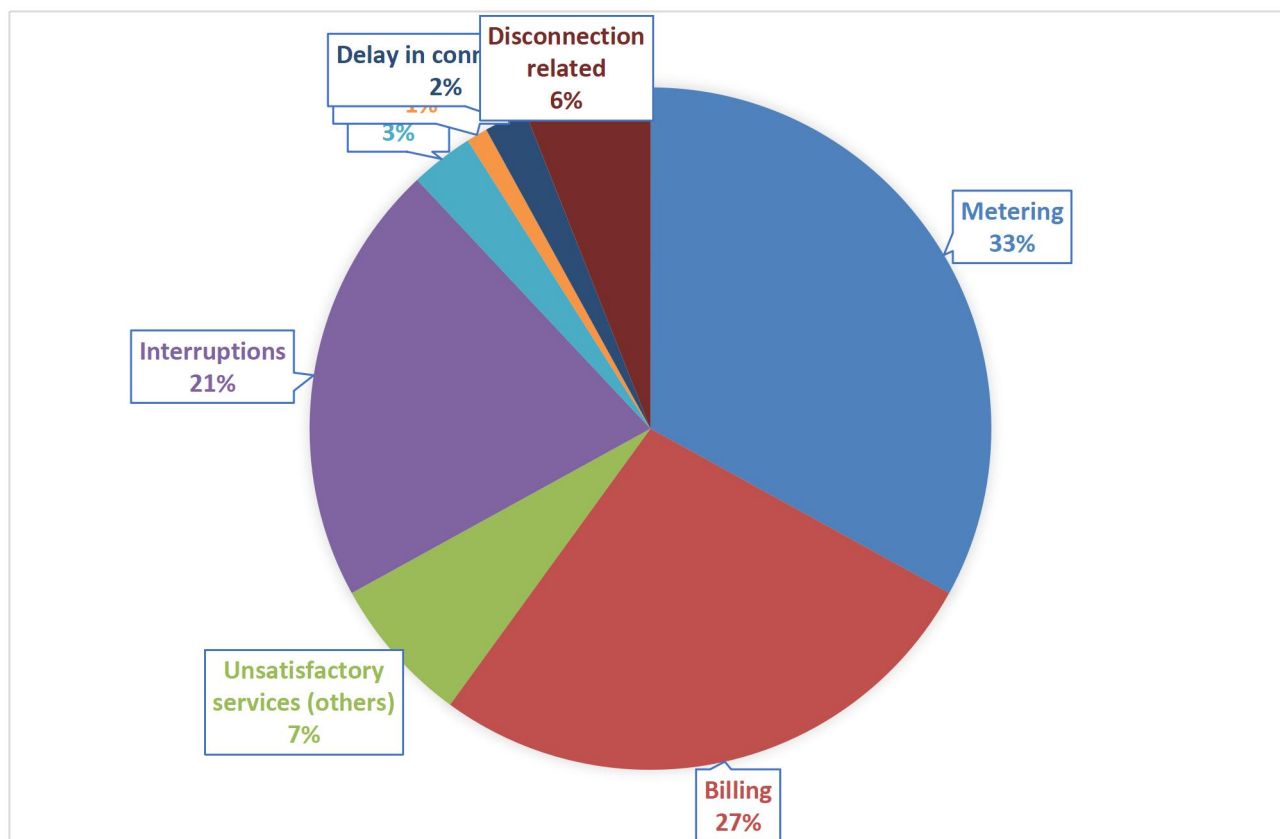
Section 3.3 Chapter II of the Methodology for Estimated Billing 2012 states that where a Disco Estimate Customer's usage of electricity, the Disco shall adopt Commission's approved methodology for estimated billing and the Customer's estimated electricity usage shall, under no circumstance be arbitrarily inflated.

A review of the NERC Forum Offices Data revealed that, out of 10,671 appeals received by the NERC's Forum offices nationwide during the period 2016 to 2018, 6,231 representing 58.3% of the total appeals received centered on outrageous estimated billing.

Similarly, the Commission in its Quarterly Reports for the period 2016, 2017 and 2018 revealed that billing is one of the three issues that dominated customer complaints in each quarter. According to the Reports, billing alone accounted for 42% and 39% of the total complaints received in the First and

Second Quarter of 2018. This is a pointer that there is non-compliance with the Methodology for Estimated Billing leading to the issuance of outrageous estimated billing by DisCos. The chart below shows that 27% of the total complaints received in the third quarter of 2017 centered on estimated billing.

Chart 3: Extent of Metering and Billing complaints by customers



Source: NERC 2018 Q3 Report on Consumers Complaints

Likewise, the Commission in its Audit Monitoring Report of DisCos compliance to Service Standards conducted in 2018 reported the following anomalies;

- i. Jos DisCo was charging customers extra charges not approved by the Commission.
- ii. Benin DisCo was using the back-billing calculator for billing in gross disregard to the Commission's directive to stop it
- iii. Enugu DisCo was not complying with methodology for estimated billing.

In the same vein, 73% of the responses obtained from 175 questionnaires administered to electricity consumers across the DisCos confirmed that bills

issued to unmetered customers are not commensurate with the actual electricity consumed during the billing period as the DisCos do not apply the Methodology for Estimated Billing approved by the Commission.

It was observed that the Commission did not carry out quarterly audit monitoring as required. Apart from the audit exercise conducted by the Commission in the second quarter of 2018 as reported in its 2018 Quarterly Report, no audit monitoring was reported to have been carried out by the Commission during the period under review. The Commission during interview session cited funding constraints as the reason for not carrying out audit monitoring in 2016 and 2017. However, it was observed from the NERC's Audited Financial Statements that the Commission reported surplus of ₦128,630,000.00 and ₦1,716,651,000.00 in 2016 and 2017, even when it could not carry out its audit monitoring due to paucity of funds.

Since DisCos are not closely monitored, and sanctions not meted to erring DisCos, they continue to issue arbitrary bills to customers that do not reflect the actual power consumed, leading to increase in the billing complaints from the unmetered customers.

Management Comment

The Commission has not relented on its statutory functions. The Commission came up with the Capping Order which repeals the Estimated Billing Methodology Regulations. The Six DisCos which were found violating the Capping Order have recently been issued with Notice of Intention to Commence Enforcement (NICE), their response is being considered for the next line of action.

Auditors' evaluation of Management comment

Management sanctions to erring DisCos are seen to be mild as they only end at Notice of Intention to Commence Enforcement (NICE). As a result, the operators are not abiding by the Regulations and Orders issued by the Commission. Estimated Billing Methodology Regulation was repealed due to lack of enforcement. Hence, the management response did not address why the Commission was unable to carry out audit monitoring in 2016 and 2017.

3.3 Ensuring Satisfactory Resolution of Customer Complaints

3.4.1 Resolution of Customer Complaints at the CCU Level

Section 3(8) of the Customer Complaints Handling: Standards and Procedures 2006 Regulation (CCHSP) provides that "All complaints shall be resolved and the customer notified expeditiously but, in any case, within

fifteen (15) working days of the written complaints being received by the Customer Complaint Unit. Where additional time is required however, for example to test the accuracy of the meter, the customer must be notified within 15 working days of receipt of the complaint of the action(s) being taken and every 15 working days until the complaint is resolved”.

Analysis of the data extracted from the NERC’s Quarterly Reports for the period 2016, 2017 and 2018 revealed that the 11 DisCos received a total of 1,155,112 complaints from electricity consumers nationwide. According to the analysis, a total of 842,169 representing 72% of the complaints were resolved, while 312,943 complaints remained unresolved as shown in the table below. The complaints were majorly about metering, estimated billing, service interruptions, poor voltage, load shedding, disconnection, delayed connection among others with metering and billing dominating most of the complaints in every quarter.

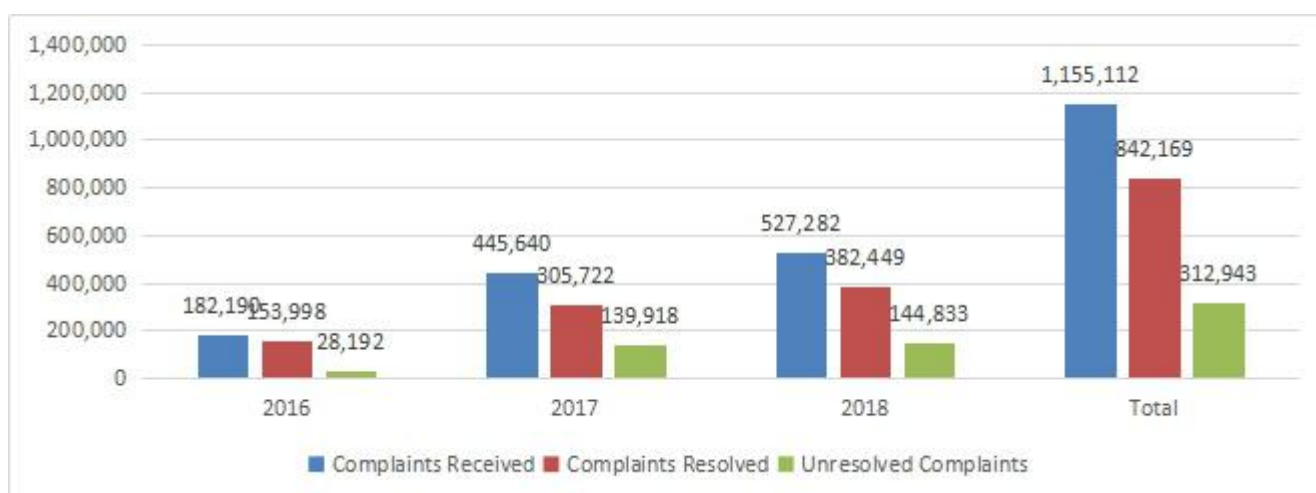
Table 8: Complaints received and resolved by 11 DisCos from 2016-2018

Years	Complaints Received	Complaints Resolved	Unresolved Complaints
2016	182,190	153,998	28,192
2017	445,640	305,722	139,918
2018	527,282	382,449	144,833
Total	1,155,112	842,169	312,943

Source: Computation based on figures provided in the 2016, 2017 and 2018 quarterly reports of the NERC.

The above table which is reflected in a column chart below shows the distribution of the complaints which was on a continuous increase from 2016 to 2018. Similarly, both complaints resolved and unresolved also grew within the same period.

Chart 4: Schedule of Customers complaints received, resolved and not resolved.



Source: Extract from the 2016, 2017 and 2018 quarterly reports of NERC.

The Commission's Audit Monitoring Report of DisCos Compliance to Service Standards conducted in 2018 however revealed that a number of unresolved or partially resolved complaints were reported as resolved in Ibadan and Ikeja DisCos whereas the cases were still pending before the CCUs of the affected Disco. Similarly, Enugu DisCo records cases as resolved when they only escalated it to another level for full resolution. For example, a customer who wants meter is asked to go and apply online. The CCU will then put the case as resolved when the customer has not been issued any meter.

Additionally, responses from the interviews held with electricity customers at Port Harcourt, Kaduna, Benin, Enugu, Yola, Eko, Jos and Ikeja DisCos revealed that resolutions from the DisCos were not always timely, and sometimes not satisfactory. Customers further revealed that complaints lodged on metering are not usually met, while that of billings were not usually attended to, even after the expiration of the required 15 working days.

Management staff of the Federal Competition and Consumer Protection Commission (FCCPC) during interview session attributed the above to inadequate training of CCU Officers on customer care issues particularly those at the Business Units of the DisCos.

To buttress further, management staff of Consumer Affairs Division of NERC revealed during interview session that DisCo staff are sometimes not well trained nor possess the required temperament and disposition to effectively handle customers and resolve their problems. Additionally, the front facing staff of the DisCos often do not understand the customer's complaint effectively to be able to handle the case and resolve it holistically. Customers

who complain about estimated billing find that the DisCo staff are not able to effectively communicate how their bills were computed and this results to customer's annoyance when the complaints are not quickly resolved.

Additionally, the Commission in its 2018 Audit Monitoring Report of DisCos Compliance to Service Standards reported that there was a training gap in the Customer Complaints Officers of Kano and Kaduna DisCos on Customer Service and Regulations.

Management Comment

We note this observation and hope to make arrangements to monitor their training programs to ensure that their staffs are given the necessary training. However; the Commission has on several occasions conducted trainings for the CCU staff of the DisCos.

Auditors' evaluation of Management comment

Management noted the observation. The earlier the Commission monitors CCU's training programs to ensure that their staffs are given the necessary training, the better for the industry.

3.4.2 Resolution of Customer Complaints at the Forum Office Level

Section 11 of the CCHSP Regulation 2006 provides that 'the Distribution Company Licensee shall implement the decision of the Forum within the time specified in the Directive of the Forum.

It was observed from the analysis of the Data collected from the Forum Offices nationwide for the period 2016 to 2018, that the Forum offices received a total of 10,671 appeals from electricity consumers out of which 9,053 were reportedly resolved by the Forum, while the remaining 1,618 customers' complaints remained unresolved. The breakdown is as shown below:

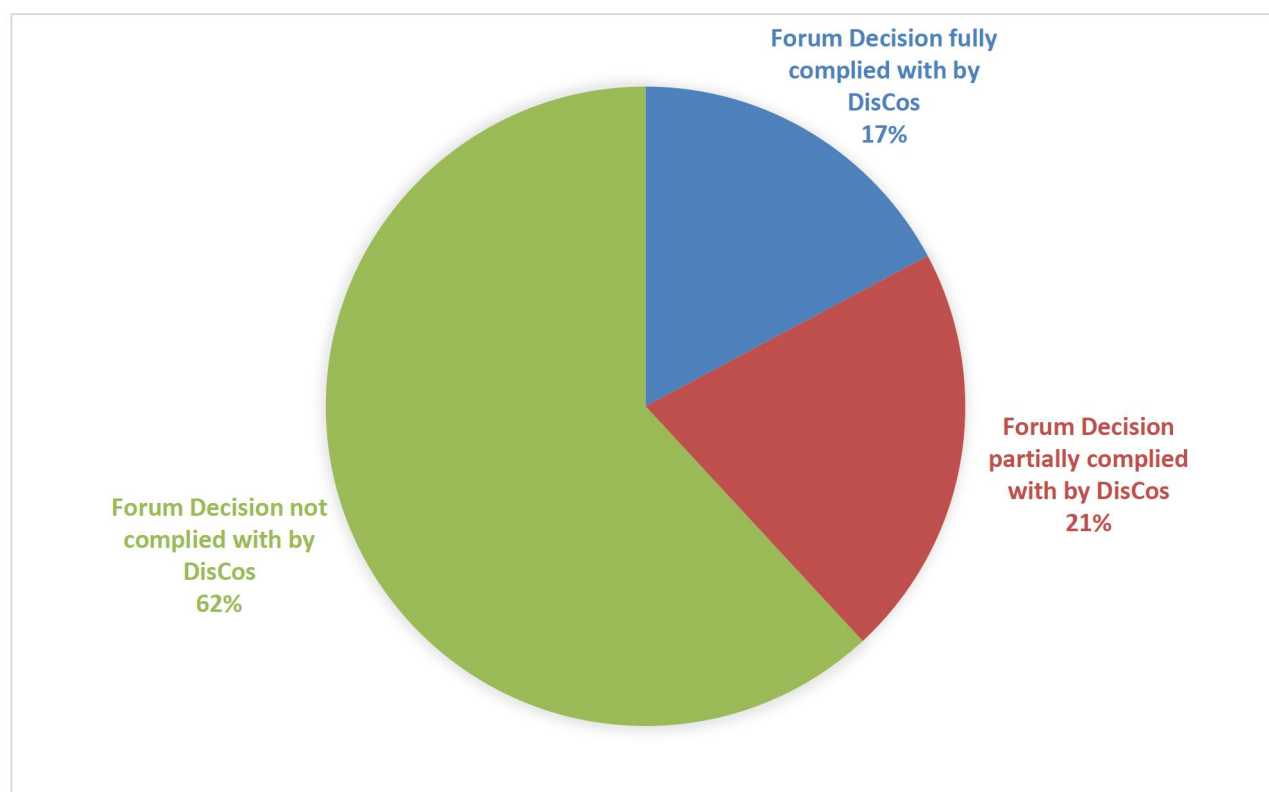
Table 9: Data Collated from the Forum Offices Nationwide (2016-2018)

Total Complaints Received at the Forum	Total Complaints Resolved at the Forum	Total Complaints Not Resolved at the Forum	Total Complaints on Outrageous Billing	Total Complaints sent to Commission for enforcement/Non-Compliance	Forum Decision fully complied by DisCos	Forum Decision partially complied By DisCos	Forum Decision not complied by DisCos
10,671	9,053	1,618	6,231	6,081	1,046	1,272	3,763

Source: Data provided by NERC

It was noted from the table above that out of 9,053 appeals resolved, only 2,972 were fully complied with by the DisCos, while 6,081 were not complied with and escalated to the Commission for enforcement. The table further revealed that out of the 6081 Forum decisions received by the Commission for enforcement, 3,763 representing 62% were not enforced and complied with. Out of the remaining 2,318 or 38%, DisCos only fully complied with 1,046 complaints and partially complied with 1,272 complaints as shown in the chart below.

Chart 5: Complaints sent to the Commission for enforcement/Non-Compliance (2016-2018)



Source: Data supplied by NERC during the Audit

Despite the huge number of Forum Office decisions not complied with, there have been no sanctions meted out to the erring DisCos as attested to by the 80.3% of the responses obtained from 180 questionnaires administered to the DisCos visited. This could have been due to the fact that NERC's Staff in the Forum Offices are mostly accommodated by the DisCos. This perceived relationship encourages non-compliance without sanctions from the Commission. Hence, some aggrieved customers lose confidence in the ability of the Commission to resolve their complaints and as such, approached FCCPC and other Intervening Agencies in a bid to get justice. Appendix XIII Refers.

Management Comment

The Commission has fully accommodated all its staff in Forum Offices outside the Disco's premises, but the observation is noted for further investigation.

Auditors' evaluation of Management comment

Management did not address the issue of sanctioning erring DisCos for not complying with Forum decisions. They noted the issue of Forum Offices being accommodated by the Disco's which Audit observed during field trips.

CHAPTER FOUR

4.0 Conclusion

This chapter presents the conclusions drawn based on the findings of the audit.

4.1 Overseeing the Provision of Meters to Customers

Non-issuance of Procurement Guidelines to ensure transparent procurement process, inadequate monitoring and sanctioning of the erring DisCos coupled with the delay in the issuance of Corporate Governance Code by the Commission to guide related party transactions and ensure judicious utilization of funds belonging to the electricity market are responsible for the DisCos inability to meet their metering obligation for both the existing and new customers, resulting to 52.7% of the total shortfalls recorded by the DisCos during the period covered.

4.2 Regulating and Ensuring Appropriate Billing of Electricity Consumers (Both Metered and Unmetered)

4.2.1 Classification of Customers by DisCos

The Commission's inability to sanction the erring DisCos to deter others coupled with inefficiencies of the DisCos in carrying out load assessments are responsible for the improper tariff classification of electricity customers

4.2.2 Billing of Unmetered Customers

The Commission's inability to closely monitor and sanction the erring DisCos is responsible for the continuous issuance of arbitrary bills to customers that do not reflect the actual power consumed.

4.3 Ensuring Satisfactory Resolution of Customer Complaints

4.3.1 Resolution of Customer Complaints at the CCU Level

Inadequate training of CCU Officers on customer care by the DisCos results to unsatisfactory resolution of customer complaints as the customers' resorts to Forum Offices and other intervening Agencies to seek redress and for appeals.

4.3.2 Resolution of Customer Complaints at the Forum Office Level

The Commission's inability to provide accommodation to her staff in the Forum Office leaving them at the mercy of the DisCos creates an atmosphere for conflict of interest and is responsible for the non-sanctioning of the erring DisCos even when huge number of Forum decisions are not complied with, within the period of the audit, at the expense of the electricity Customers.

5.0 Recommendation

5.1 Overseeing the Provision of Meters to Customers

5.1.1 Ensuring Compliance with DisCos Annual Metering Commitment

5.1.1.1 The Commission should provide Procurement Guidelines in the power sector that will ensure open, transparent and competitive bidding process. The Commission should also provide appropriate Regulations or Corporate Governance Code to guide related party transactions in the power sector.

5.1.1.2 The Open Book Review Exercise should be more frequent pending when the electricity market becomes more efficient. This will prevent arbitrary allocation of market funds to projects that had no impact on the DisCos revenue. In addition, the Commission should make regulations that will regulate technical service contracts, investment of market funds and provide alternative for the licensee to improve its collection without necessarily paying so much to collection agents. This will ensure prudence in the management of funds belonging to the market and as such free up funds to provide meters and meet other market obligations (eg payment to NBET).

5.1.2 Ensure Provision of Meters for New Connections

In addition to the above, the Commission should ensure effective monitoring of DisCos compliance to service standards in order to enforce compliance with Section 2 of the Customer Service Standards of Performance for Distribution Companies 2007. The Commission should also take adequate measures to ensure that the recently launched MAP Scheme is fully complied with in order to fast track the roll out of meters.

5.2 Regulating and Ensuring Appropriate Billing of Electricity Consumers (Both Metered and Unmetered)

5.2.1 Classification of Customers by DisCos

The Commission should ensure that erring DisCos carry out load assessment of each customer at the point of connection for proper classification and appropriate billings to avoid arbitrary charging of customers for power not consumed.

5.2.2 Billing of Unmetered Customers

The Commission should step up the monitoring of DisCos and where possible, apply sanctions to DisCos that flout the Methodology for Estimated Billings. They should also enforce compliance with the recent Order on capping of estimated billing to fast track the roll out of meters and discourage the use of estimated billing.

5.3 Ensuring Satisfactory Resolution of Customer Complaints

5.3.1 Resolution of Customer Complaints at the CCU Level

The Commission should compel DisCos to carry out adequate training of CCU Officers on customer care to ensure satisfactory resolution of customer's complaints. Also step up the monitoring of customer complaints so that customers seeking redress are timely and satisfactorily attended to.

5.3.2 Resolution of Customer Complaints at the Forum Office Level

The Commission should provide accommodation to her staff in the Forum Office to prevent familiarity and conflict of interest so that necessary sanctions should apply where possible, to enforce compliance with the Forum decisions.

APPENDICIES

APPENDIX I: List of Documents Reviewed During the Main Study

S/NO	Documents reviewed	Purpose
1	Electric Power Sector Reform (EPSR) Act of 2005	To ascertain the powers and functions of NERC
2	Road Map for Power Sector Reform of August 2010	To review the Power Sector performance from inception to date
3	Internal Audit Monitoring Reports of DisCos Compliance to Customers Service Standards	To review information on DisCos compliance with consumers service and safety standards
4	NERC quarterly reports for the period 2016 to 2018	To review the activities conducted by the Commission within the period under review
5	Performance agreement signed between BPE and DisCos	The review the terms of the agreement signed and the level of compliance
6	Customer Complaint Handling Procedures Regulation 2006	To review the procedure of seeking redress and assess the level of compliance by DisCos
7	Customer Service Standards of Performance for Distribution Companies, 2007.	To review the standard procedures of new or additional connection and assess the extent to which DisCos have complied
8	Meter Asset Providers (MAP) Regulations 2018, Technical Codes of the Electricity Industry, and a Meter Services Agreement/Service Level Agreement signed with the distribution companies.	To review information about the regulations put in place by NERC for effective provision of meters to consumers
9	Estimated Billing Methodology Regulation.	To assess the regulations put in place by NERC to ensure fair billing of consumers without meter
10	NERC MYTO 2012 and 2015 Distribution Tariffs	To assess the Order put in place by NERC to ensure cost reflective tariff to protect consumers and licensees
11	NERC Regulations, Manuals,	To review information on regulations, codes and

	Codes & Standards	standards put in place by NERC
12	NERC Orders, Directives, Decisions and Petitions received covering the privatization period	To review information with respect to the resolutions of the Commission
13	International Journal of Development and Sustainability	Background information about the unbundling of the NEPA/PHCN
14	Power Sector Report: Nigerian Power Sector Review 2018 by Stakeholder Democracy Network	To review the power sector and assess the milestone reached in the last years.
15	Complaints, appeals and petitions filed to CCU, Forum, NERC, FCCPC and so on and the subsequent responses received.	To examine areas for which customer files complain as well as determine how they are treated at different level.
16	Customer Population Report (2013-2019)	To examine the trend in the status of the customer population registered with DisCos
17	Metering Position Report (2013-2019)	To examine the trend in the status of the registered customers metered by DisCos
18	Data on Tariff Shortfall recorded by DisCos (2013-2019)	To examine the proportion of metering performance shortfall that is caused by Tariff Shortfall.
19	NERC's 2019 Open Book Review Report	To examine the investment made by the DisCos on CAPEX
20	The Commission's 2016, 2017 and 2018 Approved Budget	To ascertain the amounts appropriated to the Commission to carry out monitoring and enforcement activities of the DisCos
21	The Commission's 2016, 2017 and 2018 Audited Financial Statements	To examine the actual expenditures incurred by the Commission on monitoring and enforcement activities of the DisCos

Appendix II: Electricity distribution equipment observed during the audit

Step-down Transformer @ Gboko, JED



3-phase Residential Meter @ Karu LGA,



Distribution Lines @ JED, Gboko



Source: Pictures taken during the Main and Pre-study

APPENDIX III: Letter of Introduction and Checklist for NBET



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APPENDIX IV: Letter Requesting for Meeting/Interview with Senate and House Committee on Power

RM 2-31

OFFICE OF THE AUDITOR-GENERAL FOR THE FEDERATION
PROGRAMMES AND PERFORMANCE AUDIT DEPARTMENT

HEADQUARTERS:
Audit House,
Plot 273, Samuel Ademulegun Street,
Central Business District,
P.M.B. 128, Garki- Abuja, Nigeria



LAGOS OFFICE :
5, Sir Mobolaji Bank Anthony Street,
P.M.B. 12503
Lagos, Nigeria
Tel: +234(1) 2632335

Ref No: OAUG/F&PAD/PA/SCOP/2019/01

Date: 26th Sept., 2019

The Chairman,
Senate Committee on Power,
Senate Chambers,
Three Arms Zone,
Central Business District, Abuja FCT.

Sir,

Performance Audit on the Role of Nigerian Electricity Regulatory Commission (NERC) in ensuring Effective Electricity Distribution in Nigeria for the Period 2016 to 2018

The Auditor-General for the Federation has decided to carry out a performance audit on the Role of Nigerian Electricity Regulatory Commission (NERC) in ensuring effective electricity distribution in Nigeria. The objective of the audit is to "To assess the extent to which the Nigerian Electricity Regulatory Commission ensures adequate compliance with consumer protection standards on metering and estimated billing by DisCos".

In accordance with Section 85 of the Constitution of the Federal Republic of Nigeria, 1999 (as amended) and Financial Regulations 109 (1d) (Revised Edition 2009), I am mandated to carry out performance Audit (value for money audit). A performance audit is an audit of the economy, efficiency and effectiveness with which the audited entity/entities uses its resources to achieve its goals. The aim of a performance audit is to ensure better use of resources, improved operations and better decision making in reaching policy objectives set by Parliament.

The National Assembly (NASS) plays an important role in the Nigeria's power sector through their law making, oversight functions and budgetary provision.

The Audit Team will like to meet with the Senate Committee on Power or their representatives to collect information that is relevant for the audit. As part of the audit procedure, the Team will be in your Office on the **15th October, 2019** to conduct interview with relevant officials and review documents relating to the subject matter. The interview guide and document list are attached.

Please contact Mr Shaakaa K. Chira (Supervisor), on the cell phone number +234 8022030853 or chirashaakaa@gmail.com or kanuitor.shaakaa@oaugf.ng to agree on the date and time.

Please take note that this is not another audit of expenditure, rather the audit is aimed at finding solution to issues surrounding estimated billing of electricity consumers in the country.

*Original Copy
Received by me
Vanessa Nguher
4/10/2019*

RM 0-03 HR

OFFICE OF THE AUDITOR-GENERAL FOR THE FEDERATION
PROGRAMMES AND PERFORMANCE AUDIT DEPARTMENT

HEADQUARTERS:
Audit House,
Plot 273, Samuel Ademulegun Street,
Central Business District,
P.M.B. 128, Garki- Abuja, Nigeria



LAGOS OFFICE :
5, Sir Mobolaji Bank Anthony Street,
P.M.B. 12503
Lagos, Nigeria
Tel: +234(1) 2632335

Ref No... OAU/GF/P&PAD/PA/HCOF/2019/01

Date.... 26th Sept., 2019...

The Chairman,
House Committee on Power,
House of Representative Chambers,
Three Arms Zone,
Central Business District, Abuja FCT.

Sir,

Performance Audit on the Role of Nigerian Electricity Regulatory Commission (NERC) in ensuring Effective Electricity Distribution in Nigeria for the Period 2016 to 2018

The Auditor-General for the Federation has decided to carry out a performance audit on the Role of Nigerian Electricity Regulatory Commission (NERC) in ensuring effective electricity distribution in Nigeria. The objective of the audit is to "To assess the extent to which the Nigerian Electricity Regulatory Commission ensures adequate compliance with consumer protection standards on metering and estimated billing by DisCos".

In accordance with Section 85 of the Constitution of the Federal Republic of Nigeria, 1999 (as amended) and Financial Regulations 109 (i) (d) (Revised Edition 2009), I am mandated to carry out performance Audit (value for money audit). A performance audit is an audit of the economy, efficiency and effectiveness with which the audited entity/entities uses its resources to achieve its goals. The aim of a performance audit is to ensure better use of resources, improved operations and better decision making in reaching policy objectives set by Parliament.

The National Assembly (NASS) plays an important role in the Nigeria's power sector through their law making, oversight functions and budgetary provision.

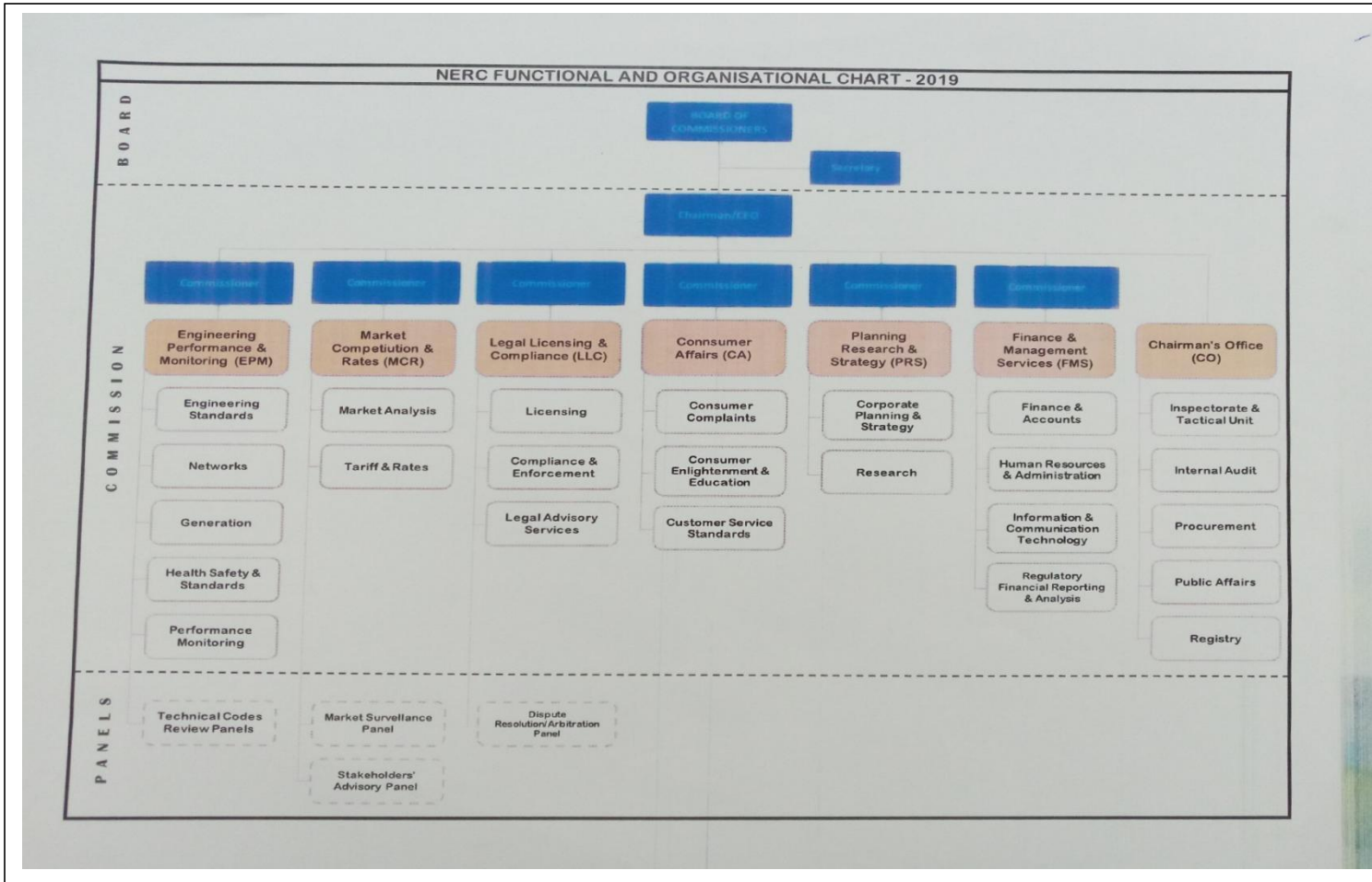
The Audit Team will like to meet with the House Committee on Power or their representatives to collect information that is relevant for the audit. As part of the audit procedure, the Team will be in your Office on the **16th October, 2019** to conduct interview with relevant officials and review documents relating to the subject matter. The interview guide and document list are attached.

Please contact Mr Shaakaa K. Chira (Supervisor), on the cell phone number +234 8022030853 or chirashaakaa@gmail.com or kanuitor.shaakaa@oaugf.ng to agree on the date and time.

Please take note that this is not another audit of expenditure, rather the audit is aimed at finding solution to issues surrounding estimated billing of electricity consumers in the country.

Original letter collected by me: Leslie Akp 7/10/19.

APPENDIX V: NERC Organogram/Organizational Chart



APPENDIX VI: Allowable CAPEX for the 11 DisCos for the period 2016-2018

DisCos	2016 (₦)	2017 (₦)	2018 (₦)
Abuja	4,597,763,000	4,597,763,000	4,597,763,000
Benin	3,053,871,000	3,053,871,000	3,053,871,000
Eko	5,673,357,000	5,673,357,000	5,673,357,000
Enugu	3,420,052,000	3,420,052,000	3,420,052,000
Ibadan	5,509,504,000	5,509,504,000	5,509,504,000
Ikeja	7,377,359,000	7,377,359,000	7,377,359,000
Jos	2,857,986,000	2,857,986,000	2,857,986,000
Kaduna	3,762,928,000	4,703,660,000	3,762,928,000
Kano	3,815,546,000	3,815,546,000	3,815,546,000
Port Harcourt	3,204,620,000	3,204,620,000	3,204,620,000
Yola	2,061,934,000	2,061,934,000	2,061,934,000
Overall DisCos	45,334,920,000	46,275,652,000	45,334,920,000

Source: Written Response from Interview session held with the Management Staff of Markets, Competition and Rates Division of NERC

APPENDIX VII: DISCOS TARIFF CLASS AND SUB-CLASSES IN NAIRA/KWH FOR 2016, 2017 & 2018.

2016 DisCos Tariff Class and Sub-Classes in ₦/kwh

Tariff Class	Abuja	Benin	Eko	Enugu	Ibadan	Ikeja	Jos	Kaduna	Kano	Port Harcourt	Yola
R1	4	4	4	4	4	4	4	4	4	4	4
R2	24.3				23.09		26.93			24.91	
R2S/R2SP/R2A		24.08	24	27.13		21.30		26.37	20.26		23.25
R2T/R2TP/R2B		24.45	25.79	27.13		21.80		28.05	26.41		24.75
R3	46.23	38.56	29	45.10	41.31	36.49	43.91	42.74	38.38	48.35	41.22
R4	46.23	38.56	29	43.19	41.31	36.92	43.91	45.76	38.38	48.35	0.00
C1	36.65				27.66		38.91	31.20		35.88	
C1S/C1SP/C1A		33.87	24	32.13		27.20			21.33		32.44
C1T/C1TP/C1B		34.19	30	36.78		28.47			26.67		34.30
C2	46.23	40.67	36	42.40	38.87	37.74	42.61	37.88	36.25	43.72	43.78
C3	46.23	40.67	36	42.97	38.87	38.14	42.61	44.22	36.25	44.30	44.88
D1	35.35				31.17	28.68	38.91	36.95	28.79	36.19	
D1S		32.51	24	37.83							33.60

D1T		32.82	30	38.68							34.76
D2	46.23	38.56	36	42.80	41.99	38.38	39.25	39.13	37.32	44.01	44.46
D3	46.23	38.56	36	43.89	41.99	38.85	38.37	44.22	37.32	44.59	45.32
A1	35.02				29.84	26.82	40.74	33.17	28.79	35.05	
A1S		31.12	24	32.01							29.49
A1T		31.42	24.28	36.78							31.75
A2	35.02	31.42	24.28	42.41	29.84	30.20	40.74	38.56	28.79	35.05	34.02
A3	35.02	31.42	24.28	42.23	29.84	30.36	40.74	39.13	28.79	46.73	37.43
S1	26.84				23.05	19.42	41.04		22.39	35.88	
L1		32.07	23.52	30.79				30.30			20.74

Source: MYTO 2015 Distribution Tariff (2015-2024)

2017 DisCos Tariff Class and Sub-Classes in ₦/kwh

Tariff Class	Abuja	Benin	Eko	Enugu	Ibadan	Ikeja	Jos	Kaduna	Kano	Port Harcourt	Yola
R1	4	4	4	4	4	4	4	4	4	4	4
R2	24.30				24.97		29.81			30.23	
R2S/R2SP/R2A		31.27	22.34	30.93		21.10		27.40	22.50		25.73

R2T/R2TP/R2B		34.40	28.39	34.28		21.73		32.33	29.61		28.17
R3	47.09	40.46	29.18	48.12	44.66	35.68	45.76	42.74	42.63	48.39	51.46
R4	47.09	40.46	29.18	46.08	44.66	36.11	45.76	48.77	42.63	50.76	0.00
C1	37.39				29.91		42.64	31.20		38.96	
C1S/C1SP/C1A		34.90	22.9	34.28		25.56			23.69		40.64
C1T/C1TP/CIB		36.27	28.60	39.25		27.59			29.62		46.77
C2	47.09	38.11	32.50	45.24	42.03	36.91	45.55	39.73	40.27	46.72	50.23
C3	47.09	38.11	32.50	45.85	42.03	37.30	45.55	47.13	40.27	48.39	60.04
D1	36.07				33.70	27.93	42.64	34.11	31.98	41.81	
D1S		35.62	24.68	40.37							40.64
D1T		37.94	28.74	42.56							46.77
D2	47.09	39.29	33.05	45.67	45.40	37.54	41.54	40.28	41.45	46.72	55.13
D3	47.09	37.71	33.05	46.83	45.40	37.99	40.40	47.13	41.45	48.39	61.26
A1	35.74				32.26	26.23	44.65	35.34	31.98	40.60	
A1S		33	22.96	34.16							36.76
A1T		33.97	22.96	39.25							39.21
A2	35.74	35.27	22.96	45.26	32.26	29.53	44.65	41.10	31.98	45.58	42.89
A3	35.74	35.27	22.96	45.06	32.26	29.69	44.65	47.13	31.98	49.07	49.01
S1	27.14				24.93	18.99	44.98		24.87	40.62	
LT		36.26	22.17	32.86				41.10			36.75

Source: MYTO 2015 Distribution Tariff (2015-2024)

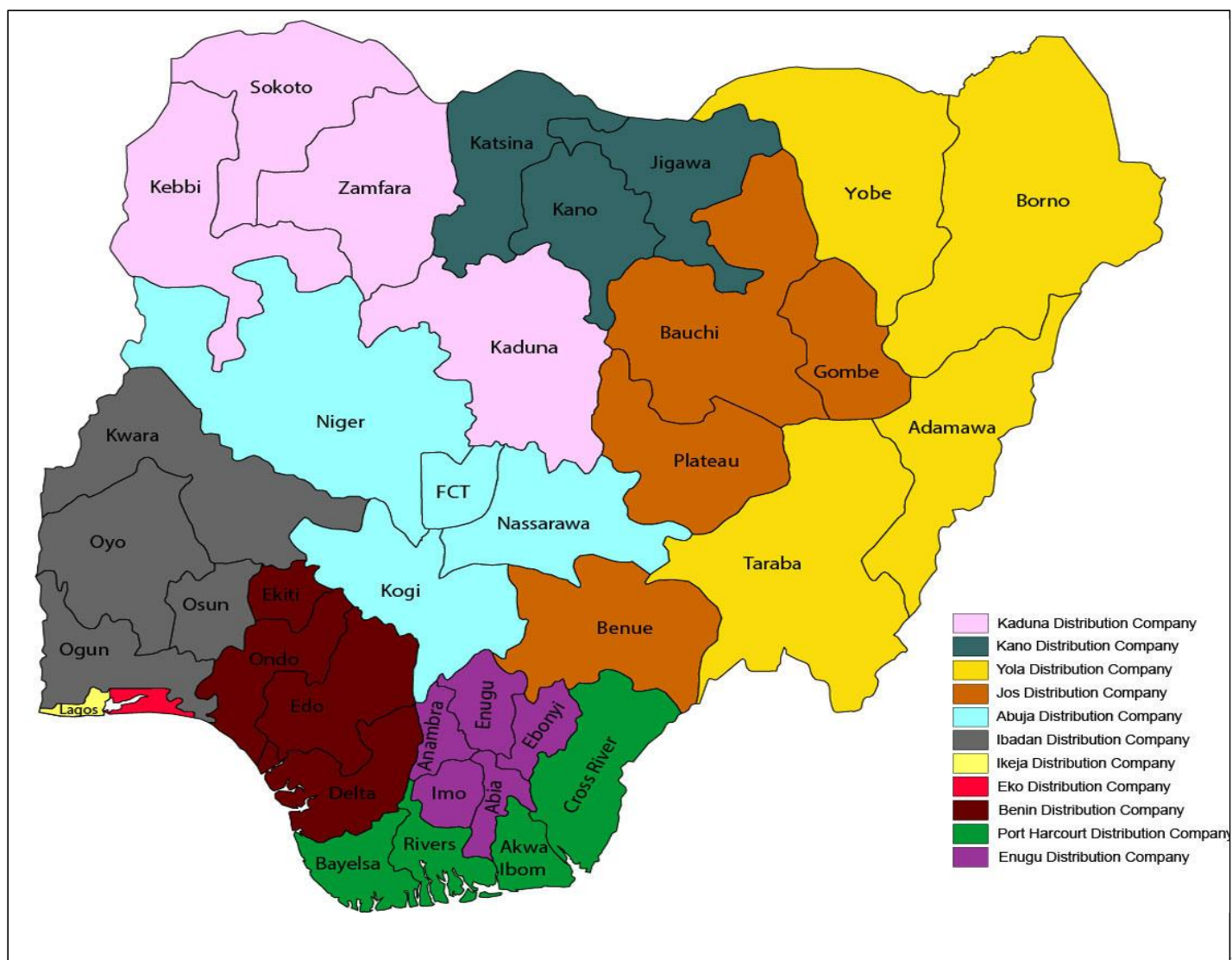
2018 DisCos Tariff Class and Sub-Classes in ₦/kwh

Tariff Class	Abuja	Benin	Eko	Enugu	Ibadan	Ikeja	Jos	Kaduna	Kano	Port Harcourt	Yola
R1	4	4	4	4	4	4	4	4	4	4	4
R2	24.03				25.71		30.93			31.78	
R2S/R2SP/R2A		31.26	20.47	31		18.94		28.75	25.46		26.51
R2T/R2TP/R2B		34.4	26.02	34.36		21.15		33.93	33.50		29.02
R3	45.72	40.46	26.74	38.23	45.98	31.62	47.64	44.85	48.24	50.81	53.01
R4	45.72	40.46	26.74	46.19	45.98	32.00	47.64	51.18	48.24	53.30	0.00
C1	36.25				30.79		44.27	32.73		40.86	
C1S/C1SP/C1A		34.90	20.98	34.36		21.76			26.81		41.87
C1T/C1TP/CIB		36.27	26.2	39.34		24.45			33.51		48.18
C2	45.72	38.11	29.78	45.35	43.27	32.47	47.29	41.69	45.56	49.04	51.75
C3	45.72	38.11	29.78	45.96	43.27	32.81	47.29	49.45	45.56	50.81	61.85
D1	34.96				34.70	24.56	44.15	35.79	36.18	42.64	
D1S		35.62	22.62	40.46							41.87
D1T		37.94	26.34	42.66							48.18

D2	45.72	39.29	30.29	45.77	46.74	33.02	43.25	42.26	46.90	49.04	56.80
D3	45.72	39.29	30.29	46.94	46.74	33.42	41.05	49.45	46.90	50.81	63.11
A1	34.63				33.22	23.24	46.23	37.09	36.18	42.64	
A1S		33	21.04	34.24							37.87
A1T		33.97	21.04	39.34							40.39
A2	34.63	35.27	21.04	45.36	33.22	26.17	46.23	43.13	36.18	47.97	44.18
A3	34.63	35.27	21.04	45.16	33.22	26.31	46.23	49.45	36.18	51.52	50.49
S1	26.54				25.66	16.83	46.57		28.14	42.64	
LT		36.26	20.32	32.94				43.13			37.86

Source: MYTO 2015 Distribution Tariff (2015-2024)

APPENDIX VIII: DisCos and their Catchment Areas



Appendix IX: Metering Obligation (Meter Deployment Plan) of the DisCos

S/No.	Distribution Licensee	Metering Obligation per year
1	Abuja	96,000
2	Benin	100,000
3	Eko	204,000
4	Enugu	264,000
5	Ibadan	100,000
6	Ikeja	252,000
5	Jos	120,000
6	Kaduna	48,000
7	Kano	217,611
10	Port Harcourt	187,600
11	Yola	51,600
	Total	1,640,811

Source: A Five-Years Metering Commitment provided by NERC

APPENDIX X: ANALYSIS OF THE DISCOS METERING PERFORMANCE FOR THE YEAR 2016

DisCos	A	B	C	D	E	F	G	H	I	J	K
	Cost Reflective Tariff	Allowed Tariff	Shortfall	DisCos Metering Obligation As Per Performance Agreement	No. of Meters DisCos Should Deploy Based on the Allowed Tariff =Column B Divided by Column A Multiplied by Column D	Metering Gap Attributed to Tariff Shortfall =Column C Divided by Column A Multiplied by Column D	DisCos Actual Metering Gap Based on Cost Reflective Tariff =Column D Minus Column J	Status of Metered Customers as at the end of December, 2015	Status of Metered Customers as at the end of December, 2016	No. of Meters Deployed =Column I Minus Column H	Metering Gap Not Attributed to Tariff Shortfall =Column E Minus Column J
Abuja	40.50	32.30	8.20	96,000	76,563	19,437	(70,388)	286,509	452,897	166,388	(89,825)
Benin	48.92	26.75	22.17	100,000	54,681	45,319	100,000	601,259	576,330	Nil	54,681
Eko	38.78	28.28	10.50	204,000	148,713	55,287	172,547	206,589	238,042	31,453	117,260
Enugu	47.47	31.12	16.35	264,000	173,071	90,929	264,000	387,873	222,184	Nil	173,071
Ibadan	47.62	28.27	19.35	100,000	59,366	40,634	100,000	706,387	621,187	Nil	59,366
Ikeja	36.95	27.30	9.65	252,000	186,255	65,745	177,689	405,551	479,862	74,311	111,944
Jos	61.11	30.90	30.21	120,000	60,677	59,323	120,000	200,368	175,517	Nil	60,677

Kadu na	57.47	30.27	27.20	48,000	25,282	22,718	(28,390)	149,305	225,695	76,390	(51,108)
Kano	52.46	27.06	25.40	217,611	112,207	105,404	185,762	118,473	150,322	31,849	80,358
Port Harco urt	51.74	28.95	22.79	187,600	104,968	82,632	149,184	228,676	267,092	38,416	66,552
Yolaol a	52.07	26.83	25.24	51,600	26,588	25,012	51,600	88,683	69,209	Nill	26,588
Overa ll DisCo s				1,640,811	1,028,371	612,440	1,222,004	3,379,673	3,478,337	418,807	609,564

Source: Computation based on figures extracted from the DisCos Meter Deployment Plan, Metering Progress Report as well as Data on Tariff Shortfalls for the period under review provided by NERC.

APPENDIX XI: ANALYSIS OF THE DISCOS METERING PERFORMANCE FOR THE YEAR 2017

DisCos	A	B	C	D	E	F	G	H	I	J	K
	Cost Reflective Tariff	Allowed Tariff	Shorfall	DisCos Metering Obligation As Per Performance Agreement	No. of Meters DisCos Should Deploy Based on the Allowed Tariff =Column B Divided by Column A Multiplied by Column D	Metering Gap Attributed to Tariff Shortfall =Column C Divided by Column A Multiplied by Column D	DisCos Actual Metering Gap Based on Cost Reflective Tariff =Column D Minus Column J	Status of Metered Customers as at the end of December, 2016	Status of Metered Customers as at the end of December, 2017	No. of Meters Deployed =Column F Minus Column E	Metering Gap Not Attributed to Tariff Shortfall =Column E Minus Column J
Abuja	42.81	32.66	10.15	96,000	73,239	22,761	96,000	452,897	450,041	Nil	73,239
Benin	51.37	32.50	18.87	100,000	63,267	36,733	100,000	576,330	535,935	Nil	63,267
Eko	39.68	28.28	11.40	204,000	145,391	58,609	173,484	238,042	268,558	30,516	114,875
Enugu	50.09	35.30	14.79	264,000	186,049	77,951	261,739	222,184	224,445	2,261	183,788
Ibadan	48.98	30.55	18.43	100,000	62,393	37,607	100,000	621,187	609,604	Nil	62,393
Ikeja	41.04	27.30	13.74	252,000	167,632	84,368	252,000	479,862	467,578	Nil	167,632
Jos	66.80	33.79	33.01	120,000	60,683	59,317	108,102	175,517	187,415	11,898	48,785
Kaduna	52.18	30.27	21.91	48,000	27,836	20,164	34,794	225,695	238,901	13,206	14,630
Kano	50.97	30.08	20.89	217,611	128,466	89,145	205,269	150,322	162,664	12,342	116,124

Port Harcourt	54.14	33.82	20.32	187,600	117,189	70,411	187,600	267,092	237,188	Nil	117,189
yola	51.61	26.83	24.78	51,600	26,835	24,765	51,527	69,209	69,282	73	26,762
Overall DisCos				1,640,811	1,058,980	581,831	1,570,515	3,478,337	3,451,611	70,296	988,684

Source: Computation based on figures extracted from the DisCos Meter Deployment Plan, Metering Progress Report as well as Data on Tariff Shortfalls for the period under review provided by NERC.

APPENDIX XII: ANALYSIS OF THE DISCOS METERING PERFORMANCE FOR THE YEAR 2018

Disco	A	B	C	D	E	F	G	H	I	J	K
	Cost Reflective Tariff	Allowed Tariff	Shortfall	DisCos Metering Obligation As Per Performance Agreement	No. of Meters DisCos Should Deploy Based on the Allowed Tariff =Column B Divided by Column A Multiplied by Column D	Metering Gap Attributed to Tariff Shortfall =Column C Divided by Column A Multiplied by Column D	DisCos Actual Metering Gap Based on Cost Reflective Tariff =Column D Minus Column J	Status of Metered Customers as at the end of December, 2017	Status of Metered Customers as at the end of December, 2018	No. of Meters Deployed =Column I Minus Column H	Metering Gap Not Attributed to Tariff Shortfall =Column E Minus Column J
Abuja	46.44	32.66	13.78	96,000	67,514	28,486	(22,139)	450,041	568,180	118,139	(50,625)
Benin	54.36	32.50	21.86	100,000	59,787	40,213	87,674	535,935	548,261	12,326	47,461
Eko	41.78	28.28	13.50	204,000	138,083	65,917	204,000	268,558	239,559	Nil	138,083
Enugu	55.29	35.30	19.99	264,000	168,551	95,449	58,822	224,445	429,623	205,178	(36,627)
Ibadan	52.60	30.55	22.05	100,000	58,099	41,901	21,952	609,604	687,652	78,048	(19,949)
Ikeja	41.70	27.30	14.40	252,000	165,039	86,961	252,000	467,578	447,299	Nil	165,039
Jos	75.57	33.79	41.78	120,000	53,640	66,360	120,000	187,415	170,409	Nil	53,640
Kaduna	56.36	30.27	26.09	48,000	25,780	22,220	48,000	238,901	149,588	Nil	25,780
Kano	53.61	30.08	23.53	217,611	122,140	95,471	217,611	162,664	126,539	Nil	122,140

Port Harcourt	59.88	33.82	26.06	187,600	105,924	81,676	69,583	237,188	355,205	118,017	(12,093)
yola	52.81	26.83	25.98	51,600	26,215	25,385	49,302	69,282	71,580	2,298	23,917
Overall DisCos				1,640,811	990,772	650,039	1,106,805	3,451,611	3,793,895	534,006	456,766

Source: Computation based on figures extracted from the DisCos Meter Deployment Plan, Metering Progress Report as well as Data on Tariff Shortfalls for the period under review provided by NERC.

APPENDIX XIII: SAMPLES OF PETITIONS FILED BY AGRIEVED CUSTOMERS TO FCCPC AND OTHER INTERVENIG AGENCIES

PIYANKO DEVELOPMENT ASSOCIATION

NO 5 NEW KARSHI ROAD PIYANKO,
NEW KARSHI DEVELOPMENT AREA, KARU L. G. A
NASSARAWA STATE

Phone: 08170786061

Date:.....

THE ORDINARY PRESIDENT,

BREKETE FAMILY.

SHERIF PLAZA.

SIR,

REQUEST FOR YOUR INTERVENTION ON ABUJA ELECTRICITY DISTRIBUTION COMPANY (A E D C) TO TAKEOVER OUR COMPLETED COMMUNITY ELECTRIFICATION PROJECT AND SETTLE OUR CONTRACTORS.

On the 12th may, 2013, the chiefs of Piyanko community of new Karshi Development Area of Karu Local Government Area, Nasarawa State in the persons of Late Alh. Sabo Mare of Piyanko Gazaky and Alh. Mohammed Agwara of Angwan Boze unanimously agreed to set up a Development Committee called Piyanko Development Association.

The Association was charged with the following responsibilities;

1. ELECTRIFICATION OF PIYANKO VILLAGE
2. GRADING OF OUR ROAD FROM THE KARSHI EXPRESS WAY AXIS
3. ATTRACTING GOVERNMENT SOCIAL AMENITIES E.G HEALTH CENTRE, BOREHOLE ETC.SEE EV 01

The Association immediately resolved in our maiden meeting on the 17th may, 2013 to start with the Electrification of piyanko because of the multiplier effects of electricity in the socio-economic activities in a community. In pursuance of this objective, the Association identified other stake holders in and around piyanko who bought properties to key to this laudable objective. SEE EV02



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THE AGUMA

MALLAM IBRAHIM BAWA



MAI ANGWA KUJE ROAD

TEL:070357335501

KUJE ROAD
GWAGWALADA AREA COUNCIL
FCT-ABUJA.

Our Ref: Your Ref: Date:

September 5th, 2019

The Executive Director,
Initiative for Leadership and Economic Watch in Nigeria
Suite 54, Dansville Plaza,
5 David Ejoor Crescent
Gudu District Abuja.

Sir,

REQUEST TO INTERVENE FOR KUJE ROAD COMMUNITY, GWAGWALADA, OVER THE INCESSANT OVERBILLING ON ESTIMATED CUSTOMERS; INAPPROPRIATE TREATMENT AND UNSATISFACTORY SERVICES BY THE REGIONAL MANAGER AND THE AREA SALES MANAGER OF ABUJA ELECTRICITY DISTRIBUTION COMPANY {AEDC}

The Community wishes to bring to your notice the ill-treatment by AEDC for the past two years. The community has experienced a continuous increase in the estimated bill indiscriminately while electricity to the people has been under rationing {two days on, one day off} due to overload on the transformer which was bought by the community years back; all efforts to see AEDC bring another transformer has proven abortive.

This has led to an increase in security challenges, underdevelopment, and economic backwardness in the area because many people and businesses have relocated.

In August, the community noticed an outrageous estimated billing that could no longer be accepted because the electricity supplied for the month was not up to twelve days. This prompted the MAI ANGWA to call for a community meeting and it was agreed that AEDC disconnection of customers in the community be suspended until the overbilling for August is reconciled and another transformer is brought to the community.

On the 25th of August, the Rep/Service Engineer of AEDC Kuje road, Gwagwalada, Mr. Sunny, came to disconnect the people even though he admitted verbally that August outrageous billing was a computer error; the community resisted the disconnection and insisted that AEDC replies the letter sent by the community, this made AEDC open up the transformer, denying the community of electricity from 27th

CHIEF/AGUMA, MALLAM IBRAHIM BAWA MAI ANGWA
KUJE ROAD GWAGWALADA FCT-ABUJA.



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INITIATIVE FOR LEADERSHIP AND ECONOMIC WATCH IN NIGERIA

Our Ref: ILEWN/KRCG/FCCPC/PET/10/19/VOL.1

THE DIRECTOR GENERAL
Federal Competition and Consumer Protection Commission
Headquarters,
Abuja

4th October, 2019

*Ad (PWC)/412
Mr. Akindele
and fresh
copy 9/10*

Sir,
DISAFFECTION, DISENCHANTMENT, UNTOLD HARDSHIP, VIOLATION OF FUNDAMENTAL HUMAN RIGHT, PUBLIC EXTORTIONS, STEALING BY TRICKERY AS IT IS LOCALLY CALLED, UNKIND AND INHUMAN ESTIMATED BILLS RUNNING INTO BILLIONS OF NAIRA HAS BEEN ILLEGALLY COLLECTED FROM KUJE ROAD COMMUNITY, GWAGWALADA, FOR THE PAST TWO YEARS WITH ESTIMATED BILLING MECHANISMS WHICH THE FEDERAL GOVERNMENT HAS LONG PROHIBITED AEDC FROM, THIS WAS ANNOUNCED BY THE THEN MINISTER OF POWER, TUNDE FASHOLA; STILL, AEDC ENGAGES IN TARIFFS COLLECTION ON THE GROUND OF ESTIMATED BILL. AEDC CONTINUES TO CUT THE RESIDENCE THROAT, WITH ESTIMATED BILL AFTER SEVERAL APPEALS TO AEDC FOR AN ADDITIONAL TRANSFORMER WITH NO AVAIL. MEANWHILE, AEDC HAS BEEN COLLECTING MONEY AS USUAL THROUGH ESTIMATED TARIFFS FOR THEIR OWN PROFITS, YET AFFLICTED THE COMMUNITY WITH PERPETUAL DARKNESS, WITH CONSISTENT POWER OUTAGE, AND FURTHER PLAGUE THE RESIDENCE OF THE COMMUNITY WITH OVERRATED BILLINGS, FOR LAW ABIDING CITIZENS OF KUJE ROAD COMMUNITY, GWAGWALADA, WITH DEMONSTRATED COMMITMENT TO COMMUNITY DEVELOPMENT.; WHOSE KIND GESTURE WAS ABYSMALLY ABUSED, WHICH IS DEMEANING, UNWHOLESOME, A SHOW OF INEPTITUDE, AND GROSS ABUSE OF PUBLIC OFFICE AT THE EXPENSE OF THE POPULACE LIVING IN KUJE ROAD COMMUNITY, GWAGWALADA. HENCE, WE REQUEST FOR CLARIFICATION AND URGENT INTERVENTION TO FURTHER FORESTALL CIVIL ACTION AGAINST AEDC IN THE PRECEEDING WEEK, AS MASS PROTEST ACTION BY THE RESIDENCE OF THE AFFECTED COMMUNITY, AND PLANS TO PICKET AEDC OFFICE FOR IMMEDIATE SOLUTION TO THEIR OVERBEARING PLIGHT IS UNDERWAY.

The Initiative for Leadership and Economic Watch in Nigeria is duly registered with the Corporate Affairs Commission with the mandate of evaluating the performance of public office holders to ensure it is in tandem with the parameters of transparency, accountability and probity for overall economic growth and national development. More so, we work with allied Civil Society groups to promote good governance and quality leadership at all strata of public service.

The unsavory situation of the People of Kuje Road Community Gwagwalada, with regards to electricity supply in the Area by the AEDC, calls for serious national concern, the ill-treatment, extortion, fraudulent estimated bills, unavailability of transformer by AEDC in the community, consistent power outage, and administrative manipulations, which violated the fundamental human right of residence living in the community, has been brought to our attention with glaring facts to show AEDC involvement in the electricity fraud perpetuated by the Regional Manager and the Area Manager of AEDC Gwagwalada, which clearly contravene the extant laws, customer rights to quality service.

Suit 54, Dansville plaza, 5 David Ejoor Crescent, Gudu District Abuja, Nigeria



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