



NIGERIAN ELECTRICITY REGULATORY COMMISSION

CONSULTATION PAPER

ON

**THE CAPPING OF ESTIMATED BILLING FOR UNMETERED ELECTRICITY
CUSTOMERS**

November 19, 2018

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1. INTRODUCTION

1.1 The Electric Power Sector Reform Act, 2005 ('the Act') mandates the Nigerian Electricity Regulatory Commission ("the Commission") to, among other things, create, promote and preserve efficient industry and market structures and to ensure optimal utilisation of resources for the provision of electricity. The Act further mandates the Commission to ensure that prices charged for electricity are fair to consumers while allowing the utility to recover efficient costs and earn a reasonable return on investment.

The practice of estimated billing in the Nigerian Electricity Supply Industry (NESI) has continued to constitute a major source of complaints by customers in all the electricity Distribution Companies (DisCos). This practice has resulted in growing customer apathy to pay their bills leading to huge unsettled DisCo invoices and calls for urgent metering of unmetered customers and timely reading of customer's post paid meters. The recent effort of the National Assembly to legislate against the practice of estimated billing reflects the public concerns relating to the inadequate end-use meters for electricity customers and flagrant abuse of the estimated billing process for both post-paid metered and unmetered customers.

In pursuit of eliminating the practice of estimated billing for unmetered customers in the NESI, the Commission approved the Meter Asset Provider Regulation (MAP) with the main objective of fast tracking the roll out of end-use meters for all consumers thus ensuring that customers pay for only what they consume. The implementation timeline for closing the metering gap is within three (3) years, hence the need to address the concerns of customers during the transitional period. The MAP regulation is without prejudice to the obligation of the DisCos to provide specified volume of meters under the terms of the Performance Agreement (PA) executed between the respective core investors and the Federal Government of Nigeria (FGN).

Section 31 of the MAP Regulations provide that the Commission shall, within 90 days of coming into effect of the regulation, develop an Order for the capping of estimated bills as a strategy of mitigating the concern of electricity consumers and to further incentivise electricity distribution companies to expedite the provision of meters nationwide.

2. BACKGROUND

2.1 The Regulation on Connection and Disconnection Procedures provides that consumers should only be connected to electricity supply upon the installation of an appropriate meter. However, the terms of the privatisation transaction for the DisCos acknowledges the legacy metering gap hence provided for the installation of a specified number of meters under the Performance Agreement over a period of five (5) years. With the ongoing enumeration of customers, it is envisaged that many more

consumers would be brought on to the billing platform of the DisCos. Prior to privatisation of the DisCos, the Commission had issued a “Methodology for Estimated Billing” Regulations in August 2012 for the following class of customers:

- (1) Customers without a meter
- (2) Customers with defective meters
- (3) Customers whose meter is inaccessible during the billing cycle

2.2 With the Commission’s Order that all Maximum Demand customers be metered no later than March 31, 2017, the estimated billing of Maximum Demand (MD) customers was abolished vide an Order that unmetered MD customers shall not pay for electricity as a means of ensuring that all such customers are metered by the DisCos. However, under the Estimated Billing Methodology Regulations, unmetered Non-MD customers shall be billed based on the "weighted average cluster model" which involves the subtraction of the entire metered load from the energy supplied to the feeder (33kV or 11kV) and the application of an appropriately determined availability factor and correction of losses which is aggregated among the various number and classes of customers supplied by the feeder.

2.3 The reports of the monitoring exercises by the Commission have indicated that the implementation of estimated billing based on the Commission’s applicable regulation has not been strictly complied with by all the DisCos. The challenge of implementing the guidelines of the regulations has further been exacerbated by the widespread inadequate metering of distribution transformers and feeders thus placing a considerable burden on unmetered customers who ultimately are exposed to unacceptable level of estimated bills that were, in most circumstances, not objectively determined. Other technical challenges in implementing estimated billing methodology include the non-integration of billing platforms for the purpose of determining the estimates of energy consumed by customers with prepaid meters and lack of relevant benchmarks and reporting on minimum supply and load shedding data.

2.4 It is the Commission’s opinion that fast tracking the roll out of meters for both energy accounting and appropriate billing of end-use customers is a key prerequisite for the recovery of NESI. In consideration of the need to mitigate customer apathy about estimated billing during the transitional period of the provision of the meters under the MAP Regulations, the Commission hereby propose to develop a Regulation that puts a cap on estimated bills that electricity distribution companies may charge different classes of customers.

2.5 **CURRENT LEVEL OF METERING:** The Performance Agreement executed between the Bureau of Public Enterprises (BPE) and the core investors in the eleven (11) DisCos provide for the installation of end-use meters based on agreed targets. However, the actual performance as at August 2018 indicates that about every six (6) in ten (10) customers are unmetered and therefore, subjected to estimated billing.

	CUSTOMER POPULATION	NO OF METERED CUSTOMERS	NO OF UNMETERED CUSTOMERS	% UNMETERED CUSTOMERS
ABUJA	967,667	526,173	441,494.00	46%
BENIN	887,966	548,261	339,705.00	38%
EKO	493,639	235,068	258,571.00	52%
ENUGU	935,860	312,385	623,475.00	67%
IBADAN	1,688,989	687,652	1,001,337	59%
IKEJA	910,338	447,299	463,039	51%
JOS	486,198	170,409	315,789	65%
KADUNA	543,630	149,588	394,042	72%
KANO	508,640	126,539	382,101	75%
P/HARCOURT	523,693	316,214	207,479	40%
YOLA	346,220	71,580	274,640	79%
TOTAL	8,292,840	3,591,168	4,701,672	57%

Source: Reported data by licensees

The above metering statistics have not adjusted for faulty meters and “inaccessible” post paid meters that are also billed based on estimation.

It is noteworthy that the key objective of the MAP Regulations is to close the above metering gap within three (3) years of the completion of the procurement process by the DisCos.

3. PURPOSE OF THE CONSULTATION DOCUMENT

3.1 The objectives of this Consultation Paper on the “CAPPING OF ESTIMATED BILLING FOR UNMETERED ELECTRICITY CUSTOMERS” are as follows:

- (i) Solicit for comments from stakeholders on the proposal to set aside the existing regulations on estimated billing methodology;
- (ii) Seek for comments on possible options on the determination of the cap on monthly estimated bills issued to customers taking into account customer classes and other relevant indices.

4. APPLICABLE LAWS & REGULATIONS

The Commission was established under the provisions of Section 31 of the Electric Power Sector Reform Act, 2005 with a mandate to regulate the Nigerian Electricity Supply Industry. Section 32(2)(g) of the said Act empowers the Commission to carry out any functions that are necessary to give effect to the objects of the Commission.

4.1 Licence Terms and Conditions of distribution licensees

The Distribution License Terms and Conditions (Condition 41(2)) provides that *“Electricity supply to a customer should be effected with an operational meter first being installed”*. The provision of electric meters to customers prior to electrical connection is further reaffirmed by Section (1) of the Regulation on connection and disconnection procedures with a requirement that ... a Distribution Company shall *“fit a meter and connect electricity supply in line with the Commission’s customer service standards of performance”*.

4.2 Meter Reading, Billing, Cash Collection and Credit Management Regulations

The provisions of Section 8 of the Meter Reading, Billing, Cash Collection and Credit Management Regulation requires that *“where there is no electricity meter to record electricity usage at a Customer’s supply address, a Distribution Company shall base the Customer’s bill on an estimated energy consumption which shall be calculated in accordance with a method approved by the Commission.”*

4.3 Meter Asset Provider Regulations, 2018

Pursuant to the provisions of Section 31 of the MAP Regulations, the Commission shall issue an Order providing guidelines for capping the estimated bills of customers. This is with a view to, in the interim, reducing customer’s indifference relating to the challenges of implementing the current estimated billing methodology and to steer the distribution licensees towards an aggressive roll out of meters under the framework of the MAP regulations.

5. PROPOSED OPTIONS FOR CAPPING ESTIMATED BILLS

5.1 One of the early options considered for the capping of estimated bills for electricity customers is to assign a maximum energy consumption based on the customers property size and usage; dwelling or commercial.. However, further consideration of this option was dropped on account of inadequate customer data associated with the various accounts, including but not limited to statistics relating to connected load on the property. It is also noteworthy that, R1 class of customers are by definition, limited to a consumption of 50kWhr per month. In the determination of a cap to estimate bills for other unmetered electricity customers, the Commission considered the under-listed methodologies for further detailed review.

5.1.1 Method I

The Multi Year Tariff Order (MYTO) model and the tariff design by the distribution licensees are based on the recovery of the approved revenue requirement from all classes of consumers in accordance with the estimated annual energy consumption for the tariff class. In this respect, taking into consideration the customer population

and customer mix for a distribution licensee, the projected average consumption per tariff class may be computed.

Under this method, the Commission is considering a cap on estimated billing based on the projected average monthly consumption of each tariff class in the MYTO model. A hypothetical example is presented below:

A distribution licensee with a total load of 400MWhr/hr, 30% of consumption by R2 as per tariff design and comprised of 250,000 R2 customers.

Monthly energy off-take: 288million kWhr
Consumption by all R2 customers per tariff design @ 30% = 86.4million kWhr
Average consumption for R2: = $86,400,000/250,000$
= 345.60kWhr per customer per month

Proposed cap on estimated billing: 345.60units x applicable R2 tariff for the DisCo
The Commission notes that this approach is strictly based on projections in the tariff design for the utility and does not take into account the actual level of supply during the period under consideration. However, the computed cap on estimated billing remains constant until a review that alters the structure of the cost recovery model.

5.1.2 Method 2

All distribution licensees have aggregated data on the average energy consumption for each tariff class within the franchise area of the utility based on information from prepaid vending platforms. Under this method, the Commission is considering the application of the average consumption of each tariff class within a franchise area as the cap for estimated billing of unmetered customers. A hypothetical example is presented below:

A distribution licensee with the following average vending data for its franchise area and extracted over a preceding period of three (3) months:

R2 – 250kWhr per month
R3 – 780kWhr per month

The proposed cap on estimated bills would be 250units x applicable R2 tariff and 780units x applicable R3 tariff respectively.

5.1.3 Method 3

In developing the guidelines for capping estimated billing, the Commission has noted the imperative of taking into account the disparity in the availability of supply within franchise area and the customer profile. The Commission is proposing to consider the option of capping the estimated bill of consumers within a Business Unit to the average

vending of the same tariff class within the area. A hypothetical example is presented below:

The vending data on average energy purchase within the Business Unit of a distribution licensee over the preceding three (3) months is as follows:

Business Unit A: R2 – 350kWhr per month

Business Unit B: R2 – 157kWhr per month

The Commission propose, under this model, that Business Unit A will apply a cap of 350kWhr per month while Business Unit B will apply a cap of 157kWhr for unmetered customers within the same tariff class.

6. OTHER CONSIDERATIONS

Considering that capping methodology is still within the framework of estimation, it is vulnerable to other challenges and potential for misapplication. In this respect, the following additional considerations are being proposed by the Commission:

- (i) Customers with history of metered consumption would not benefit from a cap on any estimated bills. In the event of unavoidable period of meter outage, the average of their previous consumption over the preceding three (3) months shall apply;
- (ii) The regulation upon approval by the Commission shall be effective with three (3) months moratorium after the completion of the procurement process and engagement of a Meter Asset Provider(s) for the distribution licensee;
- (iii) In line with the applicable regulations of the Commission, no customer shall reject the installation of a meter on its premises. Distribution licensees shall deny service to any customer who rejects the installation of a meter on its property;
- (iv) Where there is a dispute arising from a marked difference between the connected load, historical billing and the approved cap for estimated billing for a customer, the customer may petition the distribution licensee for a special consideration in line with the customer complaints handling mechanism of the NESI;
- (v) The proposed regulation on the capping of estimated billing shall leverage on industry data and hence the reporting requirements of the distribution licensee under the proposed regulation shall strictly be enforced by the Commission.

7. STAKEHOLDER INPUT TO THE PROPOSED CONSULTATION

Stakeholder input 1

Stakeholders are invited to freely comment on the options presented in this Consultation Paper

Stakeholder input 2

Stakeholders are invited to propose other possible methodologies of capping estimated billing in the NESI

Stakeholder input 3

Stakeholders are invited to contribute other considerations that may be considered by the Commission in capping estimated billing in the NESI

8. SUBMISSION OF COMMENTS

Submission of Comments to this Consultation paper has now been extended to January 16, 2019. All submissions should be sent to cap.billing@nerc.gov.ng.