

NIGERIAN  
ELECTRICITY  
REGULATORY  
COMMISSION



*Electricity on Demand*

## QUARTERLY REPORT

FOURTH QUARTER 2019

**NIGERIAN ELECTRICITY REGULATORY COMMISSION**

PLOT 1387 | CADASTRAL ZONE A00 | CENTRAL BUSINESS DISTRICT |

P.M.B. 136 | GARKI | ABUJA

[www.nerc.gov.ng](http://www.nerc.gov.ng)

NERC©2020

The NERC quarterly report is prepared in compliance with section 55(3) of the Electric Power Sector Reform Act (“EPSRA”) 2004, which mandates the Commission to submit the quarterly reports of its activities to the President and the National Assembly. The report analyses the state of the Nigerian Electricity Supply Industry (“NESI”) covering both the operational and commercial performance, regulatory functions, consumer affairs as well as the Commission’s finances and staff development. The report is directed at a wide spectrum of readers including energy economists, electrical engineers, financial and market analysts, potential investors, government officials and institutions, the private sector as well as general readers.

NERC quarterly report is freely available to NESI stakeholders, government agencies and corporations. Individuals can also access any particular issue freely from the Commission’s website. Please direct all inquiries, comments and suggestions on the report to:

The Commissioner  
Planning, Research and Strategy Division  
Nigerian Electricity Regulatory Commission  
Plot 1387 Cadastral Zone A00  
Central Business District  
P.M.B 136, Garki, Abuja  
Nigeria  
NERC website: [www.nerc.gov.ng](http://www.nerc.gov.ng)

Contact Centre:  
Tel: +234 (09) 462 1400, +234 (09) 462 1410  
Email: [info@nerc.gov.ng](mailto:info@nerc.gov.ng)

## CONTENT

<b>LIST OF TABLES .....</b>	<b>4</b>
<b>LIST OF FIGURES .....</b>	<b>5</b>
<b>LIST OF ABBREVIATIONS.....</b>	<b>6</b>
<b>1. EXECUTIVE SUMMARY .....</b>	<b>7</b>
<b>2. STATE OF THE INDUSTRY .....</b>	<b>23</b>
2.1. Operational Performance .....	24
2.1.1. Electricity Generation.....	24
2.1.2. Load Factor and Average Generation of Power Plants.....	26
2.1.3. Generation Mix .....	29
2.1.4. Grid Performance .....	30
2.2. Commercial Performance.....	34
2.2.1. Energy Received and MYTO Load Allocation .....	34
2.2.2. Energy Billed and Billing Efficiency.....	35
2.2.3. Revenue and Collection Efficiency .....	37
2.2.4. Aggregate Technical, Commercial & Collection (ATC&C) Losses.....	39
2.2.5. Market Remittance.....	41
<b>3. REGULATORY FUNCTIONS .....</b>	<b>46</b>
3.1. Regulations and Orders Issued .....	47
3.2. Licences and Permits Issued and Renewed .....	49
3.3. Certification of Metering Assets/Service Providers.....	50
3.4. Eligible Customer Applications under Evaluation.....	51
3.5. Public Consultation on Regulations.....	55
3.6. Compliance and Enforcement .....	56
3.7. Litigation .....	57
4.1. Alternative Dispute Resolution.....	57
<b>4. CONSUMER AFFAIRS .....</b>	<b>58</b>
4.2. Consumer Education and Enlightenment .....	59
4.3. Metering of End-use Customers .....	59
4.4. Customers Complaints.....	61
4.5. Forum Offices .....	64
3.8. Health and Safety .....	66
<b>5. THE COMMISSION.....</b>	<b>68</b>
5.1. Financial Report.....	69
5.2. Capacity Development.....	70

## LIST OF TABLES

Table A: Summary of System Collapse in 2019/Q1-Q4 .....	9
Table 1: System Collapse in 2019/Q1-Q4.....	31
Table 2: Energy Received and Billed by DisCos in 2019/Q3-Q4.....	36
Table 3: Revenue Performance of DisCos in 2019/Q3-Q4.....	38
Table 4: ATC&C Losses (%) by DisCos in 2019/Q1-Q4.....	40
Table 5: DisCos Quarterly Remittances to NBET and MOs in 2019/Q4 .....	42
Table 6: Generation Licences and Permit Issued and Renewal in 2019/Q4 .....	49
Table 7: Mini-Grid Registrations and Permit Approved During 2019/Q4.....	50
Table 8: Certification of Meter Service Providers in 2019/Q4.....	50
Table 9: Permits Issued to Meter Assets Providers as at December 2019.....	51
Table 10: Customers Metering Status by DisCos as of December 2019.....	60
Table 11: Complaints Received and Resolved by DisCo in 2019/Q3-Q4.....	62
Table 12: Complaints Handled by Forum Offices in 2019/Q4.....	65
Table 13: Health and Safety (H&S) Reports in 2019/Q1-Q4.....	67
Table 14: Quarterly Cash Flow of the Commission in 2019/Q3-Q4 .....	69
Table 15: Training and Workshops Attended in 2019/Q4 .....	71
Table I: Monthly Energy Received and Billed by DisCos in 2019.....	72
Table II: Monthly Revenue Performance by DisCos in 2019 .....	73
Table III: Monthly DisCos Invoices & Remittances to MO in 2019.....	74
Table IV: Monthly DisCos Invoices & Remittances to NBET in 2019.....	75
Table V: Monthly DisCos Invoices & Remittances to NBET & MO in 2019.....	76
Table VI: Category of Complaints Received by Discos in 2019/Q4 .....	77
Table VII: Lists and Addresses of NERC Forum Offices as December 2019.....	78
Table VIII: Monthly Revenue & Expenditure of the Commission, Jan. – Dec. 2019 ..	79

## LIST OF FIGURES

Figure A. Billing and Collection Efficiency by DisCos in 2019/Q4.....	10
Figure B: Remittances to MO and NBET by DisCos – 2019/Q4 .....	11
Figure C: Expected and Actual Remittances by DisCos – 2019/Q4 .....	12
Figure D: Metering Status in NESI as at December 2019.....	17
Figure E: Category of Complaints Received by DisCos in 2019/Q4 .....	18
Figure F: Complaints Received by Forum Offices in 2019/Q1-Q4.....	19
Figure G: Complaints Category Received by Forum Offices, 2019/Q4 .....	19
Figure H: Commission’s Cash Flows (₦m) in 2019/Q1-Q4 .....	21
Figure 1: Average Daily Generation and Available Capacity 2019/Q1-Q4.....	25
Figure 2: Plants Load Factor (%) in 2019/Q4.....	27
Figure 3: Share (%) of Generation Output by Plants in 2019/Q4 .....	28
Figure 4: Quarterly Share (%) of Electricity Generated by Fuel Sources.....	29
Figure 5: Transmission Loss Factor from Jan. 2019 – Dec. 2019.....	30
Figure 6: Average Daily System Frequency from Jan. – Dec. 2019 .....	32
Figure 7: Monthly System Voltage from Jan. – Dec. 2019.....	33
Figure 8: Energy Off-take by DisCos vs. MYTO Load Allocation in 2019/Q4 .....	35
Figure 9: Market Invoice and Remittance by DisCo in 2019/Q4.....	41
Figure 10: Market Remittance by DisCos in 2019/Q3-Q4 .....	44
Figure 11: Required and Actual Market Remittances by DisCos – 2019/Q4.....	45
Figure 11: Customers Metered by DisCos as at December 2019.....	61
Figure 12: Category of Complaints Received by DisCos in 2019/Q4.....	63
Figure 13: Category of Complaints Received by Forum Offices in 2019/Q4.....	65

## LIST OF ABBREVIATIONS

<b>ADR</b>	Alternative Dispute Resolution
<b>AEDC</b>	Abuja Electricity Distribution Company Plc
<b>ANAN</b>	Association of National Accountants of Nigeria
<b>ATC&amp;C</b>	Aggregate Technical, Commercial & Collection Losses
<b>BPE</b>	Bureau of Public Enterprises
<b>CAPEX</b>	Capital Expenditure
<b>CEB</b>	Beninois Electricity Community
<b>CTC</b>	Competition Transaction Charge
<b>DisCos</b>	Distribution Companies
<b>DSOs</b>	Distribution System Operators
<b>EEDC</b>	Enugu Electricity Distribution Company Plc
<b>EKEDC</b>	Eko Electricity Distribution Company Plc
<b>EPSRA</b>	Electric Power Sector Reform Act
<b>GenCos</b>	Generation Companies
<b>GWh</b>	Gigawatt hour
<b>IBEDC</b>	Ibadan Electricity Distribution Company Plc
<b>ICAN</b>	Institute of Chartered Accountants of Nigeria
<b>IEDN</b>	Independent Electricity Distribution Network
<b>IE</b>	Ikeja Electric Plc
<b>JEDC</b>	Jos Electricity Distribution Company Plc
<b>KDEDC</b>	Kaduna Electricity Distribution Company Plc
<b>KEDC</b>	Kano Electricity Distribution Company Plc
<b>MAP</b>	Meter Assets Provider
<b>MOs</b>	Market Operator
<b>MW</b>	Megawatts
<b>MWh</b>	Megawatt hour
<b>MYTO</b>	Multi-Year Tariff Order
<b>NBET</b>	Nigerian Bulk Electricity Trading Plc
<b>NERC</b>	Nigerian Electricity Regulatory Commission
<b>NESI</b>	Nigerian Electricity Supply Industry
<b>NICE</b>	Notices of Intention to Commence Enforcement
<b>NIGELEC</b>	Nigerien Electricity Society
<b>NIM</b>	Nigerian Institute of Management
<b>NIPP</b>	National Integrated Power Projects
<b>NSE</b>	Nigerian Society of Engineers
<b>PHEDC</b>	Port Harcourt Electricity Distribution Company Plc
<b>ECR</b>	Eligible Customer Regulations
<b>TCN</b>	Transmission Company of Nigeria Plc
<b>TLF</b>	Transmission Loss Factor
<b>YEDC</b>	Yola Electricity Distribution Company Plc

# 1. EXECUTIVE SUMMARY

## STATE OF THE INDUSTRY:

*Total electric energy generated in 2019/Q4 was 8,101,193MWh – 1.46% more than the generation in 2019/Q3 arising from higher capacity utilisation rate.*

## SUMMARY

**Operational Performance:** In line with its mandates derived from the EPSRA, the Nigerian Electricity Regulatory Commission (the “Commission”) continued the function of regulating the technical, operational and commercial performance of NESI. During the fourth quarter of 2019, the total electric energy generated was 8,101,193MWh – 1.46% more than the energy generated during the preceding quarter. Within the same quarter, the industry recorded the peak daily generation of 5,157MW. The available plant generation units on bar decreased to 63 from the daily average of 66 units recorded in the preceding quarter. However, despite the decrease in the available generation units in the fourth quarter, the total electric energy generated increased by 1.46% with 5.44 percentage points increase in generation capacity utilisation. The improved capacity utilisation is attributed to reduction in constraints such as gas supply shortage, transmission and distribution networks and water management at the hydropower stations. Notwithstanding the progress recorded during the quarter under review, the aforementioned industry constraints still pose major technical and operational challenges to the industry.

The resolution of technical and operational constraints in NESI remains one of the top priorities of the Commission. In this regard, the Commission has continued to work on addressing the *DisCo-TCN* interface bottlenecks to free up part of the stranded generation capacity by addressing the technical constraints inhibiting the flow of energy. Also, the Commission is currently reviewing the Performance Improvement Plans (“PIPs”) submitted by the DisCos. The PIPs, which were prepared following guidelines issued by the Commission, cover the period 2020-2025 and have an overall objective of ensuring that utilities invest in projects critical to addressing the technical and operational challenges affecting their operational efficiency. The review of the PIPs is expected to appraise 1) DisCos’ proposed utilisation of capital and operating expenditure allowances for relevance and cost efficiency, and 2) the investments required by DisCos towards addressing distribution networks bottlenecks to free up part of the stranded generation capacities and address other related constraints inhibiting the flow of energy.



One (1) incidence each of partial system collapse and total system collapse was recorded in 2019/Q4.

A comparative summary of the system stability performance of the national grid for 2019 is indicated in Table A. The report indicates a slight decline in the grid network stability in 2019/Q4 relative to 2019/Q3. Although the two quarters experienced one (1) incidence of total system collapse (i.e., *total blackout nationwide*) each, there was one (1) incidence of partial system collapse (i.e., *failure of a section of the grid*) during the fourth quarter of 2019 as compared to zero (0) partial system collapse recorded during the third quarter.

**Table A: Summary of System Collapse in 2019/Q1-Q4**

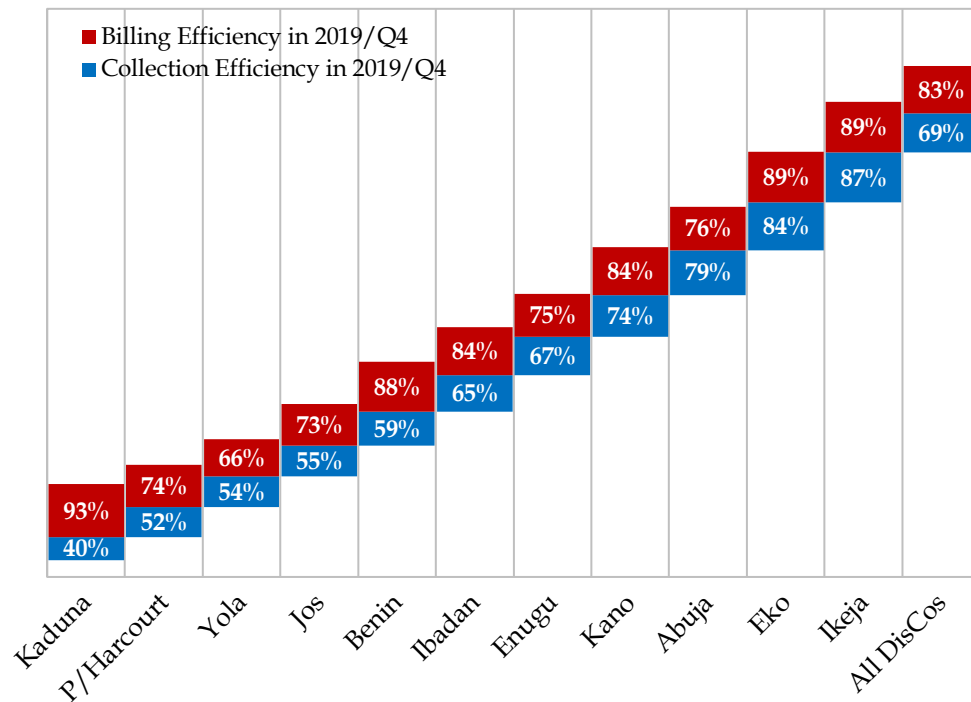
	2019/Q1	2019/Q2	2019/Q3	2019/Q4
Number of Partial Collapses	0	0	0	1
Number of Total Collapses	5	3	1	1

To further sustain the improvement in the grid stability in subsequent quarters and beyond, the Commission, in collaboration with TCN, has intensified its monitoring and supervision efforts to ensure strict compliance with the System Operator's directives to generators on *free governor* and *frequency control mode* in line with the extant provisions of the Grid Code governing the industry. Also, the Commission is reviewing the outcome of the competitive process of procuring *spinning reserve* conducted by TCN. The Commission had earlier approved the request by TCN to competitively procure *spinning reserve* for the industry. This is to guarantee adequate *spinning reserve* for proper management of the grid by the System Operator.

**Commercial Performance:** The financial viability and commercial performance of the industry continued to be a major challenge albeit the slight improvement in the fourth quarter of 2019. During the quarter under review, the total billing to and collection from electricity consumers by the eleven (11) DisCos stood at ₦184.10billion and ₦126.14billion respectively. As represented in *Figure A*, these denote 82.59% and 69.44% billing and collection efficiency respectively, indicating 1.00% and 0.45% points increases respectively, when compared with the third quarter of 2019. The level of collection efficiency during the quarter under review indicates that as much as ₦3.06 out of every ₦10 worth of energy sold during the fourth quarter of 2019 remained uncollected from consumers as and when due.

DisCos' Billing efficiency of electricity consumers stood at 82.59% while collection efficiency was 69.44%.

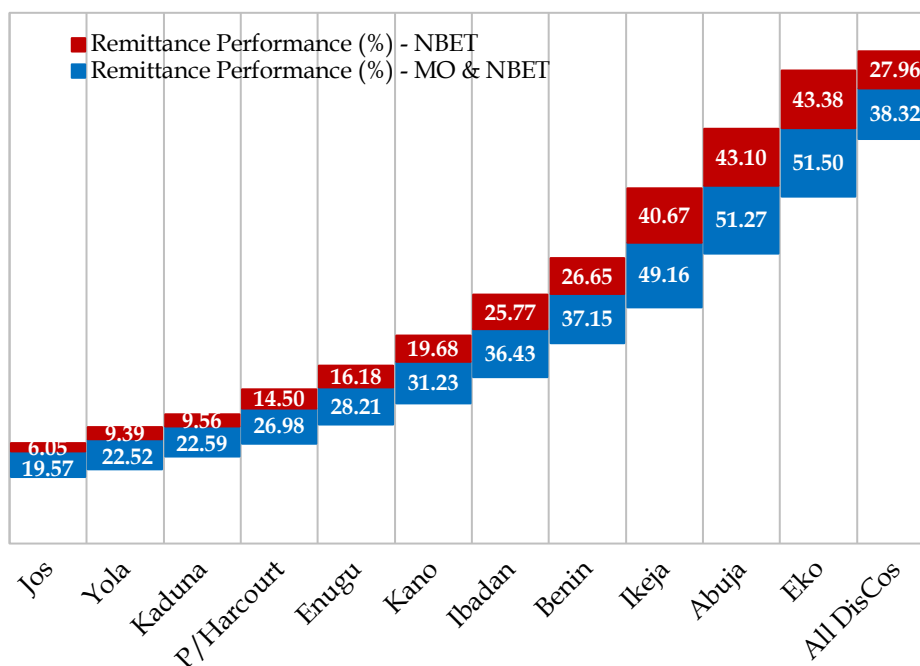
Figure A. Billing and Collection Efficiency by DisCos in 2019/Q4



During the fourth quarter of 2019, a total invoice of ₦193.66billion was issued to the eleven (11) DisCos for energy received from NBET and for service charge by MO, but only a sum of ₦74.20billion of the total invoice was settled, representing 38.32% remittance performance. This represents 0.44 percentage point increase from the final settlement rate recorded for the third quarter of 2019 following the commencement of enforcement action by the Commission. Individual DisCo's remittance performances to NBET and total market (combined MO & NBET) settlements during the fourth quarter of 2019 are represented in Figure B below. Although the DisCos fully met the expected minimum remittance thresholds (MRTs) to MO, the average aggregate remittance performance to NBET was 27.96%, with performance levels ranging from 6.05% (Jos) to 43.38% (Eko). This is lower than the MRT prescribed in the Orders on minimum remittance issued to all DisCos in July 2019 with only Jos DisCos meeting the remittance obligation during the quarter under review.

*The average total remittance performance to the market for all DisCos was rose to 38.32% and ranges from 19.57% (Jos DisCo) to 51.50% (Eko DisCo).*

Figure B: Remittances to MO and NBET by DisCos - 2019/Q4



The financial viability of NESI is still a major challenge threatening its sustainability. As highlighted in the preceding quarterly reports, the liquidity challenge is partly due to the non-implementation of cost-reflective tariffs, high technical and commercial losses exacerbated by energy theft and consumers' apathy to payments under the widely prevailing practice of estimated billing. The severity of the liquidity challenge in NESI was reflected in the settlement rates of the energy invoices issued by NBET to each of the DisCos as highlighted above, as well as the non-payment by the special and international customers.

During the quarter under review, whereas Ajaokuta Steel Co. Ltd and environ (designated as special customers) made no payment to the market, the international customers (*i.e.*, *Societe Nigerienne d'electricite* – NIGELEC and *Communaute Electrique du Benin*–CEB) paid a total sum of ₦10.26billion (US\$33.64million) and ₦2.98billion (US\$9.78million) to NBET and MO respectively. This was in addition to the ₦33.85billion (US\$110.97million) and ₦9.84billion (US\$32.27million) previously made by the international customers to NBET and MO between Jan. and Sep. 2019. Thus, the total payment made by international customers to NBET and MO for 2019 invoices and settlement of their outstanding balances from the previous years were respectively ₦44.11billion (US\$144.61million) and ₦12.83billion (US\$42.06million).

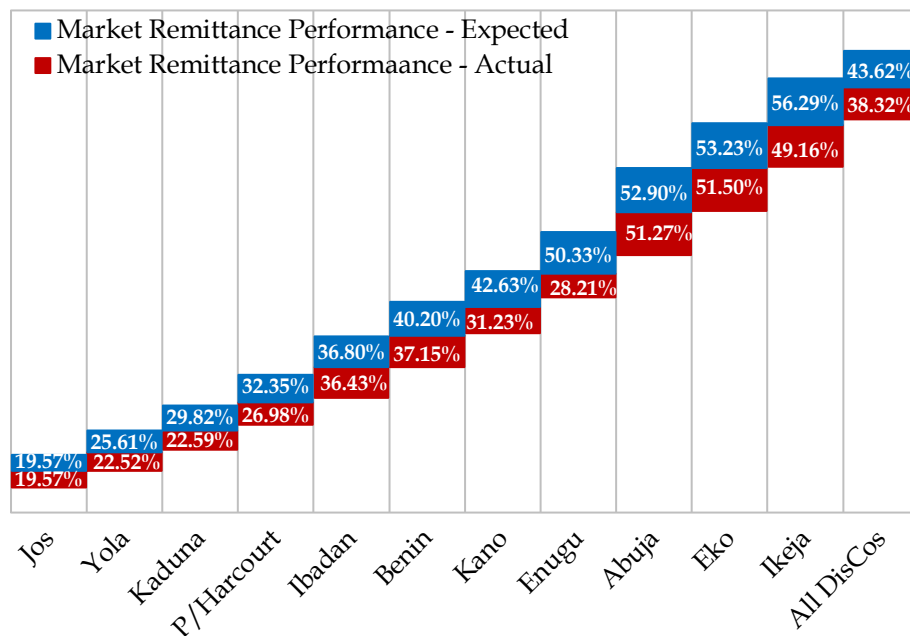
*During 2019/Q4, the international customers (CEB/SAKETE and NIGELEC) paid a total sum of US\$43.42million to offset part of their total outstanding debt.*

Nonetheless, the Federal government of Nigeria has continued to engage the governments of neighbouring countries benefitting from the export supply for timely payments of the electricity purchased from Nigeria.

It is noteworthy that tariff shortfall (represented by the difference between actual end-user tariffs and rates approved by NERC) has partly contributed to liquidity challenges being experienced in the industry. However, the settlement ratio to the expected minimum remittance threshold (MRT), having adjusted for tariff shortfall, as represented in Figure C indicates that DisCos need to improve on their performance. Whereas DisCos were expected to make a market remittance of 43.62% during 2019/Q4, only 38.32% settlement rate was achieved within the timeframe provided for market settlement in the Market Rules. Therefore, DisCos' remittance level, regardless of the prevailing tariff shortfall, was still below the expected MRT. Thus, to ensure business continuity and improve sector liquidity, DisCos must continue to improve on effort towards reducing their ATC&C losses to levels commensurate with their contracted obligations in the performance agreements.

*The expected minimum remittance threshold adjusted for tariff shortfall stood at 43.62% in 2019/Q4 while DisCos' actual market remittance to NBET & MO during the period was 38.32%*

**Figure C: Expected and Actual Remittances by DisCos - 2019/Q4**



In pursuit of addressing the low remittance to the market and the viability of the DisCos as a going concern, the Commission has since commenced the review of DisCos' compliance to meeting the MRT for

enforcement actions. The Commission is also reviewing the 2020-2025 performance improvement plans filed by the DisCos and related strategy towards addressing the operational challenges of DisCos.

As noted in the preceding quarterly reports, another major initiative towards improving revenue collection and remittance in NESI is the provision of meters to all registered end-use consumers of electricity. The MAP Regulations issued by the Commission on March 8, 2018, aims to fast-track the roll-out of end-use meters through the engagement of third-party investors for the financing, procurement, supply, installation and maintenance of electricity meters. To this end, the Commission approved and issued permits to the preferred Meter Asset Providers procured by each of the DisCos. In pursuit of ensuring prudence in the industry, the Commission further approved the regulated prices of meters for the MAPs on August 20, 2019 following the completion of competitive procurement process by DisCos. The Commission has further continued to strictly monitor the deployments of meters in compliance with the provisions of the MAP Regulations.

## REGULATORY FUNCTIONS:

**Regulations and Orders:** Although no new regulations were issued in the fourth quarter of 2019, the Commission continued the process of gazetting some of the existing regulations including the Nigerian Electricity Supply and Installation Standards Regulations. Also, the Commission continued to monitor the enforcement of provisions of existing regulations *including* the Meter Asset Provider regulations.

*On the other hand,* the Commission issued thirteen (13) Orders including

- 1) **Order NERC/183/2019** on the mandatory migration of R3 Class of residential customers, and industrial and commercial customers to cashless settlement platforms and other matter relating to revenue protection in the Nigerian Electricity Supply Industry. This Order aligns with Federal Government policy directive on cashless policy and, among others, aims to reduce collection leakages/losses and improve overall revenue assurance in NESI.

*During 2019/Q4, the Commission issued Thirteen (13) Orders to the industry operators.*

2-12) *Orders* NERC/GL/184/2019, NERC/GL/185/2019, NERC/GL/186B/2019, NERC/GL/187B/2019, NERC/GL/188B/2019, NERC/GL/189B/2019, NERC/GL/190B/2019, NERC/GL/191B/2019, NERC/GL/192/2019, NERC/GL/193/2019 & NERC/GL/194/2019 on the

December 2019 Minor Review of Multi-Year Tariff Order (MYTO) and Minimum Remittance Order for the year 2020 for DisCos. The Orders:

i) Reflect the impact of the changes in the minor review variables for 2019-2020; ii) Determine the cost-reflective tariffs for the relevant years; and iii) Ascertain the tariff deficits and implement a framework to manage 2020 revenue shortfall in the industry by prescribing minimum remittance thresholds for various DisCos to account for tariff shortfalls in the settlement of market invoices issued by NBET & MO.

- 13) *NERC/GL/195/2019* on the December 2019 Minor Review of Multi-Year Tariff Order (MYTO) and Minimum Remittance Order on Market Operator's invoice for the year 2020 for the Transmission Company of Nigeria (TCN) Plc to achieve similar objectives as the NERC's Orders *NERC/GL/184/2019 - NERC/GL/194/2019* and to:
- i) Reaffirm the obligation of the System Operator (SO) Division of the TCN to comply with the dispatch merit order prescribed in the 2019 Minor Review (MYTO financial model) towards ensuring compliance with projected generation cost in the vesting contract executed between NBET and the DisCos as well as the PPAs executed between NBET and the GenCos.

In addition to these Orders, the Commission continued with the review of comments received during the public discussions on Consultation Papers on Capping of Estimated Billing (CEB), Competition Transition Charge (CTC) and Electricity Distribution Sub-Franchising (EDS) to develop final CEB, CTC and EDS *Order or guideline* as applicable that will be representative of the industry interest and public good.

**Licensing and Permits:** The Commission, after satisfactory evaluation, issued one (1) *new* off-grid licence and Captive Power Generation (CPG) permit each in 2019/Q4 with a total nameplate capacity of 15.20MW. The Commission also approved the *renewal* of one (1) on-grid generation licence and two (2) CPG permits and *amended* one (1) CPG permit, with a total nameplate capacity of 1,159.22MW. This brings the total nameplate capacities of licences and permits issued, renewed and amended by the Commission during the fourth quarter of 2019 to 1,174.42MW.

*During 2019/Q4, the Commission issued one (1) new off-grid licence and CPG permit each with a total nameplate capacity of 15.20MW.*

*As at the end of 2019/Q4, the Commission had issued twenty-six (26) Meter Assets Provider Permits.*

Furthermore, the Commission approved the certification of seven (7) Meter Service Providers for installer category, and as at the end of the fourth quarter of 2019, the Commission had issued permits to twenty-six (26) Meter Asset Providers. The Commission also continued with the technical evaluation of fourteen (14) Eligible Customer applications during the fourth quarter of 2019.

***Compliance and Enforcement:*** Enforcement actions against violations, breaches and infractions of regulations, orders and technical codes of the NESI are key mandates of the Commission. In this regard, the Commission, during the fourth quarter, issued notices of intention to cancel licences (NICL) to Abuja, Benin, Enugu, Ikeja, Kaduna, Kano, Port Harcourt and Yola DisCos for the contravention of the provisions of ESPRA, *terms and conditions* of their respective distribution licences, and the 2016-2018 minor review of MYTO 2015 and minimum remittance Order for the Year 2019. However, all the concerned DisCos have since met the conditions required to set aside the NICL *on/before* the stipulated deadline of the 9<sup>th</sup> December 2019.

The Commission also continued with the twenty-one (21) enforcement actions brought forward from the preceding quarters against some licensees for violations of rules and infraction. These include failure to submit required data within a stipulated timeline, electric accidents and electrocution cases, and the failure to adhere to forum decisions without filing appeals.

***Litigation:*** During the fourth quarter, the Commission was involved in two (2) *new* matters seeking declarations that: 1) some provisions of the MAP Regulation (2018) as issued by the Commission contravened the EPSRA, and 2) the Commission lacks the power and authority to issue a notice of intention to cancel licences of erring DisCos. The Commission also continued with eleven (11) *on-going* cases reported in the preceding quarterly reports that are currently at various stages. The *on-going* matters include Abuja DisCo challenging the Order of the Commission directing it (Abuja DisCo) to pay ₦50million as compensation to the family of a boy electrocuted in Niger State and a fine of ₦250million for breach of safety standards; suspension of the board of Ibadan DisCo; implementation of MYTO 2015; land dispute and granting of Eligible Customer status among others.

**CONSUMER AFFAIRS:** *Consumer Education & Enlightenment:* To ensure continuous education of customers on their rights and obligations and other general service delivery, the Commission continued the monitoring of the 2019 customer enlightenment programs of all the DisCos *vis-à-vis* their proposed schedules for the year 2019. On its part, the Commission continued with the sponsorship of the airing of a dedicated weekly radio program titled 'Electricity Spot Light Today' on FRCN with the objective of engaging and enlightening electricity consumers on various issues. The programme focuses on issues including but not limited to complaints redress mechanism, customers' rights and obligations, health and safety, estimated billing, meter related issues and the efforts being made to bridge the metering gap in NESI.

Following the approved timeline for its 2019 town hall meetings on consumers awareness and enlightenment, the Commission held three (3) town hall meetings on the 21<sup>st</sup>, 23<sup>rd</sup> and 25<sup>th</sup> October 2019 in *Ikeja* (Lagos), *Ibadan* (Oyo) and *Owerri* (Imo) respectively. At the meeting, the Commission discussed and addressed questions about metering (*i.e.*, MAP scheme), estimated billing, health and safety, service interruption, the *ongoing* customers' enumeration and the efforts being made to resolving all outstanding issues.

*The metering* gap for end-use customers is still a key challenge in the industry. The records of the Commission indicate that, of the 10,374,597 registered electricity customers, only 3,918,322 (37.77%) have been metered as at the end of the fourth quarter of 2019. Thus, 62.37% of the registered electricity customers are still on estimated billing which has contributed to customer apathy towards payment for electricity. In comparison to the third quarter, the numbers of registered and metered customers increased by 7.23% and 0.59% respectively. The increase in registered customer population was due to the *on-going* customer enumeration exercise by DisCos through which unregistered consumers of electricity were brought unto the DisCos' billing platform. Similarly, the increase in metered customers was attributed to the roll-out of meters under the Meter Assets Provider (MAP) scheme.

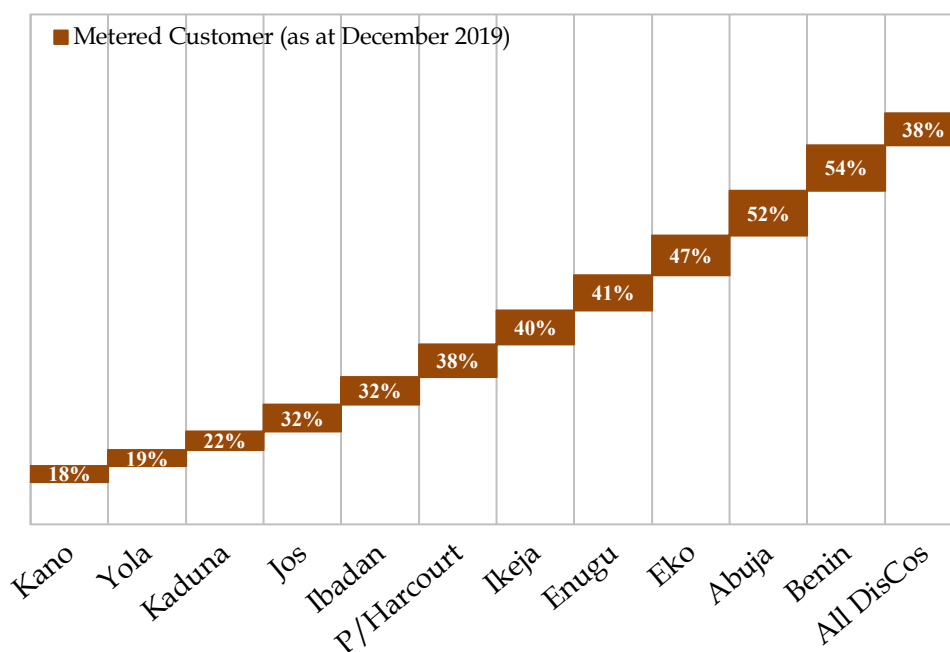
A review of the customer population data in *Figure D* indicates that only Abuja and Benin DisCos had metered more than 50% of their registered electricity customers as at the end of December 2019. The

*Only two (2) DisCos have metered more than 50% of its registered electricity customers as at the end of the fourth quarter of 2019.*



Commission continued its monitoring of DisCos' implementation of and compliance with the provisions of the MAP Regulations to fast-track meter roll-out, with the target of closing the metering gap in NESI by December 31, 2021. To this end, the Commission during the quarter approved the preferred MAPs for the DisCos that had finalised their procurement process to contracting MAP(s). In total, the Commission had approved 26 MAPs as at December 31, 2019.

**Figure D: Metering Status in NESI as at December 2019**



*The number of customer complaints increased by 2.88% during the fourth quarter of 2019.*

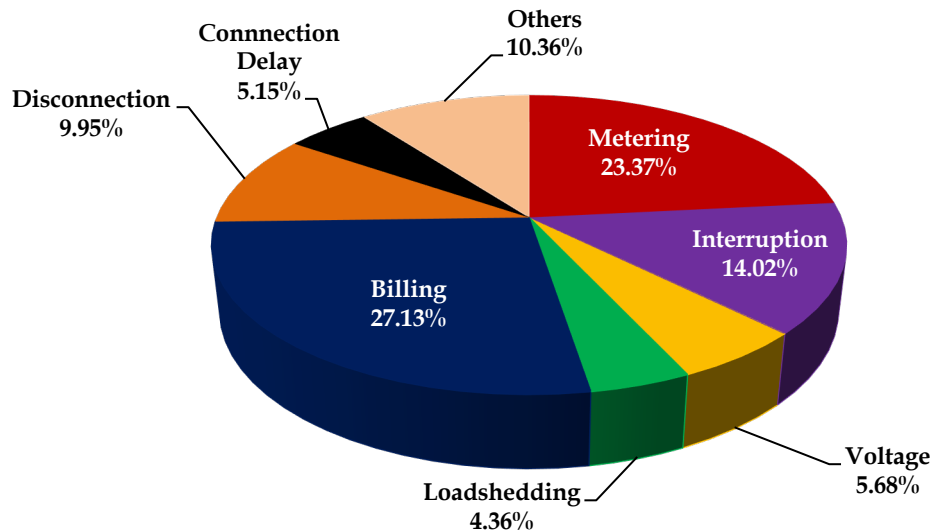
**Customer Complaints:** During the fourth quarter of 2019, the eleven (11) DisCos received a total of 177,807 complaints from consumers (2.88% more than complaints received during the third quarter of 2019) and attended to a total of 160,842 representing an increase of 5.80 percentage points from the preceding quarter. The report shows that Ibadan and Enugu DisCos had the lowest customers' complaints resolution rates based on the proportion of complaints not addressed in the fourth quarter.

A review of customer complaints statistics in *Figure E* indicates that estimated billing, metering and service interruption remain the most significant areas of concerns for customers, accounting for 64.52% (*i.e.*, 114,702) of the total complaints in the fourth quarter of 2019. To ensure improved customer service delivery, the Commission continued to

*Metering and estimated billing still dominated the customers' complaints, accounting for 50.49% of the total complaints in 2019/Q4.*

monitor and audit customers' complaint handling and resolution process by DisCos. Also, the Commission, continuously, monitors the operation and efficacy of its Forum Offices which were set up to redress on consumers' complaints not adequately resolved to the customers' satisfaction by the responsible DisCos.

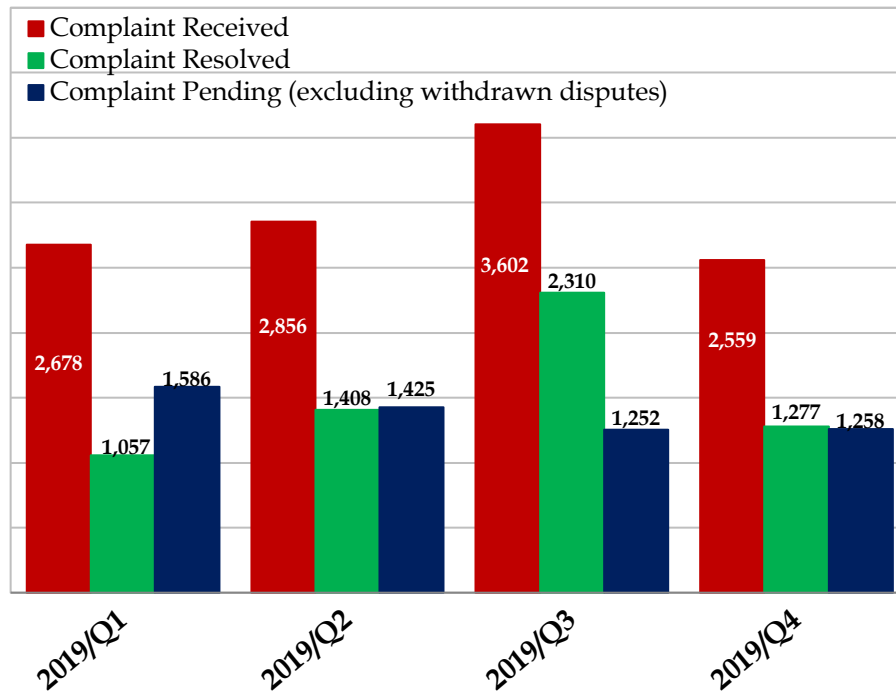
**Figure E: Category of Complaints Received by DisCos in 2019/Q4**



*As at the end of 2019/Q4, the Commission had 30 operational Forum Offices in 29 States and the Federal Capital Territory (FCT).*

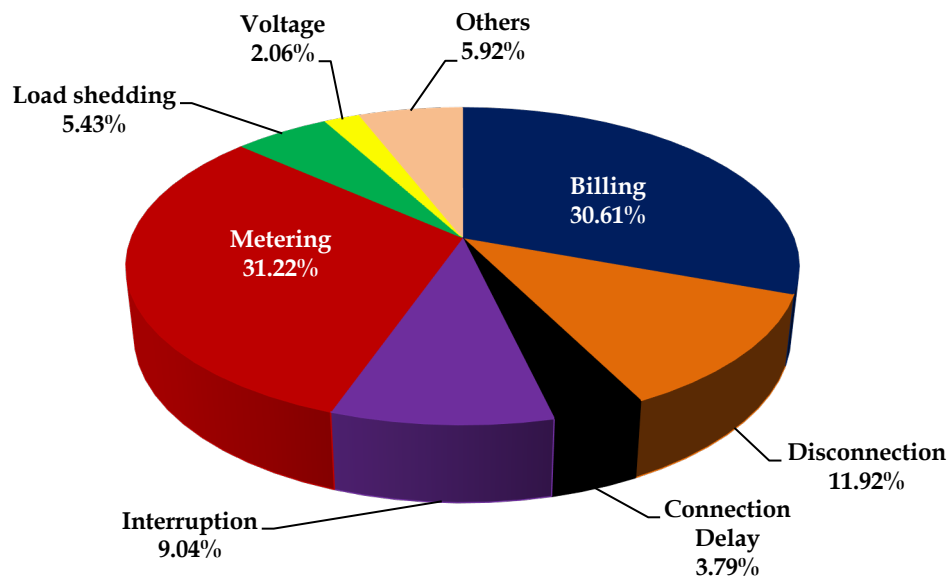
**Forum Offices:** Forum panels review unresolved disputes, as enshrined in the Commission's Customer Complaints Handling Standards and Procedure (CCHSP) Regulations. As at the end of the fourth quarter of 2019, the Commission had thirty (30) operational Forum Offices in twenty-nine (29) states and the FCT. The chart in *Figure F* indicates that the Forum Offices had a total of 2,559 complaints in the fourth quarter of 2019 (including 1,033 pending complaints from the third quarter) from customers who were dissatisfied with DisCos' decision in resolving their lodged complaints. During the same period, the Forum Panels had 46 hearings and resolved 49.90% of the complaints lodged at Forum Offices nationwide, representing an average resolution of 27 cases per hearing.

Figure F: Complaints Received by Forum Offices in 2019/Q1-Q4



Similar to the categories of complaints received by DisCos, metering and billing issues dominated the category of complaints received by the Forum Offices as represented in Figure G. This shows that billing and metering issues were mostly the complaints not satisfactorily resolved by the DisCos' Complaints Handling Units in 2019/Q4.

Figure G: Complaints Category Received by Forum Offices, 2019/Q4



Whereas some of the pending cases are due to incomplete submission *and/or* abandonment by consumers, the Commission and its respective Forum Offices are committed to quickly resolving all outstanding complaints in line with its operating manual. To further improve customer care in NESI, the Commission is working toward establishing additional Forum Offices in a bid to achieving its objective of establishing at least one Forum Office in each state of the federation.

**Health and Safety:** The Commission received a total of 115 accident reports from the licensed operators during the fourth quarter of 2019. The accidents unfortunately resulted in 13 deaths and 9 injuries of various degrees involving both employees of the companies and the third parties. In comparison with the third quarter of 2019 when 17 deaths and 8 injuries were recorded, there was slight improvement in the health and safety performance of the operators in the fourth quarter of 2019.

*In 2019/Q4, electrical accidents resulted in 13 deaths and 9 injuries of various degrees involving both employees of the companies and the third parties.*

In line with its mandate to ensure safe and reliable electricity services, the Commission has commenced enforcement on some of the incidences involving various safety breaches during the fourth quarter. The Commission is also developing a comprehensive penalty and compensation structure for health and safety breaches in NESI to stop the utilities' discretionary payment of compensations to electrical accident victims or their families. On account of the Commission's stand for zero tolerance on safety breaches in NESI and, in line with its strategic goals 2017-2020, the Commission has intensified its monitoring and implementation of various safety programmes aimed at reducing accidents in the electricity industry. The safety programs being implemented by the Commission include, but not limited to, the standardisation of system protection schemes, engagement of stakeholders on Right of Way (ROW) violation, public enlightenment on the safe use of electricity and a review of an operational procedure for Distribution System Operators (DSO) on fault clearing.

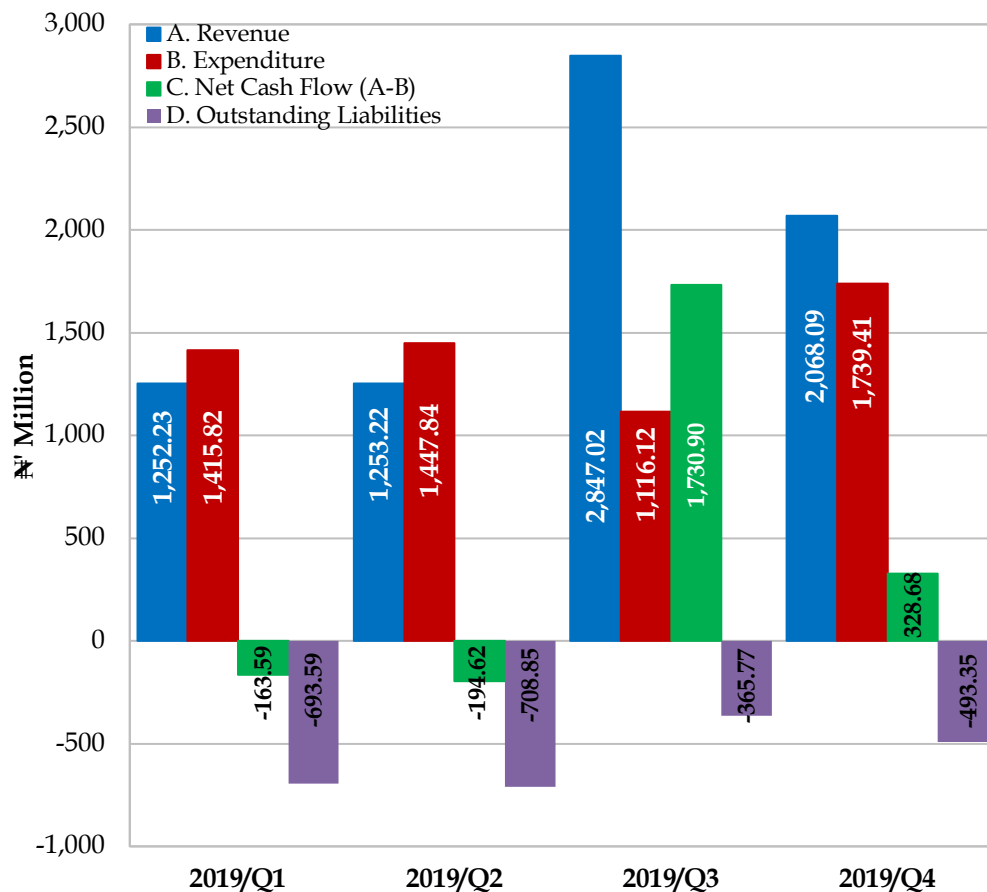
**Financial Report:** During the fourth quarter of 2019, the total revenue realised by the Commission was ₦2.07billion representing a decrease of 37.66% from the revenue recorded during the third quarter. The higher revenue recorded in the third quarter was due to funds released from FGN appropriation for capital projects. Operating levy (*i.e.*,

**THE  
COMMISSION:**

As at the end of 2019/Q4, the unpaid liabilities of the Commission stood at ₦0.49billion.

market charges) remain relatively the same for both quarters while other internally generated revenues (OIGR) decreased substantially in the fourth quarter. The chart in *Figure H* indicates that the total expenditure of the Commission rose to ₦1.74billion from ₦1.12billion incurred in the preceding quarter. A comparison of the revenue and expenditure of the Commission in the fourth quarter of 2019 indicates lesser expenditure incurred when compared to actual cash receipts, showing a positive net cash flow of ₦0.33billion. However, the Commission still has unpaid liabilities of ₦0.49billion as at the end of the fourth quarter of 2019.

**Figure H: Commission's Cash Flows (₦' m) in 2019/Q1-Q4**



**Capacity Development:** During the fourth quarter, the Commission continued with its commitment to human capital development and sponsored some members of staff, based on their job/skills gap needs, to attend various regulatory, leadership and management training programs. During the same quarter, members of staff were sponsored to attend workshops, meetings and conferences on issues beneficial to

the Commission's statutory responsibilities. Members of staff of the Commission were also allowed to attend annual conferences of their respective professional bodies to keep them up to date with current developments in their respective professions.

As part of recognising and rewarding performance, the Commission organised end of the year 2019 awards for staff in December where staff that had demonstrated outstanding and exceptional performance during the year were rewarded.

## 2. STATE OF THE INDUSTRY

## 2.1. Operational Performance

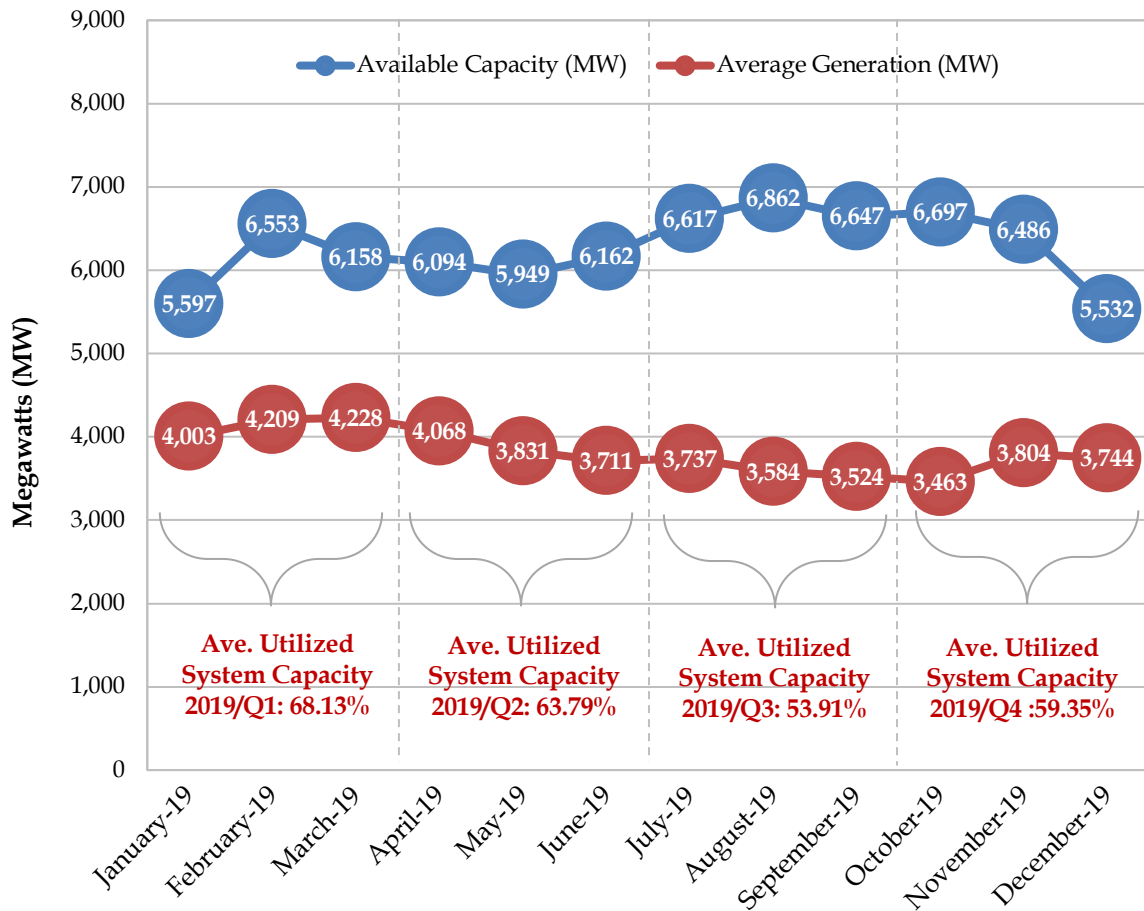
### 2.1.1. Electricity Generation

In line with the mandate derived from EPSRA, the Commission continues the monitoring of the operational and commercial performance of NESI. The industry's daily generation peak of 5,157MW for the fourth quarter of 2019 was recorded on the 19<sup>th</sup> November 2019. Available average generation capacity fell by 7.01% to 6,238MW during the fourth quarter of 2019. This decrease in available generation capacity is attributable to the increase in the number of generation units currently undergoing maintenance and overhaul, which made them unavailable for electricity generation. On average, 63 generation units were available during the fourth quarter of 2019 compared to 66 generation units available during the third quarter of 2019. However, due to an improvement in the capacity utilisation, the total electric energy generated increased by 1.46% from 7,984,685MWh recorded in the third quarter to 8,101,192.72MWh in the fourth quarter of 2019.

A review of both the average daily available capacity and generation (in MW) by quarter in 2019 is represented in Figure 1. The Figure shows that 59.35% of the available capacity was utilised in the fourth quarter of 2019, indicating 5.44 percentage points increase from the capacity utilisation rate during the third quarter. By implication, fewer available capacities (about 40.65%) were redundant during the fourth quarter as compared to about 46.09% that were redundant during the third quarter. The improved capacity utilisation was due to reductions in technical and operational constraints relating to inadequate gas supply, water management at the hydropower stations, transmission constraints, limited distribution networks, and commercially induced low load off-take by DisCos.



Figure 1: Average Daily Generation and Available Capacity 2019/Q1-Q4



Complete resolution of both the operational and technical challenges in electricity generation remains as one of the top priorities of the Commission. The Commission continued consultations with relevant stakeholders to develop lasting solutions to the gas impasse in the power industry. Furthermore, the Commission continues to execute a number of actionable items identified in its Strategic Plan 2017-2020 to completely resolve the technical and operational challenges in NESI. Pursuant to this effort, the Commission is currently reviewing the Performance Improvement Plans (PIPs) filed by the DisCos. The PIPs, which were prepared with the guidelines provided by the Commission, cover the period 2020–2025 and have an overall objective to ensure that utilities invest in projects critical to addressing the technical and operational constraints affecting their operational efficiency. Thus, the review is expected to appraise 1) DisCos’ proposed utilisation of capital and operating

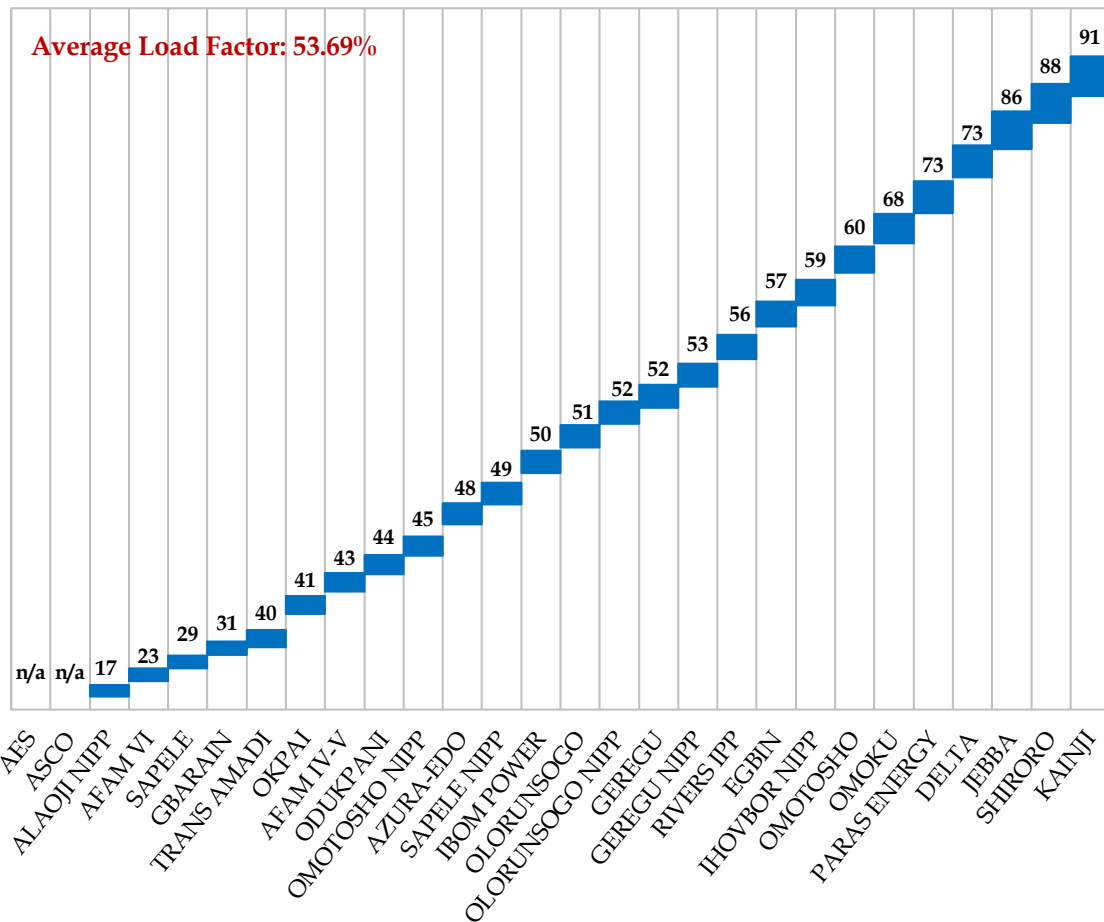
expenditure allowances for relevance and cost efficiency, 2) the investments required by DisCos towards addressing distribution networks bottlenecks and free up part of the stranded generation capacities and address other related constraints inhibiting the flow of energy. During the quarter, the Commission approved the 2019 minor review of the Multi-Year Tariff Order (“MYTO”) 2015 to determine the cost-reflective tariffs, relevant tariff and market shortfalls and prescribe the minimum remittance thresholds for the year 2020 for each DisCo in line with the allowed end-user tariffs payable by customers.

### **2.1.2. Load Factor and Average Generation of Power Plants**

The average load factor (i.e., the dispatch rate) of the generation plants, defined as the amount of energy that a power plant generated over a certain period relative to its available capacity for the said period, recorded a decline of 1.64 percentage points from the 55.33% recorded during the preceding quarter. As represented in Figure 2, the average dispatch rate (or load factor) stood at 53.69% during the fourth quarter, indicating that an average power plant operating during the third quarter 2019 had just 53.69% of its available capacity dispatched by the System Operator (SO).

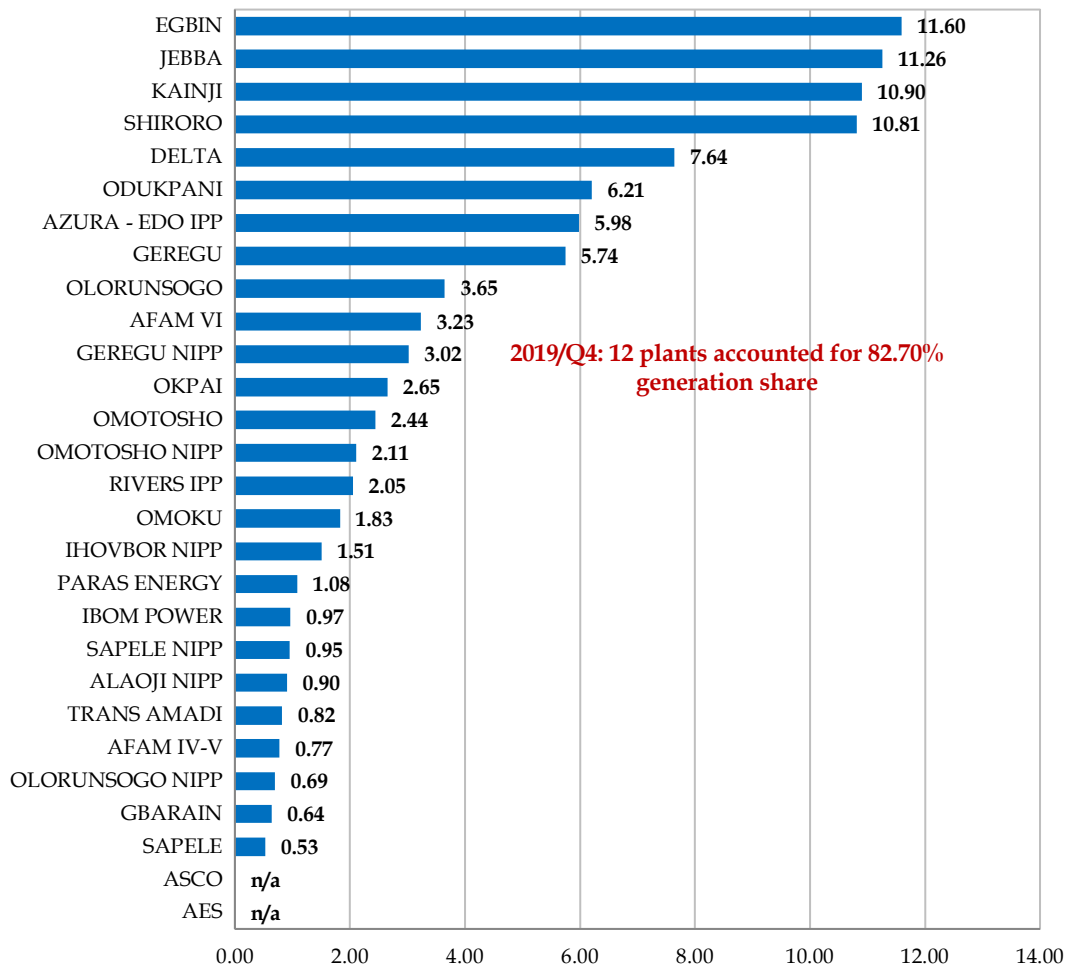
Expectedly, each of the three hydropower plants Jebba, Shiroro and Kanji had at least 80% of their available capacity dispatched by SO. The high dispatch rate of the hydro plants was in compliance with the Order of the Commission which was issued in the third quarter declaring hydropower plants as ‘*must run*’ by SO. The Order was to ensure that hydro plants are efficiently dispatched, given their low tariffs and in consideration of safety associated with spilling of water from dams during the rainy season. As represented in Figure 2, Kanji has the highest load factor of 91.18% followed by Shiroro and then Jebba which recorded 88.49% and 86.25% load factors respectively. In the same period, the load factor of the Azura power plant rose by 2.73 percentage points to 47.61% while Alaoji NIPP had the least dispatch rate of 17.00%.

Figure 2: Plants Load Factor (%) in 2019/Q4



The contribution of the individual power plant to the total energy output during the fourth quarter of 2019 is represented in Figure 3. Twelve (12) of the twenty-six operational power plants accounted for 82.70% of the total electric energy generated during the fourth quarter. Due to its highest available capacity, Egbin power plant accounted for the highest share (i.e., 11.60%) of the total energy output followed by Jebba hydropower plant which accounted for 11.26% energy share. Sapele power plant accounted for the least share of output during the fourth quarter with 0.53%. Figure 3 shows clearly that energy generation in Nigeria still heavily depends on a few plants, as seven (7) of the operating plants accounted for 64.41% of the total electric energy output during the fourth quarter of 2019.

Figure 3: Share (%) of Generation Output by Plants in 2019/Q4



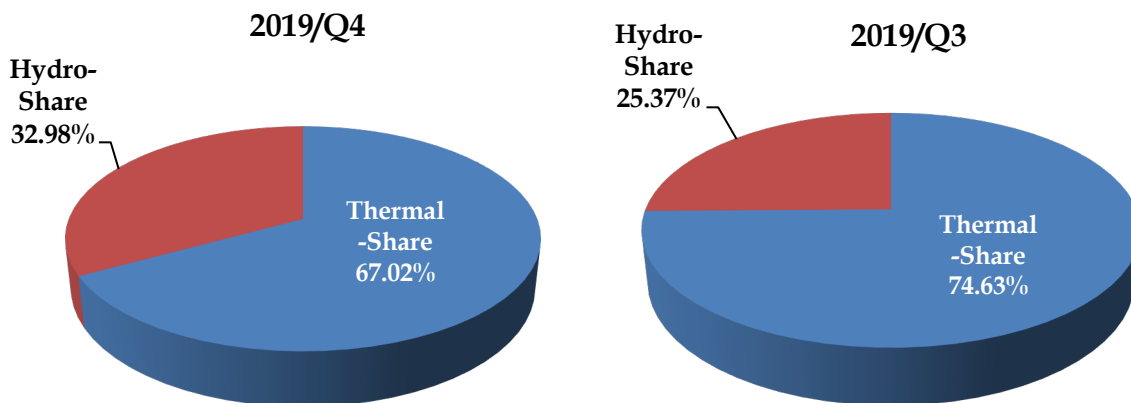
As previously reported, the implication from Figure 3 is that the (over) reliance of the grid on the energy supplied from just seven (7) power plants may pose a risk to the industry because downtime in any of them may result in grid instability if there are no adequate proactive measures such as adequate spinning reserves.<sup>1</sup> In order to mitigate the risk to grid stability that may arise from inadequate generation from any of the seven (7) major plants, the Commission continued the evaluation of the outcome of the competitive procurement of spinning reserve conducted by TCN. The procurement of adequate spinning reserves is to ensure proper management of the grid by SO.

<sup>1</sup> Spinning reserve is the extra generating capacity that is available to the system operator within a short interval of time to meet demand (in case a generator goes down or there occurs a disruption to the supply) by increasing the power output of generators already connected to the power system.

### 2.1.3. Generation Mix

The shares of electricity generation by fuel source for the third and fourth quarters of 2019 are represented in Figure 4. Although thermal share has been on the decline since the third quarter, it still dominates the electricity generation mix accounting for 67.02% of the electricity generated during the fourth quarter of 2019. This implies that approximately 6.70kWh of every 10kWh of electric energy generated in Nigeria in the fourth quarter of 2019 came from gas. However, there was a 7.61 percentage point increase in the share of electric energy generated from hydro in the fourth quarter, accounting for 32.98% of the total energy output. The Commission still notes with concern the security of supply implication of the continuous dominance of gas-fired plants as acts of vandalism of gas pipelines could result in serious grid instability, as was experienced in the year 2016.

**Figure 4: Quarterly Share (%) of Electricity Generated by Fuel Sources**



Notwithstanding the improvement in the generation fuel mix, the Commission shall continue to work with other key stakeholders in the NESI to develop regulatory and implement policy interventions for the actualisation of improved energy mix through *coal-to-power* generation, and on-grid/off-grid renewables. In this regard, the Commission's constant engagement with the Rural Electrification Agency (REA) indicates that potential investors have continued to take advantages of the opportunities created by the Mini-Grid Regulations.

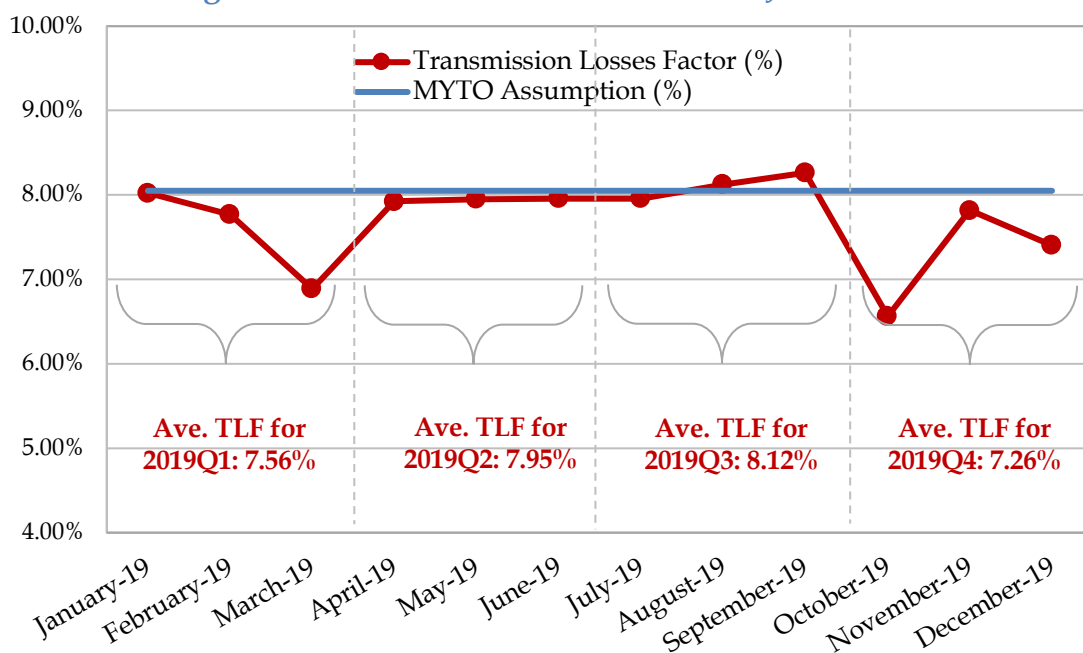
### 2.1.4. Grid Performance

To assess the performance of the grid, the Commission focuses on four (4) Key Performance Indicators (KPIs) that relate to power transmission. These include the transmission loss factor, incidence of system collapse, the stability of grid frequency and voltage fluctuation.

- **Transmission Losses Factor**

The Transmission Loss Factor (TLF), as measured by the proportion of the difference between the total energy sent out by power stations and energy delivered to all DisCos and exported by TCN relative to the total energy sent out, decreased during the fourth quarter of 2019. As represented in Figure 5, the TLF declined by 0.86 percentage point from 8.26% recorded in September to 7.40% in December 2019. This decline implies an average TLF of 7.26% in 2019/Q4, which is significantly lower than the 8.05% industry Multi-Year tariff Order (MYTO) reference loss factor. The recorded TLF indicates an improvement in transmission network when compared with the 2019/Q3 average TLF of 8.12%.

**Figure 5: Transmission Loss Factor from Jan. 2019 – Dec. 2019**



In order to ensure further improvement in the TLF, the Commission will ensure increased investments in transmission infrastructure and improved efficiency of the transmission networks. The Commission shall continue to work with other stakeholders in the NESI, in particular, the TCN to achieve this task.

- **System Collapse**

The industry witnessed a slight decline in the stability of the grid network during the fourth quarter of 2019 relative to the third quarter. Table 1 presents the number of system collapses experienced in 2019. Similar to the preceding quarter, the industry recorded one (1) incidence of total system collapse (i.e. *total blackout nationwide*) during the fourth quarter of 2019. However, there was one (1) incidence of partial system collapse (i.e., *failure of a section of the grid*) during the same period as compared to zero (0) partial system collapse recorded during the third quarter.

**Table 1: System Collapse in 2019/Q1-Q4**

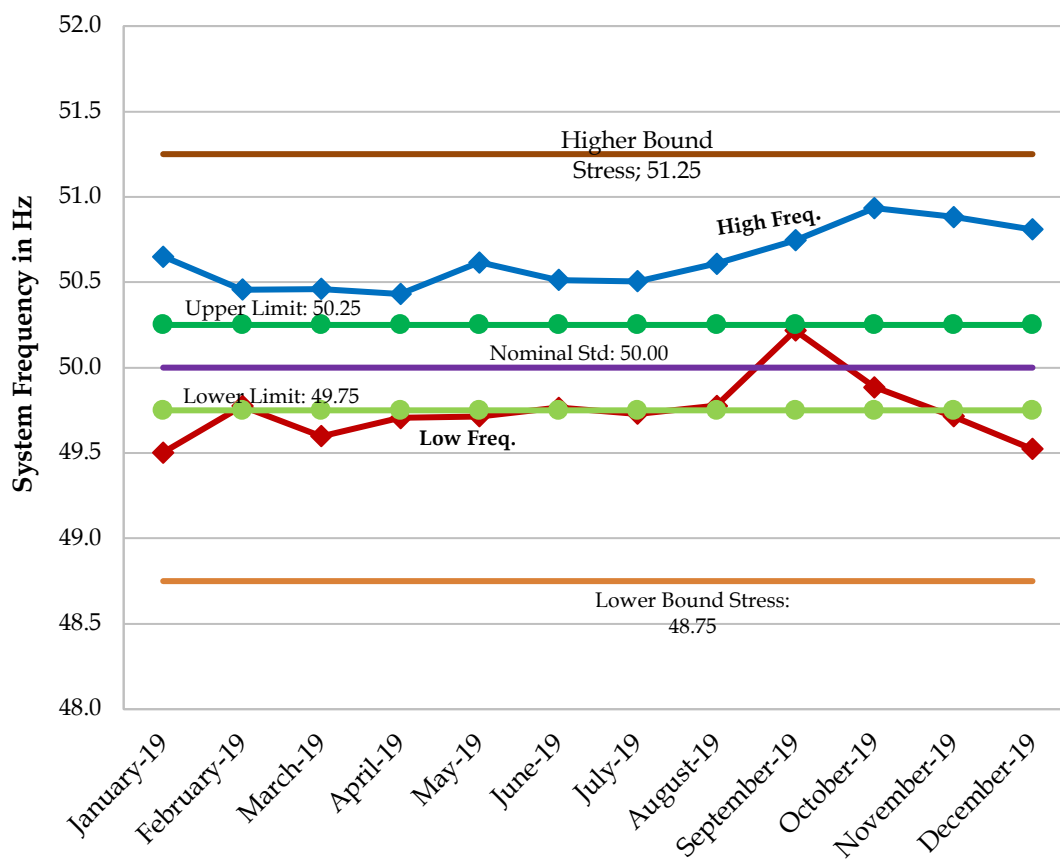
	2019/Q1	2019/Q2	2019/Q3	2019/Q4
Number of Partial Collapses	0	0	0	1
Number of Total Collapses	5	3	1	1

As highlighted in the preceding reports, to further improve the grid stability and prevent system collapse in subsequent quarters and beyond, the Commission in collaboration with the TCN shall intensify efforts to ensure further improvement in the grid performance. The Commission shall continue to intensify monitoring of strict compliance to the SO's directives to generators on *free governor* and *frequency control mode* in line with the provisions of the subsisting operating codes in the electricity industry. Furthermore, the Commission has reviewed the outcome of the competitive procurement of spinning reserves conducted by the TCN. This is to guarantee adequate spinning reserves for proper management of the grid by the System Operator.

- **Grid Frequency**

Based on the provisions of the Grid Code, the system frequency, under normal circumstances, is expected to be between a lower limit of 49.75Hz and an upper limit of 50.25Hz. The Grid Code, however, provides for grid frequency to operate between 48.75Hz – 49.75Hz (lower bound stress) and 50.25Hz – 51.25Hz (upper bound stress) when the grid is stressed. The system frequency pattern from January to December 2019 represented in Figure 6 shows significant instability during the quarter under review. Specifically, during the fourth quarter of 2019, both the low and high system frequencies diverged considerably from the industry nominal standard (50Hz) by averages of -0.29Hz and 0.88Hz respectively per month. Similarly, both frequencies were outside their lower and upper limits during the quarter under review with the exception of the low frequency which was within the lower limit in October 2019.

**Figure 6: Average Daily System Frequency from Jan. – Dec. 2019**

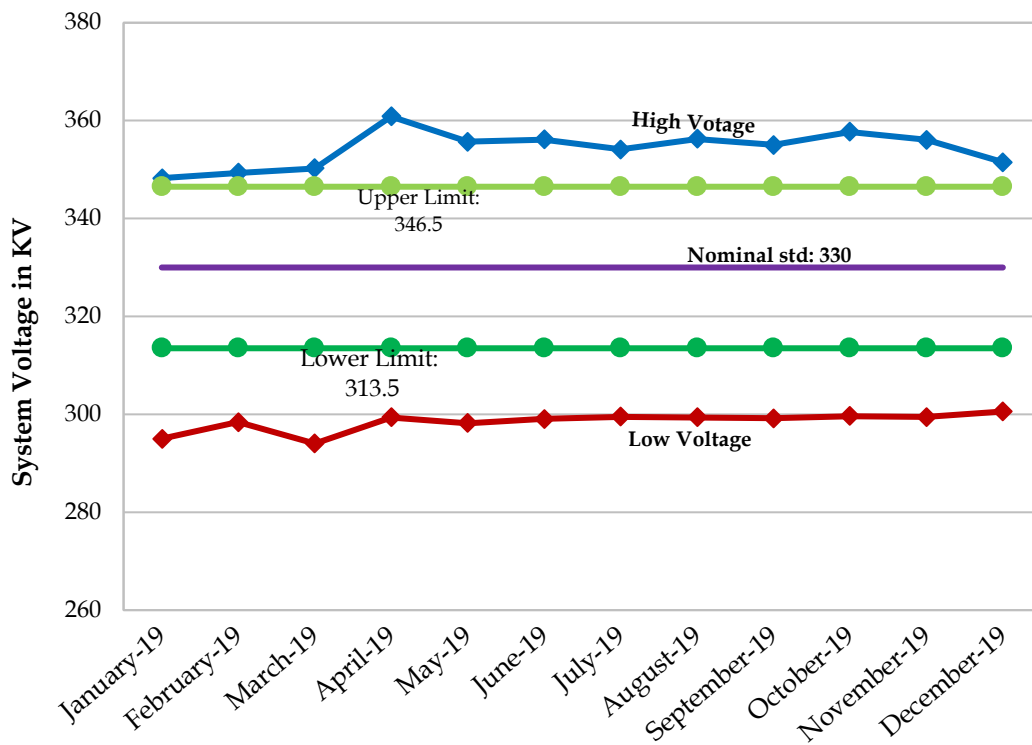




- **Voltage Fluctuation**

Similar to the frequency pattern, the industry Grid Code allows for voltage fluctuation between a lower boundary of 313.50kV and an upper boundary of 346.50kV. The system voltage pattern from January to December 2019 is represented in Figure 7. Although there has been a continuous improvement in the actual high voltage level from April 2019 to date, both the high and low system voltages were outside the prescribed regulatory boundaries throughout the period. As stated in the preceding quarterly reports, frequency fluctuation and other harmonic distortion will result in poor power quality that could damage sensitive industrial machinery and equipment that are connected at a high voltage level. To minimise the frequency and voltage fluctuations, the Commission shall continue to work with TCN and other relevant stakeholders to ensure that system voltage and frequencies operate within the prescribed regulatory limits in order to ensure safe and reliable electricity supply.

**Figure 7: Monthly System Voltage from Jan. - Dec. 2019**



## 2.2. Commercial Performance

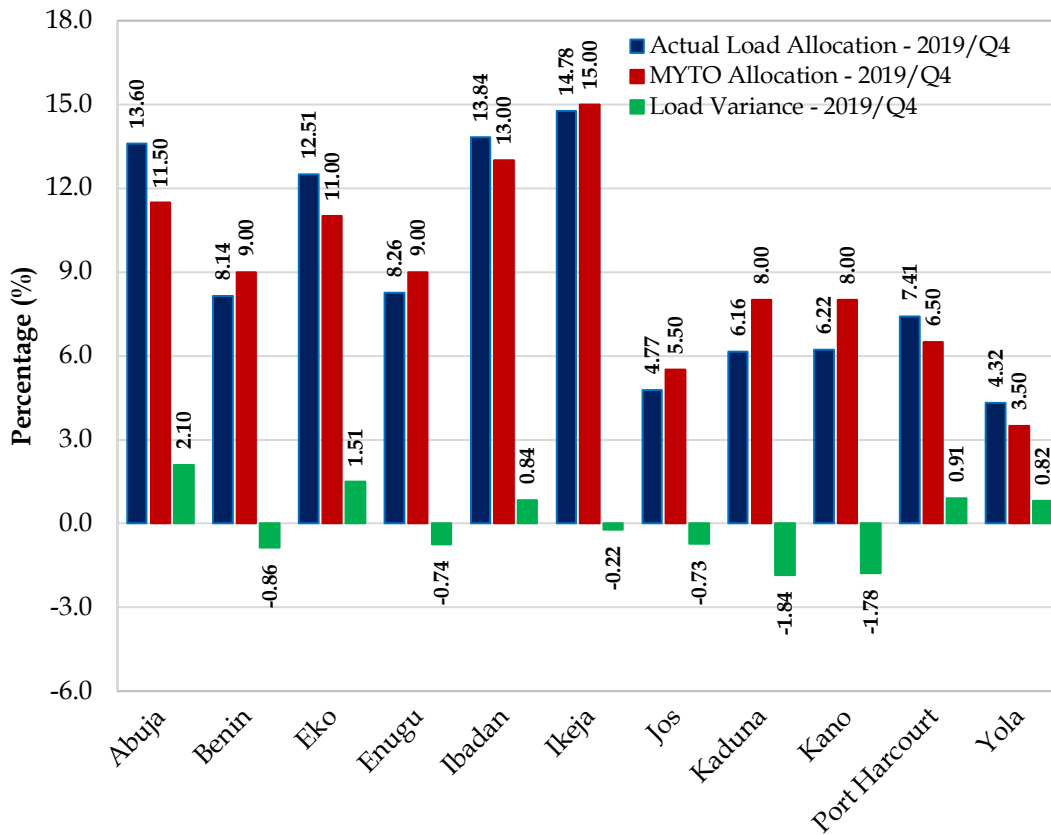
### 2.2.1. Energy Received and MYTO Load Allocation

The amount of energy received by DisCos at their trading points increased by approximately 4.39% to 6,918GWh in 2019/Q4 from the 6,627GWh recorded in 2019/Q3. This increase is reflective of the increase in the total energy generated during the quarter as compared to 2019/Q3.

For the individual DisCos, the comparison of the MYTO load allocation with the share of energy received by DisCos during the fourth quarter of 2019 is represented in Figure 8. Two (2) categories of DisCos emerged from this comparative analysis. The first group comprising of six (6) DisCos received less energy than their MYTO allocation during 2019/Q4 due to technical limitation of their networks and/or commercially induced low load offtake. From 2019/Q2 till date, Benin, Enugu, Ikeja, Jos, Kaduna and Kano DisCos made this first group. It is also noted that Enugu, Ikeja, Jos, and Kano DisCos have taken less energy than their MYTO allocation in the last four quarters. On the other hand, the second group comprising Abuja, Eko, Ibadan, Port Harcourt and Yola DisCos received more energy than their MYTO allocation during 2019/Q4 as well as in 2019/Q3.

To ensure improvements in energy off-take by DisCos, the Commission has introduced 1) regulatory interventions to enforce *take or pay obligation* on the capacity equivalent of MYTO load allocation for each DisCo, and 2) a slight modification to retrospective minor tariff review mechanism to discourage commercially induced load rejection and encourage investment in distribution networks.

Figure 8: Energy Off-take by DisCos vs. MYTO Load Allocation in 2019/Q4



### 2.2.2. Energy Billed and Billing Efficiency

The amount of energy received, billed and billing efficiency by DisCos during the third and fourth quarters of 2019 are represented in Table 2. Similar to the preceding quarter, the table indicates an increase in DisCos' billing efficiency during the fourth quarter of 2019. Out of the 6,918GWh total energy received by all DisCos in the fourth quarter, 5,714GWh (82.59%) was billed to the end-users, implying 1.00 percentage point increase in billing efficiency and lower technical and commercial losses of 17.41% relative to the third quarter. Notwithstanding the continuous improvement in the DisCos' billing efficiency, the Commission is committed to reducing the technical losses at distribution networks to a minimal level, as 17.41% technical and commercial losses are above the global standard. The level of DisCos' billing efficiency shows that, for every 10kWh of energy received by DisCos from the Transmission System Provider (TSP), approximately 1.74kWh is lost due to technical

inefficiencies and energy theft. In other words, for every ₦10 worth of electricity received by DisCos during the third quarter of 2019, ₦1.74 was lost due to energy theft and poor distribution infrastructure.

The performance of the DisCos in Table 2 shows that Kaduna DisCo had the highest billing efficiency of 93.05% during the fourth quarter of 2019. Yola DisCo recorded the lowest billing efficiency of 65.53% among the DisCos and also underperformed in billing its customers relative to the third quarter. It is noteworthy that Yola DisCo has retained the same position since the fourth quarter of 2018.

**Table 2: Energy Received and Billed by DisCos in 2019/Q3-Q4**

DisCos	Total Energy Received (GWh)		Total Energy Billed (GWh)		Billing Efficiency (%)	
	2019/Q3	2019/Q4	2019/Q3	2019/Q4	2019/Q3	2019/Q4
Abuja	887	932	684	712	77.11	76.39
Benin	523	552	454	484	86.80	87.57
Eko	838	857	742	765	88.56	89.30
Enugu	541	561	375	422	69.32	75.22
Ibadan	898	940	741	787	82.61	83.74
Ikeja	1,063	1,117	946	1000	89.04	89.50
Jos	303	318	221	232	73.01	72.91
Kaduna	440	417	379	388	86.14	93.05
Kano	397	422	324	354	81.55	83.83
Port Harcourt	473	510	362	379	76.48	74.33
Yola	264	293	178	192	67.42	65.53
<b>All DisCos</b>	<b>6,627</b>	<b>6,918</b>	<b>5,407</b>	<b>5,714</b>	<b>81.59</b>	<b>82.59</b>

*Notes of the table:* DisCos are the electricity distribution companies

Based on relative improvement from the preceding quarter, seven (7) of the DisCos recorded an improvement in billing efficiency. The only exceptions being Abuja, Jos, Port Harcourt and Yola DisCos which recorded a decline in their billing efficiency during the quarter under review. In particular, Kaduna DisCo recorded the highest increase of 6.91 percentage points moving from 86.14% in 2019/Q3 to 93.05% in the fourth quarter of 2019 while Ikeja DisCo recorded the lowest increase of 0.46 percentage point during the same period.

Pursuant to the strong commitment of the Commission to address DisCos' technical and commercial inefficiencies (e.g., poor distribution network), the Commission has commenced the review of the 2020-2024 PIPs prepared by the DisCos in accordance with the Commission's guidelines. Specifically and as highlighted in the preceding reports, the guidelines include a capital expenditure process for the next five years whereby investments by DisCos would be thoroughly reviewed and optimised for prudence and relevance to service delivery. Also, a revenue adjustment mechanism is to be adopted in subsequent tariff reviews, to claw back any return allowed on previously proposed investments that were not eventually executed by the DisCos.

To address commercial losses (i.e., energy theft or poor energy accounting), the Commission has continued to monitor the DisCos' asset mapping and tagging under the framework of the *ongoing* customer enumeration in order to identify illegal consumers and bring same onto the DisCos' billing platforms. Similarly, as reported in the preceding quarterly reports, the Commission had supervised DisCos' procurement of Meter Asset Providers (MAP) for compliance with the requirements of the MAP Regulations. It is also monitoring the roll-out of meters by DisCos following the conclusion of the procurement of MAPs.

### **2.2.3. Revenue and Collection Efficiency**

The total revenue collected by eleven (11) DisCos from customers in the fourth quarter of 2019 stood at ₦127.14billion out of the total billing of ₦183.10billion. Following the increase in the billing efficiency recorded in 2019/Q4 relative to the preceding quarter, the total revenue collected as a ratio of the total billing by DisCos (i.e., collection efficiency) in 2019/Q4 slightly increased when compared to 2019/Q3. As shown in Table 3, the overall collection efficiency for all DisCos increased to 69.44% in the fourth quarter of 2019 representing a 0.45 percentage point increase from the 68.99% collection efficiency recorded in 2019/Q3. The collection efficiency implies that for every ₦10.00 worth of energy billed to customers by DisCos in the third quarter, ₦3.06 remained unrecovered from customers as and when due.

Notwithstanding its increase from the preceding quarter, the collection efficiency by the DisCos is still low and has continued to adversely impact the financial liquidity of the industry, which in turn, has led to low investment in NESI.

In appraising individual performances, Ikeja DisCo had the highest collection efficiency of 87.35% followed by Eko DisCo with 84.28%. Kaduna DisCo has the lowest collection efficiency of 40.44%. It is noteworthy that, six (6) of the DisCos namely Abuja, Benin, Eko, Ibadan, Ikeja and Kaduna maintained their rankings since the second quarter of 2019 till date. On a quarter-on-quarter basis, Abuja DisCo recorded the highest improvement in collection efficiency increasing by 3.84 percentage points from 75.20% in the third quarter to 79.04% in the fourth quarter.

**Table 3: Revenue Performance of DisCos in 2019/Q3-Q4**

DisCos	Total Billings (₦Billion)		Revenue Collected (₦Billion)		Collection Efficiency (%)	
	2019/Q3	2019/Q4	2019/Q3	2019/Q4	2019/Q3	2019/Q4
Abuja	22.99	24.32	17.29	19.22	75.20	79.04
Benin	16.25	17.38	10.07	10.32	61.97	59.38
Eko	22.45	23.20	19.05	19.56	84.82	84.28
Enugu	14.03	15.56	9.61	10.46	68.51	67.26
Ibadan	22.90	24.32	14.24	15.70	62.18	64.54
Ikeja	26.75	27.59	23.19	24.10	86.69	87.35
Jos	7.65	8.38	4.14	4.58	54.15	54.64
Kaduna	11.72	12.09	4.97	4.89	42.44	40.44
Kano	10.35	11.40	7.40	8.39	71.53	73.54
Port Harcourt	13.04	13.68	6.65	7.12	50.98	52.02
Yola	4.76	5.18	2.68	2.81	56.31	54.31
<b>All DisCos</b>	<b>172.90</b>	<b>183.10</b>	<b>119.29</b>	<b>127.14</b>	<b>68.99</b>	<b>69.44</b>

Noting that a major factor contributing to low collection efficiency is customers' displeasure with estimated billing which often resulted in an unwillingness to pay, the Commission, during the quarter, continued the monitoring of the operational performance of the exiting Meter Asset Providers (MAP) and issued permits to

newly procured DisCos' preferred MAPs in line with the guidelines provided in the MAP Regulations.

#### **2.2.4. Aggregate Technical, Commercial & Collection (ATC&C) Losses**

The Aggregate technical, commercial & collection (ATC&C) losses of the industry, as indicated in Table 4, is the combined index of losses due to technical, billing and collection inefficiencies in the industry. The overall average ATC&C for all the DisCos in the fourth quarter of 2019 declined to 42.63% from 43.65% recorded in the third quarter. The noted decrease in the overall ATC&C was due to the decrease in both the overall technical and commercial, and collection losses which respectively decreased by 1.00 and 0.45 percentage points during the quarter. As previously reported in the preceding quarters, the collection losses still account for the largest share of the total losses, indicating DisCos' need to intensify efforts in revenue collection in order to improve on their cashflow, contractual obligations and operational performance. Despite the observed decrease in ATC&C losses during the quarter, the overall ATC&C losses are still substantially larger than the expected industry average of approximately 26% - the allowable ATC&C losses provided in the MYTO for 2019.

The high ATC&C losses reflect low investments in distribution networks aggravated by the low level of metering of end-use customers thus, creating lingering liquidity challenge to the industry. The implication of the level of the ATC&C losses in the fourth quarter of 2019 is that, on average, as much as ₦4.26 in every ₦10.00 worth of energy received by a DisCo was unrecovered due to a combination of energy theft, inefficient distribution networks, weak management effort in revenue collection, and low metering and willingness to pay by customers.

Table 4: ATC&amp;C Losses (%) by DisCos in 2019/Q1-Q4

DisCos	MYTO Target for 2019 (%)	Average ATC&C (%)			
		2019 /Q1	2019 /Q2	2019 /Q3	2019 /Q4
Abuja	24	41.96	40.71	41.91	39.64
Benin	31	56.52	49.67	46.22	47.84
Eko	14	29.79	24.96	24.80	24.65
Enugu	29	53.01	50.09	52.42	49.41
Ibadan	25	50.18	46.23	48.45	45.80
Ikeja	15	28.33	22.51	22.76	21.74
Jos	44	60.13	60.94	60.52	60.15
Kaduna	32	73.45	65.06	63.07	62.37
Kano	29	48.50	45.45	41.64	38.39
Port Harcourt	37	63.14	60.85	61.01	61.30
Yola	28	68.64	69.91	62.11	64.16
<b>Overall DisCos:</b>					
MYTO Level	<b>26</b>	-	-		
Total Technical, Commercial & Collection losses	-	<b>48.72</b>	<b>44.53</b>	<b>43.65</b>	<b>42.63</b>
Technical & Commercial losses	-	<b>20.02</b>	<b>19.81</b>	<b>18.40</b>	<b>17.40</b>
Collection losses	-	<b>35.90</b>	<b>30.84</b>	<b>30.95</b>	<b>30.55</b>

Notes of the table: MYTO is Multi-Year Tariff Order; ATC&C Loss MYTO targets are adjusted for a two-year non-performance mutually agreed by BPE and DisCos' Core Investors.

In appraising the individual performances of the DisCos as presented in Table 4, Ikeja DisCo is the most technically and commercially efficient DisCo by recording the lowest level of ATC&C losses of 21.74% in the fourth quarter of 2019. The worst performing DisCo during the same quarter was Yola DisCo with the ATC&C losses of 64.16% as against the MYTO target of 28.00%. This was followed by Kaduna DisCo with ATC&C losses of 62.37%. It is noteworthy that Ikeja has since 2018/Q4 continued to be the most technically and commercially efficient DisCo.

On the basis of relative improvement from the preceding quarter, Kano DisCo recorded the highest progress in reducing ATC&C losses, decreasing from 41.64% to 39.39% (*i.e.*, ~3.25 percentage point decrease) in the fourth quarter of 2019. Seven (7) other DisCos (*i.e.*, Abuja, Eko, Enugu, Ibadan, Ikeja, Jos and Kaduna) also recorded relative improvements in their ATC&C losses during the quarter under review.



### 2.2.5. Market Remittance

Despite the recent improvement, the liquidity challenge is still a major issue in NESL. This is evidenced in the DisCos', international and special customers' remittances to NBET and MO during the fourth quarter of 2019, as compared to the invoices received for energy purchased from NBET and those received for administrative services from MO in the same period. During the fourth quarter, DisCos were issued a total invoice of ₦193.66billion for energy received from NBET and for administrative services by MO, but only a total of ₦74.20billion (i.e. 38.32%) of the invoice was settled as and when due, creating a total deficit of ₦119.46billion including tariff shortfall. A comparative analysis of market invoice performance by DisCos in 2019/Q4 represented in Figure 9 indicates an average settlement rate per DisCo of 34.24% of the invoice. Only Abuja and Eko DisCos achieved a settlement rate of 50% of their market invoices during the quarter under review. Although Jos DisCo achieved slight progress as compared to the third quarter, its 19.57% remittance performance was the lowest recorded among the DisCos followed by Yola DisCo (22.52%).

Figure 9: Market Invoice and Remittance by DisCo in 2019/Q4

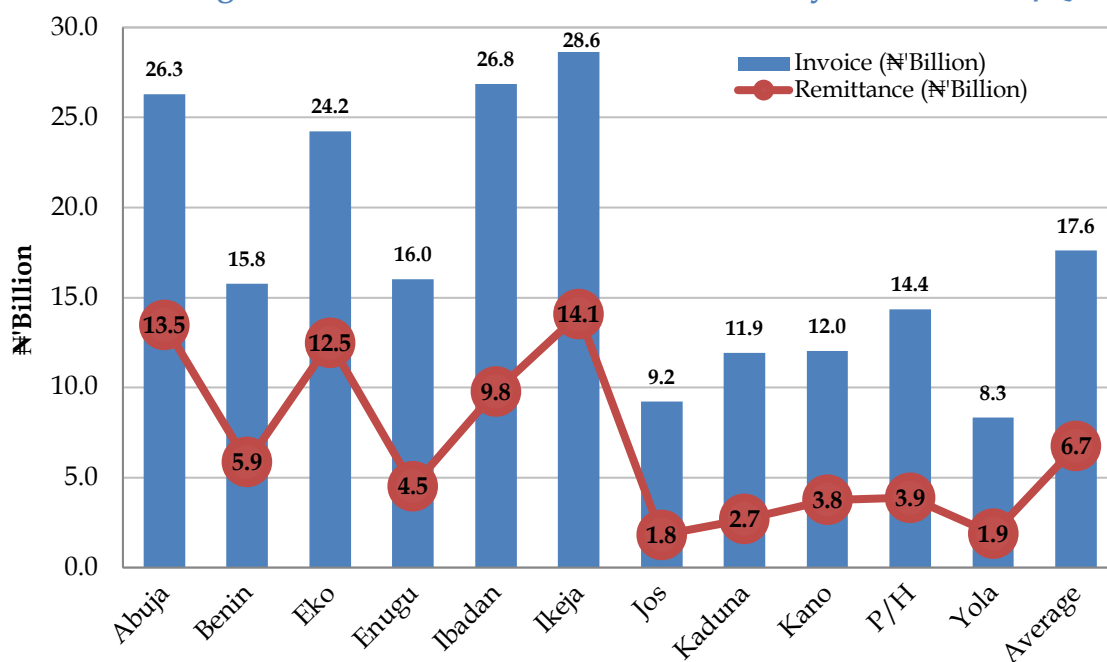


Table 5 presents the statistics of the DisCos' remittances to NBET and MO for energy received and service charge respectively. The combined total market remittances to NBET and MO in 2019/Q4 increased by 0.4 percentage point from the total remittance recorded during the third quarter. However, the total remittance was lower than the minimum remittance threshold (MRT) prescribed by the Commission due to lower settlement rate to NBET during the quarter. The Commission has since commenced the review of remittances by DisCos for enforcement actions.

**Table 5: DisCos Quarterly Remittances to NBET and MOs in 2019/Q4**

DisCos	NBET				MO			
	Inv.	Remit.	Remittance		Inv.	Remit.	Remittance	
	(₦Billion)		Performance (%)		(₦Billion)		Performance (%)	
	2019 /Q4	2019 /Q4	2019 /Q4	2019 /Q3*	2019 /Q4	2019 /Q4	2019 /Q4	2019 /Q3
Abuja	22.52	9.70	43.10	53.85	3.78	3.78	100.00	100.00
Benin	13.52	3.60	26.65	30.98	2.26	2.26	100.00	100.00
Eko	20.76	9.01	43.38	45.40	3.48	3.48	100.00	100.00
Enugu	13.71	2.22	16.18	22.91	2.30	2.30	100.00	100.00
Ibadan	22.99	5.92	25.77	28.09	3.86	3.86	100.00	100.00
Ikeja	24.54	9.98	40.67	43.78	4.10	4.10	100.00	100.00
Jos	7.91	0.48	6.05	6.01	1.33	1.33	100.00	100.19
Kaduna	10.20	0.97	9.56	28.69	1.72	1.72	100.00	118.86
Kano	10.29	2.03	19.68	47.33	1.73	1.73	100.00	120.32
Port Harcourt	12.29	1.78	14.50	21.00	2.06	2.09	101.32	96.32
Yola	7.13	0.67	9.39	13.00	1.21	1.21	100.00	100.00
<b>All DisCos</b>	165.85	46.37	27.96	34.95	27.81	27.83	100.10	102.26
<b>Special Customer:</b>								
Ajaokuta Steel	-	0.00	-	0.00	0.03	0.00	0.00	0.00
NIGELEC	1.03	1.90	183.83	69.92	1.03	0.55	53.57	51.43
CEB (SAKETE)	-	8.36	-	425.16	-	2.43	-	542.25

Notes of the table: 1. DisCos, NBET, MO, CEB and NIGELEC are electricity Distribution Companies, Nigeria Bulk Electricity Trading Plc, Market Operator, Beninois Electricity Community and Nigerian Electricity Society respectively; ₦Billion is billions of Nigeria Currency;

2. \* indicates the values in the column for remittances (in %) to NBET are different from those reported in 2019/Q3 report due to payment for outstanding bills for 2019/Q3 or adjustment for omission detected;

3. Remittances (in %) to MO by Jos, Kaduna, Kano, and payment by CEB are more than 100% in 2019/Q3 due to payment of outstanding bills. The same applied to Port Harcourt DisCo in 2019/Q4.

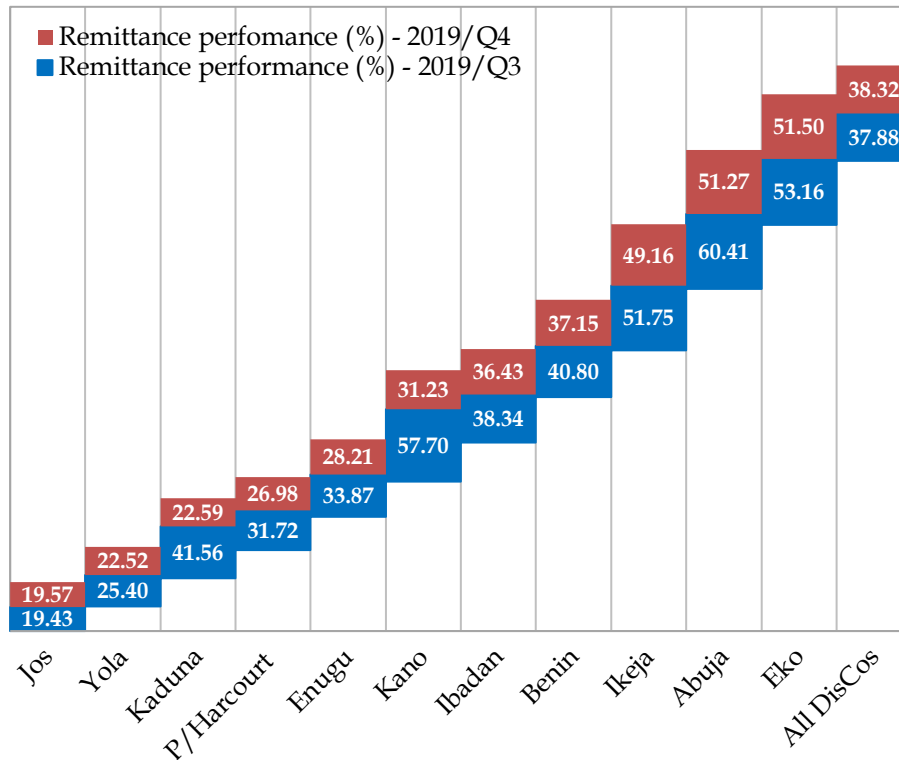
During the quarter, while the special customers (Ajaokuta Steel Co. Ltd and environs) made no payment to the market, the international customers (i.e., *Societe Nigerienne d'electricite* - NIGELEC and *Communaute Electrique du Benin* - CEB) paid a total sum of ₦10.26billion (US\$33.64million) and ₦2.98billion (US\$9.78million) to NBET and MO respectively. This was in addition to the ₦33.85billion (US\$110.97million) and ₦9.84billion (US\$32.27million) paid by the international

customers to NBET and MO respectively between January and September 2019. Thus, the total payment made by international customers to NBET and MO for energy and administrative charges in 2019 and for settlement of their outstanding debts from the preceding years were respectively ₦44.11billion (US\$144.61million) and ₦12.83billion (US\$42.06million). Nonetheless, the Federal government of Nigeria has continued to engage the governments of neighbouring countries benefitting from the export supply to ensure timely payments for the electricity purchased from Nigeria.

Although there has been a significant improvement, the challenge of low remittance to the market is still a concern to the Commission as it is one of the main causes of the liquidity crisis facing NESI. As highlighted in the preceding quarters, low remittance adversely affects the ability of NBET to honour its financial obligations to GenCos while service providers struggle with the paucity of funds impacting their capacity to perform their statutory obligations.

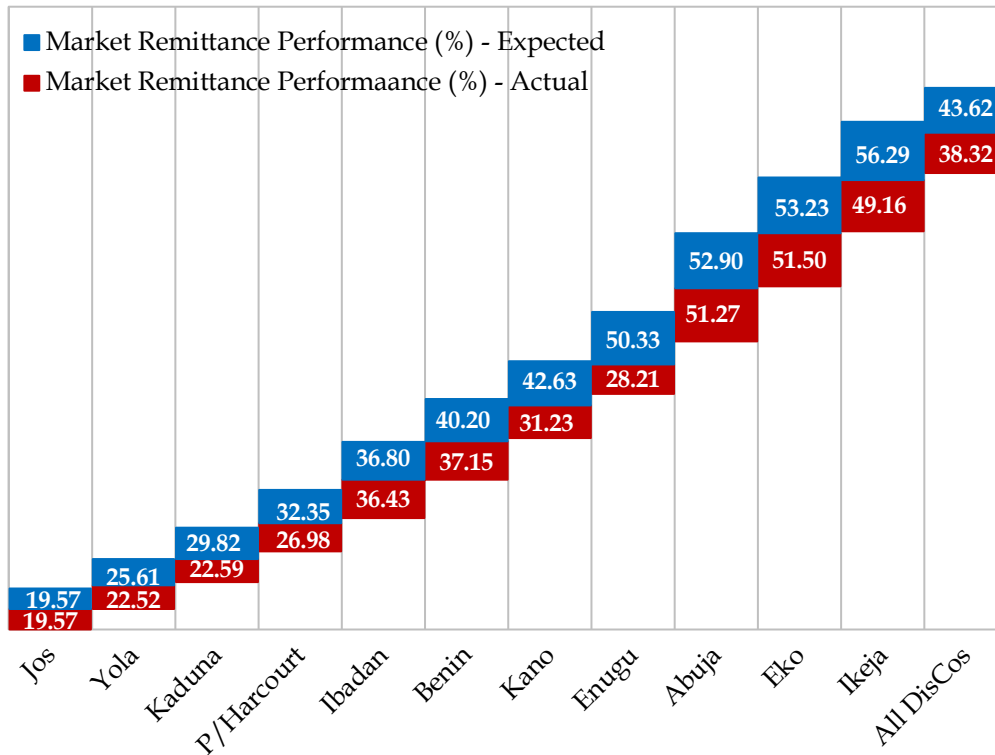
The individual remittance performance indicates that only Jos DisCo recorded an increase in its remittance performance in the fourth quarter of 2019 as represented in Figure 10 which shows the proportion of the market invoice settled by individual DisCo for the third and fourth quarters of 2019. The aggregate combined invoice settlement rate for all DisCos rose to 38.32% in the fourth quarter. Eko DisCo recorded the highest remittance rate (51.50%) in the fourth quarter of 2019 followed by Abuja with 5.27% remittance rate. Although Jos DisCo' settlement rate improved during the fourth quarter, its remittance rate of 19.57% was the lowest in the fourth quarter of 2019.

Figure 10: Market Remittance by DisCos in 2019/Q3-Q4



Noting that tariff shortfall may have partly accounted for the low remittances by DisCos as represented in Figure 10, the expected Minimum Remittance Threshold (MRT) for DisCos adjusted for tariff shortfall vis-à-vis their actual remittances are represented in Figure 11. The figure shows that adjusting for tariff shortfall, DisCos' total expected MRT to the market (NBET & MO) during 2019/Q4 was 43.62% and ranged from 19.57% (for Jos DisCo) to 56.29% (for Ikeja DisCo). As at the end of the fourth quarter, the actual remittance rate of the individual DisCo, except for Jos DisCo, was lower than the projected MRT for the DisCos. This indicates that regardless of the prevailing tariff shortfall DisCos' remittance was still below the expected MRT having adjusted for tariff shortfall. To ensure business continuity and improve sector liquidity, therefore, DisCos must improve on efforts towards reducing their ATC&C losses.

Figure 11: Required and Actual Market Remittances by DisCos - 2019/Q4



As reported in the preceding quarterly reports, the Commission notes that tariff deficit is partly responsible for poor remittance in the industry. Nonetheless, all the DisCos are being steered continually to rapidly improve on their revenue collection from customers in order to fulfil their remittance obligations and mitigate financial distress in NESI.

To enforce payment discipline and compliance with minimum remittance, the Commission, during the fourth quarter, commenced enforcement action against DisCos that defaulted in the third quarter billing cycle. Following the commencement of enforcement by the Commission, all DisCos except Enugu DisCo have met their expected MRTs for the third quarter. The Commission has since commenced the review of payment compliance for the fourth quarter for necessary regulatory intervention.

### **3. REGULATORY FUNCTIONS**

### 3.1. Regulations and Orders Issued

- **Regulations**

Although no new regulations were issued during the fourth quarter of 2019, the Commission in collaboration with the Nigerian Federal Ministry of Justice continued the review of the Nigerian Electricity Supply and Installation Standards (NESIS) Regulations for the purpose of gazetting. The Commission also continued the monitoring of compliance with the provision of existing regulations including the Meter Asset Provider (MAP) Regulations which was approved on the 8<sup>th</sup> March 2018 to swiftly bridge the existing metering gap in the industry.

- **Orders**

During the fourth quarter of 2019, the Commission issued the under-listed Orders:

- *NERC/183/2019* issued on the 30<sup>th</sup> day of December 2019 on the Mandatory Migration of R3 Class of Residential Customers, Industrial and Commercial Customers to Cashless Settlement Platforms and Other Matter Relating to Revenue Protection in The Nigerian Electricity Supply Industry. The Order aligns with the Federal Government policy directive that requires the mandatory transition of certain classes of end-use customers of DisCos from direct cash settlement of bills to cashless settlement platforms in order to reduce collection leakages/losses and improve overall revenue assurance in NESI.
- *NERC/GL/184/2019, NERC/GL/185/2019, NERC/GL/186B/2019, NERC/GL/187B/2019, NERC/GL/188B/2019, NERC/GL/189B/2019, NERC/GL/190B/2019, NERC/GL/191B/2019, NERC/GL/192/2019, NERC/GL/193/2019 and NERC/GL/194/2019* on the 31<sup>st</sup> day of December 2019 on the December 2019 Minor Review of Multi-Year Tariff Order (MYTO) 2015 and Minimum Remittance Order for the year 2020 for Abuja, Benin, Eko, Enugu, Ibadan, Ikeja, Jos, Kaduna, Kano, Port Harcourt and Yola electricity distribution companies (DisCos) respectively. The objectives of the Orders, among others, are 1) to reflect the impact of the changes in the minor review variables

(i.e., the Nigerian and US inflation rates, NGN/USD foreign exchange rates, gas prices and available generation capacity) for the period 2019-2020; and to ascertain revenue shortfalls given the differential between such tariffs and allowed tariffs in the Nigerian electricity supply industry; 2) to develop and implement a framework to manage revenue shortfall for the year 2020 through a minimum market remittance requirement to account for differences between cost-reflective tariffs and allowed tariffs in the settlement of invoices issued by NBET and MO; and 3) Establish the interim payment arrangements, reaffirm the payment securitisation requirement and flow of funds from DisCos to NBET and the MO.

- [NERC/GL/195/2019](#) issued on the 31<sup>st</sup> day of December 2019 on the 2019 Minor Review of Multi-Year Tariff Order (MYTO) 2015 and Minimum Remittance on Market Operator's Invoice for the year 2020 for the Transmission Company of Nigeria (TCN) Plc. This Order has similar objectives with the NERC's Orders [NERC/GL/184/2019](#) - [NERC/GL/194/2019](#) and reaffirms the obligation of the System Operator (SO) Division of the TCN to comply with the merit order dispatch prescribed in the 2019 Minor Review (MYTO financial model) towards ensuring least generation cost.

In addition to the Orders issued, the Commission continued the review of comments and suggestions received during public hearings on Consultation Papers on Capping of Estimated Billing (CEB), Competition Transaction Charge (CTC) and Electricity Distribution Sub-franchising (EDS) to develop the final CEB, CTC and EDS *Orders or guidelines* (as applicable) that will be representative of the industry interest and public good. Electronic copies of the (*new and existing*) Regulations and Orders of the Commission are available on the Commission's website ([www.nerc.gov.ng](http://www.nerc.gov.ng))



### 3.2. Licences and Permits Issued and Renewed

A summary of all licences and permits issued and renewed by the Commission during the fourth quarter of 2019 is presented in Table 6. The Commission after due consideration issued one *new* (1) captive power generation (CPG) permit and off-grid generation licence each with a total nameplate capacity of 15.20MW. Similarly, the Commission approved the *renewal* of one (1) on-grid licence, two (2) CPG permits and amended one (1) CPG permit with a total nameplate capacity of 1,159.22MW. This brings the total nameplate capacities of licences and permits issued, renewed or amended by the Commission during 2019/Q4 to 1,174.42MW.

The Commission also approved the change in management, shareholding and control of *LR-Aaron* Power Ltd through the transfer of 50% shares to IBV Nigerian Hold Ltd in consideration for a gross sum of NGN3.5Million valued at NGN1.00 per share (which corresponds to the share value plus all on-going project developmental cost, until the project reaches financial closure).

**Table 6: Generation Licences and Permit Issued and Renewal in 2019/Q4**

S/N	Applicants	Location (State)	Licence Type	Capacity (MW)
<b>A.</b>	<b>New Issue</b>			
1.	Coronation Utility Limited	Lagos	Off-grid	14.00
2.	MTN Nigeria Communication Limited	Imo	CPG	1.20
<b>B.</b>	<b>Renewal</b>			
3.	Oma Power Generation Limited	Abia	On-grid	1,080
4.	Nestle Nigeria Plc-Agbara Industrial Estate	Ogun	CPG	10.976
5.	Nestle Nigeria Plc-Flower-gate Factory	Ogun	CPG	5.24
6.	Mobil Producing Nigeria Limited ( <i>Amendment</i> )	Rivers	CPG	57→63
	<b>Grand-Total Capacity</b>			<b>1,174.416</b>

During the quarter under review, the Commission also approved the registration of six (6) *new* Isolated Mini-grid applications and issued one (1) *new* permit for Interconnected Mini-grid following the satisfactory evaluation of their applications. The name of all successful isolated mini-grid and interconnected mini-grid applicants and their locations are presented in Table 7.

**Table 7: Mini-Grid Registrations and Permit Approved During 2019/Q4**

S/N	Applicants	Location (State)	Mini Type	Grant
1.	Power-Gen Nigeria Assets Limited	Edati LGA, Niger State	Isolated Mini-Grid	Registration
2.	ACOB Lighting Technology Limited	Ijebu East LGA, Ogun State	Isolated Mini-Grid	Registration
3.	ACOB Lighting Technology Limited	Ovia Southwest LGA, Edo State	Isolated Mini-Grid	Registration
4.	E-Sam Energy Solutions Limited	Bomadi LGA, Delta State	Isolated Mini-Grid	Registration
5.	Nayo Tropical Technology Limited	Obafemi Owode LGA, Ogun State	Interconnected Mini-Grid	Permit
6.	Cloud Energy Photo Electrics Limited	Iko LGA, Ebonyi State	Isolated Mini-Grid	Registration
7.	A4 & T Power Solutions Limited	Ijebu Waterside, Ogun State	Isolated Mini-Grid	Registration

### 3.3. Certification of Metering Assets/Service Providers

As at the end of the fourth quarter of 2019, the Commission has issued a total of twenty-six (26) permits to applicants as Meter Asset Providers (MAP) following the satisfactory evaluation of their applications. During the same quarter under review, the Commission also certified seven (7) Meter Service Providers (MSP) for installer category following the satisfactory evaluation of their applications. The name of all successful MSP and MAP applicants with their permits ID (or certification classes) are presented in Tables 8 and 9 respectively.

**Table 8: Certification of Meter Service Providers in 2019/Q4**

S/N	Name of Applicants	Certification Class Issued
1.	Alpha Crown Engineering Limited	A1 Meter Installer
2.	Juron Connect Engineering Company Limited	A1 Meter Installer
3.	Klertek Nigeria Limited	A1 Meter Installer
4.	Rivet Engineering Limited	A1 Meter Installer
5.	XT Monitor Limited	A1 Meter Installer
6.	Avaner General Services Limited	C1 Meter Installer
7.	Rivet Engineering Limited	C1 Meter Installer

**Table 9: Permits Issued to Meter Assets Providers as at December 2019**

S/N	Name of Applicants	Permit Identification Number
1.	CIG Metering Assets Nigeria Limited	NERC/MAP/001
2.	Sabrud Consortium Nigeria Limited	NERC/MAP/002
3.	Turbo Energy Limited	NERC/MAP/003
4.	Turbo Energy Limited	NERC/MAP/004
5.	Turbo Energy Limited	NERC/MAP/005
6.	Inlaks Power Solutions Limited	NERC/MAP/006
7.	Armese Consulting Limited	NERC/MAP/007
8.	FLT Energy Systems Limited	NERC/MAP/008
9.	New Hampshire Capital Limited	NERC/MAP/009
10.	Protogy Global Services Limited	NERC/MAP/010
11.	Bendoriks International Limited	NERC/MAP/011
12.	IRL Integrated Resources Limited	NERC/MAP/012
13.	MOMAS Meter Manufacturing Company Limited	NERC/MAP/013
14.	Holley Metering Limited	NERC/MAP/014
15.	Protogy Global Services Limited	NERC/MAP/015
16.	Gunit Engineering Limited	NERC/MAP/016
17.	Gospel Digital Technology	NERC/MAP/017
18.	Triple Engineering Limited	NERC/MAP/018
19.	Chris-Ejik International Limited	NERC/MAP/021
20.	Moren Consortium - Abuja DisCo	NERC/MAP/022
21.	Mojec International Limited	NERC/MAP/023
22.	Mojec International Limited	NERC/MAP/024
23.	Mojec International Limited	NERC/MAP/025
24.	Mojec International Limited	NERC/MAP/026
25.	Mojec International Limited	NERC/MAP/027
26.	Cresthill Engineering Limited	NERC/MAP/028

### 3.4. Eligible Customer Applications under Evaluation

During the quarter under review, no new eligible customer application was received but the Commission continued with the technical evaluation of fourteen (14) existing Eligible Customer applications with a total capacity of 245.455MW. The under-listed are the details and the updated status of the existing applications.

- Applicants: Inner Galaxy Limited, Abia State  
Power required: 25MW.  
Proposed supplier: Mainstream Energy Solution Limited (MESL)  
Proposed tariff: ₦27/per KWh excluding competition transaction charge (CTC)

Application Status: Eligible Customer status yet to be granted by the Commission as it awaits the evidence of the negotiated contractual arrangement between MESL and NBET in line with schedule one (1) of the Eligible Customer Regulations.

2. Applicants: KAM Industrial Limited, Ilorin, Kwara State

Power required: 15MW.

Proposed supplier: Mainstream Energy Solution Limited

Proposed tariff: ₦27/per KWh, excluding CTC

Application Status: Eligible Customer status yet to be granted due to lack of executed TUOS and evidence of excess capacity that the plant can sell to the eligible customer beyond the already contracted capacity.

3. Applicants: KAM Integrated Steel Limited, Ilorin, Kwara State

Power required: 60MW.

Proposed supplier: Mainstream Energy Solution

Proposed tariff: ₦27/per KWh, excluding CTC

Application Status: Eligible Customer status not yet granted as the Commission awaits evidence of excess capacity that the plant can sell to the eligible customer beyond the already contracted capacity with NBET.

4. Applicants: Young Xing Steel Limited, Benin, Edo State

Power required: 60MW.

Proposed supplier: Mainstream Energy Solution

Proposed tariff: ₦27/per KWh, excluding CTC

Application Status: EC status yet to be granted due to lack of executed TUOS and evidence of excess capacity that the plant can sell to the eligible customer beyond the already contracted capacity.

5. Applicants: Crown Flour Mills Limited, Ilorin, Kwara State

Power required: 3MW.

Proposed supplier: Mainstream Energy Solution  
Proposed tariff: ₦27/per KWh, excluding CTC  
Application Status: Eligible Customer status yet to be approved as applicant yet to submit customer current source of power supply and the voltage level at which supply is taken and the average load system per month.

6. Applicants: Lord's Mint Limited, Abeokuta, Ogun State  
Power required: 3MW.  
Proposed supplier: Mainstream Energy Solution  
Proposed tariff: ₦27/per KWh, excluding CTC  
Application Status: Eligible Customer status yet to be approved as applicant yet to submit customer connection point, trading point and types of meters installed, and tax clearance certificate.

7. Applicants: Abuja Steel Limited, Suleja, Federal Capital Territory  
Power required: 10MW  
Proposed supplier: Paras Energy Limited  
Proposed tariff: ₦38.01/per KWh, excluding CTC  
Application Status: Eligible Customer yet to be issued due to lack of executed TUOS and letter of no indebtedness from AEDC.

8. Applicants: Prism Steel Mills Limited, Oshogbo, Osun State  
Power required: 20MW.  
Proposed supplier: Mainstream Energy Solution  
Proposed tariff: NA  
Application Status: Eligible Customer status yet to be approved due to lack of executed TUOS and evidence of excess capacity that the plant can sell to the eligible customer beyond the already contracted capacity.

9. Applicants: Phoenix Steel Mills, Sagamu, Ogun State  
Power required: 20MW.

Proposed supplier: Mainstream Energy Solution  
Proposed tariff: NA  
Application Status: Eligible Customer status yet to be approved due to lack of executed TUOS and evidence of excess capacity that the plant can sell to the eligible customer beyond the already contracted capacity.

**10. Applicants:** Edo State Government, Benin City, Edo State  
**Power required:** 5MW.  
**Proposed supplier:** Ossiomo Power Company Limited (Embedded)  
**Proposed tariff:** ₦41/per KWh, excluding CTC  
**Application Status:** Provisional approval given by the Commission pending the submission of the final bilateral Project Agreement between Ossiomo Power Company limited and Benin DisCo Plc.

**11. Applicants:** Vita Products Limited, Ogba-Ikeja, Lagos State  
**Power required:** 2MW.  
**Proposed supplier:** Geogrid Lightec Limited  
**Proposed tariff:** ₦47.28/per KWh, excluding CTC  
**Application Status:** Eligible Customer status not yet granted by the Commission due to incomplete documentation by the applicant.

**12. Applicants:** Ashaka Cement Plc  
**Power required:** 15MW.  
**Proposed supplier:** Main Stream Energy Solution  
**Proposed tariff:** NA  
**Application Status:** Eligible Customer status yet to be approved due to lack of evidence of excess capacity that the plant can sell to the eligible customer beyond the already contracted capacity.

**13. Applicants:** Livestock Ltd  
**Power required:** 2MW.  
**Proposed supplier:** Tower Energy Solutions & Systems

Proposed tariff: ₦82/per KWh, excluding CTC

Application Status: Undergoing evaluation.

**14. Applicants:** Viathan Engineering LTD on behalf of NATCOM, Union Bank and Sura Market.

Power required: 7.955MW.

Proposed supplier: Island Power Limited

Application Status: Eligible Customer status yet to be approved for NATCOM, and Union Bank due to incomplete documentation, while it has been approved for Sura Market following the satisfactory evaluation of its application and in the overriding public interest.

### 3.5. Public Consultation on Regulations

The Commission did not conduct public consultations on new regulations during the quarter under review as no new regulations were under consideration. However, to improve awareness of the existing regulations, and consumer rights and obligations, the Commission continued customer and stakeholder engagement through town hall meetings, radio programmes and consumer assembly. Also, during the quarter, the Commission finalised the schedule for public hearings on the consideration of applications filed for *extraordinary tariff review* by DisCos and TCN in compliance with the EPSRA, Business Rules of the Commission and the tariff Review Regulations. The details of the public hearings which have since been held at different locations within the franchise areas of the DisCos will be provided in the 2020/Q1 quarterly report covering the period in which the hearings were held.

### 3.6. Compliance and Enforcement

In a bid to ensure compliance to the industry rules and regulations, the Commission continued its enforcement actions against several operators for violations of rules and infractions. In this regard, the Commission, during the fourth quarter of 2019, issued a notice of intension to cancel licences (NICL) of the under listed DisCos believed to have breached EPSRA, terms and conditions of their respective distribution licences, and the 2016-2018 minor review of MYTO 2015 and minimum remittance Order for the Year 2019, as firstly demonstrated by their July 2019 market settlement.

1. Abuja Electricity Distribution Company
2. Benin Electricity Distribution Company
3. Enugu Electricity Distribution Company
4. Ikeja Electricity Distribution Company
5. Kaduna Electricity Distribution Company
6. Kano Electricity Distribution Company
7. Port Harcourt Electricity Distribution Company
8. Yola Electricity Distribution Company

The Commission requires each of the eight (8) DisCos to *show cause* in writing within 60 days from the date of receipt of the notice as to why their licences should not be cancelled in accordance with section (74) of ESPRA. Following the submissions by the DisCos, a public hearing was conducted by the Commission in December 2019. It is noteworthy that all the DisCos with the exception of Enugu and Yola had complied with the minimum remittance Order for the period under review. The Commission is working with NBET to ensure that the relevant provisions of the vesting contracts between the two DisCos and NBET are activated to remedy the infraction.

The Commission also continued with the twenty-one (21) enforcement actions brought forward from the preceding quarters against a number of operators for violations of rules and infractions. These include the violations of Regulations and



Orders, accidents and electrocution cases, failure to provide required data within a timeline and the failure to adhere to forum decisions among others.

### 3.7. Litigation

The Commission was involved in two (2) new matters during the fourth quarter of 2019. The claimants are seeking among others declarations that; some provisions of the Meter Assets Provider Regulation (2018) as issued by the Commission are ultra vires and in contravention of EPSRA; and that the Commission lacks the power and authority to issue a notice of intention to cancel licences of erring DisCos. These cases are pending before Abuja High Courts. The Commission also continued with eleven (11) *on-going* litigations reported in the preceding quarters. The aforementioned litigations, which directly or indirectly involved the Commission, include 1) a case instituted by Abuja DisCo against the Order of the Commission directing it (Abuja DisCo) to pay ₦50million as compensation to the family of a boy who was fatally electrocuted in Niger State and a fine of ₦250million for the infraction arising from their negligence, 2) suspension of the board of Ibadan DisCo by the Commission, 3) the sufficiency of consultations conducted by the Commission prior to the implementation of the MYTO 2015 tariff review in 2016, and 4) the dispute between Enugu DisCo and Ariaria Market Energy Solution Ltd & Others among others.

### 3.8. Alternative Dispute Resolution

The Commission did not handle any disputes between stakeholders of the industry as there was no pending dispute and no new dispute reported during 2019/Q4.



## 4. CONSUMER AFFAIRS

#### 4.1. Consumer Education and Enlightenment

To ensure continuous customers' education on their rights and obligations, during the fourth quarter of 2019, the Commission continued the monitoring of the 2019 customer enlightenment programmes of the eleven (11) DisCos *vis-à-vis* their filed schedules for the year 2019. On its part, the Commission continued the airing of a dedicated weekly radio program titled '*Electricity Spot Light Today*' on FRCN to engage and enlighten electricity consumers on various issues. The program focuses on but not limited to customers' rights and obligations, customers' redress mechanism, estimated billing, outstanding metering gaps and the strategy being adopted by the Commission to bridge the metering gap in the industry.

The Commission held three (3) town hall meetings on the 21<sup>st</sup>, 23<sup>rd</sup> and 25<sup>th</sup> October 2019 in Ikeja (Lagos), Ibadan and Owerri respectively. At the meetings, the Commission discussed the *ongoing* MAP metering implementation, customers' enumeration exercise, and efforts being made to resolving issues of estimated billing and service interruption.

#### 4.2. Metering of End-use Customers

The status of end-use metering as at the end of December 2019 is presented in Table 10. The table indicates that inadequate metering remains a serious challenge in the industry, with only 3,918,322 (37.77%) of the total customer population of 10,374,597 are metered. With 62.37% of the end-use customers on estimated billing, huge collection losses due to customer apathy have posed a serious challenge to the viability and sustainability of the industry. In comparison to the third quarter, the numbers of registered and metered customers increased by 699,850 (*i.e.*, 7.23%) and 22,825 (*i.e.*, 0.59%) respectively. The increase in the number of registered customers is attributable to the *on-going* enumeration by DisCos through which unregistered consumers of electricity are brought onto the billing platform of the DisCos.

**Table 10: Customers Metering Status by DisCos as of December 2019**

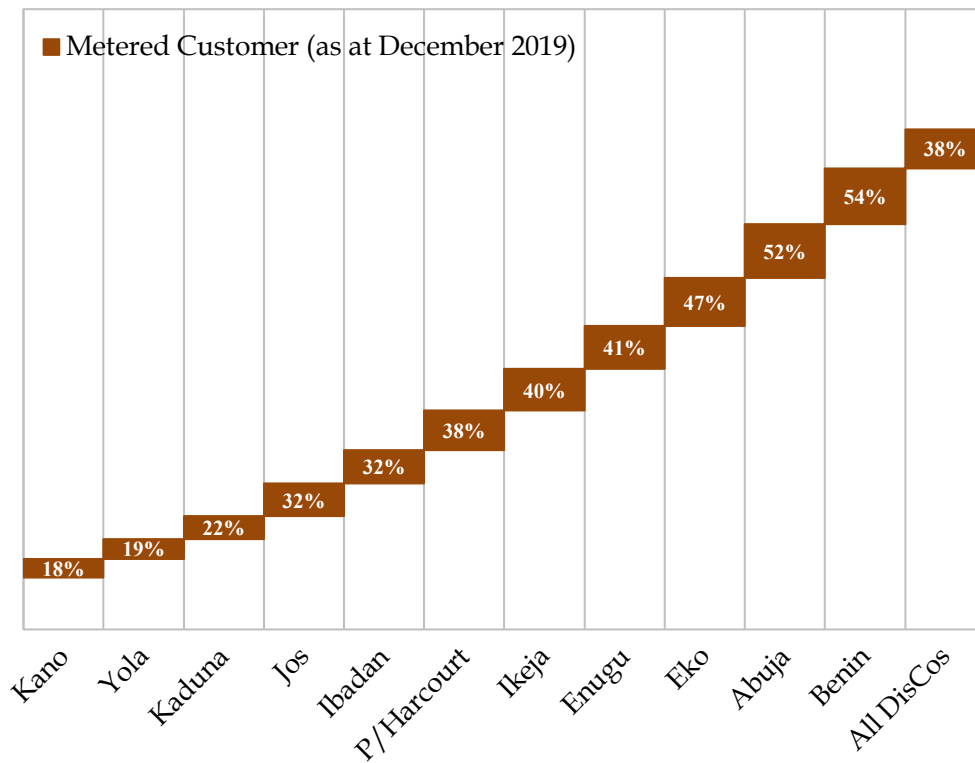
Distribution Companies (DisCos)	Registered Customer as at Dec. 2019	Metered Customer as at Dec. 2019	Metering Progress as at Dec. 2019 (%)	Metering Gap as at Dec. 2019 (%)
Abuja	1,228,288	643,445	52.39	47.61
Benin	1,022,458	549,211	53.71	46.29
Eko	518,192	241,819	46.67	53.33
Enugu	1,100,292	453,928	41.26	58.74
Ibadan	2,139,741	689,123	32.21	67.79
Ikeja	1,145,622	462,586	40.38	59.62
Jos	537,726	170,492	31.71	68.29
Kaduna	673,848	150,204	22.2	77.71
Kano	689,304	126,539	18.36	81.64
Port Harcourt	937,305	359,395	38.34	61.66
Yola	381,803	71,580	18.75	81.25
<b>Overall DisCos</b>	<b>10,374,579</b>	<b>3,918,322</b>	<b>37.77</b>	<b>62.23</b>

*Notes of the table:* DisCos are the electricity distribution companies

The increase in metered customers is mainly attributed to the roll-out of meters under the Meter Asser Provider (MAP) schemes. The Commission notes with concern that the additional 22,825 end-use customers' meters installed during the fourth quarter fell significantly from the 83,768 meters installed during the third quarter. This poses risk to the Commission's goal of closing the metering gap in NESI by December 31, 2021. Although some MAPs have not fully commenced meter deployments, the *low metering* recorded during the quarter is *partly* due to the increase of 35% points in import duty on meter components. The Commission in collaboration is already working with the Ministry of Finance, Budget and National Planning towards addressing these issues in order to fast-track meters roll-out.

The percentage of metered customers by each DisCo as at the end of December 2019 is represented in Figure 11. Only Abuja, Eko, Enugu, Ikeja, Kaduna, and Port Harcourt DisCos metered additional customers while Abuja and Benin had metered not less than 50% of their registered customers as at the end of December 2019. The Commission shall continue to monitor the DisCos to ensure total compliance with the MAP regulations.

Figure 11: Customers Metered by DisCos as at December 2019



### 4.3. Customers Complaints

The complaints received by DisCos during the third and fourth quarters of 2019 are presented in Table 11. The eleven (11) DisCos nationwide received a total of 177,807 complaints during the fourth quarter, indicating 1,933 complaints per day compared to 1,879 complaints received daily in the preceding quarter. During the same period, Eko DisCo received the highest customer complaints while Yola DisCo recorded the least. It is noteworthy that Yola retained the same positions since the second quarter of 2019 as the DisCo that recorded the lowest number of customers' complaints.

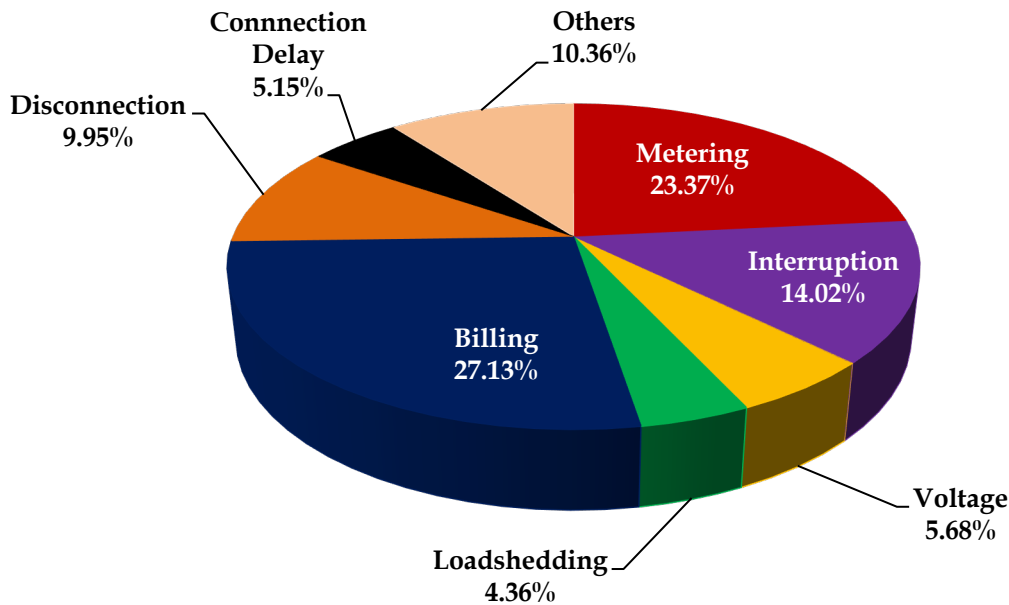
**Table 11: Complaints Received and Resolved by DisCo in 2019/Q3-Q4**

DisCos	2019/Q3			2019/Q4		
	Complaints:			Complaints:		
	Total Received	Total Resolved	% Resolved	Total Received	Total Resolved	% Resolved
Abuja	16,354	12,165	74.39	19,631	17,106	87.14
Benin	10,517	9,754	92.75	10,665	9,322	87.41
Eko	16,223	13,977	86.16	47,209	45,672	96.74
Enugu	56,249	45,879	81.56	17,713	14,797	83.54
Ibadan	8,657	6,006	69.38	7,772	5,757	74.07
Ikeja	27,853	24,138	86.66	35,256	31,804	90.21
Jos	4,624	4,294	92.86	5,852	5,337	91.20
Kaduna	9,364	9,008	96.20	9,662	9,340	96.67
Kano	4,988	4,684	93.91	6,481	6,242	96.31
P/Harcourt	15,688	14,116	89.98	15,603	13,535	86.75
Yola	2,316	2,305	99.53	1,963	1,930	98.32
<b>Total</b>	<b>172,833</b>	<b>146,326</b>	<b>84.66</b>	<b>177,807</b>	<b>160,842</b>	<b>90.46</b>

The DisCos' customer complaints centred on service interruption, poor voltage, load shedding, metering, estimated billing, disconnection, delayed connection, among others. During the fourth quarter of 2019, all the eleven (11) DisCos received several numbers of complaints on each of the afore-mentioned key issues.

The number of complaints on metering and billing increased significantly and still dominate the customer complaints during the quarter under review. The categories of complaints presented in Table VI of the appendix and the summary represented in Figure 12 show that metering and billing accounted for 50.49% (*i.e.*, 89,782) of the total complaints received during the fourth quarter of 2019 as against 49.70% (*i.e.*, 85,890) recorded in the third quarter. This implies that, on average, 976 customers complained about metering and billing per day in the fourth quarter of 2019. Another issue of serious concern is service interruption and disconnection, accounting for 14.02% (*i.e.*, 24,920) and 9.95% (*i.e.*, 17,694) of the total customer complaints received respectively.

Figure 12: Category of Complaints Received by DisCos in 2019/Q4



To address customers' complaints, the Commission, on a continuous basis, monitors the complaint handling and resolution process adopted by DisCos. Specifically, the Commission has been implementing some of the recommendations from the review of the eleven (11) DisCos' compliance with service standards conducted in 2018. Also, the Commission is strictly monitoring the DisCos' compliance to its directive on monthly submission of their customers' complaints reports to ensure timely regulatory interventions when necessary.

Similarly, the Commission continuously strives to improve on the operation of its Forum Offices which are set up to redress customers' complaints that are not adequately resolved to the satisfaction of consumers by the responsible DisCos. As at the end of the fourth quarter of 2019, the Commission had established thirty (30) Forum Offices for effective resolution of customer complaints. In addition, in line with its 2017-2020 strategic plans, the Commission continues monitoring of the implementation of the Meter Asset Provider (MAP) Regulations which is designed to address the metering gap and eliminate estimated billing in NESI.

#### 4.4. Forum Offices

In line with the Commission's mandate on Customer Protection, NERC Forum Offices are set up pursuant to section 80(1b) of the EPSRA to hear and resolve customer complaints not satisfactorily resolved at the DisCos' Customer Complaints Units. The Forum Panels assist in redressing customers' and operators' unresolved disputes as enshrined in the NERC's Customer Complaints Handling Standards and Procedures (CCHSP) Regulations. As at December 2019, the Commission had thirty (30) operational Forum Offices in twenty-nine (29) states and the Federal Capital Territory, Abuja. The details including names, addresses and contacts of the Commission's Forum Offices are presented in Table VII of the Appendix.

The summary presented in Table 12 indicates that, during the quarter under review, the Forum Offices received a total of 1,526 new complaints (in addition to 1,033 pending complaints from the third quarter of 2019) from customers who were dissatisfied with DisCos' effort at resolving their lodged complaints. The Forum Office covering Ikeja DisCo's network area had the highest number of complaints (*i.e.*, 799 complaints) during the quarter. This was followed by Forum Offices covering Ibadan DisCo's network area which received 645 complaints during the same period. On the other hand, Yola Forum Office had the lowest number of complaints (*i.e.*, 28 complaints) during the same period.

The Commission's Forum Offices' Panels had a total of 46 hearings in the fourth quarter and resolved 49.90% of the total 2,559 complaints before the Forum Offices. This resolution rate indicates that one (1) in every two (2) disputes that got the Forum Offices during the fourth quarter were resolved and that an average of 27 cases were resolved per hearing.



**Table 12: Complaints Handled by Forum Offices in 2019/Q4**

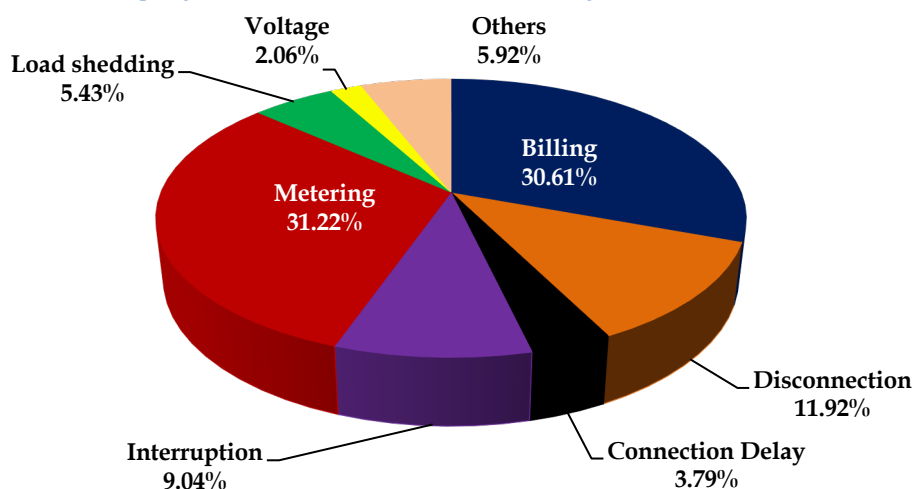
Forum Offices	Accountable DisCos	Complaint Received <sup>1</sup>	Complaint Resolved <sup>2</sup>	Complaint Pending <sup>3</sup>	No of Sitzings
Abuja, Lafia & Lokoja	Abuja	148	92	51	5
Asaba & Benin	Benin	107	82	20	6
Eko	Eko	171	121	50	2
Abakaliki, Akwa, Enugu, Owerri, & Umuahia	Enugu	180	139	41	14
Ibadan, Ilorin & Osogbo	Ibadan	645	174	470	3
Ikeja	Ikeja	799	398	401	7
Bauchi, Gombe, Jos & Makurdi	Jos	93	60	21	2
Gusau, Kaduna, Kebbi & Sokoto	Kaduna	144	39	99	3
Jigawa, Kano & Katsina	Kano	90	47	43	0
Calabar, Port Harcourt & Uyo	P/Harcourt	154	103	51	4
Yola	Yola	28	17	11	0
<b>All Forum Offices</b>	<b>All DisCos</b>	<b>2559</b>	<b>1277</b>	<b>1258</b>	<b>46</b>

Note of tables: <sup>1</sup> Complaint received includes outstanding complaints from the preceding quarter

<sup>2</sup> Complaint resolved excludes complaints withdrawn or rejected

<sup>3</sup> Complaints are still within the regulatory timeframe of 2 months to resolve

Similar to the categories of complaints received by the DisCos, billing and metering issues topped the complaints received by the Forum Offices and accounted for 61.83% of the total, as represented in Figure 13. This implies that billing and metering issues were mostly the complaints not satisfactorily resolved by DisCos' CCUs.

**Figure 13: Category of Complaints Received by Forum Offices in 2019/Q4**

Whereas some of the undecided cases at the Forum Offices are due to incomplete submission *and/or* abandonment by the concerned consumers, the Commission is committed towards ensuring quick resolution of all outstanding complaints at the Forum Offices in line with its operating manual. Moreover, the Commission has continued to intensify effort in monitoring the *day-to-day* activities of the Forum Offices through its performance monitoring mechanism. Also, the Commission is working towards establishing additional Forum Offices in a bid to achieve its objective of establishing at least one Forum Office in each state of the federation and ensure that customer care standards are given adequate attention. Further details on the customers' complaints received, resolved and outstanding by Forum Offices for the first, second, third and fourth quarters of 2019 are presented in Tables *VIII* and *IX* of the appendix.

### **3.8. Health and Safety**

As emphasised in the preceding reports, the safety of all electricity providers and users in Nigeria remains as one of the key priorities of the Commission and it has continued to monitor the health and safety performance of NESI for continuous improvement. The Commission received a total of one hundred and fifteen (115) health and safety reports from the operators in the fourth quarter of 2019. These reports were used in line with the provisions of section 32 1(e) of EPSRA for monitoring and evaluation of health and safety performance of licensees in order to ensure that operators keep up to their responsibility of delivering safe electricity services to consumers. The summary statistics on the accidents experienced in the Nigerian electricity supply industry during the first, second, third and fourth quarters of 2019 is presented in Table 13.

**Table 13: Health and Safety (H&S) Reports in 2019/Q1-Q4**

Item	Frequency			
	2019 /Q1	2019 /Q2	2019 /Q3	2019 /Q4
Number of Expected H&S Reports	87	87	120*	120*
Number of H&S Reports Submitted	72	73	104	115
Number of Deaths (employees & third parties)	10	37	17	13
Number of Injuries	7	18	8	9
Number of Enforcement Actions Taken	6	<i>Under Review</i>	<i>Under Review</i>	<i>Under Review</i>

*Notes:* \* indicates that the expected H&S reports increased as additional operators are captured

There was a slight improvement in the health and safety performance of the operators during the fourth quarter of 2019 as the number of deaths decreased by four (4) persons from the preceding quarter. However, the number of injured persons increased by one (1) during the fourth quarter. Approximately two (2) persons died of electrocution every fortnight during the fourth quarter of 2019, as compared to the third quarter where roughly three (3) persons died of electrocution fortnightly. The Commission, in line with its mandate to ensure licensees' commitment to safe energy delivery, has commenced hearings on some of the incidences involving various health and safety breaches during the quarter. However, due to the complexity of many of the cases, enforcement actions and appropriate penalties were not finalised during the quarter under review.

On the other hand, the Commission continued to work on a framework for penalties and compensations guidelines in order to stop the utilities' discretionary payment of compensations to victims or victims' families. Moreover, in line with its 2017-2020 strategic goals, the Commission has continued to intensify efforts at implementing various safety programmes aiming at eliminating accidents in the industry. Among the safety programs being implemented by the Commission include but not limited to the standardisation of protective schemes, public enlightenment on safety, engagement of government agencies on right of way violation and a review of an operational procedure for distribution system operators on fault clearing.



## 5. THE COMMISSION

## 5.1. Financial Report

The summary of the Commission's revenue and expenditure in the third and fourth quarters of 2019 is presented in Table 14. During the quarter under review, the total revenue realised by the Commission was ₦2.07billion, about 37.66% lower than the revenue realised in the preceding quarter. The higher revenues recorded in the third quarter was attributed to funds released for capital projects of the Commission from the 2019 Federal Government appropriation. Operating levy (*i.e.*, market charges) remain relatively the same for both quarters while other internally generated revenue (OIGR) such as licensing fees dropped significantly in the fourth quarter. The operating levy and other IGR stood at ₦2.02billion and ₦44.56million respectively in the fourth quarter. In the same period, the total (capital and recurrent) expenditure of the Commission stood at ₦1.74billion.

**Table 14: Quarterly Cash Flow of the Commission in 2019/Q3-Q4**

Description	Monthly Reports for 2019/Q4 (₦' Million)			Quarterly Reports (₦' Million)	
	Oct.	Nov.	Dec.	2019/Q4	2019/Q3
<b>A. Revenue</b>					
Operating Levy (MC)	1,069.66	723.93	229.94	2,023.53	2,676.25
Other IGR	0.00	30.97	13.59	44.56	170.770
<b>Total Revenue</b>	<b>1,069.66</b>	<b>754.90</b>	<b>243.53</b>	<b>2,068.09</b>	<b>2,847.02</b>
<b>B. Expenditure</b>					
Personnel Cost	286.36	500.96	364.39	1,151.71	698.96
Regulatory Expenses	239.76	114.31	111.57	465.64	353.48
Admin & General Maintenance	32.56	21.40	68.10	122.06	63.68
<b>Total Expenditure</b>	<b>558.68</b>	<b>636.67</b>	<b>544.06</b>	<b>1,739.41</b>	<b>1,116.12</b>
<b>Net Cash Flow (A-B)</b>	<b>510.98</b>	<b>118.23</b>	<b>(300.53)</b>	<b>328.68</b>	<b>1,730.90</b>
Memo:					
Outstanding liabilities as at the end of the stated quarters				(493.35)	(365.77)

Notes of the table:

1. MC is Market Charges and IGR is internally Generated Revenue

A comparison of the revenue and expenditure of the Commission within the fourth quarter of 2019 indicated lesser expenditure incurred when compared to actual cash receipts, showing a positive net cash flow of ₦0.33billion. However, the Commission still has unpaid liabilities of ₦0.49billion as at the end of the fourth quarter of 2019.

As stated in the previous reports, the proper management of the Commission's cash flow remains one of its key financial obligations. Thus, the Commission continued to monitor its expenditure and liabilities while working on the regulatory interventions necessary to improve the liquidity in the industry. Further details on the quarterly cash flow of the Commission for the period 2019/Q1-Q4 are presented in Table X of the appendix.

## 5.2. Capacity Development

The Commission continued with its commitment to human capacity development and sponsored some members of staff, based on their job/skill gap needs, to attend various regulatory, management and training programs during the fourth quarter of 2019. During the same quarter, staffs were also sponsored to the annual conferences of their different professional associations to keep them up to date with new developments in their respective professions. Table 15 presents titles of trainings, workshops and meetings attended by staff of the Commission during the fourth quarter of 2019.

During the quarter, the Commission organised end of the year awards where staff that demonstrated outstanding and exceptional performance during the year were rewarded.

**Table 15: Training and Workshops Attended in 2019/Q4**

S/N	Title by Category
	<b>Training:</b>
1	Alternative Dispute Resolution Programme
2	Authentic Leader Development Program
3	Electricx Hosted Buyer Programme
4	NARUC Rate School Programme
5	New Mexico State University Capacity Training
6	Records and Archival Management
7	Practical Tour of NIPSS 2019 Senior Executive Course
8	SERVICOM Exchange Programme
9	Strategic Management Performance System Certification Boot-camp
	<b>Workshop:</b>
10	Regional Workshop to Validate the Draft Report on the Feasibility of Hydropower Financing Mechanism
	<b>Forum/Meeting/Conference:</b>
11	ERERA Consultative Committees Meeting
12	ERRA Customers & Retail Markets Working Group Meeting
13	Working Group Meeting Harmonized Comparison of Electricity Tariffs in ECOWAS Member Countries

## Appendix

Table I: Monthly Energy Received and Billed by DisCos in 2019

DisCos	2019/Q1			2019/Q2			2019/Q3			2019/Q4			Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Energy Received (GWh)</b>													
Abuja	326	304	372	357	313	303	310	291	286	298	322	312	3794
Benin	230	222	223	212	198	170	188	171	163	164	187	200	2332
Eko	285	276	312	263	277	251	276	295	267	261	295	301	3358
Enugu	208	186	210	200	187	176	177	188	176	179	186	196	2269
Ibadan	300	285	288	281	295	275	307	314	277	284	316	340	3562
Ikeja	345	325	372	333	350	343	355	<b>364</b>	344	340	376	401	4248
Jos	110	105	105	98	99	103	102	102	100	105	104	109	1241
Kaduna	205	189	205	167	176	164	165	148	127	134	145	138	1963
Kano	142	150	179	172	160	154	144	128	126	142	139	141	1776
P/H	172	161	176	165	168	157	158	155	161	169	161	180	1981
Yola	94	94	116	103	87	87	84	90	90	105	100	88	1138
<b>All DisCos</b>	<b>2418</b>	<b>2298</b>	<b>2559</b>	<b>2351</b>	<b>2310</b>	<b>2183</b>	<b>2265</b>	<b>2246</b>	<b>2116</b>	<b>2181</b>	<b>2332</b>	<b>2406</b>	<b>27663</b>
<b>Energy Billed (GWh)</b>													
Abuja	261	258	317	275	223	226	241	232	211	228	242	242	2956
Benin	195	189	193	183	179	149	163	149	142	146	164	173	2025
Eko	250	247	270	233	239	227	246	258	238	237	259	269	2973
Enugu	144	127	142	135	129	121	119	131	125	135	142	145	1595
Ibadan	245	235	242	236	244	227	254	259	229	240	262	285	2958
Ikeja	298	283	314	297	304	303	316	<b>324</b>	306	312	336	352	3744
Jos	70	74	72	72	74	75	75	74	72	76	76	80	890
Kaduna	141	136	150	123	146	134	131	123	125	125	134	129	1597
Kano	118	124	148	139	128	125	119	102	103	120	115	118	1459
P/H	126	118	136	124	121	117	120	118	124	129	126	123	1483
Yola	61	61	74	67	57	56	56	61	61	64	67	61	746
<b>All DisCos</b>	<b>1909</b>	<b>1852</b>	<b>2058</b>	<b>1884</b>	<b>1844</b>	<b>1759</b>	<b>1841</b>	<b>1831</b>	<b>1734</b>	<b>1813</b>	<b>1924</b>	<b>1977</b>	<b>22426</b>
<b>Billing Efficiency (%)</b>													
Abuja	80.1	84.9	85.2	77.0	71.2	74.6	77.7	79.7	73.8	76.5	75.2	77.6	77.9
Benin	84.8	84.8	86.3	86.3	90.3	87.4	86.6	87.2	86.6	89.0	87.5	86.5	86.8
Eko	87.7	89.5	86.5	88.7	86.3	90.4	89.4	87.3	89.1	90.8	87.9	89.3	88.5
Enugu	69.2	68.3	67.6	67.5	69.0	68.8	67.2	69.7	71.0	75.4	76.3	74.0	70.3
Ibadan	81.6	82.5	83.9	84.2	82.6	82.6	82.8	82.5	82.6	84.6	83.0	83.8	83.0
Ikeja	86.2	87.1	84.3	89.2	86.8	88.3	89.1	89.0	89.0	91.8	89.4	87.7	88.1
Jos	63.6	69.9	69.0	72.9	74.7	72.8	73.7	72.6	72.7	72.9	72.7	73.1	71.7
Kaduna	68.8	72.0	73.2	73.7	83.0	81.7	79.4	83.1	98.4	93.3	92.4	93.5	81.4
Kano	83.1	82.6	83.0	80.5	79.9	81.0	82.9	79.8	81.8	84.8	82.7	84.0	82.2
P/H	72.9	73.6	77.1	75.5	72.5	74.8	76.0	76.5	76.9	76.3	78.6	68.7	74.9
Yola	64.9	64.9	63.8	65.0	65.5	64.4	66.7	67.8	67.8	61.0	67.0	69.3	65.6
<b>All DisCos</b>	<b>78.9</b>	<b>80.6</b>	<b>80.4</b>	<b>80.1</b>	<b>79.8</b>	<b>80.6</b>	<b>81.3</b>	<b>81.5</b>	<b>82.0</b>	<b>83.1</b>	<b>82.5</b>	<b>82.2</b>	<b>81.1</b>

Notes of the table:

DisCos are the electricity distribution companies; GWh is Giga-watt hour



Table II: Monthly Revenue Performance by DisCos in 2019

DisCos	2019/Q1			2019/Q2			2019/Q3			2019/Q4			Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	<b>Total Billings (₦ billion)</b>												
Abuja	8.64	8.55	10.35	9.28	7.60	7.65	8.24	7.67	7.08	7.84	8.28	8.21	99.38
Benin	6.94	6.67	6.82	6.55	6.27	5.42	5.79	5.31	5.15	5.27	5.97	6.14	72.30
Eko	7.57	7.46	8.19	7.03	7.17	6.85	7.47	7.78	7.20	7.16	7.83	8.22	89.93
Enugu	5.25	4.68	5.26	5.03	4.81	4.49	4.45	4.97	4.62	4.99	5.22	5.35	59.11
Ibadan	7.42	7.18	7.44	7.28	7.59	7.06	7.87	7.94	7.09	7.43	8.11	8.78	91.19
Ikeja	8.34	7.89	8.78	8.37	8.56	8.45	9.22	8.98	8.55	8.49	9.25	9.85	104.7
Jos	2.51	2.65	2.62	2.62	2.67	2.69	2.72	2.31	2.62	2.73	2.77	2.88	31.79
Kaduna	4.32	4.21	5.12	4.33	4.50	4.19	4.05	3.82	3.85	3.89	4.22	3.98	50.48
Kano	3.70	3.79	4.46	4.33	4.03	3.91	3.74	3.26	3.35	3.95	3.77	3.68	45.98
P/H	4.58	4.16	4.69	4.60	4.40	4.25	4.33	4.27	4.44	4.64	4.56	4.49	53.41
Yola	1.60	1.57	1.96	1.80	1.54	1.49	1.52	1.61	1.63	1.76	1.80	1.62	19.91
<b>All DisCos</b>	<b>60.9</b>	<b>58.8</b>	<b>65.7</b>	<b>61.2</b>	<b>59.1</b>	<b>56.4</b>	<b>59.4</b>	<b>57.9</b>	<b>55.6</b>	<b>58.2</b>	<b>61.8</b>	<b>63.2</b>	<b>718.2</b>
	<b>Revenue Collected (₦ billion)</b>												
Abuja	6.19	6.21	6.70	7.37	5.78	6.42	5.81	5.94	5.54	6.26	6.85	6.12	75.17
Benin	3.44	3.45	3.52	3.89	3.05	3.46	3.64	3.10	3.33	3.26	3.49	3.56	41.20
Eko	5.95	6.22	6.34	6.07	5.64	6.11	6.34	6.48	6.23	6.13	6.42	7.01	74.94
Enugu	3.24	3.63	3.53	3.60	3.21	3.61	2.96	3.21	3.45	3.34	3.45	3.67	40.90
Ibadan	4.40	4.46	4.42	4.75	4.67	4.75	4.80	4.61	4.84	5.02	5.27	5.41	57.39
Ikeja	6.68	7.07	7.07	7.46	7.08	7.77	7.76	7.76	7.67	7.35	8.19	8.56	90.41
Jos	1.15	1.76	1.68	1.34	1.33	1.57	1.39	1.20	1.55	1.49	1.57	1.51	17.55
Kaduna	1.44	2.00	1.57	1.94	1.73	2.05	1.82	1.45	1.71	1.60	1.73	1.56	20.59
Kano	2.36	2.47	2.56	2.94	2.66	2.72	2.60	2.31	2.49	3.02	2.74	2.62	31.50
P/H	2.16	2.22	2.25	2.44	2.35	2.21	2.10	2.26	2.29	2.28	2.34	2.50	27.39
Yola	0.78	0.79	0.92	0.68	0.78	0.75	0.78	0.85	1.05	0.95	0.92	0.95	10.20
<b>All DisCos</b>	<b>37.8</b>	<b>40.3</b>	<b>40.6</b>	<b>42.5</b>	<b>38.3</b>	<b>41.4</b>	<b>40.0</b>	<b>39.2</b>	<b>40.1</b>	<b>40.7</b>	<b>43.0</b>	<b>43.5</b>	<b>487.2</b>
	<b>Collection Efficiency (%)</b>												
Abuja	71.6	72.6	64.7	79.4	76.1	83.8	70.5	77.5	78.2	79.8	82.7	74.6	75.6
Benin	49.6	51.7	51.7	59.3	48.6	64.0	62.8	58.5	64.6	61.9	58.5	58.1	57.0
Eko	78.7	83.4	77.4	86.3	78.7	89.3	84.8	83.2	86.5	85.6	82.0	85.3	83.3
Enugu	61.6	77.5	67.1	71.6	66.8	80.5	66.5	64.5	74.7	66.9	66.2	68.6	69.2
Ibadan	59.3	62.1	59.4	65.3	61.5	67.3	60.9	58.0	68.2	67.5	65.0	61.7	62.9
Ikeja	80.1	89.6	80.5	89.2	82.6	92.0	84.2	86.4	89.7	86.5	88.5	86.9	86.3
Jos	45.9	66.3	63.9	51.4	49.8	58.4	51.2	51.8	59.2	54.7	56.9	52.5	55.2
Kaduna	33.4	47.6	30.6	44.7	38.5	48.9	45.0	37.8	44.3	41.2	41.0	39.1	40.8
Kano	63.9	65.2	57.3	68.0	66.0	69.4	69.4	71.0	74.4	76.5	72.7	71.2	68.5
P/H	47.2	53.2	48.0	53.0	53.3	51.9	48.4	52.8	51.7	49.2	51.3	55.6	51.3
Yola	48.7	50.0	47.1	37.9	50.4	50.7	51.4	52.9	64.2	53.8	51.1	58.4	51.2
<b>All DisCos</b>	<b>62.1</b>	<b>68.5</b>	<b>61.7</b>	<b>69.4</b>	<b>64.7</b>	<b>73.4</b>	<b>67.3</b>	<b>67.6</b>	<b>72.2</b>	<b>70.0</b>	<b>69.6</b>	<b>68.8</b>	<b>67.8</b>

Notes of the table:

1. DisCos are the electricity distribution companies
2. ₦ Billion is Billions of Nigeria Currency

Table III: Monthly DisCos Invoices &amp; Remittances to MO in 2019

DisCos	2019/Q1:			2019/Q2:			2019/Q3:			2019/Q4:			Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	<b>Invoice (₦ Billion)</b>												
Abuja	1.28	1.21	1.52	1.42	1.24	1.20	1.22	1.14	1.11	1.25	1.28	1.26	15.11
Benin	0.90	0.89	0.93	0.85	0.78	0.67	0.74	0.67	0.63	0.70	0.75	0.81	9.33
Eko	1.12	1.09	1.28	1.05	1.09	0.99	1.09	1.16	1.04	1.09	1.17	1.21	13.38
Enugu	0.82	0.74	0.88	0.80	0.74	0.70	0.70	0.74	0.68	0.76	0.74	0.79	9.09
Ibadan	1.18	1.14	1.20	1.13	1.17	1.09	1.21	1.23	1.08	1.21	1.26	1.38	14.29
Ikeja	1.20	1.14	1.37	1.18	1.38	1.21	1.25	1.27	1.20	1.30	1.33	1.46	15.30
Jos	0.44	0.43	0.44	0.40	0.40	0.41	0.41	0.41	0.40	0.45	0.43	0.46	5.07
Kaduna	0.81	0.76	0.86	0.67	0.70	0.65	0.65	0.58	0.50	0.57	0.58	0.56	7.90
Kano	0.56	0.60	0.74	0.69	0.63	0.61	0.57	0.50	0.49	0.60	0.55	0.57	7.11
Port Harcourt	0.67	0.63	0.72	0.65	0.66	0.62	0.62	0.60	0.62	0.71	0.64	0.72	7.86
Yola	0.37	0.38	0.49	0.42	0.34	0.35	0.33	0.35	0.35	0.45	0.40	0.36	4.58
<b>All DisCos</b>	<b>9.34</b>	<b>9.00</b>	<b>10.43</b>	<b>9.26</b>	<b>9.14</b>	<b>8.49</b>	<b>8.80</b>	<b>8.66</b>	<b>8.10</b>	<b>9.10</b>	<b>9.12</b>	<b>9.60</b>	<b>109.03</b>
Ajaokuta Steel	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.01	-	-	0.02	0.01	0.15
NIGELEC	0.24	0.25	0.34	0.36	0.36	0.34	0.37	0.36	0.40	0.41	0.35	0.27	4.05
CEB (SAKETE)	0.55	0.46	0.46	0.44	0.35	0.31	0.29	0.03	0.05	-	-	-	2.95
	<b>Remittance (₦ Billion)</b>												
Abuja	0.30	0.30	0.30	0.50	1.24	1.20	1.22	1.14	1.11	1.25	1.28	1.26	11.08
Benin	0.33	0.32	0.33	0.34	0.78	0.67	0.74	0.67	0.63	0.70	0.75	0.81	7.09
Eko	0.78	0.77	0.90	0.73	1.09	0.99	1.09	1.16	1.04	1.09	1.17	1.21	12.02
Enugu	0.20	0.20	0.20	0.30	0.74	0.70	0.70	0.74	0.68	0.76	0.74	0.79	6.76
Ibadan	0.38	0.36	0.38	0.47	1.17	1.09	1.21	1.23	1.08	1.21	1.26	1.38	11.24
Ikeja	0.72	0.69	0.82	0.71	1.38	1.21	1.25	1.27	1.20	1.30	1.33	1.46	13.35
Jos	0.05	0.05	0.05	0.08	0.40	0.40	0.41	0.41	0.40	0.45	0.43	0.46	3.58
Kaduna	0.32	0.18	0.20	0.20	0.70	0.33	0.98	0.58	0.50	0.57	0.58	0.56	5.70
Kano	0.10	0.10	0.10	0.10	0.32	0.61	0.88	0.50	0.49	0.60	0.55	0.57	4.92
Port Harcourt	0.14	0.16	0.14	0.15	0.66	0.62	0.62	0.60	0.55	0.72	0.65	0.72	5.74
Yola	0.22	0.28	0.24	0.21	0.34	0.35	0.33	0.35	0.35	0.45	0.40	0.36	3.89
<b>All DisCos</b>	<b>3.54</b>	<b>3.41</b>	<b>3.67</b>	<b>3.79</b>	<b>8.82</b>	<b>8.16</b>	<b>9.45</b>	<b>8.66</b>	<b>8.03</b>	<b>9.11</b>	<b>9.13</b>	<b>9.60</b>	<b>85.36</b>
Ajaokuta Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NIGELEC*	0.26	0.14	0.33	0.00	0.27	0.34	0.00	0.24	0.34	0.00	0.12	0.43	2.47
CEB*	2.02	0.50	0.11	0.64	1.59	1.03	0.39	0.78	0.87	0.24	0.20	2.00	10.36
	<b>Remittance Performance (%)</b>												
Abuja	23.5	24.8	19.7	35.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	73.3
Benin	36.5	36.5	35.5	40.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	76.0
Eko	70.0	70.0	70.0	70.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	89.8
Enugu	24.5	27.0	22.8	37.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	74.3
Ibadan	32.0	32.0	32.0	42.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	78.7
Ikeja	60.0	60.0	60.0	60.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.2
Jos	11.3	11.7	11.3	20.0	100.0	99.4	100.6	100.0	100.0	100.0	100.0	100.0	70.6
Kaduna	39.9	23.4	23.3	29.8	100.0	50.0	149.9	100.0	100.0	100.0	100.0	100.0	72.2
Kano	18.0	16.7	13.5	14.5	50.0	100.0	155.8	100.0	100.0	100.0	100.0	100.0	69.3
Port Harcourt	20.8	25.0	20.0	23.0	100.0	100.0	100.0	100.0	89.0	101.9	102.1	100.0	72.9
Yola	60.0	75.0	50.0	50.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	84.9
<b>All DisCos</b>	<b>37.9</b>	<b>37.8</b>	<b>35.2</b>	<b>40.9</b>	<b>96.5</b>	<b>96.1</b>	<b>107.3</b>	<b>100.0</b>	<b>99.2</b>	<b>100.1</b>	<b>100.1</b>	<b>100.0</b>	<b>78.3</b>
Ajaokuta Steel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0
NIGELEC*	108.5	53.8	95.0	0.0	74.2	101.5	0.0	65.3	86.4	0.0	34.7	160.4	60.9
CEB*	367.9	110.6	23.0	144.4	450.7	336.2	133.3	2535.3	1608.6	-	-	-	351.3

Notes of the table:

- DisCos, NBET, CEB and NIGELEC are electricity Distribution Companies, Nigeria Bulk Electricity Trader, Beninois Electricity Community and Nigerien Electricity Society respectively; ₦Billion is billions of Nigeria Currency
- \* indicates the values in the rows for NIGELEC and CEB (SAKETE) are different from those reported in 2019/Q1-Q3 quarterly reports due to adjustment for omission detected; and where remittance performance is greater than 100%, it also indicates payment covers outstanding debts.

Table IV: Monthly DisCos Invoices &amp; Remittances to NBET in 2019

DisCos	2019/Q1:			2019/Q2:			2019/Q3:			2019/Q4:			Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	<b>Invoice (₦ Billion)</b>												
Abuja	7.63	6.85	7.97	7.94	7.31	6.71	7.17	6.98	6.79	6.87	7.50	8.15	87.88
Benin	5.39	5.02	4.85	4.74	4.64	3.78	4.37	4.10	3.87	3.86	4.38	5.28	54.28
Eko	6.68	6.20	6.70	5.85	6.45	5.55	6.38	7.09	6.33	6.03	6.87	7.87	77.99
Enugu	4.88	4.20	4.58	4.48	4.37	3.91	4.11	4.51	4.17	4.21	4.34	5.16	52.94
Ibadan	7.03	6.44	6.27	6.28	6.89	6.10	7.11	7.52	6.56	6.66	7.38	8.95	83.21
Ikeja	7.17	6.50	7.19	6.58	8.19	6.82	7.37	7.82	7.33	7.19	7.83	9.52	89.52
Jos	2.65	2.43	2.31	2.23	2.33	2.27	2.40	2.49	2.45	2.45	2.50	2.96	29.46
Kaduna	4.81	4.27	4.48	3.74	4.11	3.66	3.83	3.56	3.02	3.15	3.40	3.65	45.69
Kano	3.33	3.40	3.88	3.85	3.74	3.41	3.33	3.07	2.97	3.33	3.25	3.71	41.27
Port Harcourt	4.02	3.60	3.76	3.64	3.90	3.45	3.65	3.70	3.77	3.89	3.73	4.68	45.77
Yola	2.19	2.12	2.53	2.31	2.03	1.93	1.95	2.16	2.14	2.47	2.34	2.32	26.49
<b>All DisCos</b>	<b>55.8</b>	<b>51.0</b>	<b>54.5</b>	<b>51.6</b>	<b>54.0</b>	<b>47.6</b>	<b>51.7</b>	<b>53.0</b>	<b>49.4</b>	<b>50.1</b>	<b>53.5</b>	<b>62.3</b>	<b>634.5</b>
Ajaokuta Steel	0.09	0.08	0.09	0.09	0.09	0.10	0.10	-	-	-	-	-	0.63
NIGELEEC	0.62	0.67	0.88	0.87	0.93	0.83	0.90	0.95	0.99	1.03	-	-	8.69
CEB	3.06	2.64	2.57	2.46	1.92	1.68	1.55	-	0.09	-	-	-	15.97
	<b>Remittance (₦ Billion)</b>												
Abuja	1.80	2.20	2.50	3.00	2.50	2.00	4.73	3.49	3.06	3.09	3.37	3.24	34.98
Benin	1.21	1.21	1.21	1.16	1.14	0.76	1.87	1.61	0.34	1.17	1.18	1.26	14.10
Eko	2.34	2.48	2.68	2.34	2.26	1.83	2.90	3.22	2.87	2.74	3.12	3.15	31.92
Enugu	1.50	1.70	1.10	1.50	1.20	0.30	1.30	0.80	0.84	0.85	0.87	0.50	12.45
Ibadan	2.04	2.13	2.20	2.32	1.38	0.80	1.86	1.97	2.12	1.75	1.93	2.25	22.74
Ikeja	2.51	2.07	2.87	2.18	2.65	2.24	3.42	3.29	3.15	3.02	3.29	3.67	34.37
Jos	0.25	0.25	0.20	0.23	0.27	0.00	0.15	0.15	0.15	0.15	0.15	0.18	2.12
Kaduna	0.40	0.60	1.00	0.56	0.40	0.00	0.97	1.14	0.88	0.57	0.41	0.00	6.92
Kano	0.45	0.54	1.13	0.77	0.50	0.35	1.40	1.53	1.51	1.10	0.93	0.00	10.20
Port Harcourt	0.62	0.75	1.31	0.70	0.70	0.34	0.77	0.78	0.79	0.41	0.39	0.98	8.55
Yola	0.26	0.32	0.25	0.28	0.20	0.19	0.25	0.28	0.28	0.32	0.05	0.30	2.99
<b>All DisCos</b>	<b>13.4</b>	<b>14.2</b>	<b>16.4</b>	<b>15.0</b>	<b>13.2</b>	<b>8.8</b>	<b>19.6</b>	<b>18.3</b>	<b>16.0</b>	<b>15.2</b>	<b>15.7</b>	<b>15.5</b>	<b>181.3</b>
Ajaokuta Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NIGELEEC	0.91	0.47	1.13	0.00	0.91	1.18	0.00	0.81	1.18	0.00	0.42	1.48	8.49
CEB	6.95	1.73	0.37	2.20	5.47	3.54	1.33	2.67	2.99	0.82	0.68	6.87	35.62
	<b>Remittance Performance (%)</b>												
Abuja	23.6	32.1	31.4	37.8	34.2	29.8	66.0	50.0	45.0	45.0	45.0	39.7	39.8
Benin	22.5	24.0	24.8	24.5	24.5	20.0	42.7	39.3	8.9	30.2	26.9	23.8	26.0
Eko	35.0	40.0	40.0	40.0	35.0	33.0	45.4	45.4	45.4	45.4	45.4	40.1	40.9
Enugu	30.7	40.4	24.0	33.4	27.4	7.7	31.5	17.7	20.0	20.2	20.0	9.7	23.5
Ibadan	29.0	33.0	35.0	37.0	20.0	13.1	26.2	26.2	32.3	26.2	26.2	25.1	27.3
Ikeja	35.0	31.8	40.0	33.2	32.3	32.9	46.4	42.0	43.0	42.0	42.0	38.6	38.4
Jos	9.4	10.3	8.6	10.3	11.6	0.0	6.0	5.9	6.1	6.0	6.0	6.0	7.2
Kaduna	8.3	14.0	22.3	15.0	9.7	0.0	25.4	32.0	29.0	18.0	12.0	0.0	15.1
Kano	13.5	16.0	29.0	20.0	13.4	10.3	42.0	49.7	50.9	33.0	28.5	0.0	24.7
Port Harcourt	15.5	20.9	34.9	19.2	18.0	10.0	21.0	21.0	21.0	10.5	10.5	21.0	18.7
Yola	12.0	15.0	10.0	12.0	10.0	10.0	13.0	13.0	13.0	13.0	2.0	13.0	11.3
<b>All DisCos</b>	<b>24.0</b>	<b>27.9</b>	<b>30.2</b>	<b>29.1</b>	<b>24.4</b>	<b>18.5</b>	<b>38.0</b>	<b>34.4</b>	<b>32.4</b>	<b>30.2</b>	<b>29.3</b>	<b>25.0</b>	<b>28.6</b>
Ajaokuta Steel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	-	0.0
NIGELEEC	146.4	69.7	127.3	0.0	98.4	142.1	0.0	84.8	119.1	0.0	-	-	97.7
CEB	227.2	65.8	14.3	89.6	284.7	211.3	85.8	-	3183.7	-	-	-	223.0

Notes of the table:

1. DisCos, NBET, CEB and NIGELEEC are electricity Distribution Companies, Nigeria Bulk Electricity Trader, Beninois Electricity Community and Nigerian Electricity Society respectively; ₦ Billion is billions of Nigeria Currency
2. \* indicates the values in the rows for NIGELEEC and CEB (SAKETE) are different from those reported in 2019/Q1-Q3 quarterly reports due to adjustment for omission detected; and where remittance performance is greater than 100%, it also indicates payment covers outstanding debts.

Table V: Monthly DisCos Invoices &amp; Remittances to NBET &amp; MO in 2019

DisCos	2019/Q1:			2019/Q2:			2019/Q3:			2019/Q4:			Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Invoice (₦ Billion)</b>													
Abuja	8.90	8.06	9.50	9.37	8.55	7.90	8.39	8.12	7.90	8.12	8.77	9.41	102.99
Benin	6.29	5.91	5.78	5.59	5.42	4.45	5.11	4.77	4.51	4.56	5.12	6.10	63.61
Eko	7.80	7.29	7.98	6.89	7.55	6.54	7.47	8.25	7.37	7.12	8.04	9.08	91.37
Enugu	5.70	4.94	5.45	5.29	5.11	4.61	4.81	5.25	4.86	4.97	5.08	5.95	62.03
Ibadan	8.21	7.58	7.48	7.41	8.06	7.19	8.33	8.76	7.63	7.88	8.64	10.34	97.50
Ikeja	8.37	7.65	8.56	7.75	9.57	8.03	8.62	9.09	8.53	8.49	9.17	10.99	104.82
Jos	3.09	2.86	2.76	2.63	2.73	2.67	2.81	2.89	2.85	2.89	2.92	3.42	34.52
Kaduna	5.62	5.03	5.33	4.41	4.81	4.31	4.49	4.14	3.51	3.72	3.98	4.21	53.58
Kano	3.88	3.99	4.63	4.54	4.37	4.02	3.90	3.58	3.46	3.94	3.80	4.28	48.38
Port Harcourt	4.69	4.23	4.48	4.29	4.56	4.06	4.27	4.30	4.39	4.59	4.36	5.40	53.63
Yola	2.56	2.50	3.01	2.73	2.37	2.28	2.28	2.52	2.49	2.92	2.74	2.68	31.07
<b>All DisCos</b>	<b>65.1</b>	<b>60.0</b>	<b>65.0</b>	<b>60.9</b>	<b>63.1</b>	<b>56.1</b>	<b>60.5</b>	<b>61.7</b>	<b>57.5</b>	<b>59.2</b>	<b>62.6</b>	<b>71.8</b>	<b>743.5</b>
Ajaokuta Steel	0.10	0.09	0.11	0.10	0.11	0.11	0.11	0.01	-	-	0.02	0.01	0.78
NIGELEC	0.86	0.92	1.23	1.23	1.29	1.17	1.27	1.31	1.39	1.45	0.35	0.27	12.74
CEB	3.61	3.09	3.04	2.90	2.28	1.98	1.84	0.03	0.15	-	-	-	18.92
<b>Remittance (₦ Billion)</b>													
Abuja	2.10	2.50	2.80	3.50	3.74	3.20	5.96	4.63	4.17	4.34	4.65	4.49	46.07
Benin	1.54	1.53	1.53	1.50	1.92	1.43	2.61	2.28	0.98	1.87	1.92	2.07	21.19
Eko	3.12	3.24	3.58	3.07	3.35	2.82	3.98	4.38	3.91	3.83	4.29	4.36	43.94
Enugu	1.70	1.90	1.30	1.80	1.94	1.00	2.00	1.54	1.52	1.61	1.61	1.29	19.21
Ibadan	2.42	2.49	2.58	2.80	2.55	1.89	3.08	3.20	3.20	2.96	3.19	3.63	33.98
Ikeja	3.23	2.75	3.70	2.89	4.03	3.46	4.68	4.56	4.35	4.32	4.62	5.14	47.72
Jos	0.30	0.30	0.25	0.31	0.67	0.40	0.56	0.55	0.55	0.59	0.58	0.64	5.70
Kaduna	0.72	0.77	1.20	0.76	1.10	0.33	1.95	1.72	1.37	1.14	0.99	0.56	12.62
Kano	0.55	0.64	1.23	0.87	0.82	0.96	2.28	2.03	2.00	1.70	1.48	0.57	15.12
Port Harcourt	0.76	0.91	1.46	0.85	1.36	0.96	1.39	1.38	1.34	1.13	1.04	1.70	14.28
Yola	0.48	0.60	0.50	0.49	0.55	0.54	0.59	0.64	0.63	0.77	0.45	0.66	6.88
<b>All DisCos</b>	<b>16.9</b>	<b>17.6</b>	<b>20.1</b>	<b>18.8</b>	<b>22.0</b>	<b>17.0</b>	<b>29.1</b>	<b>26.9</b>	<b>24.0</b>	<b>24.3</b>	<b>24.8</b>	<b>25.1</b>	<b>266.7</b>
Ajaokuta Steel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NIGELEC	1.17	0.60	1.45	0.00	1.18	1.53	0.00	1.04	1.53	0.00	0.54	1.91	10.95
CEB	8.97	2.24	0.47	2.84	7.07	4.57	1.72	3.44	3.87	1.05	0.87	8.86	45.98
<b>Remittance Performance (%)</b>													
Abuja	23.6	31.0	29.5	37.4	43.7	40.4	70.9	57.0	52.7	53.5	53.0	47.8	44.7
Benin	24.5	25.9	26.5	26.9	35.4	32.1	51.1	47.9	21.7	40.9	37.5	34.0	33.3
Eko	40.0	44.5	44.8	44.6	44.4	43.1	53.3	53.1	53.1	53.8	53.3	48.1	48.1
Enugu	29.8	38.4	23.8	34.0	37.9	21.6	41.5	29.3	31.3	32.4	31.6	21.7	31.0
Ibadan	29.4	32.8	34.5	37.8	31.6	26.3	37.0	36.6	41.9	37.6	37.0	35.1	34.9
Ikeja	38.6	36.0	43.2	37.3	42.1	43.0	54.2	50.1	51.0	50.9	50.4	46.8	45.5
Jos	9.7	10.5	9.1	11.8	24.4	15.1	19.8	19.2	19.3	20.5	19.7	18.6	16.5
Kaduna	12.9	15.4	22.5	17.2	22.8	7.6	43.5	41.6	39.0	30.6	24.8	13.4	23.6
Kano	14.2	16.1	26.5	19.2	18.7	23.8	58.5	56.7	57.8	43.3	38.9	13.3	31.3
Port Harcourt	16.3	21.5	32.5	19.8	29.8	23.6	32.5	32.1	30.6	24.6	23.8	31.6	26.6
Yola	18.9	24.0	16.4	17.8	23.1	23.7	25.7	25.2	25.3	26.4	16.3	24.6	22.1
<b>All DisCos</b>	<b>26.0</b>	<b>29.4</b>	<b>31.0</b>	<b>30.9</b>	<b>34.9</b>	<b>30.3</b>	<b>48.1</b>	<b>43.6</b>	<b>41.8</b>	<b>41.0</b>	<b>39.6</b>	<b>35.0</b>	<b>35.9</b>
Ajaokuta Steel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0
NIGELEC	135.7	65.4	118.2	0.0	91.6	130.4	0.0	79.5	109.8	0.0	154.1	711.9	86.0
CEB	248.6	72.4	15.6	98.0	310.5	230.6	93.3	11253.2	2608.3	-	-	-	243.0

Notes of the table:

1. DisCos, NBET, CEB and NIGELEC are electricity Distribution Companies, Nigeria Bulk Electricity Trader, Beninois Electricity Community and Nigerien Electricity Society respectively; ₦ Billion is billions of Nigeria Currency
2. \* indicates the values in the rows for NIGELEC and CEB (SAKETE) are different from those reported in 2019/Q1-Q3 quarterly reports due to adjustment for omission detected; and where remittance performance is greater than 100%, it also indicates payment covers outstanding debts.

Table VI: Category of Complaints Received by Discos in 2019/Q4

Complaints Categories	Electricity Distribution Companies (DisCos)											All DisCos
	Abuja	Benin	Eko	Enugu	Ibadan	Ikeja	Jos	Kaduna	Kano	Port Harcourt	Yola	
Billing	2,675	3,510	6,411	11,332	2,736	9,590	1,177	1,980	2,566	5,513	745	48,235
Connection Delay	24	683	1,136	5,000	271	1,077	4	127	383	322	123	9,150
Disconnection	103	1,204	2,040	5,302	1,059	4,167	96	627	736	2,114	246	17,694
Interruption	699	1,552	1,901	6,266	1,071	5,481	2,242	3,378	351	1,783	196	24,920
Load Shedding	304	496	947	3,239	166	936	17	173	292	1,132	44	7,746
Metering	8,175	2,044	3,684	8,671	2,001	8,675	551	2,286	1,752	3,258	450	41,547
Others	6,873	660	675	4,511	174	3,335	1,403	330	114	244	105	18,424
Voltage	778	516	919	2,888	294	1,995	362	761	287	1,237	54	10,091
<b>Total</b>	<b>19,631</b>	<b>10,665</b>	<b>17,713</b>	<b>47,209</b>	<b>7,772</b>	<b>35,256</b>	<b>5,852</b>	<b>9,662</b>	<b>6,481</b>	<b>15,603</b>	<b>1,963</b>	<b>177,807</b>

Table VII: Lists and Addresses of NERC Forum Offices as December 2019

No.	Forum Office	Location	Telephone	Email
1	Abakaliki, Ebonyi State	3, Ezekuna Crescent, Off Nsugbe Street, Abakaliki Ebonyi State	09037808590	<a href="mailto:abakalikiforum@nerc.gov.ng">abakalikiforum@nerc.gov.ng</a>
2	Abuja, FCT	14, Road 131, Gwarinpa, Federal Capital Territory, Abuja	08146862225	<a href="mailto:abujaforum@nerc.gov.ng">abujaforum@nerc.gov.ng</a>
3	Asaba, Delta State	Denis Osadebe Way, Beside Mobil Filling Station, Asaba, Delta State	09062277247	<a href="mailto:asabaforum@nerc.gov.ng">asabaforum@nerc.gov.ng</a>
4	Awka, Anambra State	Plot 80, Aroma Junction Layout, Opp. CBN, Awka, Anambra State	09037808594	<a href="mailto:awkaforum@nerc.gov.ng">awkaforum@nerc.gov.ng</a>
5	Bauchi, Bauchi State	37, Old Jos Road, GRA, Bauchi, Bauchi State	09062924607	<a href="mailto:bauchiforum@nerc.gov.ng">bauchiforum@nerc.gov.ng</a>
6	Benin, Edo State	34, Akpakpava Street, Benin City, Edo State	09037808592	<a href="mailto:beninform@nerc.gov.ng">beninform@nerc.gov.ng</a>
7	Birnin Kebbi, Kebbi State	8, Ahmadu Bello Way, Opp. Kebbi State Government House, Kebbi State	09062863161	<a href="mailto:birninkebbiforum@nerc.gov.ng">birninkebbiforum@nerc.gov.ng</a>
8	Calabar, Cross Rivers State	Plot 109, MCC Road by Ibok Street, Calabar, Cross River State	09062863159	<a href="mailto:calabarforum@nerc.gov.ng">calabarforum@nerc.gov.ng</a>
9	Dutse, Jigawa State	Dutse G.R.A, Dutse, Jigawa State	07031704827	<a href="mailto:jigawaforum@nerc.gov.ng">jigawaforum@nerc.gov.ng</a>
10	Eko, Lagos State	61, Odunlami Street, Off Marina, Lagos Island, Lagos State	08106807261	<a href="mailto:ekoforum@nerc.gov.ng">ekoforum@nerc.gov.ng</a>
11	Enugu, Enugu State	John Anichukwu Close, Plot 7 Mkpokiti Pocket Layout, Enugu, Enugu State	08146862230	<a href="mailto:enuguforum@nerc.gov.ng">enuguforum@nerc.gov.ng</a>
12	Gombe, Gombe State	Government Layout GDP/2, Along Ministry of Education Road, Gombe State	08140440079	<a href="mailto:gombeforum@nerc.gov.ng">gombeforum@nerc.gov.ng</a>
13	Gusau, Zamfara State	2 Canteen Daji, J. B. Yakubu Road, Gusau, Zamfara State	09062863163	<a href="mailto:gusauforum@nerc.gov.ng">gusauforum@nerc.gov.ng</a>
14	Ibadan, Oyo State	Jibowu Street, Opp. Magara Police Station, Iyaganku, G.R.A, Ibadan, Oyo State	08146862252	<a href="mailto:ibadanforum@nerc.gov.ng">ibadanforum@nerc.gov.ng</a>
15	Ikeja, Lagos State	199, Obafemi Awolowo Way, Alausa, Ikeja, Lagos State	08106807298	<a href="mailto:ikejaforum@nerc.gov.ng">ikejaforum@nerc.gov.ng</a>
16	Ilorin, Kwara State	30, Stadium Road, Off Taiwo Road, Ilorin, Kwara State	09062924603	<a href="mailto:ilorinform@nerc.gov.ng">ilorinform@nerc.gov.ng</a>
17	Jos, Plateau State	5a, Ray-field Road, Jos, Plateau State	09037808597	<a href="mailto:josforum@nerc.gov.ng">josforum@nerc.gov.ng</a>
18	Kaduna, Kaduna State	22, Ahmadu Bello Way, Opposite NNDC Building, Kaduna, Kaduna State	08106807299	<a href="mailto:kadunaforum@nerc.gov.ng">kadunaforum@nerc.gov.ng</a>
19	Kano, Kano State	2, Miller Road, Bompai, Nasarawa G.R.A, Kano, Kano State	08146862222	<a href="mailto:kanoforum@nerc.gov.ng">kanoforum@nerc.gov.ng</a>
20	Katsina, Katsina State	7, Abuja Crescent, Off Hassan Usman Katsina Road, Katsina, Katsina State	07031704821	<a href="mailto:katsinaforum@nerc.gov.ng">katsinaforum@nerc.gov.ng</a>
21	Lafia, Nasarawa State	Nacwkye Street, Opp. Zenith Int'l School, Off Shendam Rd, Lafia, Nasarawa State	09062924599	<a href="mailto:lafiaforum@nerc.gov.ng">lafiaforum@nerc.gov.ng</a>
22	Lokoja, Kogi State	Hassan Kastina Rd, Opp. State Civil Service Commission, Zone 8 Police HQ, Lokoja, Kogi State.	09062924601	<a href="mailto:lokojaforum@nerc.gov.ng">lokojaforum@nerc.gov.ng</a>
23	Makurdi, Benue State	Hephzibah Plaza, Atom Kpera Road, Opp. Makurdi Int'l School, Benue State	09062277249	<a href="mailto:makurdiforum@nerc.gov.ng">makurdiforum@nerc.gov.ng</a>
24	Osogbo, Osun State	51, Isiaka Adeleke Way, Along Okefia-Alekuwodo Road, Osogbo, Osun State	09062924604	<a href="mailto:osogboforum@nerc.gov.ng">osogboforum@nerc.gov.ng</a>
25	Owerri, Imo State	1, C.B Anyanwu Road, Housing Area B, Exclusive Garden, Owerri, Imo State	09062277245	<a href="mailto:owerriforum@nerc.gov.ng">owerriforum@nerc.gov.ng</a>
26	Port Harcourt, Rivers State	The Vhelberg Imperial Hotel, Plot 122 & 122a, Bank Anthony Avenue, Off Ordinance Road, Port Harcourt, River State	08146862223	<a href="mailto:phforum@nerc.gov.ng">phforum@nerc.gov.ng</a>
27	Sokoto, Sokoto State	1, Garba Duba Road, Sokoto, Sokoto State	09062863157	<a href="mailto:sokotoforum@nerc.gov.ng">sokotoforum@nerc.gov.ng</a>
28	Umuahia, Abia State	House 2, Adelabu Street, Amaokwe Housing Estate, Umuahia Ibeku, Abia State	09062277251	<a href="mailto:umuahiaforum@nerc.gov.ng">umuahiaforum@nerc.gov.ng</a>
29	Uyo, Akwa Ibom State	63, Osongama Road, Off Oron/Uyo Airport Road, Uyo, Akwa Ibom State	09062863165	<a href="mailto:uyoforum@nerc.gov.ng">uyoforum@nerc.gov.ng</a>
30	Yola, Adamawa State	5, Nguroje Street, Karewa Extension, Jimeta, Yola, Adamawa State	09037808535	<a href="mailto:volaforum@nerc.gov.ng">volaforum@nerc.gov.ng</a>

Table VIII: Monthly Revenue &amp; Expenditure of the Commission, Jan. – Dec. 2019

Description	2019/Q1 (₦' Million)			2019/Q2 (₦' Million)			2019/Q3 (₦' Million)			2019/Q4 (₦' Million)			2019 (₦' Million)
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
<b>A. Revenue</b>													
Operating Levy (i.e., MC)	318.20	505.68	353.85	280.73	410.74	305.51	862.98	989.61	823.66	1,069.66	723.93	229.94	6,874.49
Other IGR	10.37	13.75	50.38	53.61	134.36	68.27	52.77	71.74	46.26	0.00	30.97	13.59	546.07
<b>Total Revenue</b>	<b>328.57</b>	<b>519.43</b>	<b>404.23</b>	<b>334.34</b>	<b>545.10</b>	<b>373.78</b>	<b>915.75</b>	<b>1,061.35</b>	<b>869.92</b>	<b>1,069.66</b>	<b>754.90</b>	<b>243.53</b>	<b>7,420.56</b>
<b>B. Expenditure</b>													
Personnel Cost	425.47	351.34	459.32	287.49	326.61	451.91	301.75	221.10	176.11	286.36	500.96	364.39	4,152.81
Regulatory Expenses	27.20	67.25	31.10	101.78	96.99	109.05	133.39	124.69	95.40	239.76	114.31	111.57	1,252.49
A&G. Maintenance	4.62	17.92	31.60	24.16	32.74	17.11	18.25	19.43	26.00	32.56	21.40	68.10	313.89
<b>Total Expenditure</b>	<b>457.29</b>	<b>436.51</b>	<b>522.02</b>	<b>413.43</b>	<b>456.34</b>	<b>578.07</b>	<b>453.39</b>	<b>365.22</b>	<b>297.51</b>	<b>558.68</b>	<b>636.67</b>	<b>544.06</b>	<b>5,719.19</b>
<b>C. Net Cash Flow (A-B)</b>	<b>(128.72)</b>	<b>82.92</b>	<b>(117.79)</b>	<b>(79.09)</b>	<b>88.76</b>	<b>(204.29)</b>	<b>462.36</b>	<b>696.13</b>	<b>572.41</b>	<b>510.98</b>	<b>118.23</b>	<b>(300.53)</b>	<b>1,701.37</b>
	As at the end of 2019/Q1			As at the end of 2019/Q2			As at the end of 2019/Q3			As at the end of 2019/Q4			
<b>Memo:</b>													
Outstanding Liabilities	(693.59)			(708.85)			(365.77)			(493.35)			(493.35)

Notes of the table: MC is Market Charges; IGR internal Generated Revenue; and A&G is admin and general



**NIGERIAN ELECTRICITY REGULATORY COMMISSION**  
PLOT 1387 | CADASTRAL ZONE A00 | CENTRAL BUSINESS DISTRICT |  
P.M.B. 136 | GARKI | ABUJA  
[www.nerc.gov.ng](http://www.nerc.gov.ng)