NIGERIAN ELECTRICITY REGULATORY COMMISSION

Electricity on Demand

QUARTERLY REPORT

FIRST QUARTER 2022

NIGERIAN ELECTRICITY REGULATORY COMMISSION

PLOT 1387| CADASTRAL ZONE A00| CENTRAL BUSINESS DISTRICT|
P.M.B. 136| GARKI| ABUJA

www.nerc.gov.ng

The Nigerian Electricity Regulatory Commission (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 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, 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 stakeholders of NESI, government agencies and corporations. Individuals can also access any particular issue freely from the Commission's Website: www.nerc.gov.ng

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

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

Table of Content

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ADR	Alternative Dispute Resolution
AEDC	Abuja Electricity Distribution Company Plc
ATC&C	Average Technical, Commercial & Collection Losses
BEDC	Benin Electricity Distribution Company Plc
CAPEX	Capital Expenditure
CCU	Customers Complaint Unit
CEET	Compagnie Energie Electrique du Togo
CTC	Competition Transaction Charge
DisCos	Distribution Companies
DSOs	Distribution System Operators
ECR	Eligible Customer Regulations
EEDC	Enugu Electricity Distribution Company Plc
EKEDC	Eko Electricity Distribution Company Plc
EPSRA	Electric Power Sector Reform Act
GenCos	Generation Companies
GWh	Gigawatt's hour
IBEDC	Ibadan Electricity Distribution Company Plc
IEDN	Independent Electricity Distribution Network
IE	Ikeja Electric Plc
JEDC	Jos Electricity Distribution Company Plc
KEDC	Kaduna Electricity Distribution Company Plc
KEDCO	Kano Electricity Distribution Company Plc
kWh	Kilowatt-hour
MAP	Meter Assets Provider
MO	Market Operator
MW	Megawatts
MWh	Megawatt's hour
MYTO	Multi-Year Tariff Order
NBET	Nigerian Bulk Electricity Trading plc
NERC	Nigerian Electricity Regulatory Commission
NESI	Nigerian Electricity Supply Industry
NICE	Notices of Intention to Commence Enforcement
NIGELEC	Nigerien Electricity Society
NIPP	National Integrated Power Project
NMMP	National Mass Metering Program
PHEDC	Port Harcourt Electricity Distribution Company Plc
PP	Percentage points
SBEE	Société Béninoise d'Energie Electrique
TCN	Transmission Company of Nigeria Plc
TLF	Transmission Loss Factor
YEDC	Yola Electricity Distribution Company Plc

1. EXECUTIVE SUMMARY

1.0 SUMMARY

The Nigerian Electricity Regulatory Commission (NERC or the Commission), in line with the mandates enshrined in the Electric Power Sector Reform Act (EPSRA) 2004, continued the function of regulating the technical, operational, and commercial performance of the Nigerian Electricity Supply Industry (NESI). Through this regulatory oversight function, the Commission ensures the implementation of regulatory interventions to deliver first-rate services to electricity consumers.

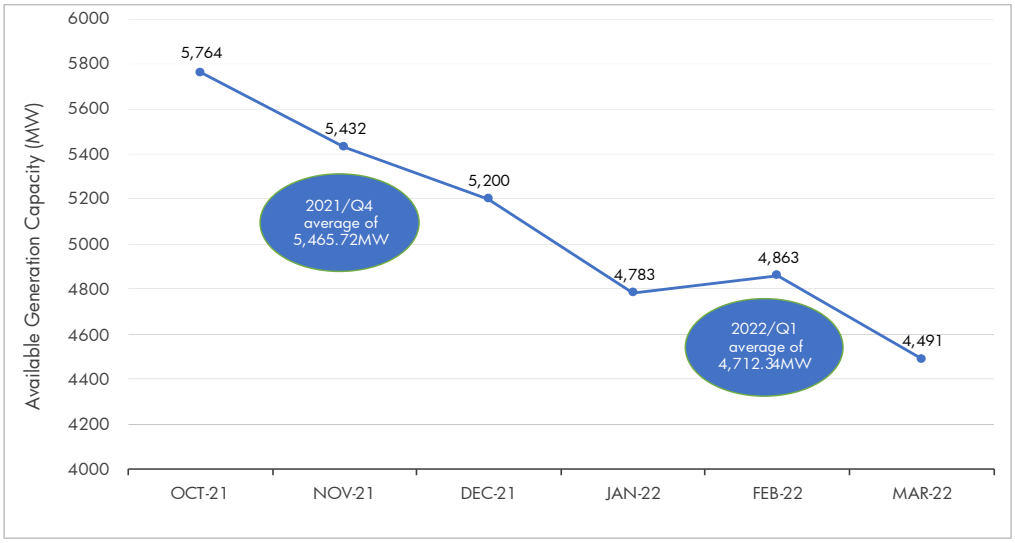
Operational Performance

The average available generation capacity in 2022/Q1 was 4,712.34 MW

The Operational performance parameters reported in 2022/Q1 covers the available generation capacity, average hourly generation, total quarterly generation, load factor and generation mix of grid-connected power plants as well as the grid frequency and voltage patterns during the quarter.

a. **Available Generation Capacity:** There were twenty-six (26) grid-connected power stations in 2022/Q1 consisting of nineteen (19) gas, four (4) hydro, two (2) steam, and one (1) gas/steam-powered plants. The plants' average available generation capacity during the quarter was 4,712.34MW representing a 13.78% decrease (-753.38MW) compared to 5,465.72MW recorded in 2021/Q4, represented in figure A.

Figure A: Available generation capacity (October2021-March 2022)

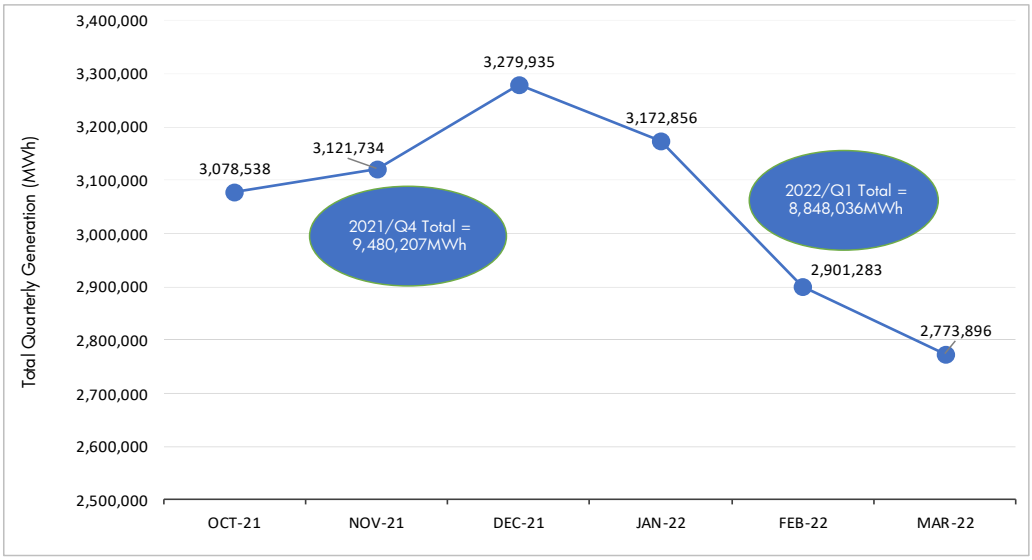


b. **Average Hourly Generation:** In 2022/Q1, the average hourly generation of all available units decreased by 190.58MWh/h (-4.44%) from 4,294.02MWh/h in 2021/Q4 to 4,103.11MWh/h. Incessant technical faults, gas constraints, as well as undulating load demand patterns have continued to affect the amount of energy generated by power plants. The reduced generation is also expected due to an overall reduction in available capacity. The Commission is working towards gradual activation of contracts to incentivise commercial and contractual discipline throughout the value chain.

The electricity generated in 2022/Q1 was 8,848.04 GWh

c. **Total Quarterly Generation:** Figure B shows that the total quarterly generation in 2022/Q1 was 8,848.04GWh. This represents a decrease of 632.17GWh (-6.67%) from 9,480.21GWh of electric energy generated in 2021/Q4.

Figure B: Total Generation (October 2021-March 2022)



d. **Grid Performance:** In 2022/Q1, the system frequency was outside the normal operating limits (+/- 0.5%) but remained within the higher and lower bound stress limits (+/- 2.5%). However, the system voltage was outside the prescribed regulatory boundaries (+/- 5%). Continuous operation at these could have detrimental impacts on the overall health and reliability of the grid in the short and long term. Therefore, the System Operator (SO) under the Transmission Company of Nigeria (TCN) needs to invest and incorporate

operational procedures that will improve its real-time visibility and ability to enforce grid discipline among the GenCos and Discos to ensure that frequency and voltage are maintained within regulatory limits.

Commercial Performance

a. **Billing Efficiency:** The total energy received by all DisCos in 2022/Q1 was 7,300.05GWh while the energy billed to the end-use customers was 5,649.21GWh indicating an average billing efficiency of 77.38%. This billing efficiency is an increment of +1.02 pp from the 76.56% recorded in 2021/Q4.

A total of ₦199.90 billion was collected by all DisCos in 2022/Q1 out of the ₦295.69 billion billed to customers

b. **Collection Efficiency:** The total revenue collected by all DisCos in 2022/Q1 was ₦199.90 billion out of ₦295.69 billion billed to customers —this corresponds to a collection efficiency of 67.36% which represents a 1.98 pp reduction compared to 2021/Q4 where the average collection efficiency was 69.34%. In monetary terms, although the billing in 2022/Q1 reduced by ₦7.41 billion (-2.44%), revenue collections reduced at a higher rate - ₦10.98 billion (-5.22%). It is imperative for DisCos to employ technologies and operational procedures to increase both their billing and collection performances to forestall long term financial challenges. These could include holistic energy accounting procedures, customer and infrastructure metering, etc…

c. **Aggregate Technical, Commercial and Collection (ATC&C) Losses:** The ATC&C loss in 2022/Q1 was 47.88% comprising of technical and commercial loss (23.44%) and collection loss (30.66%). The ATC&C loss increased by +0.97 pp compared to 2021/Q4 (46.91%). All DisCos did not meet their allowed ATC&C loss targets as specified in the MYTO —this means that all DisCos exceeded their efficient loss targets and thereby were not able to earn the revenue requirement upon which their approved tariffs for the period were set. Consistently incurring these inefficient losses could prevent the DisCos from meeting their upstream market obligations and have adverse effects on their long term financial positions.

d. **Market remittance:** The combined invoices from NBET (MRO[1] adjusted) and MO to DisCos in 2022/Q1 was ₦205.63 billion split as follows: I) generation costs - ₦164.86 billion; II) transmission and administrative services - ₦40.77 billion. Out of this amount, the DisCos collectively remitted a total sum of ₦135.69 billion (₦109.96 billion for NBET and ₦25.73 billion for MO) with an outstanding balance of ₦69.94 billion; this corresponds to a remittance performance of 65.99% during the quarter. Poor remittance is a direct consequence of the DisCos recording higher than allowed ATC&C performance as established above.

i. **Remittance to NBET:** Out of the total invoice of ₦203.13 billion issued by NBET to DisCos for energy generation costs, it was expected to receive ₦164.86 billion under the MRO derived from the allowed tariff; this means the government is responsible for covering the difference in form of subsidy to energy consumers (₦35.27 billion). However, NBET received only ₦109.96 billion during the quarter. Overall, the total DisCo remittance performance to NBET was 66.70% of the expected MRO for 2022/Q1 compared to 68.34% (₦109.45 billion remitted against an MRT adjusted invoice of ₦160.13 billion) in 2021/Q4.

ii. **Remittance to MO:** The total invoice from MO to DisCos in 2022/Q1 for which a 100% remittance is expected was ₦40.77 billion. However, only ₦25.73 billion was received across all the DisCos, meaning that the remittance performance to MO for the quarter was 63.12%. This represents a 15.47 pp decrease compared to 78.59% (₦39.75 billion remitted against an invoice of ₦50.58 billion) recorded in 2021/Q4.

No remittance was made by Ajaokuta Steel Company and Odukpani-CEET in respect of invoices issued to them by MO and NBET in 2022/Q1

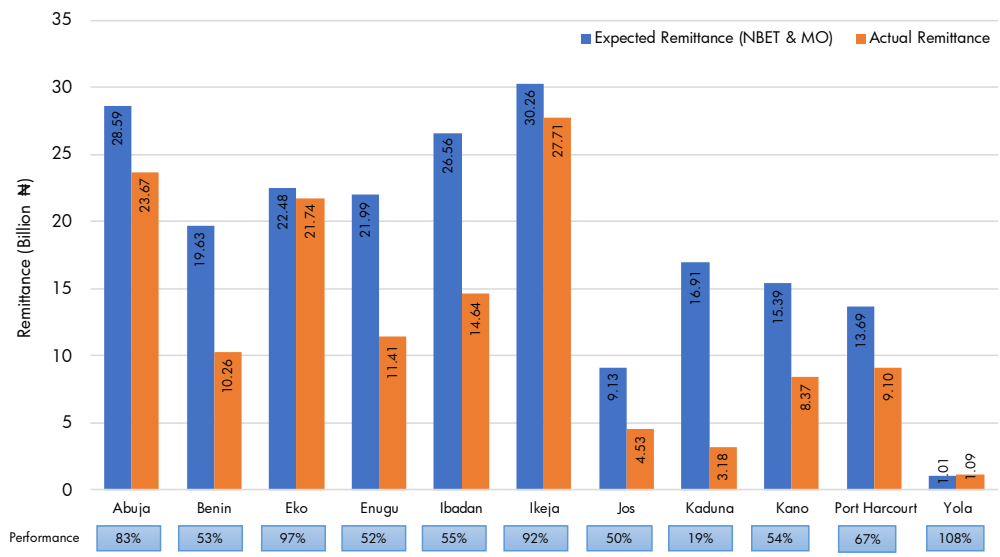
iii. **Remittance by Special/International Customers:** In 2022/Q1, no remittance was made by Ajaokuta Steel Company for invoices of ₦391.65 million and ₦69.45 million issued to it by NBET and MO respectively. During the same period, bilateral customers; Paras-SBEE, Transcorp-SBEE, and Mainstream-NIGERLEC received invoices of $2.72 million, $2.74 million and $4.61 million from MO and each remitted $2.72 million (100%), $2.74

[1]Minimum Remittance Threshold (MRT) is the portion of the remittance a DisCo is obligated to cover based on the allowed tariff as determined by the Commission in line with the MYTO. The obligation to pay the MRT is issued in the Commission's Minimum Remittance Order (MRO) to Discos

million (100%), and $4.52 million (98%) respectively. Odukpani-CEET received an invoice of $3.42 million from MO during the period but no payment was made by this customer. The non-settlement of market obligations by this category of market participants should push MO and NBET to activate relevant safeguards for remittance shortfalls.

The Commission granted a total of eighty-six (86) licenses and permits in 2022/Q1

Figure C: DisCo invoices and remittances in 2022/Q1



Regulatory Functions

a. Licensing and Permits: In 2022/Q1, the Commission approved the issuance of eleven (11) new generation licenses, renewal of two (2) existing licenses and transfer of one (1) on-grid generation license. The Commission also approved forty-one (41) mini-grid registration/permits and granted an aggregate capacity of 186.06MW captive power generation permits to seven (7) new companies. Twelve (12) Metering Service Providers (MSP) consisting of eight (8) meter installers, three (3) meter manufacturers and one (1) meter importer, were also approved by the Commission in 2022/Q1.

b. 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, during the quarter,

the Commission continued with enforcement actions brought forward from the preceding quarters against some licensees for violations of rules and infractions.

Consumer Affairs

In March 2022, town hall/customer complaints resolution meetings were held in Benin

a. Consumer Education and Enlightenment: To ensure continuous education of customers on their rights and obligations, as well as on other general service delivery matters in the industry, the Commission continued to implement customer enlightenment programs and monitor activities of the DisCos relative to their proposed schedules for the year 2022. In addition, town hall/customer complaints resolution meetings were held in Benin during the quarter— this is one of the mechanisms put in place by the Commission to enlighten customers on the activities of the Commission as well as ensure swift complaints resolution.

A total of 85,510 meters were installed in 2022/Q1

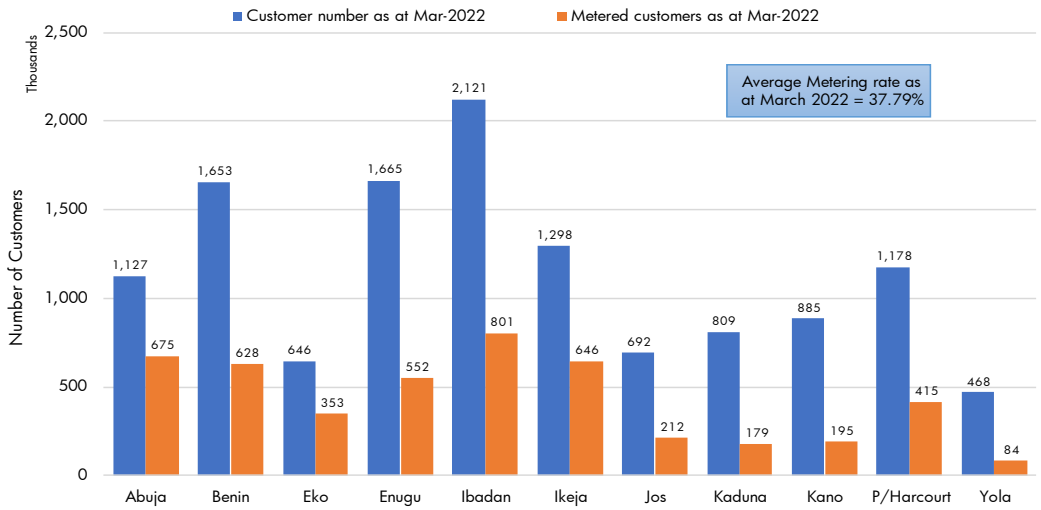
b. Metering: The huge metering gap for end-use customers is still a key challenge in the industry – it is estimated that of the 12,542,581 registered energy customers as at March 2022, only 4,740,114 (37.79%) have been metered. A total of 85,510 meters were installed in 2022/Q1 as compared to the 79,978 meters installed in 2021/Q4. At a macro level, quarterly meter installations have been reducing as a result of the winding down of the National Mass Metering Program (NMMP) phase 0[2]. By comparison, the net metering rate dropped from 45.40% metering as at December 2021 to 37.79% in March 2022 – this can be explained by the constant updating of DisCos customer base information as a result of ongoing customer enumeration[3].

The Commission continues to engage relevant stakeholders to ensure month-on-month increments in metering rate while instituting safeguards against overbilling of unmetered customers (by setting maximum limits to the amount of energy that may be billed to an unmetered customer during a period).

[2] The number of meter installations through the NMMP phase 0 was 158,889 in 2021/Q1, 308,016 in 2021/Q2, 279,917 in 2021/Q3, 70,676 in 2021/Q4 and 20,016 in 2022/Q1.

[3] Enumeration can change metering statistics in 2 ways – i) it can lead to a change in the count of customers; ii) it can also change the metering status of customers i.e. DisCos identifying customers that were previously classed as not having meters or having defective meters which can be removed based on the Commission's established rules.

Figure D: Status of Customer metering as at March 2022



c. Customer Complaints: In 2022/Q1, cumulatively, the DisCos received 243,387 complaints from consumers — this is 20,748 (+9.32%) more complaints than those received in 2021/Q4. In total, the DisCos resolved 230,493 complaints corresponding to a 94.70% resolution rate. Metering, billing, and service interruptions were the prevalent sources of customer complaints, accounting for more than 65% of the total complaints during the quarter. The Commission is introducing initiatives to address these category of complaints, such as the independent verification of DisCos compliance with the capping regulation that protects unmetered customers from overbilling.

In 2022/Q1, the Forum Offices resolved 70.78% of total complaints at sixty-eight (68) sittings

d. Forum Offices: As enshrined in the Commission's Customer Complaints Handling Standards and Procedure (CCHSP) Regulations, Forum panels are set up to review unresolved disputes at DisCos Complaint Handling Units (DisCos-CCU). In 2022/Q1, the Forum Offices had a total of 2,279 active complaints (inclusive of the pending 677 complaints from 2021/Q4) from customers who were dissatisfied with DisCos' decision on their lodged complaints. During the period, the Forum Panels held sixty-eight (68) sittings and resolved 1,613 (70.78%) of the complaints lodged at Forum Offices nationwide, this means 666 complaints were yet to be resolved as at the end of the quarter.

To ensure a more efficient customer complaint resolution process, the Commission continues to push for an improvement in the quality of complaint resolution at the CCU of the DisCos, the establishment of additional Forum Offices across the country as well as the creation of alternative complaint resolution channels.

Investigations have been launched into all reported accidents

e. Health & Safety: Out of the eighty-seven (87) mandatory health and safety reports expected from licensees in 2022/Q1, the Commission received a total of seventy-eight (78) reports from licensed operators compared to seventy-five (75) reports received in 2021/Q4. The Commission has initiated new processes to track licensees' compliance with the submission of statutory reports, and investigations have been launched into all reported accidents.

The total number of incidents in 2022/Q1 was 55; 18 injuries and 37 deaths compared to the 40 incidents recorded in 2021/Q4; 9 injuries and 31 deaths. The Commission has launched investigations into all the incidents and will work with all sector stakeholders to improve the overall health and safety in the NESI.

The Commission

a. **Financial Report:** The total revenue realized by the Commission in 2022/Q1 was ₦3,582.22 million representing a decrease of ₦3,575.26 million (-49.95%) from the ₦7,157.48 million realized in 2021/Q4[4]. During the same period, the total expenditure also declined by ₦1,020.89 million (-41.28%) from ₦2,473.36 million in 2021/Q4 to ₦1,452.47 million. The decrease in the revenue was substantially due to a decrease in operating levy (market charges), while the decrease in expenditure was largely due to decreased personnel costs and regulatory expenses during the quarter.

The Commission realised ₦3.58 billion as revenue and expenditure of ₦1.45 billion in 2022/Q1

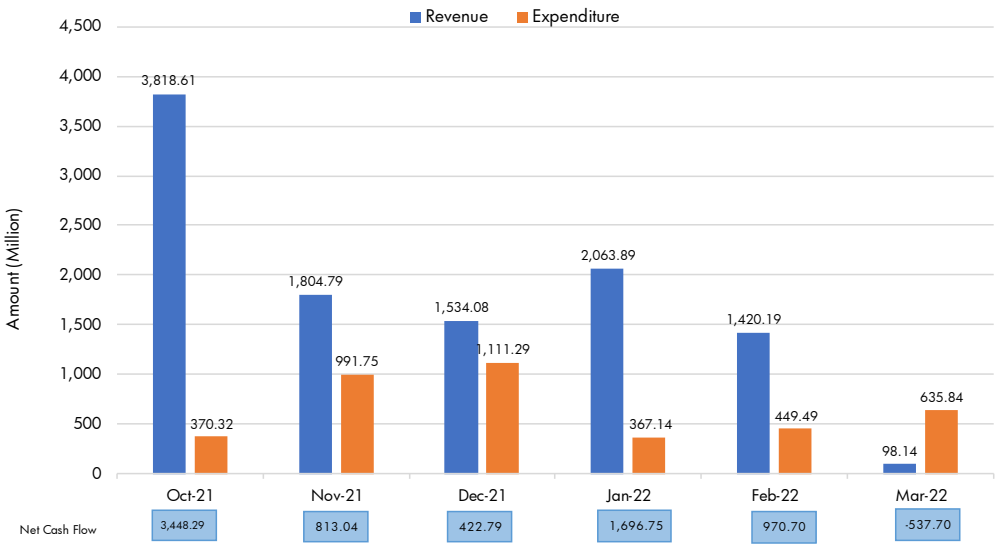
A comparison of the revenue and expenditure patterns of the Commission in 2022/Q1 shows a positive net cash flow of ₦2,129.75 million (₦4,684.12

[4] Market remittances to the MO reduced by over 35% as reported earlier – leading to the sharp drop in the Commission's revenues

million in 2021/Q4). Riding on one of its key financial obligations of proper cash flow management, the Commission has continued to record positive net cash flows every quarter.

b. Capacity Development: The Commission, in its commitment to staff safety, capacity development and business continuity, continued to leverage Information Communication Technology (ICT) in conducting and attending meetings, trainings and workshops, as well as in engaging industry operators.

Figure E: Commission's revenue and expenditure (Oct-2021 to Mar-2022)



NESI Performance Key Facts of 2022/Q1

4,712.34 MW	Average available generation capacity; 753.38 MW (-13.78%) decrease compared to 2021/Q4 – 5,465.72 MW
8,848.04 GWh	Total quarterly energy generation; 632.17 GWh (-6.67%) decrease compared to 2021/Q4 – 9,480.21 GWh
4,103.44 MWh/h	Average hourly generation; 190.58 MWh/h (-4.44%) decrease compared to 2021/Q4 – 4,294.02 MWh/h
87.02%	Load Factor; 8.47 pp increase compared to 2021/Q4 – 78.55%
26.56%	Share of hydropower plants in the energy mix; 1.39 pp decrease compared to 2021/Q4 –27.95%
8.02%	Transmission Loss Factor; 2021/Q4 = 8.20%, 0.19 pp decrease compared 8.02% in 2021/Q4. MYTO allowance = 7.50%
7,300.76 GWh	Total energy received by the DisCos; 611.29 GWh (-7.73%) decrease compared to 2021/Q4 – 7,912.05 GWh
5,649.21 GWh	Energy billed; 408.57 GWh (6.74%) decrease compared to 2021/Q4 —6,057.78 GWh
₦199.90 billion	Total revenue collected by the Discos (4.89% decrease compared to 2021/Q4 – ₦210.17 billion)
77.38%	Billing efficiency (0.82 pp increase compared to 2021/Q4 —76.56%)
67.36%	Collection efficiency (1.98 pp decrease compared to 2021/Q4 —69.34%).

47.88%	Aggregate Technical, Commercial and Collection Losses (0.97 pp increase compared to 2021/Q4 —46.91%)
₦205.63 billion	Combined invoice from NBET (MRT adjusted) and MO to DisCos (2.41% decrease compared to 2021/Q4 – ₦210.72 billion)
₦135.69 billion	Total amount remitted by DisCos (9.04% decrease compared to 2021/Q4 – ₦149.19 billion)
65.99%	Discos' average remittance performance (4.81 pp decrease compared to 2021/Q4 —70.80%)
85,510	Number of new meters installed (6.92% increase compared to 2021/Q4 – 79,978)
94.70%	Average DisCo complaint resolution rate (0.69 pp decrease compared to 2021/Q4 – 95.39%)
70.78%	Forum Office complaint resolution rate (1.43 pp increase compared to 2021/Q4 —69.35%)
37	Number of fatalities (6 more death compared to 2021/Q4 – 31)
18	Number of injuries (9 more injuries compared to 2021/Q4 —9)
₦3.59 billion	Total revenue realized by the Commission (49.95% decrease compared to 2021/Q4 – ₦7.16 billion)
₦1.45 billion	Total expenditure by the Commission (41.28% decrease compared to 2021/Q4 – ₦2.47billion)

2. STATE OF THE INDUSTRY

2.0 State of the Industry

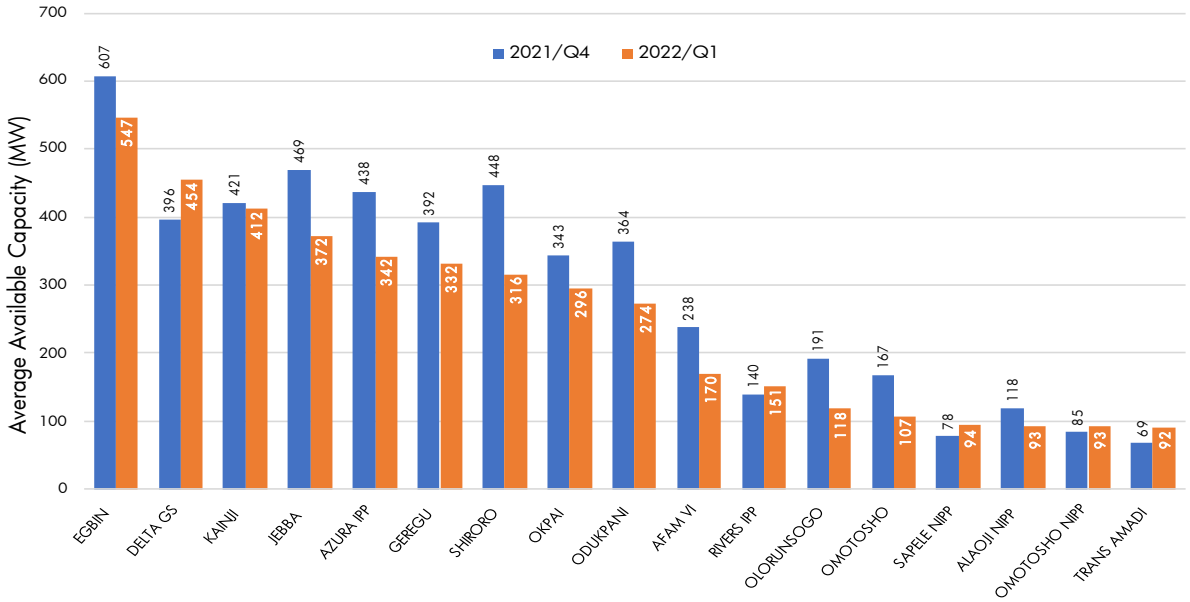
The Nigerian Electricity Regulatory Commission (NERC), in line with its statutory mandate continues to monitor the technical, operational and commercial performance of the Nigerian Electricity Supply Industry (NESI). These actions are geared towards ensuring the implementation of appropriate regulatory interventions and ultimately, optimum service delivery to consumers.

2.1. Operational Performance

Over the course of 2022/Q1, the average available generation capacity was 4,712.34MW, the average hourly generation stood at 4,103.44MW while the total quarterly generation was 8,848.04GWh from 26 generating plants across the country.

Average Available Capacity: The average available generation capacity was 4,712.34MW – a decline of 753.38MW (-13.78%) from 5,465.72MW recorded in 2021/Q4. As illustrated in Figure 1, the drop in available generation was driven largely by Geregu NIPP, Olorunsogo and Omotosho power plants that each recorded a reduction of 91.91MW (-59.99%), 72.77MW (-38.13%) and 60.32MW (-36.15%) in their average available capacity compared to 2021/Q4 respectively.

Figure 1[5]: Average Available Capacity (MW) in 2021/Q4 VS 2022/Q1



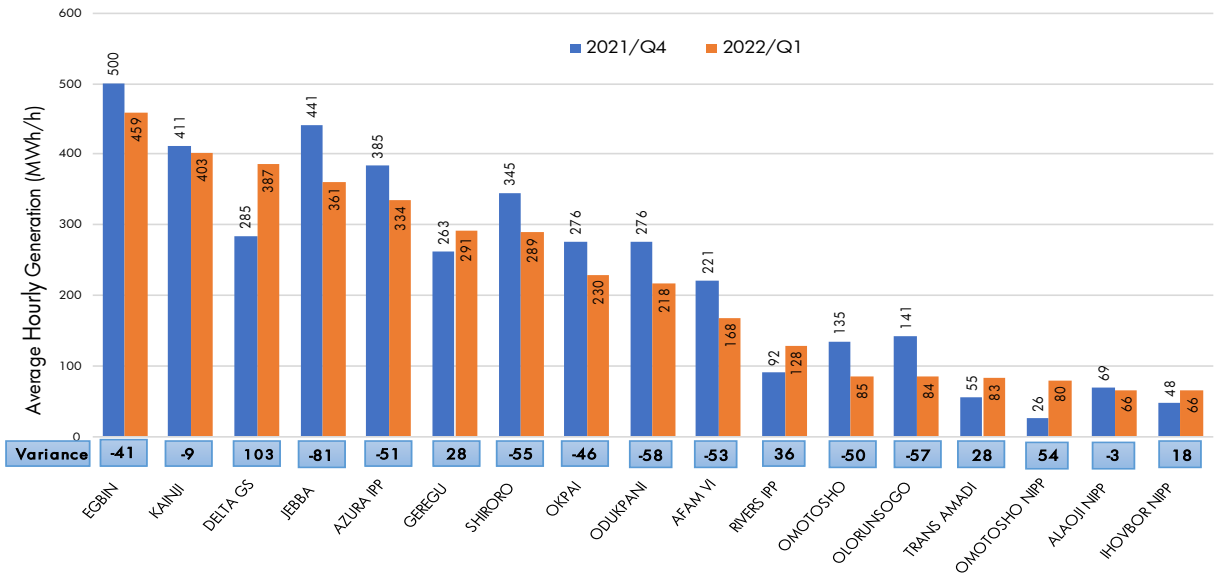
[5] Figure 1 reflects the top 17 plants, by size, which constitute 91% of the total available capacity during the quarter

Average Hourly Generation: The combined hourly output of all the units in a power plant varies in accordance with grid demand and availability of the units. A plant's average hourly output throughout the quarter is an indication of the operational health of the power plant, its technical and commercial viability during the quarter as well as overall grid demand during the period.

In 2022/Q1, the grid's average hourly generation was 4,096.31MWh/h representing a decrease of 197.71MWh/h (-4.60%) from 4,294.02MWh/h in 2021/Q4. As represented in Figure 2, the average hourly generation of Geregu NIPP, Olorunsogo gas and Omotosho plants decreased by 55.27MWh/h (-51.12%), 56.95MWh/h (-40.29%), and 49.95MWh/h (-37.07%) respectively in 2022/Q1 compared to 2021/Q4. Conversely, the average hourly generation of Dadin Kowa, Omotosho NIPP, Sapele NIPP, Trans-Amadi, Ibom and Rivers NIPP plants increased by 32.82MWh/h (+1,393.45%), 53.81MWh/h (+205.77%), 35.50MWh/h (+124.79%), 28.13MWh/h (+51.16%), 6MWh/h (+47.02%), and 36.48MWh/h (+39.77%) respectively.

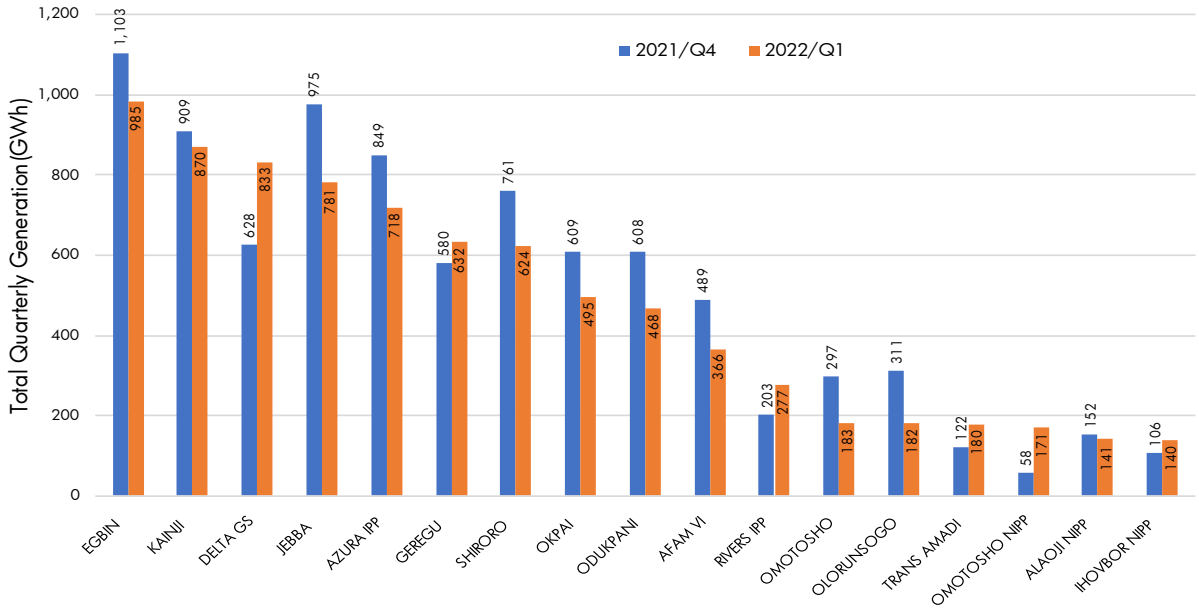
Geregu NIPP suffered low generation due to units that were down on faults (air filter clogging and generator protection faults), gas constraints and frequency response. A generating unit in Olorunsogo gas was out throughout the quarter on fault (compressor stalling) while others were limited by gas constraints. The two units at Dadinkowa were out on maintenance for most parts of 2021/Q4 but became available in 2022/Q1.

Figure 2: Average Hourly Generation (MWh/h) 2021/Q4 VS 2022/Q1



Total Quarterly Generation: The total generation in 2022/Q1 was 8,848.04GWh representing a decrease of 632.17GWh (-6.67%) from the 9,480.21GWh generated in 2021/Q4. As represented in Figure 3, the total generation of Delta, Omotosho NIPP, Sapele NIPP, Rivers NIPP, Dadin Kowa and Trans Amadi plants increased appreciably by 205.68GWh (+32.78%), 113.52GWh (+196.21%), 76.73GWh (+122.97%), 73.47GWh (+36.17%), 70.60GWh (1,343.01%) and 58.00GWh (47.71%) respectively while those of Jebba, Odukpani, Shiroro, Azura IPP, Olorunsogo, Geregu NIPP and Afam VI decreased by 193.91GWh (-19.89%), 140.16GWh (-23.04%), 137.08GWh (-18.02%), 130.53GWh (-15.37%),129.92GWh (-41.46%), 126.14GWh (-52.93%) and 123.68GWh (-25.28%) respectively relative to 2021/Q4.

Figure 3[6]: Total Quarterly Generation (GWh) in 2021/Q4 VS 2022/Q1



In 2022/Q1, the major issues that caused generation decline were faults —air filter clogging (Geregu NIPP), compressor stalling (Olorunsogo gas) and burnt generator winding (Jebba), water management, as well as gas constraints. To improve this performance, the Commission accelerated its efforts towards the implementation of the partial activation of contracts with the expectation that increased cashflow security will allow GenCos to do better Operation & Maintenance thereby improving the reliability of their units.

[6] Figure 3 reflects the top 17 plants, by size, which constitute 91% of the total available capacity during the quarter

2.2. Generation Load Factor

Load factor is defined as the amount of energy that a power plant generated over a certain period relative to its available capacity for the same period. The load factor plays a significant role in the cost of the generation per unit kWh. The higher the load factor of a plant, the better the capacity utilization and profitability as the fixed costs of generation plants are spread across more MWh dispatched.

The formula for Load Factor is represented by equation 1 below:

$$Load\ Factor = \frac{Total\ Energy\ Generated\ (MWh)}{Average\ Available\ Capacity\ (MW) \times 24hrs \times period\ (in\ days)} \quad (1)$$

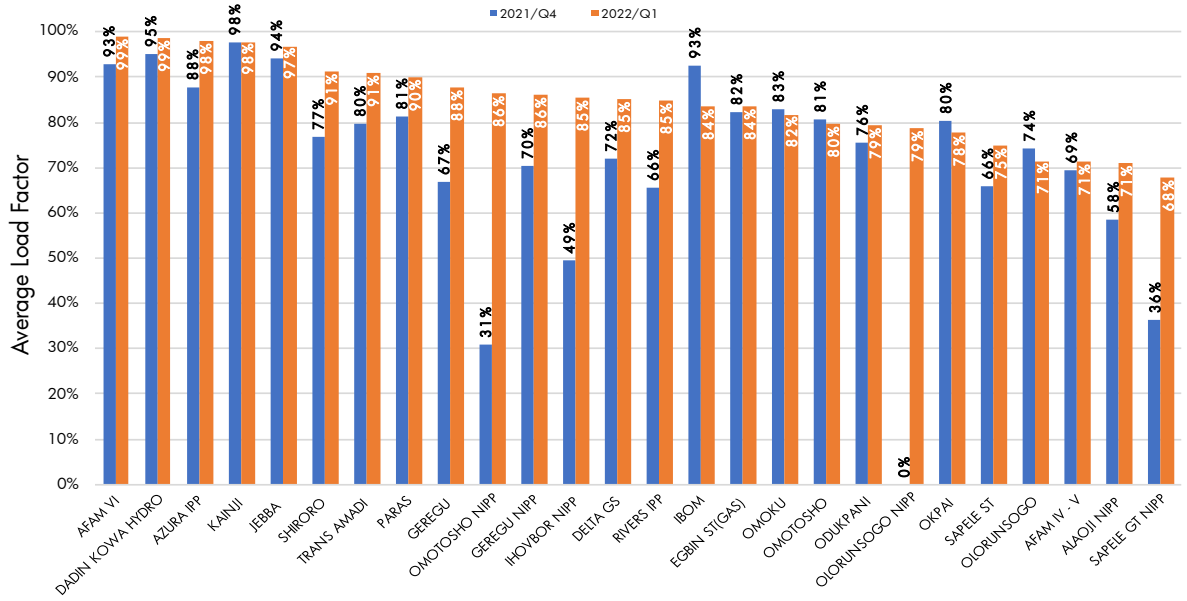
Across all the grid connected power plants, the average load factor in 2022/Q1 was 87.02%; this means that up to 12.98% of the available capacity of GenCos in this quarter was not dispatched. However, the 87.02% recorded in 2022/Q1 represents an increase of 8.47 percentage points (pp) from the 78.55% average load factor recorded in 2021/Q4; this is attributable to a decrease (-15.75%) in the availability of all plants across the 2 quarters.

As represented in Figure 4, eight (8) power plants – Afam VI (99.06%), Dadin Kowa (98.72%), Azura IPP (97.92%), Kainji (97.84%), Jebba (96.82%), Shiroro (91.19%), Trans Amadi (90.81%) and PARAS (90.03%) had over 90% of their available capacities dispatched in 2022/Q1. In 2022/Q1, the hydropower plants had an average load factor of 96.14% — this is in compliance with the Commission's Order (Order No: NERC/182/2019) which mandates that hydro plants that are the cheapest energy generation source within the mix get priority dispatch in an effort to reduce the wholesale cost of energy for consumers.

Similarly, Olorunsogo NIPP, Omotosho NIPP, Ihovbor, Sapele NIPP, Geregu, Rivers IPP, Geregu NIPP, Shiroro and Delta GS power plants experienced increased load factor performance of +78.69, +55.46, +35.91, +31.52, +20.72, +19.14, +15.66, +14.26 and +13.20 pp respectively. With regards to the plants listed above, the increased load factor performance is attributable to increased gas availability and lower incidences of reduced generation in response to system frequency. It is noteworthy that Olorunsogo NIPP was unavailable throughout 2021/Q4 and therefore had a load factor of 0%; this

explains the large change in its load factor when compared with 2022/Q1. Only Ibom, Olorunsogo, Okpai, Omoku and Omotosho power plants experienced decreased load factor performance of -8.90, -2.70, -2.62, -1.12 and -1.04 pp respectively in 2022/Q1 compared to 2021/Q4.

Figure 4: Plants Load Factor (%) in 2021/Q4 VS 2022/Q1



The Commission is committed to driving improvements in load offtake by DisCos to maximise the dispatch of available generation to increase supply to the citizens, and by so doing, improve the load factor of the available plants. To this end, the Commission will continue to supervise the implementation of the Performance Improvement Plans (PIP) aimed at reinforcing the resilience of the grid network for improved power delivery to customers. The Commission is also exploring ways of tracking load offtake by DisCos in real-time to ensure that supply to customers is only curtailed when all the available generation has been exhausted.

2.3. Generation Mix

The electricity generation mix refers to the combination of fuels used to generate electricity over a period of time. The generation mix varies from one country to another depending on availability of natural resources, government policies, environmental factors, type of generating plants installed, quantity of energy required, as well as seasonal variations. An optimal energy mix is one that is best able to balance the energy trilemma —energy cost

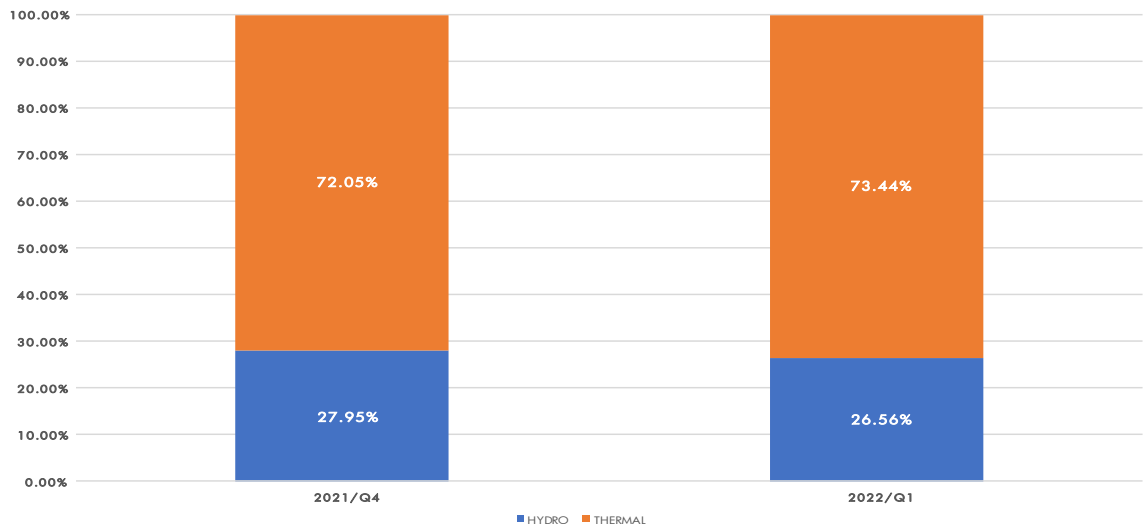
reduction, continuous energy generation (reliability), utilisation of locally available resources (energy security/independence).

The share of electricity generation by fuel sources is given by equation 2 below:

$$Share\ of\ fuel_i = \frac{Total\ electricty\ generated\ from\ fuel\ i\ (MWh)}{Total\ electricity\ generated\ from\ all\ energy\ sources\ (MWh)} \quad (2)$$

The share of electricity generation by fuel sources for 2021/Q4 and 2022/Q1 are represented in Figure 5. The share of hydro power plants in the energy mix decreased marginally from 2,649.440GWh (27.95%) in 2021/Q4 to 2,350.12GWh (26.56%) in 2022/Q1[7]. This decrease is consistent with expectations regarding Nigeria's energy mix as energy generated by hydro plants are limited by water availability in the months of January to July. The consistency of the output of hydro plants is partly due to the control mechanisms being put in place by the National Control Centre (NCC). The NCC tracks the daily water levels at all hydro plants and manages the dispatch of the plants in a way that ensures that there is sufficient water in the plants' reservoirs to allow them run during the peak of the dry season albeit with limited capacity compared to the wet season. This is critical to grid stabilisation as it allows for year-round security of supply from the hydros.

Figure 5: Share of Electricity Generated by Energy Sources in 2021/Q4 & 2022/Q1



[7] The amount of energy generated by each power plant is detailed in appendix I

The current energy mix in Nigeria means that seasonal variations in water volume and uncertainty of gas supply constitute substantial risk factors for electricity supply. While both hydro and thermal (gas) plants are relatively clean sources of electricity generation, it is critical for the Commission to monitor the generation mix in furtherance of the Government's climate change mitigation commitments. The Commission will continue to work with key stakeholders in the NESI to develop regulatory interventions and implement policies necessary for the actualization of improved energy mix. Notable among these interventions is the Commission's ongoing collaboration with the Transmission Company of Nigeria (TCN) to evaluate the National Grid's ability to integrate grid-scale renewable energy sources such as wind and solar as well as a review of relevant regulations to improve regulatory stability required by investors in grid-integrated renewables.

In the long term, it is essential that ongoing efforts by the Federal Ministry of Power with respect to the creation of an Integrated Resource Plan (IRP) are concluded, as this will provide clear guiding principles for the optimisation of NESI's generation mix. The Commission is committed to support the Ministry in finalising the IRP which will serve as a policy instrument to guide it in the evaluation of generation plant licence applications.

2.4. Grid Performance

To assess performance of the grid, the Commission focuses on four (4) Key Performance Indicators (KPI) that relate to power transmission. These are:

1. Transmission loss factor
2. Stability of grid frequency
3. Voltage fluctuation
4. Incidence of system collapse

2.4.1 Transmission Loss Factor

Transmission Loss Factor (TLF) refers to the proportion of the total energy sent out by the power plants that was lost in transmission (electrical wire losses and transmission station use) i.e., neither delivered to the DisCos nor exported to international customers. There is an inverse relationship between the TLF and the efficiency of the transmission system i.e., a decline in the TLF indicates an improvement in transmission efficiency.

The formula for TLF is represented by equation 3 below:

$$TLF = \left(1 - \frac{Energy\ delivered\ to\ all\ DisCos + Energy\ Exported}{Energy\ Sent\ out\ by\ all\ GenCos}\right) \times 100 \qquad (3)$$

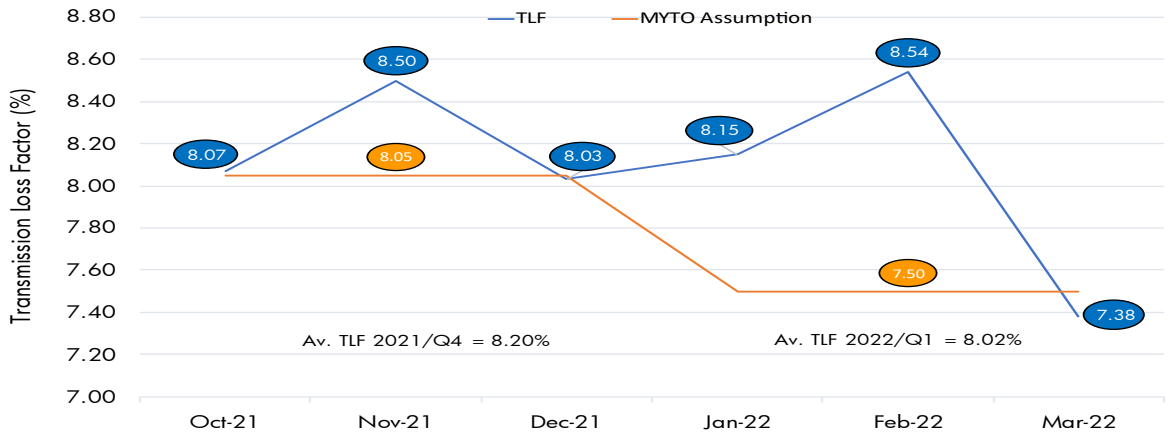
As illustrated in Figure 6, the average TLF in 2022/Q1 was 8.02%. The average TLF decreased by 0.18pp from an average of 8.20%[8] recorded in 2021/Q4, indicating a slight improvement in TCN's operational performance. An 8.02% TLF implies that for every 100 MWh of energy injected into the grid from the generation stations in 2022/Q1, 8.02MWh of the energy was dissipated in transit as transmission loss and utilised to power the transmission substations.

In view of the magnitude of network reinforcement projects being undertaken by TCN, the fact that TCN had recorded TLF as low as 6.34% (July 2021), and in a bid to reduce the inefficient costs being passed to consumers through tariffs, the Commission reduced the allowed TLF losses (TLF limit that will be included in the tariff) from 8.05% to 7.50% effective from January 2022.

From the foregoing analyses, the TCN has not been able to meet up with the allowed TLF target, which implies that its operational profitability is adversely affected since it will not be allowed to transfer the losses above the approved limits (7.5%) into the tariff. The increase in actual TLF above the MYTO assumption should serve as a call to action for the management of TCN to explore avenues for increasing operational efficiency.

In furtherance of the objective to increase TCN's operational efficiency, the Commission requested TCN to submit its Performance Improvement Plan (PIP) which should guide TCN towards implementing projects that will reduce the losses across its network.

Figure 6: Transmission Loss Factor VS MYTO Assumption January – March 2022



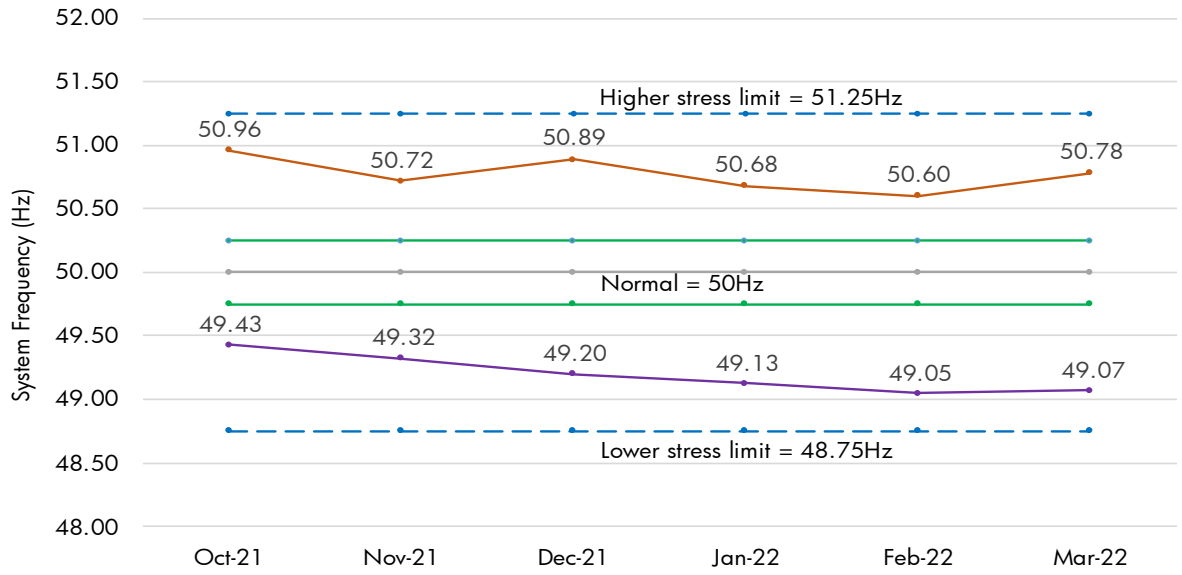
[8] Upon data reconciliation, the average load factor in 2021/Q4 was 8.20% as against the 7.77% that was earlier reported

2.4.2 Grid Frequency

Frequency is a major power quality parameter that consumers (especially industrial customers) are concerned about because of the sensitivity of their machines. Most industrial production assembly lines have machines that are frequency sensitive and would not operate outside the pre-set frequency tolerance limits. As specified in 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 (allowance of +/- 0.5% in normal circumstances), but may reach an upper bound stress limit of 51.25Hz and a lower bound stress limit of 48.75Hz in extreme circumstances (allowance of +/- 2.5% in extreme circumstances).

The system frequency pattern from October 2021 to March 2022 represented in Figure 7 shows that the system has remained within the higher and lower bound stress limits throughout the period. Nevertheless, the system frequency throughout the quarter was outside the statutory normal limits (49.75Hz < frequency < 50.25Hz) set in the grid code. There is an urgent need for the SO to improve its real time visibility of the grid network potentially leveraging alternative technologies such as Internet of Things (IoT) meters pending the completion of the Supervisory Control and Data Acquisition (SCADA) project. This will improve its ability to maintain real-time balance between load and offtake on the network to keep the frequency as close to 50Hz as possible.

Figure 7: Average Daily System Frequency from October 2021 – March 2022



It is important to the note that the reduced lower frequency performance in 2022/Q1 compared to 2021/Q4 is to be expected due to the significant reduction in available generation. When this happens, the NCC is forced to allow loads up to the system's generation limit which leaves the system exposed to risk of routinely running at frequencies below 50Hz.

As reported in the previous quarter's report, there is an urgent need for improved system coordination by the System Operator (SO) to ensure the grid frequency falls and maintained within the statutory limits to attain the envisaged quality of grid electricity and make it acceptable to all consumers. This will require improved balancing of load offtake and generation which can be enhanced by improvement in predictability of availability and load patterns of the GenCos and DisCos respectively.

Many industrial customers avoid using grid power supply for production purposes even when available due to potential impact of poor quality of power on their critical machinery. Data from DisCos indicate that industrial customers currently account for only a fraction of their annual energy sales.

To increase the patronage of grid electricity by industrial customers who constitute the highest tariff class, as well as the class with the lowest commercial losses, the Commission continues to push for improved quality of grid supply by ensuring the grid frequency remains within the statutory bounds. While the infrastructure investments required to improve the reliability and redundancy of the grid are being undertaken in the short/medium term, the Commission continues to explore options for improved contractual discipline and associated monitoring/evaluation around quality of energy generated, transported, and delivered along the National grid. DisCos are encouraged to pursue investment in systems that will provide real-time visibility into load offtake at all their feeders thereby improving the SO's ability to balance generation and load in real-time as well as helping the DisCos optimise the utilisation of the grid energy allocation.

Another detrimental impact of the inability of the grid to be operated within the limits under normal circumstances is that it will make it very difficult for Nigeria to participate hitch-free in the West African Power Pool (WAPP) which will connect the transmission system of several West African Countries. The WAPP provides both an opportunity for Nigerian GenCos to sell their power seamlessly across the border while also allowing Nigeria to import energy from its neighbours with excess capacity.

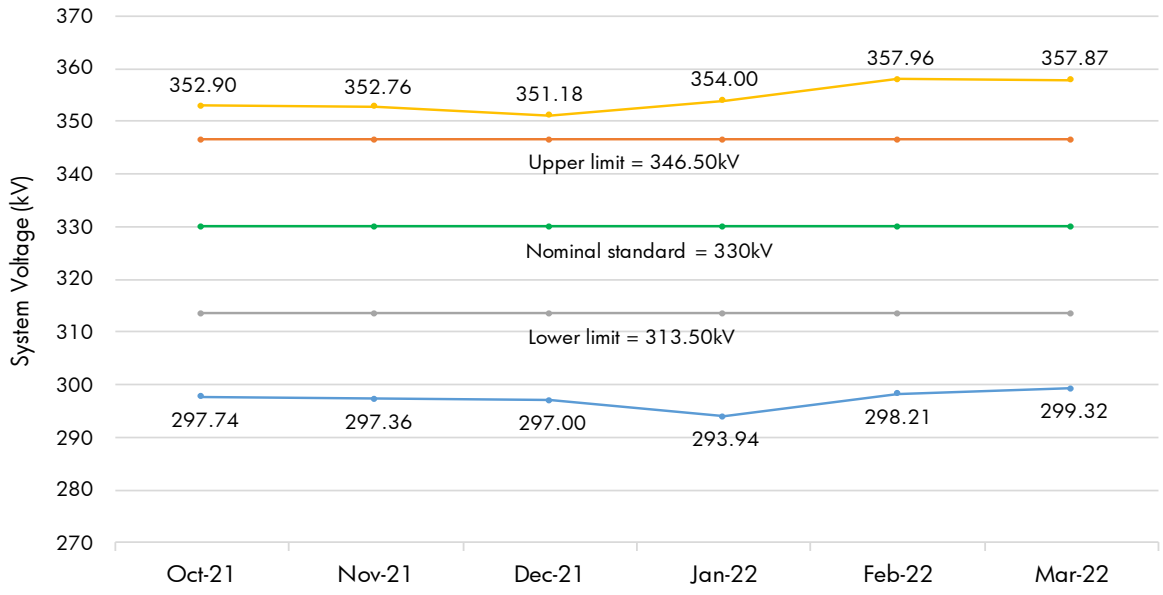
2.4.3 Voltage Fluctuation

To ensure good power quality, the Grid code specifies a nominal system voltage of 330kV with a tolerance of +/- 5% (between 313.5kV – 346.5kV). The grid voltage fluctuations which could manifest in spikes, dips, flickers, brownouts, and blackouts are detrimental to consumers and have the potential to exacerbate commercial losses. Extreme cases of voltage fluctuation especially at the level of distribution network, can cause heavy damage to industrial machine and push industrial customers to self-generation rather than depending on the distribution networks.

The system voltage pattern from October 2021 to March 2022 is represented in Figure 8. Throughout 2022 Q1, both the High and Low system voltages were outside the prescribed regulatory boundaries. The DisCos' inability to adhere to SO directives on load offtake continue to negatively affect voltage stability, while the SO's lack of full visibility of the grid system hinders its prompt response to voltage fluctuations.

To minimize the frequency and voltage fluctuations, the Commission continues to work with TCN and other relevant stakeholders to ensure that system voltage operates within the prescribed regulatory limits to ensure safe and reliable electricity supply. Strategies being pursued include the use of battery banks, voltage compensators, and embedded generation at the distribution network.

Figure 8: Monthly system Voltage from October 2021 – March 2022



2.4.4 System Collapse

The national power grid, a network of electrical transmission lines connecting generating stations to demand over the entire country, is designed to operate within certain nominal limits in terms of voltage (330kV±0.5%) and frequency (50Hz±0.5%). Whenever the grid operates outside of these stability ranges, the grid will become unstable causing power quality to decrease and a high risk of wide scale supply disruptions. These disruptions could result in the failure of a section of the grid (partial collapse), or the entire grid (total collapse) resulting in blackouts in the affected areas.

Maintaining a stable grid frequency of 50Hz requires sustained balance between the amount of electricity fed into the electricity grid and the amount of electricity off-taken by end users since it is not economically feasible to store electricity in large quantities over a long period of time. The System Operator ensures that this frequency is sustained at all times within a tolerance threshold of ±0.5%.

When supply exceeds demand, the electrical frequency increases and in extreme cases some power plants that are unable to tolerate excessive frequency variation may shut down. This causes a sudden drop in available generation on the grid which exacerbates the frequency imbalance and potentially leading to a full/partial system collapse. When demand exceeds supply, the frequency drops and unless the System Operator immediately brings in additional supply or sheds off some load, there is the risk of cascading (automatic protection systems within the generation units which forces them to shut down when the frequency is below acceptable limits) leading to a total collapse of the grid where generation drops to near 0MW.

The number of systems collapse experienced in 2021/Q4 and 2022/Q1 is presented in Table 1. In 2022/ Q1, the stability of the grid network declined with two total collapses on 14th and 15th March 2022, as against zero collapses in 2021/Q4. As reported in the daily broadcast[9] of 15th March 2022, the collapse of the 14th March 2022 was triggered by the tripping of Sapele NIPP GT1. This was followed by the tripping of Shiroro 411G4 as well as the tripping of Delta/Benin 330kV line (Circuit G3B) at both ends. Further tripping of Delta GT15 & 20 and Delta GT17-19 caused a total generation loss of 659.5MW. Subsequently, the system frequency dropped from 50.12Hz to 47.25Hz which

[9] The daily broadcast is a document prepared by the Transmission Company of Nigeria (TCN) detailing operational events of the day.

cascaded into a full system collapse. The collapse occurred at 10:40 Hrs and lasted for about 29mins before grid restoration commenced at 11:09 Hrs.

As contained in the daily broadcast of 16th March 2022, the collapse of the 15th March 2022 was triggered by the tripping of Shiroro 411G3 on emergency and protective shut down as well tripping of Shiroro 411G4 on protective shut down. The total generation loss as a result of these trippings was 300MW. This triggered a significant drop in System Frequency (50.15Hz to 47.80Hz) and consequentially a cascaded collapse of the grid. The collapse occurred at 17:10 Hrs and lasted for about 35mins before the system was restored at 17:45Hrs.

Table 1: System Collapse in 2021/Q4 VS 2022/Q1

Category	*2021/Q4*	*2022/Q1*
Number of Partial Collapses	0	0
Number of Total Collapses	0	2

One potential reason for total grid collapse could be the misalignment in the relay settings across the network. Relays are protection systems that coordinate how a system responds to frequency events. A well-set relay system will ensure that various parts of the network act in tandem when frequency fluctuations are recorded in order to mitigate widespread or cascading impact. In the absence of a well calibrated relay system, there would be instances of generators responding to frequency fluctuations before the protection systems that have been incorporated into the network are activated.

The Commission, in collaboration with the TCN, continues to intensify efforts to enhance improvements in grid stability and prevent system collapses. In this regard, the Commission shall continue to strictly monitor compliance with 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. The Commission is also exploring options for the

enforcement of under frequency[10] load shedding scheme instituted to provide an added layer of security for the grid in the case of sudden loss of generation. TCN could be required to undertake a review of the calibration of its relay settings as part of the efforts to increase grid stability.

2.5. Commercial Performance

2.5.1 Energy received and MYTO Allocation

In approving the tariffs of DisCos, there is a need to make an assumption on the quantity of energy that each DisCo will sell over the course of any given period. This is especially important because unlike some other electricity markets across the World, DisCos are only allowed to recover their entire revenue (fixed and capital costs inclusive) through energy charges. Each DisCo's expected energy offtake that is used in the tariff model is referred to as the "MYTO allocation".

A DisCo's ability to receive the MYTO allocation is conditioned on the following –
1. The availability of the required generation volume
2. TCN's ability to wheel (transmit) the electricity to where the DisCo needs it
3. DisCo's ability and/or willingness to offtake the energy

The market is expected to compensate the DisCo if its inability to offtake the forecasted allocation is due to either 1 or 2 above, while the DisCo will incur losses which cannot be recovered through tariffs (passed on to customers) if its non-offtake is due to 3.

The summary presented in Table 2 shows that the amount of energy received by DisCos at their trading points in 2022/Q1 was 7,300.76GWh. This is a decrease of 611.26GWh (-7.73%) from 7,912.05GWh recorded in 2021/Q4. The decrease is partly reflective of the decrease in available and actual generation in 2022/Q1.

[10] Under frequency load shedding allows for automatic shedding of load in the case of a sudden loss of generation to maintain grid frequency at or near the desired 50Hz threshold.

Table 2: Quarterly Energy (GWh) received and MYTO Share

DisCos	*2021/Q4*			*2022/Q1*		
	Received A	MYTO share B	Variance C=A-B	Received A	MYTO share B	Variance C=A-B
Abuja	1057	910	147	965	840	125
Benin	693	712	-19	718	657	60
Eko	927	870	57	764	803	-39
Enugu	734	712	22	746	657	89
Ibadan	1079	1029	51	899	949	-50
Ikeja	1167	1187	-20	1039	1095	-56
Jos	379	435	-56	378	402	-24
Kaduna	628	633	-5	572	584	-12
Kano	541	633	-92	500	584	-84
Port Harcourt	489	514	-25	490	475	15
Yola	217	277	-60	230	256	-26
All DisCos	7912.05	7912.05		7300.76	7300.76	

Notes of the table: DisCos are the electricity distribution companies

Since privatisation, the Multi-Year Tariff Order (MYTO) load allocation framework splits the total available generation between the DisCos in percentages[11]. The actual energy offtake by DisCos does not always conform with the MYTO load allocation and is often used to identify load rejection among DisCos.

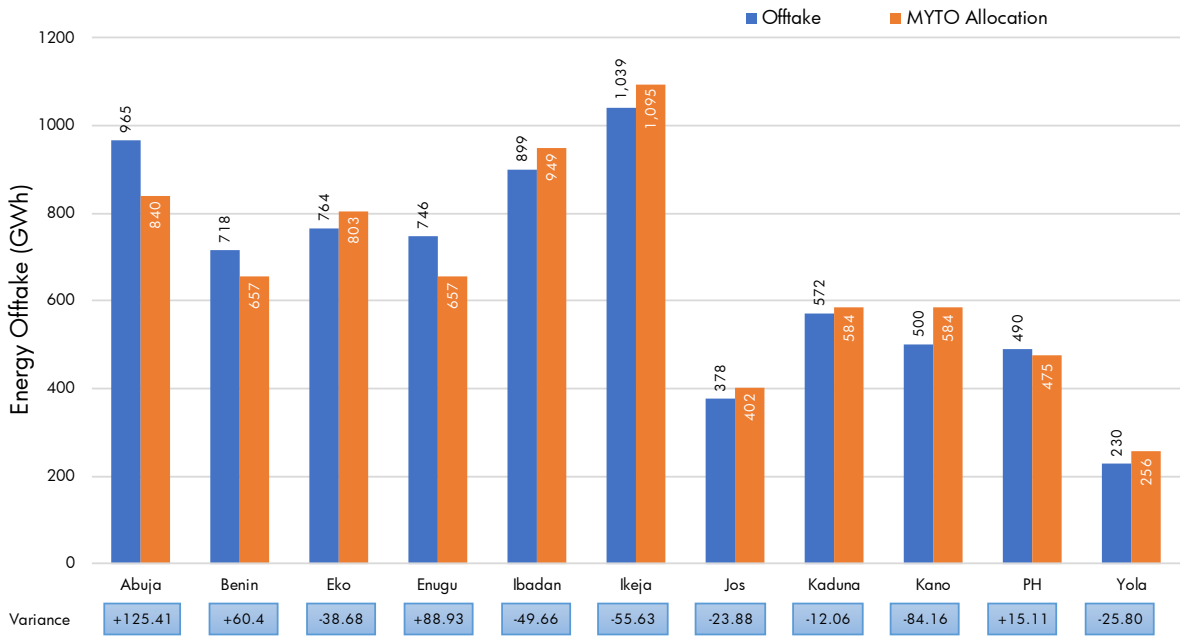
As represented in Figure 9, Eko (-38.68 GWh), Ibadan (-49.66 GWh), Ikeja (-55.63 GWh), Jos (-23.88GWh), Kaduna (-12.06GWh), Kano (-84.16GWh), and Yola (-25.80GWh) DisCos took less than their MYTO allocations in 2022/Q1, possibly due to technical limitation of their networks and/or commercially induced low load offtake during the period. Conversely, Abuja (+125.41GWh), Benin (+60.44GWh), Enugu (+88.93GWh), and Port Harcourt (+15.11GWh) DisCos took more energy than their MYTO allocations over the same period. In 2022/Q1, relative to their MYTO allocations, Abuja DisCo had the largest positive variance (125.41GWh; +14.75%) while Kano DisCo had the largest negative variance (-84GWh; -15.54%).

Any DisCo that took more than its share of the MYTO allocation will have effectively benefited from reduced wholesale energy cost because it would have only paid the capacity charge for its MYTO allocation in spite of consuming more capacity. Conversely, any DisCo that took energy below its allocation will have been punished with increase

[11] The percentages are Abuja (11.50%), Benin (9.00%), Eko (11.00%), Enugu (9.00%), Ibadan (13.00%), Ikeja (15.00%), Jos (5.50%), Kaduna (8.00%), Kano (8.00%), Port Harcourt (6.50%) and Yola (3.50%)

wholesale energy cost because it was still required to pay for the capacity which it did not take and will not be able to earn revenue.

Figure 9: Energy Off-take (GWh) by DisCos vs. MYTO Allocation in 2022/Q1



2.5.2 Energy Billed and Billing Efficiency

A certain amount of energy generated is lost before reaching the final consumers. This is because part of the energy generated from the power stations is used in-house to power station equipment, offices, and other facilities. Energy sent out (energy injected into the transmission grid) is thus the total energy generated less the power station own-use. A fraction of the injected energy is again lost in the transmission system (TLF) before it is received at the Disco's metering points and the international customers' metering points. This energy received by the DisCos is subject to further technical losses (heat along the lines/cables) before reaching the customers.

Billing Efficiency is an indicator of the proportion of energy that has been billed (including metered and unmetered sales) to customers in comparison with the total energy supplied to that area within a given period. In addition to technical losses, another reason why

The formula for billing efficiency is represented by equation 4 below:

$$Billing\ Efficiency = \left(\frac{Total\ energy\ billed\ to\ customers\ (kWh)}{Total\ energy\ reeceived\ by\ the\ Network\ (kWh)}\right) \times 100 \qquad (4)$$

DisCos are unable to record a 100% billing efficiency is their inability to identify who consumes all their energy — owing to poor customer enumeration, low metering, the presence of inaccurate meters, and energy theft (commercial loss).

Billing efficiency therefore combines technical and commercial efficiencies. For instance, a 70% billing efficiency means that for every ₦10.00 worth of electricity received by DisCos during a period, ₦3.00 worth of energy is unable to be billed by the DisCos due to reasons ranging from energy theft, poor distribution infrastructure and inadequate customer enumeration.

The summary presented in Table 3 shows that the total energy received by all DisCos in 2022/Q1 was 7,300.05GWh, the total energy billed was 5,649.21GWh and the billing efficiency was 77.38%. In 2022/Q1, the total energy billed to end users decreased by 408.57GWh (-7.23%) from the 6,057.78GWh energy billed by DisCos to the end-users in 2021/Q4. This decrease could be attributed to a 7.73% drop in total energy received by the DisCos in 2022/Q1. The billing efficiency however showed a marginal increase of 1.02 pp from the 76.56% recorded in 2021/Q4.

Table 3[12]: Energy Received and Billed by DisCos in 2021/Q4 and 2022/Q1

	Total Energy Received (GWh)		*Total Energy Billed (GWh)*		*Billing Efficiency (%)*	
DisCos	2021/Q4	2022/Q1	2021/Q4	2022/Q1	2021/Q4	2022/Q1
Abuja	1,057.00	965.00	683.00	643.00	64.62	66.63
Benin	692.81	717.50	580.09	597.39	83.73	83.26
Eko	927.07	764.40	822.97	666.39	88.77	87.18
Enugu	734.00	746.00	503.80	516.00	68.64	69.17
Ibadan	1,079.37	899.43	759.82	661.51	70.39	73.55
Ikeja	1,167.29	1,039.48	1,033.37	910.07	88.53	87.55
Jos	379.47	377.66	285.56	287.06	75.25	76.01
Kaduna	628.00	572.00	471.00	464.00	75.00	81.12
Kano	541.42	499.90	410.78	371.90	75.87	74.39
Port Harcourt	488.88	489.66	396.55	400.75	81.11	81.84
Yola	216.74	229.72	110.85	131.15	51.14	57.09
All DisCos	**7,912.05**	**7,300.76**	**6,057.78**	**5,649.21**	**76.56**	**77.38**

In 2022/Q1, Kaduna, Yola, Ibadan, and Abuja DisCos had improved billing efficiencies of 81.12% (+6.12 pp), 57.09% (+5.95 pp), 73.55% (+3.16 pp) and 66.63% (+2.01

[12] The energy received, energy billed and billing efficiency for each month in the quarter are contained in appendix II

pp) respectively when compared to 2021/Q4. Ikeja and Kano DisCos however recorded decreased billing efficiencies of 81.55% (-0.98 pp) and 74.39% (-1.48 pp) respectively compared to 2021/Q4.

In 2022/Q1, Ikeja Disco recorded the highest billing efficiency of 87.55% while Yola DisCo recorded the lowest billing efficiency of 57.09%. This indicates that Yola DisCo lost about 42.91% (98.57GWh) of the energy it received in 2022/Q1 to a combination of technical and commercial inefficiency. YEDC has consistently recorded the lowest billing efficiency for more than eight (8) consecutive quarters.

Notwithstanding the progress in most of the DisCos' billing efficiency, the Commission is committed to working with DisCos to ensure that distribution losses are significantly reduced as part of the efforts towards steering the industry to financial sustainability. This effort will hinge on improved customer enumeration by the DisCos to ensure that losses that are due to unauthorised consumption (energy theft) are minimised.

2.5.3 Revenue and Collection Efficiency

Collection efficiency is an indicator of the proportion of an amount that has been collected from customers relative to the amount invoiced to them by the DisCos. Many customers continue to default in payment of their billed amounts due to declining capacity (economic reasons) and willingness to pay (including. unsatisfactory DisCo services). This has led to mounting commercial losses recorded by DisCos.

Collection efficiency of 70% for instance implies that for every ₦10.00 worth of energy billed to customers by DisCos, approximately ₦3.00 remained unrecovered from the billed customers.

The formula for collection efficiency is represented by equation 5 below:

$$Collection\ Efficiency = \left(\frac{Total\ Revenue\ Collected\ (₦)}{Total\ Billed\ Amount\ (₦)}\right) \times 100 \qquad (5)$$

The total revenue collected by all DisCos in 2022/Q1 was ₦199.90 billion out of ₦295.69 billion billed to customers which translates to a collection efficiency of 67.36%. The total collections by all DisCos declined in 2022/Q1 by ₦10.27 billion representing a 4.89% decrease in total revenue collected as compared to 2021/Q4 (₦210.17 billion).

The summary of revenue performance for all DisCos in 2021/Q4 and 2022/Q1 is contained in Table 4. The DisCos' cumulative collection efficiency decreased by 1.98 pp from 69.34% in 2021/Q4 to 67.36% in 2022/Q1. The decrease was largely driven by Kano and Kaduna DisCos that recorded significant declines in collection efficiency by 5.39 and 3.54 pp respectively. On the contrary, Eko, Ikeja and Yola DisCos recorded increase in collection efficiency of +1.25, +1.71, and +3.37 pp respectively between 2021/Q4 and 2022/Q1. Although the amount collected by Benin and Port Harcourt DisCos increased in absolute terms, between 2021/Q4 and 2022/Q1, their collection efficiency declined by 2.20 and 1.65 pp respectively.

Table 4[13]: Revenue Performance (%) of DisCos in 2021/Q4 VS 2022/Q1

DisCos	*Total Billings* (₦'Billion)		*Revenue Collected* (₦'Billion)		*Collection* Efficiency (%)	
	2021/Q4	2022/Q1	2021/Q4	2022/Q1	2021/Q4	2022/Q1
Abuja	37.42	36.49	31.96	30.42	85.41	83.36
Benin	28.52	31.00	15.44	16.10	54.14	51.94
Eko	40.19	34.52	33.02	28.79	82.17	83.42
Enugu	27.32	27.45	18.65	18.18	68.26	66.23
Ibadan	38.23	34.80	24.76	21.84	64.77	62.77
Ikeja	47.48	44.53	42.50	40.62	89.52	91.23
Jos	15.04	16.94	6.58	7.15	43.75	42.20
Kaduna	24.97	24.15	8.62	7.49	34.53	30.99
Kano	19.82	19.02	13.36	11.79	67.38	61.98
Port Harcourt	19.07	21.03	12.62	13.57	66.18	64.53
Yola	5.05	5.78	2.66	3.24	52.63	56.00
All DisCos	303.11	295.70	210.17	199.19	69.34	67.36

To improve this performance, the Commission continued to actively track each DisCo's progress under various metering interventions – the National Mass Metering Program ("NMMP") funded through the Central Bank of Nigeria and the Meter Asset Provider ("MAP") scheme.

2.5.4 Aggregate Technical, Commercial and Collection (ATC&C) Losses

The Aggregate Technical, Commercial and Collection ("ATC&C") loss is a summation of billing losses incurred by the DisCo due to its inability to bill 100% of delivered energy to consumers (technical and commercial losses) and the collection losses arising from the DisCo's inability to collect against 100% of the invoice's issued to customers. ATC&C loss

[13] The total billing, revenue collected and billing efficiency for each month in the quarter are contained in appendix III

is a critical performance setting parameter in the MYTO that is used to determine the tariffs that DisCos are allowed to charge customers.

The MYTO makes allowance for specific ATC&C loss level targets for each DisCo (this can be referred to as the efficient losses that the DisCo is allowed to recover from customers). DisCos that can outperform their allowed ATC&C losses (i.e., a lower ATC&C loss than allowed), will earn more returns on their set tariff. Conversely, DisCos that underperform relative to their allowed ATC&C losses (i.e., a higher ATC&C loss than allowed), will be unable to earn the expected returns on its set tariffs and could risk long term financial challenges.

ATC&C losses are broken into the following 3 components:

1. *Technical Loss* - heat losses due to load flow in electrical lines and transformation loss in transformers.
2. *Commercial Loss* - due to discrepancy in meter reading, erroneous billing, unmetered consumption, or energy theft.
3. *Collection Loss* – unpaid bills.

The formula for ATC&C losses is represented by Equation 6 below:

$$ATC\&C\ Losses = [1 - (billing\ efficiency \times collection\ efficiency)] \times 100 \quad (6)$$

As contained in Table 5, the ATC&C losses in 2022/Q1 was 47.88% composed of 22.62% technical and commercial losses, and 32.64% in collection loss. This level of ATC&C losses implies that, on average, as much as ₦4.79 in every ₦10.00 worth of energy received by a DisCo was unrecovered due to a combination of inefficient distribution networks, energy theft, low revenue collection and unwillingness of customers to pay their bills.

In comparison, the ATC&C losses for 2022/Q1 increased by +0.97 pp from the 46.91% recorded in 2021/Q4. This increase was largely driven by Benin (56.75%), Kano (53.89%), Kaduna (74.86%), Enugu (54.19%), and Jos (67.92%) DisCos which had increased ATC&C losses of +2.08, +5.01, +0.76, +1.04 and +0.84 pp respectively between 2021/Q4 and 2022/Q1. The inability of most DisCos to meet their allowed loss targets means they are unable to meet revenue requirements thereby compromising their long-term financial position.

Table 5: ATC&C Losses (%) by DisCos in 2021/Q4 VS 2022/Q1

DisCos	*MYTO Target for 2022*	*Average ATC&C*	
		2021/Q4	2022/Q1
Abuja	19.27%	44.81%	44.46%
Benin	17.37%	54.67%	56.75%
Eko	14.18%	27.06%	27.27%
Enugu	11.31%	53.15%	54.19%
Ibadan	15.47%	54.41%	53.84%
Ikeja	11.37%	20.75%	20.13%
Jos	27.27%	67.08%	67.92%
Kaduna	10.65%	74.10%	74.86%
Kano	15.85%	48.88%	53.89%
Port Harcourt	21.45%	46.32%	47.19%
Yola	64.14%	73.09%	68.03%
All DisCos			
MYTO Level	20.76%		
Aggregate Technical, Commercial & Collection losses	-	46.91%	47.88%
Technical & Commercial losses	-	23.44%	22.62%
Collection losses	-	30.66%	32.64%

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

The overall ATC&C losses of 47.88% is significantly higher than the expected ATC&C losses (20.76%) provided for in the MYTO for the quarter. All DisCos recorded ATC&C losses that were above their allowed targets. There is an urgent need for all the DisCos to take emergency remedial actions through customer enumeration and increased revenue assurance to improve their ATC&C losses. Failure to resolve this will not only prevent the DisCos from being able to meet their upstream obligations, it will saddle them with too much debt and erode their equity.

As indicated in Table 5, collection losses including unpaid bills from sensitive customers, disputed bills, unsettled MDA debts, etc., continue to form a greater part of the ATC&C losses. The Commission will continue to collaborate with stakeholders to reduce incidences of unpaid MDA debts, as well as coordinate more with Federal Government and CBN on National Mass Metering Program (NMMP) to increase the penetration of prepaid meters, thereby helping revenue security and reducing collection losses.

2.5.5 Market Remittance to NBET and MO

Starting in 2013, the CBN set up an escrow mechanism as part of the conditions for the several interventions that the CBN has extended to the DisCos. Under this arrangement, all the revenues of the DisCos are escrowed. DisCos only have access to these funds after relevant deductions to meet their loan and upstream market obligations have been made. This escrow mechanism also provides visibility into the financial performance of the DisCos with respect to collections.

In June 2020, the remit of the fund manager responsible for the escrow was expanded to include the implementation of the payment waterfall framework which was designed by the Commission to increase upstream market remittance to the Nigerian Bulk Electricity Trading Plc (NBET) to cover the cost of energy taken from GenCos and to the Market Operator (MO) that is responsible for covering transmission charges payable to the Transmission Service Provider (TSP) and other administrative charges. Prompt payment of upstream invoices is critical for securing the availability of generation and transmission capacities. The waterfall regime pushes DisCos to boost their collections because most of their allowed revenues rank low in the waterfall.

In the absence of cost-reflective tariffs, the Government undertakes to cover the resultant gap (between the cost-reflective and allowed tariff) in the form of tariff shortfall funding. This funding is applied to the NBET invoices that are to be paid by DisCos. The amount to be covered by the DisCo is based on the allowed tariff determined by the Commission and set out as their Minimum Remittance Obligation (MRO) in the periodic MYTO Orders issued by the Commission. The applicable MROs (%), total NBET invoices and final obligation for each DisCos during 2022/Q1 are summarised in Table 6. A key takeaway is that due to the absence of cost reflective tariffs across all DisCos, the Government was saddled with a subsidy obligation of ₦38.27 billion over the 3 months of Q1 2022 which translates to ₦12.76 billion per month.

The summary presented in Table 7 shows that the combined MRO adjusted invoices from NBET & MO to DisCos in 2022/Q1 was ₦205.63billion (₦164.86 billion for NBET and ₦40.77 billion for MO) for generation cost as well as transmission and administrative services. Out of this amount, the DisCos collectively remitted a total of ₦135.69 billion (₦109.96 billion for NBET and ₦25.73 billion for MO), creating a total deficit of ₦69.94 billion and translating to a remittance performance of 65.99% during the quarter.

Table 6: NBET Invoice and MRT Adjusted final Obligation for 2022/Q1

DisCos	NBET Invoice (₦' billion)	MRO (%)	Final Obligation (₦'billion)
Abuja	25.15	95.29	23.96
Benin	19.09	80.99	15.45
Eko	21.79	83.10	18.11
Enugu	19.52	91.65	17.89
Ibadan	25.64	81.56	20.91
Ikeja	29.61	83.58	24.75
Jos	10.96	60.39	6.62
Kaduna	16.06	86.98	13.97
Kano	15.02	82.97	12.46
Port Harcourt	13.53	79.15	10.71
Yola	6.73	0.00	0.00
All DisCos	**203.13**		**164.86**

Table 7 : DisCos Remittances and Performance to NBET and MO in 2022/Q1

DisCos	Invoice(₦'Billion)		MRT Adjusted Invoice (₦'Billion)		Actual Remittance (₦'Billion)		Remittance Performance (%)	
	NBET	MO	NBET	MO	NBET	MO	2021/Q4[14]	2022/Q1
Abuja	25.15	4.63	23.97	4.63	19.17	4.50	77.08%	82.77%
Benin	19.09	4.17	15.46	4.17	7.82	2.44	56.43%	52.27%
Eko	21.80	4.37	18.11	4.37	18.56	3.19	124.18%	96.73%
Enugu	19.52	4.10	17.89	4.10	9.71	1.69	77.83%	51.87%
Ibadan	25.64	5.65	20.91	5.65	11.15	3.49	56.53%	55.10%
Ikeja	29.61	5.51	24.75	5.51	24.71	3.00	93.50%	91.56%
Jos	10.96	2.51	6.62	2.51	3.28	1.25	92.21%	49.57%
Kaduna	16.06	2.93	13.97	2.93	1.37	1.81	16.71%	18.80%
Kano	15.02	2.93	12.46	2.93	6.34	2.03	52.50%	54.41%
Port Harcourt	13.53	2.97	10.71	2.97	7.28	1.82	56.46%	66.53%
Yola	6.73	1.01	0.00	1.01	0.57	0.51	27.98%	108.02%
All DisCos	**203.13**	**40.77**	**164.86**	**40.77**	**107.74**	**25.73**	**70.80%**	**65.99%**

In comparison with 2021/Q4, the total invoice, remittance and remittance performance changed as follows: -₦5.08 billion (-2.41%), -₦13.49 billion (-9.04%) and -4.81 pp respectively. Figure 10 shows that Yola had remittance performance of 108%[15] (₦1.08 billion) while Eko and Ikeja DisCos also had high remittances of above 90%. Jos and

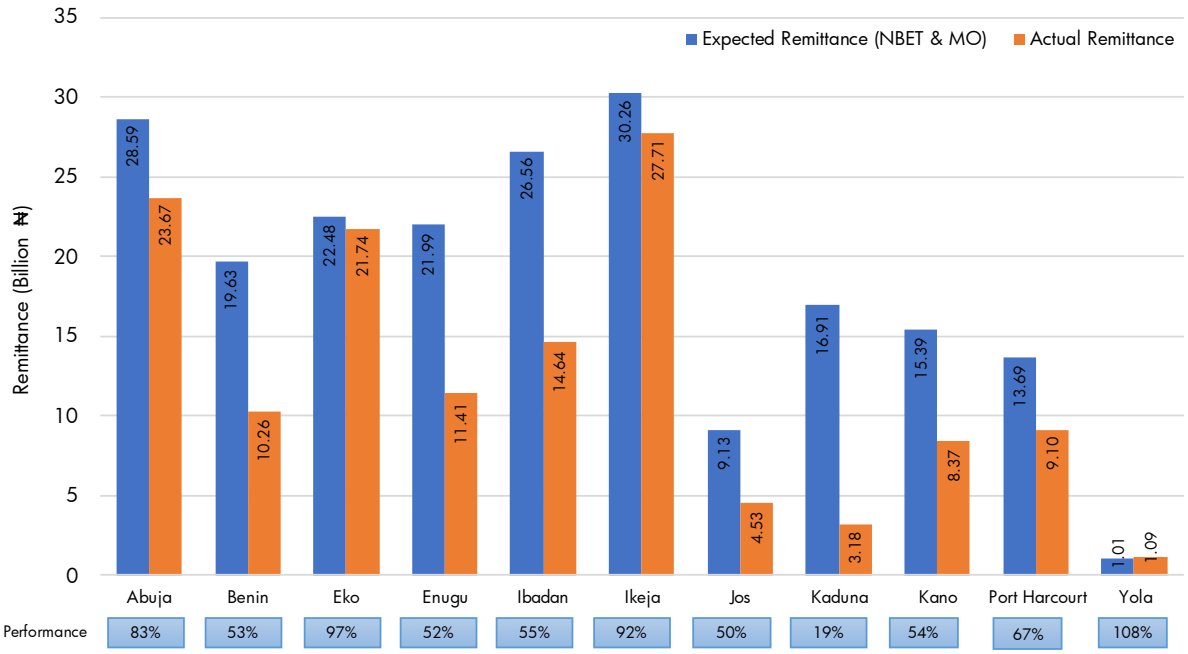
[14] 2021/Q4 numbers were extracted from the 2021/Q4 report and are contained in appendix III

[15] Beginning January 2022, as contained in the MRO, Yola's Minimum Remittance to NBET is 0%. This is as a result of ownership transition and the terms of the re-privatization agreed with the government. It is primarily responsible for the significantly high remittance performance reported by the DisCo.

Kaduna DisCos however had low remittance performances of 49.57% (₦4.53 billion) and 18.80% (₦3.18 billion) respectively.

It is noteworthy to note that there is an urgent need for all the DisCos to implement new strategies to increase their collections in order to improve their remittance performance. If this is not done, they will be saddled with too much market shortfall debts which will compromise their equity position.

Figure 10: Market Invoice and Remittance by DisCos in 2022/Q1

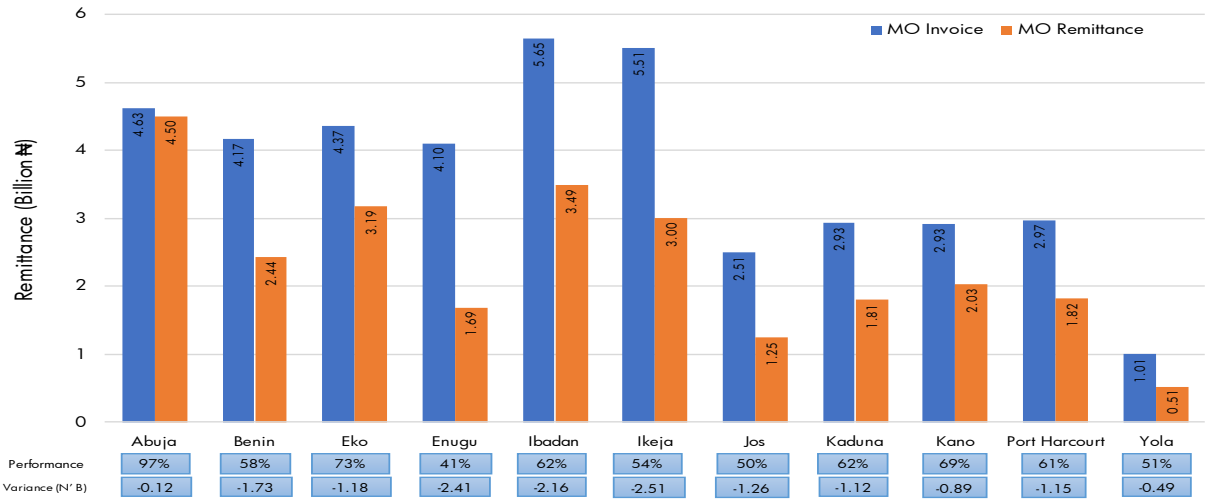


2.5.6 Market Remittance to MO

Figure 11 shows that in 2022/Q1, the average remittance performance to the MO was 63.12% compared to 78.59% in 2021/Q4. Abuja had 97.31% remittance performance to MO (₦4.50billion against invoice of N4.63billion). Enugu, Jos, and Yola DisCos had low remittances of 41.29% (1.69 billion), 49.76% (1.25 billion) and 51.04% (0.51 billion). Compared to 2021/Q4, all DisCos except Benin, Kaduna, Kano, Ibadan, and Yola Discos had improved remittances to the MO. Kaduna DisCo had the largest increase (+₦1.80billion, +45.08 pp) in remittance while Abuja DisCo had the largest decrease in remittance (- ₦5.08 billion, -64.57 pp)[16] to the MO between 2021/Q4 and 2022/Q1.

[16] Abuja's remittance performance to MO in 2021/Q4 and 2022/Q1 were 161.88% and 97.31% respectively. The overpayment in 2021/Q4 was done to cover for deficits from previous quarters i.e. 2021/Q3 and 2021/Q2.

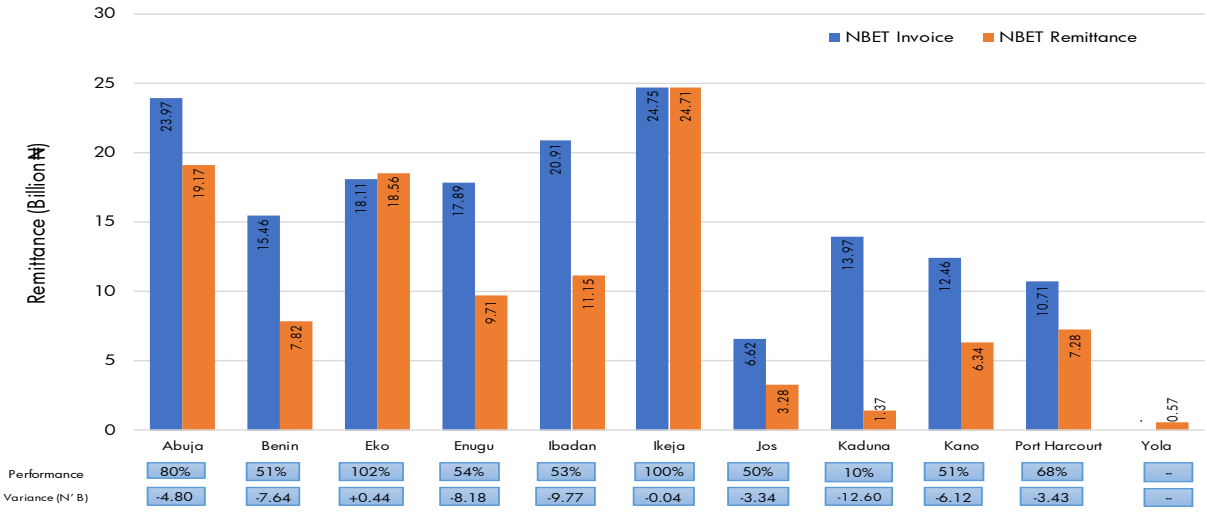
Figure 11[17]: DisCos Remittance Performances to MO in 2022/Q1



2.5.7 Market Remittance to NBET

Figure 12 shows that the average remittance performance to NBET in 2022/Q1 was 66.70% compared to 68.34% in 2021/Q4 (-1.64 pp change). Eko Disco had a notable 102.45% remittance amounting to ₦18.56 billion (which could be attributed to a retroactive review of MRT or payment of amounts outstanding from previous quarters), while Yola and Kaduna had 8.86% (₦0.57 billion) and 9.79% (₦1.37 billion) respectively.

Figure 12[18]: DisCos Remittance Performances to NBET in 2022/Q1



[17] Monthly Disco invoices, remittances and performances to the MO are contained in appendix IV
[18] Monthly Disco invoices, remittances and performances to NBET are contained in appendix V

Compared to the remittance performance to NBET in 2021/Q4, Abuja, and Port Harcourt DisCos had significantly improved remittance performances of +24.97 and +13.61 pp corresponding to ₦19.17 billion, and ₦7.29 billion respectively, while Jos Disco decreased by -51.07 pp amounting to -₦3.28 billion. Low remittances have continued to adversely affect the ability of NBET to honour its financial obligations to GenCos while service providers struggle with paucity of funds.

In recognition of the importance of improving market remittances to sustain the operations of the sector, the Commission continues to support DisCos with initiatives on revenue growth. The introduction of the SBT and DisCos' ability to migrate customers upwards by increasing the quality of supply provides a clear pathway for DisCos to boost their revenues without absolute tariff increases. The ongoing infrastructure investments and metering interventions being undertaken by DisCos will increase the volume of reliable energy supplied to customers and revenue assurance which should translate into increased collections and market remittances.

To enforce market discipline and compliance with payment obligations, the Commission has ordered NBET to exercise its contractual right on the payment security cover provided by DisCos in accordance with the terms of its vesting contract with the DisCos.

2.5.8 Remittance by Special and International Customers

The summary presented in Table 8 indicates that no payment was made by the special customer (Ajaokuta Steel Co. Ltd and the host community) in respect of the ₦0.38 billion and ₦0.07 billion market invoices issued by NBET and MO respectively in 2022/Q1. In the same period, bilateral customers; Paras-SBEE, Transcorp-SBEE, and Mainstream-NIGERLEC received invoices of $2.72 million, $2.74 million and $4.61 million from the MO and each remitted $2.72 million (100%), $2.74 million (100%), and $4.52 million (98%) respectively. Odukpani-CEET received an invoice of $3.42 million from the MO during the period but no payment was made by this customer.

Table 8: Special Customer Invoices and Remittances (₦'billion) in 2022/Q1

Special Customers	NBET				MO			
	Invoice (Million)	Remittance (Million)	Performance (%)		Invoice (Million)	Remittance (Million)	Performance (%)	
	2022 /Q1	2022 /Q1	2021 /Q4	2022 /Q1	2022 /Q1	2022 /Q1	2021 /Q4	2022 /Q1
AJAOKUTA STEEL (₦)	387.48	0.00	0.00	0.00	69.45	0.00	0.00	0.00
PARAS-SBEE($)	0.00	0.00	0.00	0.00	2.72	2.72	0.00	100
TRANSCORP-SBEE ($)	0.00	0.00	0.00	0.00	2.74	2.74	0.00	100
MAINSTREAM-NIGELEC ($)	0.00	0.00	0.00	0.00	4.61	4.52	0.00	98
ODUKPANI-CEET ($)	0.00	0.00	0.00	0.00	3.42	0.00	0.00	0.00
TOTAL ($)	**0.00**	**0.00**	**0.00**	**0.00**	**13.49**	**0.00**	**0.00**	**0.00**

Notes of the table:
1. NBET, MO, SBEE, CEET and NIGELEC are Nigeria Bulk Electricity Trader, Market Operator, Société Beninoise d'Energie Electrique, Compagnie Energie Electrique du Togo and Société Nigerienne d'electricite respectively.

3. REGULATORY FUNCTIONS

3.0 Regulatory Functions

3.1 Regulations/Orders

Regulations are a set of rules that the Commission may issue from time to time to optimise the performance of licensees with a view to giving effect to the object of the 2004 EPSRA. In the first quarter of 2022, no new regulations and Orders were issued. However, the Commission continued the monitoring of compliance with the provisions of extant regulations, orders and standards governing the NESI.

3.2 Licences and Permits Issued or Renewed

In 2022/Q1, the Commission approved the issuance of eleven (11) new generation licenses with a total nameplate capacity of 50.34MW and approved the renewal of two (2) existing licenses in addition to the transfer of an on-grid generation license from Wapsila Nigeria Limited to Lord's mint Technologies Limited. The details are contained in Table 9 below.

Table 9: List of Generation Licences issued in 2022/Q1

SN	*Licensee*	*Capacity (MW)*	*Type*	*Location*	*Fuel Type*
	A. New Issue				
1	Daybreak Power Solutions Nigeria Limited	1.5	Off-Grid Generation	NBC Idu, Abuja	Solar
2	Daybreak Power Solutions Nigeria Limited	1.6	Off- Grid Generation	NBC Asejire, Oyo	Solar
3	Daybreak Power Solutions Nigeria Limited	3.5	off-grid generation	NBC Challawa, Kano	Solar
4	CKS Power Nigeria Limited	5	embedded generation	Yabo, Sokoto	Gas
5	Tower Power Utility Limited	20	off-grid generation (renewal)	Ota, Ogun	Gas
6	Globeleq Power Solutions Limited	5.5	off-grid generation	NBC Port Harcourt	Gas
7	Daybreak Power Solutions Limited	1.74	Off-grid generation	Kudenda, Kaduna	Solar
8	Daybreak Power Solutions Limited	6	off-grid generation	7UP Ikeja, Lagos	Solar
9	Daybreak Power Solutions Limited	2	off-grid generation	1A Lateef Jakande Road, Ikeja, Lagos	Solar
10	Daybreak Power Solutions Limited	2	off-grid generation	1B Lateef Jakande Road, Ikeja	Solar
11	Genco Sunrise Limited	1.5	embedded generation	Sunrise Hills Estate, Asokoro	Diesel

12	Electro Sunrise Limited		Independent distribution	Sunrise Hills Estate, Asokoro	NA
13	Transfer of NERC Licence (NERC/LC/204) issued to Standard Metallurgical Company Limited to Taopex Energy Services Company Limited	90	on-grid generation	Sagamu, Ogun	Gas
	B. Renewal				
14	Olorunshogo Power Generation Company Limited	750	Renewal of on-grid generation	Olorunshogo, Ogun	Gas
15	Ogorode Power Generation Company Limited	450	Renewal of on-grid generation	Sapele, Delta	Gas
	C. Transfer of Certificate				
16	Wapsila Nigeria Limited	310	Bilateral sale agreement with Lord's Mint Technologies Ltd	Ota, Ogun	Gas

3.3 Captive Power Generation Permits

Captive power plants are energy generating plants owned and maintained by the generating entity for its own consumption and not for sale to a third party. In 2022/Q1, the Commission granted seven (7) new captive power generation permits with a total nameplate capacity of 183.06MW. Details of the permit holders, location and plant capacities are listed below in Table10.

Table 10: Captive Generation Plants Approved in 2022/Q1

S/N	*Company Name*	*Location/State*	*Capacity (MW)*
1	Speciality Pulp and Paper Company Limited	Ijebu Ode, Ogun	3.5
2	African Natural Resources & Mines Ltd	Gujeni, Abuja	50
3	Nigerian Breweries Plc	• Aba Malting Plant • Ibadan Breweries • Ama Breweries • Aba Breweries	7.97 7.2 10.59 5.6
4	Nigerian Breweries Plc	• Awo Omama Breweries • Ijebu-Ode, Ogun	4.4 5.8
5	Greenville Oil & Gas Limited (renewal)	Emuoha, Rivers	80
6	Duport Midstream Company Limited	Egbokor, Edo	2
7	Julius Berger Nigeria Plc	• Utako, FCT • Idu, FCT	3 3

3.4 Mini-grid Operators Registered with the Commission

Following the satisfactory evaluation of mini-grid applications, the Commission approved three (3) Mini-grid permits and thirty-eight (38) registration certificates in 2022/Q1. The details of the successful mini-grid applicants and their locations are presented in Table11.

Table 11: Mini-grid Permits and Registration Certificate Approved in 2022/Q1

S/N	Name	Location	Type	Capacity (kW)
	A. Registration			
1	Husk Power Energy Systems Nigeria Limited	Gidan Buba, Lafia, Nassarawa	Registration	100
2	Husk Power Energy Systems Nigeria Limited	Kiguna, Lafia, Nassarawa	Registration	100
3	Husk Power Energy Systems Nigeria Limited	Igbabo, Doma, Nassarawa	Registration	122
4	A4 & T Power Solutions Limited	Laoso, Ondo West, Ondo	Registration	97
5	Havenhill Synergy Limited	Kigbe, Kwali, FCT	Registration	20
6	Rivet Engineering Limited	Bolorunduro, Ekiti South-West, Ekiti State	Registration	50
7	Rivet Engineering Limited	Aba Ekan, Ise/Orun, Ekiti	Registration	40
8	Rivet Engineering Limited	Oriokuta, Ekiti West, Ekiti	Registration	40
9	Rivet Engineering Limited	Omuaran, Ekiti South- Wes, Ekiti	Registration	40
10	Rivet Engineering Limited	Ilupeju Edetedo, Ekiti West, Ekiti	Registration	100
11	News Engineering Nigeria Limited	Inname, Binji, Sokoto,	Registration	40
12	Steven International Company Limited	Alapa, Ilado, Ibarapa East, Oyo	Registration	100
13	Leading Diagonal Engineering Limited	Maluri, Turmi-Maluri, Fika, Yobe	Registration	100
14	Power Gen Nigeria Assets Limited	Jikangi, Lavun, Niger	Registration	86
15	Power Gen Nigeria Assets Limited	Kpanje, Lavun, Niger	Registration	86
16	Power Gen Nigeria Assets Limited	Sa'achi, Lavun, Niger	Registration	106
17	Power Gen Nigeria Assets Limited	Lagun, Lavun, Niger	Registration	10

18	Power Gen Nigeria Assets Limited	Sosa, Lavun, Niger	Registration	106
19	Power Gen Nigeria Assets Limited	Ebangi, Lavun, Niger	Registration	106
20	Power Gen Nigeria Assets Limited	Gbade, Lavun, Niger	Registration	186
21	Power Gen Nigeria Assets Limited	Dukugi, Lavun, Niger	Registration	256
22	Power Gen Nigeria Assets Limited	Danchitagi, Lavun, Niger	Registration	330
23	Power Gen Nigeria Assets Limited	Toto, Toto, Nasarawa	Registration	362
24	ABSI Building System International Limited	Abuke Oluwo, Owode, Ogun	Registration	80
25	Decrown West Africa Company Limited	Sule Camp Community, Ovia Southwest, Edo	Registration	100
26	Husk Power Energy Systems Nigeria	Acura, Lafia, Nassarawa	Registration	100
27	Darway Coast Nigeria Limited	Odiopiti, Ahoada West, Rivers	Registration	71
28	Darway Coast Nigeria Limited	Ekowe, Southern Ijaw, Bayelsa	Registration	99
29	Darway Coast Nigeria Limited	Odeke, Ibaji, Kogi	Registration	88
30	Darway Coast Nigeria Limited	Amala 2, Ngor Okpala, Imo	Registration	99
31	Darway Coast Nigeria Limited	Okumbiri, Sagbama, Bayelsa	Registration	71
32	Darway Coast Nigeria Limited	Umudora, Anambra West, Anambra	Registration	99
33	Darway Coast Nigeria Limited	Emirikpoko, Abua/Odual, Rivers	Registration	78
34	Darway Coast Nigeria Limited	Oroma-Etiti, Anambra West, Anambra	Registration	99
35	Darway Coast Nigeria Limited	Umuawaibu, Okigwe, Imo	Registration	71
36	Darway Coast Nigeria Limited	Emago- Kugbo, Abua/Odual, Rivers	Registration	99
37	Darway Coast Nigeria Limited	Amatolo, Sagbama, Bayelsa	Registration	71
38	Darway Coast Nigeria Limited	Akeddei, Sagbama, Bayelsa	Registration	99
	B. Approved Permits			
1	Ventura Logistic Services Limited	Mebiowa Okposi, Ohaozara LGA, Ebonyi State.	Permit	98
2	Zanoplus Energy Limited	Ifite-Ogwari, Aguata LGA, Anambra State	Permit	199
3	Blue Camel Energy Limited	Kasuwan Magani, Kajuru, Kaduna	Permit	100

3.5 Certification of Metering Service Providers/Meter Asset Providers

A Metering Service Provider (MSP) is an entity certified by the Commission as a manufacturer, supplier, vendor, or installer of electric energy meters and/or metering systems. A Meter Asset Provider (MAP) is an entity that is granted a permit by the Commission to provide metering services with roles that may include meter financing, procurement, supply, installation, maintenance, and replacement.

In 2022/Q1, the Commission certified twelve (12) MSPs following the satisfactory evaluation of their applications. The list of the certified MSPs in Table 12 comprises eight (8) meter installer companies, three (3) meter manufacturers, and one (1) meter importer.

Table 12: Approved Meter Asset providers in 2022/Q1

S/N	Name	Authorisation Type
1	Bajis Limited	Installer A1
2	Nextsol Nigeria Limited	Installer A1
3	Tis & P Dynamic Solutions Limited	Installer A1
4	Jofebo Global Resources Limited	Installer A1
5	Tinutten Nigeria Limited	Installer A1
6	Watts & Grid Limited	Installer A1
7	Global Hydro Cool Water Limited	Installer B1
8	Information Management Technology Limited	Installer B1
9	ASBA Synergy Concept Limited	Manufacturer
10	Sandex Global Resources Limited	Manufacturer
11	Payafrik International Limited	Manufacturer
12	Nigerian Energy Support Program	Importer

3.6 Public Consultation and Awareness

The Commission did not conduct public consultations on new regulations in 2022/Q1, as no new regulations were under consideration. To improve awareness of the existing regulations, consumer rights and obligations, the Commission continued several customer

and stakeholder engagements through radio programmes (e.g., Electricity Update). The Commission is committed to maintaining the regularity of its town hall meetings as well as power consumer assembly[19] in accordance with the provisions of the Electricity Power Sector Reform Act (EPSRA). The engagements will seek among others, to improve stakeholders' awareness of the existing regulations, and consumer rights and obligations as provided in the industry rules and the EPSRA.

3.7 Compliance and Enforcement

In 2022/Q1, the Commission continued with existing enforcement actions (such as payments of penalties and compensations) brought forward from the preceding quarters against several operators for violations of rules and infractions. These include the violations of Regulations and Orders, accidents and electrocution cases and the failure to comply with Forum decisions within the stipulated time frame. Over the course of the quarter, compliance letters were issued to Abuja, Ibadan and Ikeja DisCos compelling them to take remedial actions on issues ranging from excessive customer billing, metering, to non-compliance with Forum Office rulings.

3.8 Alternative Dispute Resolution

The Alternative Dispute Resolution (ADR) refers to the settlement process instituted by the Commission for the resolution of disputes that may arise amongst market participants. In accordance with Market Rule 42.3.7, the Commission constitutes a Dispute Resolution Panel (DRP) responsible for arbitrating or otherwise resolving disputes between market participants. A Dispute Resolution Counsellor (usually with extensive knowledge and experience in dispute resolution) is appointed by the Commission to administer and ensure effective operation of the dispute resolution provisions of Market Rules and the Grid Code.

The Commission did not oversee any disputes between stakeholders in the industry in 2022/Q1. As noted in the previous quarter, the Commission continues to push for an improved utilization of the DRP by sector stakeholders and is currently reviewing initiatives to aid this course—the Commission concluded the review and assessment process for the appointment of a new DRP Counsellor.

[19] Power consumer assemblies are public forums held by the commission between consumers, operators, and licensees to discuss issues pertinent to them

4. CONSUMER AFFAIRS

4.0 Consumer Affairs

4.1 Consumer Education and Enlightenment

To ensure continuous customer education on their rights and obligations, in 2022/Q1, the Commission continued with the airing of the radio enlightenment program 'Electricity Update' across twelve states of the country including the FCT. The program focuses on Service Based Tariff, customers' rights and obligations, customers' redress mechanisms, capping of estimated billing, metering gaps and the strategy being adopted by the Commission to bridge the metering gap in the industry. In addition to the recorded radio program, the Commission continued the live radio session where staff go on air to address key burning issues in the NESI.

Other consumer education and enlightenment mechanisms instituted by the Commission are town hall meetings and customer complaints resolution meetings. In March 2022, the Commission held a town hall meeting in Benin where staff of Benin DisCo as well as customers within the franchise area met to discuss issues pertinent to them. These meetings have been put in place to enlighten customers on the activities of the Commission, discuss customer rights and obligations as well as ensure swift resolution of complaints.

4.2 Metering End-Use Customers

The total number of registered customers as of 31st March 2022 was 12,542,581, out of which 4,740,114 have been metered representing 37.79% metering rate as presented in Table 13.

Table 13: Status of customer Metering in the NESI as at 2022/Q1

DisCos	*Total Number of Registered Customers*	*No of Metered Customers*	*Metering Performance*
Abuja	1,126,682	675,098	59.92%
Benin	1,652,722	627,764	37.98%
Eko	646,023	353,232	54.68%
Enugu	1,665,264	551,703	33.13%
Ibadan	2,121,325	800,888	37.75%
Ikeja	1,298,323	645,862	49.75%
Jos	692,474	212,449	30.68%
Kaduna	809,003	179,482	22.19%
Kano	884,710	194,628	22.00%
Port Harcourt	1,177,641	414,951	35.24%
Yola	468,414	84,057	17.95%
Total	12,542,581	4,740,114	37.79%

Since the Commission issued the updated MAP & NMMP Regulations (2021), customer metering has continued to progress thereby increasing the share of customers that pay for the exact energy consumed. In 2022/Q1, an additional 85,510 end-user customers were metered. This represents a 5,532 (6.92%) increase when compared to the 79,978[20] meters installed in 2021/Q4 (Table 14). Out of the 85,510 meters installed for end users in 2022/Q1, 29,282 (34.24%) were metered under the NMMP scheme while 56,228 (65.76%) customers were metered under the MAP intervention.

On a DisCo-by-DisCo basis, Ibadan DisCo metered 30,404 customers in 2022/Q1 representing a +121.91% (+16,703) increment compared to the number of customers metered in 2021/Q4. Similarly, Ikeja Disco reported 18,169 installations in 2022/Q1 compared to 71meter installations in 2021/Q4.

In contrast, Jos, Benin, Abuja, Eko and Kano DisCos recorded declines of -65.19%, -69.70%, -74.30%, -78.62%, and -97.58% respectively in their metering between 2021/Q4 and 2022/Q1. The main reason why Abuja, Benin, Kano, and Port Harcourt had significant reductions in meter installations in 2022/Q1 compared to 2021/Q4 is due to their early utilisation of their meter allocation under the NMMP. As in 2021/Q4, Yola DisCo did not meter customers in 2022/Q1.

Table 14: MAP and NMMP meter deployment by DisCos 2021/Q4 VS 2022/Q1

DisCos	*Customers Metered in 2021/Q4*	*Customers Metered in 2022/Q1*	*Change in Metering Rate between 2021/Q4 and 2022/Q1*
Abuja	2,743	705	-74.30%
Benin	20,911	6,336	-69.70%
Eko	15,260	3,263	-78.62%
Enugu	4,084	8,852	116.75%
Ibadan	13,701	30,404	121.91%
Ikeja	71	18,169	25490.14%
Jos	5,648	1,966	-65.19%
Kaduna	2,446	8,493	247.22%
Kano	8,211	199	-97.58%
Port Harcourt	6,900	7,123	3.23%
Yola	-	-	-
Total	**79,978**	**85,510**	**6.92%**

[20] 79,978 installations were recorded in 2021/Q4 as against 81,084 previously reported

Further details on the metering progress under the NMMP and MAP between 2022/Q1 and 2021/Q4 are presented in appendices XI and XII respectively. In 2022/Q1 under the MAP intervention, a total of 56,228 meters were installed representing a 65.76% (+45,943) increase in metering under MAP compared to the 10,285 installations recorded in 2021/Q4. Ibadan DisCo recorded the highest number of installations (19,438) representing 34.57% of the total number of customers metered under the MAP scheme in 2022/Q1. Benin, Jos, and Yola DisCos did not record any installation under the MAP scheme in 2022/Q1.

During the same period, a total of 29,282 customers were metered under the NMMP representing a 57.98% decline from the 69,693[21] customers metered under NMMP in 2021/Q4. All DisCos reported a decline in customer metering through NMMP in 2022/Q1 compared with 2021/Q4. This is due to the winding down of the NMMP Phase 1. Abuja, Enugu, Ikeja, Kano, Port Harcourt and Yola DisCos did not record any meter installation under the NMMP scheme in 2022/Q1. Yola DisCo's poor offtake of the NMMP was caused by the ownership transition taking place at the time.

With the DisCos unable to leverage any of the options to finance mass meter roll-out (contained in the Commissions regulation – NERC/R/113/2021[22]), MAP and NMMP continue to provide the clearest path for mass customer metering. On NMMP, the Commission is actively engaged with the CBN, World Bank and other relevant stakeholders to accelerate financial closure and funds disbursement for the next round of the NMMP. On MAP, the Commission is undertaking steps to increase customer uptake through a combination of enlightenment and developing a mechanism for the implementation of the customer refund. Ways for holding DisCos to account for increased enlightenment and ultimately off-take of the MAP meters are also being evaluated.

In the absence of meters, the Commission has also continued to drive compliance efforts with its capping order (NO/NERC/197/2020) which was issued 2020 to define the upper limit of what DisCos can charge to unmetered customers based on the consumption of metered customers on the same feeder. This will serve as a makeshift measure to protect customers from excessive billing by the DisCos.

[21] 69,693 NMMP meter installations were recorded in 2021/Q4 as against 70,676 previously reported

[22] The options to finance mass meter rollout as contained in the regulation are: (a). MAP (b). NMMP (c). Vendor Finance (d). Self-funded by Discos' own funds (e). Other efficient external financing for meters

4.3 Customers Complaints

The complaints received and resolved by DisCos in 2021/Q4 and 2022/Q1 are represented in Table 15. The total number of complaints received in 2022/Q1 was 243,387 across all DisCos and 230,493 of those were resolved. The average resolution rate recorded in 2022/Q1 was 94.70%. Compared to 2021/Q4, the number of complaints received, number of cases resolved, and average resolution rate changed by 20,748 (+9.32%), 18,057 (8.50%) and -0.69 pp respectively.

Port Harcourt Disco had the highest number of complaints (46,152 representing 18.96% of total complaints), while Yola Disco had the least number of complaints (1,268 representing 0.53%). In comparison with 2021/Q4, Port Harcourt, Enugu, Jos, Ibadan, and Ikeja DisCos recorded increased customer complaints by 14,819 (+47.30%), 13,849 (57.49%), 5,451 (+40.60%), 5,204 (+52.58%), and 1,611 (+4.58%) respectively.

In contrast, Yola, Benin, Kaduna, Kano, Abuja and Eko DisCos received less complaints from customers in 2022/Q1 compared to 2021/Q4 by 435 (-25.22%), -1,837 (-16.14%), -2,673 (-24.22%), -3,436 (-20.86%), 3,800(-12.24%) and 8,005 (-21.62%) respectively. All the DisCos except Eko and Kaduna DisCos had over 90% resolution rate for the complaints received in 2022/Q1 with Abuja, Enugu, Kano, Port Harcourt and Yola DisCos having resolution rates of 98%+.

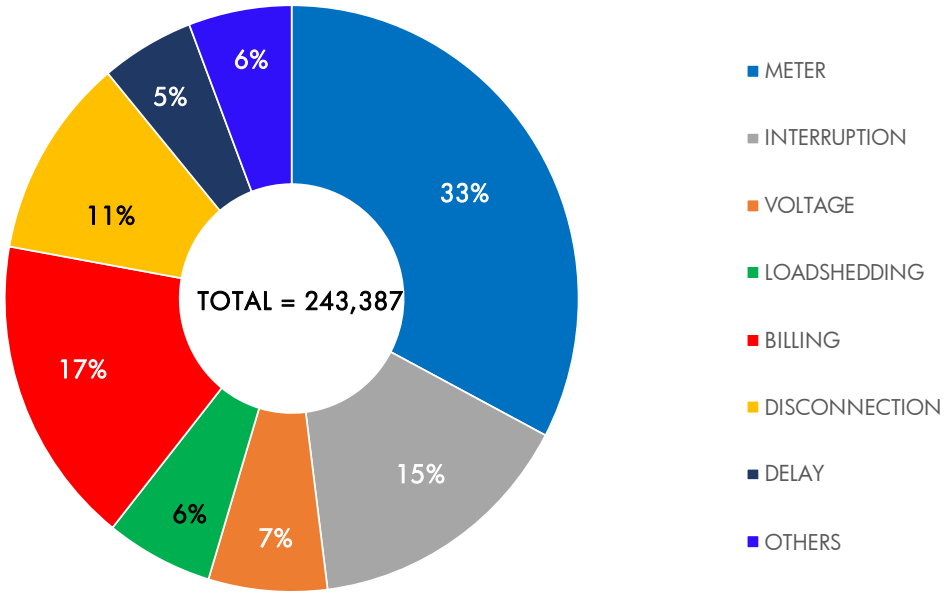
Table 15: Complaints Received and Resolved by Disco in 2021/Q4 and 2022/Q1

DisCos	*2021/Q4* Complaints Received	*2021/Q4* Complaints Resolved	*2021/Q4* Resolution Rate	*2022/Q1* Complaints Received	*2022/Q1* Complaints Resolved	*2022/Q1* Resolution Rate
Abuja	31,051	29,967	96.51%	27,251	26,948	98.89%
Benin	11,383	10,832	95.16%	9,546	9,163	95.99%
Eko	37,033	35,757	96.55%	29,028	23,466	80.84%
Enugu	24,089	22,046	91.52%	37,938	37,412	98.61%
Ibadan	9,898	9,017	91.10%	15,102	14,179	93.89%
Ikeja	35,191	32,375	92.00%	36,802	33,542	91.14%
Jos	13,427	13,178	98.15%	18,878	18,475	97.87%
Kaduna	11,036	10,603	96.08%	8,363	7,425	88.78%
Kano	16,473	16,122	97.87%	13,037	12,969	99.48%
PH	31,333	30,878	98.55%	46,152	45,646	98.90%
Yola	1,725	1,661	96.29%	1,290	1,268	98.29%
Total	**222,639**	**212,436**	**95.39%**	**243,387**	**230,493**	**94.70%**

The most frequent complaints topics in 2022/Q1 were metering, service interruption, and billing; they cumulatively accounted for more than 65% of the total complaints received as

presented in Figure 13[23]. This implies that out of the total 243,387 complaints received, 79,637 were on metering, 37,186 were related to service interruption, and 41,644 were billing-related. These set of complaint categories also accounted for 58.83% of the complaints in 2021/Q4 which indicates that they continue to be major concern of consumers. In recognition of this, the Commission is introducing initiatives to address these major customer pain points. For example, on the issues of metering/billing, the Commission has introduced a process that allows it independently to verify whether DisCos are complying with the Capping Regulations that have been put in place to protect unmetered customers from overbilling. The process also involves a revised methodology and frequency of calculating allowable caps to reflect the quality of supply which customers have experienced in the preceding months.

Figure 13: Category of Complaints Received by DisCos in 2022/Q1



Over the years, the Commission has continuously monitored the complaint handling and resolution process adopted by all DisCos. The Commission is strictly monitoring the DisCos' compliance with its directive on monthly submission of their customers' complaints reports to ensure timely regulatory interventions when necessary. The Commission has also commenced the review of its strategy of monitoring DisCos' customer complaints handling and resolution process, with a view to further improving regulatory oversights. This also

[23] The number of complaints received by each DisCo under each category of complaint is contained in appendix VI

includes the strict review of the operations in the Commission's Forum Offices which are set up to redress the customers' complaints that are not resolved by the DisCos.

4.4 Forum Offices

In line with the Commission's mandate on customer protection, Forum Offices were set up pursuant to section 80(1)(b) of the EPSRA to hear and resolve customer complaints not satisfactorily resolved at the DisCos' Customer Complaints Units ("DisCos-CCU"). The Forum Office is managed by the Forum Secretariat while the hearings are conducted by five (5) Forum Panel members who are not Commission staff and are selected from the following groups/agencies –

1. One representative of Industrial customers to be nominated by the Manufacturers' Association of Nigeria ("MAN").
2. One representative of Commercial customers to be nominated by the Nigerian Association of Chambers of Commerce, Industry, Mining and Agriculture ("NACCIMA").
3. One representative of household customers to be nominated by the Federal Competition and Consumers Protection Commission ("FCCPC").
4. One representative of an NGO based in the DisCos operating area nominated by the Commission.
5. One nominee based in the DisCos operating area who has an electrical engineering background nominated by the Commission.

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 of 31st March 2022, the Commission had thirty (31) operational Forum Offices in thirty (30) states and the FCT, Abuja. The details including names, addresses and contacts of the Commission's Forum Offices are presented in the Appendix XV.

Table 16 presents a summary of the complaints received at the forum offices in 2022/Q1. The total number of new complaints received in the quarter was 1,602 while the Forum Offices cumulatively had a total of 677 pending complaints carried over from 2021/Q4. This means in total, there were 2,279 across all the Forum Offices in 2022/Q1. Comparatively, this corresponds to a decrease of 80 (-3.39%) complaints compared to 2,359 active complaints in 2021/Q4.

The Forum Offices covering Ibadan Disco's operation areas (Ibadan, Ilorin and Osogbo) had the highest number of active complaints (467 complaints) in 2022/Q1. This was followed by the Forum Offices covering Port Harcourt (Calabar, Port Harcourt and Uyo) and Ikeja DisCos' operation areas which received 429 and 354 complaints respectively. The Forum Offices covering Kano (Jigawa. Kano and Katsina) and Yola Disco operation areas had the least number of active complaints (30 and 29 respectively) in 2022/Q1. The Forum Office covering Yola DisCo Operational areas have in recent quarters, consistently recorded the least number of complaints.

The Forum Offices' Panels had a total of sixty-eight (68) sittings in 2022/Q1 compared to 72 sittings in 2021/Q4 and resolved 1,613 (70.78%) of the total active complaints. These were resolved either through formal hearings or preliminary engagements between the Forum Secretaries and the DisCos. By comparison, the compliant resolution rate across all the forum offices in 2021/Q4 was 69.35% –1.43 pp lower than was achieved during 2022/Q1. The Forum offices covered by Enugu DisCo had the highest number of sittings (17) and those covered by Ibadan DisCo had the highest number (340) of resolved complaints in 2022/Q1.

Table 16: Complaints Handled by Forum Offices in 2022 Q1

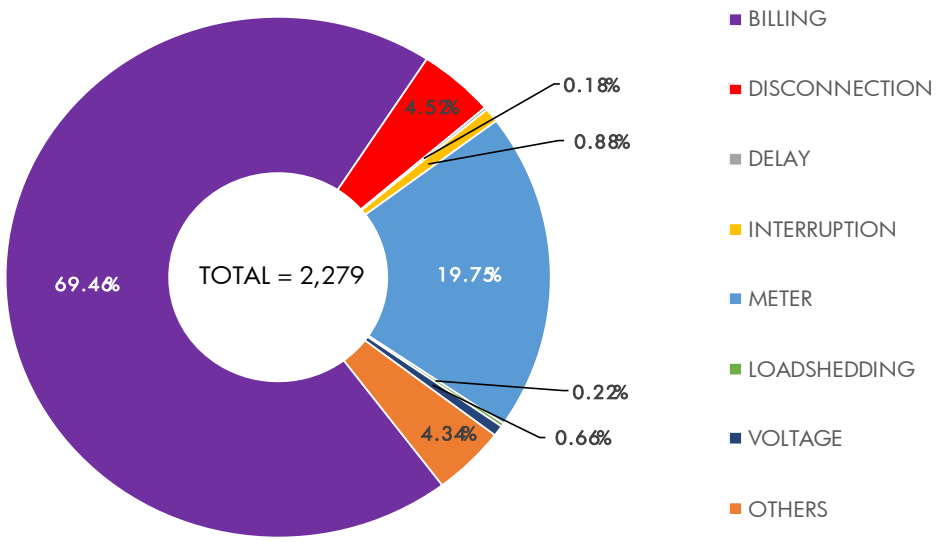
Forum Offices	*Accountable DisCos*	*Complaint Received*[1]	*Complaint Resolved*[2]	*Complaint Pending*[3]	*No of Sittings*
Abuja, Lafia & Lokoja	Abuja	82	59	23	5
Asaba & Benin	Benin	151	125	26	8
Eko	Eko	142	114	28	3
Abakaliki, Akwa, Enugu, Owerri, & Umuahia	Enugu	290	211	66	17
Ibadan, Ilorin & Osogbo	Ibadan	467	340	127	9
Ikeja	Ikeja	354	222	132	5
Bauchi, Gombe, Jos & Makurdi	Jos	109	71	28	4
Gusau, Kaduna, Kebbi & Sokoto	Kaduna	196	139	57	7
Jigawa, Kano & Katsina	Kano	30	22	8	1
Calabar, Port Harcourt & Uyo	P/Harcourt	429	290	139	8
Yola	Yola	29	20	9	1
All Forum Offices	**All DisCos**	**2,279**	**1,613**	**643**	**68**

Note of tables: [1.] Complaint received includes outstanding complaints from the preceding quarter
[2.] Complaint resolved excludes complaints withdrawn or rejected
[3.] Complaints are still within the regulatory timeframe of 2 months to resolve

Figure 14 represents the various categories of complaints received at the Forum Offices in 2022/Q1. Billing related complaints represented a significant portion of cases presented

to the forum offices accounting for ~69.46% of the total in the quarter. Metering and disconnection were also prevalent representing 19.75% and 4.52% of the total complaints received. These 3 topics accounted for >90% of total complaints as they did in the previous two quarters. The Commission is harmonising its customer service regulations and improved customer education in a bid to reduce complaints along these topics. The introduction of improved processes around estimated billing and its enforcement (described above) are some of the steps being taken by the Commission to reduce the prevalence of these sort of complaints. The Commission is also working on creating an incentive structure to push DisCos towards improving the quality of customer compliant resolution at that CCU because this will translate into reduced escalation of complaints by customers to the forum offices.

Figure 14[24]: Category of Complaints Received by Forum Offices in 2022/Q1



With only twenty-three (1.01%) of the undecided cases at the Forum Offices were due to incomplete submission and/or withdrawal by the concerned consumers, the Commission continued the review of the operation of the Forum Offices to ensure speedy resolution of complaints in line with the Commission's strategic objective of upholding high customer care standards. The Commission is working towards establishing additional Forum Offices

[24] The number of complaints received by each Forum Office under each category of complaint is contained in appendix VII

and other customer complaint resolution channels in a bid to increase overall customer complaint management in the NESI.

4.5 Health and Safety

In accordance with section 32(1)(e) of EPSRA, the Commission continued to monitor health and safety performance in the NESI to guarantee the delivery of safe and reliable electricity to Nigerians. Out of the eighty-seven (87) mandatory health and safety reports expected from licensees in 2022/Q1, the Commission received a total of seventy-eight (78) reports as against seventy-five (75) submitted in 2021/Q4. Sapele and Egbin Power have two outstanding reports each, while Yola DisCo, Agip power, Geregu power, Shell power and Shiroro power each have one outstanding report for 2022/Q1. The Commission has developed new processes to track the submission of statutory reports (including the health and safety report) by licensees which will guide the implementation of relevant actions against licensees that do not meet their obligations.

The health and safety reports were analysed in line with the provisions of Section 32(1)(e) of ESPRA for monitoring and evaluating of health and safety performance of licensees to ensure that operators abide by their responsibility of delivering safe electricity services to consumers. The summary statistics on the accidents experienced in the NESI in 2021/Q4 and 2022/Q1 are presented in table 17. In 2022/Q1, the total number of incidents was 55 – 18 injuries and 37 deaths. Compared to 40 incidents recorded in 2021/Q4 – 9 injuries and 31 deaths. The Commission has launched investigations into all the reported incidents with a view of understanding the root causes records and meting out relevant actions against the licensees (where applicable).

Table 17: Health and Safety (H&S) Reports in 2021/Q4 and 2022/Q1

Item	2021/Q4	2022/Q1	Net Change
Number of Expected H&S Reports	87	87	0
Number of H&S Reports Submitted	75	78	+3
Number of Deaths (employees & third parties)	31	37	+6
Number of Injuries	9	18	+9

In line with its 2017-2020 strategic goals, the Commission has intensified efforts at implementing various safety programmes aimed at eliminating accidents in the industry. Some of the safety programmes implemented by the Commission include the standardisation of protective schemes, public enlightenment on health & safety,

engagement of government agencies on Right of Way (RoW) violations, and a review of an operational procedure for distribution system operators on fault clearing.

5. THE COMMISSION

5.0 Commission

5.1 Financial Report

The summary of the Commission's revenue and expenditure in 2021/Q4 and 2022/Q1 is presented in Table 18. In 2022/Q1 the total revenue realised by the Commission was ₦3,582.22 million and a total expenditure of ₦ 1,452.47 million.

The total revenue in 2022/Q1 was about ₦ 3,575.26 million (-49.95%) lower than the 7,157.48 million revenue realised in 2021/Q4. This decrease in revenue is attributed to the decrease in operating levy (market charges) which declined by ₦3,527.67 million (-50.81%), from ₦6,943.50 million realized in 2021/Q4 to ₦3,415.83 million in 2022/Q1.

Table 18: Quarterly Cash Flow of the Commission for 2022/Q1

	Summary for 2022/Q1 (₦' Million)			2022/Q1	2021/Q4
A. Revenue	**January**	**February**	**March**		
Operating Levy (i.e., MC)	2,017.89	1,385.74	12.20[25]	3,415.83	6,943.50
Other IGR	46.00	34.45	85.94	166.39	213.98
Total Revenue	2,063.89	1,420.19	98.14	3,582.22	7,157.48
B. Expenditure					
Personnel Cost	354.18	209.72	580.32	1,144.22	1,647.84
Regulatory Expenses	11.06	204.91	26.10	242.07	725.30
Admin & General Maintenance	1.90	34.86	29.42	66.18	100.22
Total Expenditure	367.14	449.49	635.84	1,452.47	2,473.36
C. Net Cash Flow (A-B)	**1,696.75**	**970.70**	**-537.70**	**2,129.75**	**4,684.12**
Outstanding Liabilities as at the end of the Stated Quarters				**4,087.34**	**4,361.18**

Notes of the table: MC is Market Charges, and IGR internal Generated Revenue comprising licence processing fee, and registration fees for MSP and MAP etc.

In addition, Other Internally Generated Revenue (OIGR) also declined from ₦213.98 million in 2021/Q4 to ₦166.39million in 2022/Q1 representing a decline of -22.24%. During the same period, the total (capital and recurrent) expenditure of the Commission

[25] In March 2022, no inflow was received from the MO in respect of market charges for the month. The Commission has launched an investigation into this non-remittance with a view to making appropriate reconciliations.

recorded a ₦1,020.89 million (-41.28%) decline on the ₦2,473.36 million incurred in 2021/Q4. This is attributable to the reduction in personnel cost, regulatory expenses as well as administrative expenses.

A comparison of the revenue and expenditure of the Commission in 2022/Q1 reveals a positive net cash flow of ₦2,129.75 million. The total outstanding liabilities[26] at the end of the quarter however stood at ₦4,087.34 million.

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 continuously working on the regulatory interventions necessary to improve the liquidity in the industry.

5.2 Capacity Development

The Commission is committed to staff safety and continuity of business operations. In this regard, the Commission in 2022/Q1 continued to explore various avenues provided by Information communication technology (ICT) to conduct meetings, seminars, trainings, and engagements with other industry operators.

[26] These are Commission's expenses that have accrued and are payable in subsequent quarters. E.g. taxes, pensions, surplus revenue due to be transferred to REA as provided in the EPSRA, etc.

APPENDIX

Appendix I: Energy generation in 2021/Q4 and 2022/Q1

GenCos	*Available Capacity (MW)*		*Average Daily Generation (MWh)*		*Quarterly Generation (GWh)*	
	2021/Q4	2022/Q1	2021/Q4	2022/Q1	2021/Q4	2022/Q1
AES	-	-	-	-	-	-
Afam _VI	74.62	64.76	1,243.79	45.91	114.44	100.11
Afam IV_V	237.94	169.59	5,302.40	168.27	489.29	365.61
Alaoji NIPP	117.97	92.91	1,656.40	66.32	152.16	141.44
Azura-Edo IPP	437.69	342.25	9,232.32	334.08	848.99	718.46
Dadin Kowa	2.47	35.62	56.53	35.18	5.26	75.86
Delta	395.89	454.27	6,830.49	387.10	627.52	833.20
Egbin	606.80	546.85	11,994.09	458.82	1,103.12	984.70
Egbin St-6	-	-	-	-	-	-
Gbarain NIPP	-	-	-	-	-	-
Geregu Gas	392.23	332.30	6,309.71	291.11	580.49	632.31
Geregu NIPP	153.22	61.30	2,594.53	52.84	238.33	112.19
Ibom Power	13.76	22.25	306.40	18.77	27.98	40.02
Ihovbor NIPP	97.67	77.18	1,161.04	66.00	106.41	140.13
Jebba	469.45	372.39	10,593.92	361.00	974.72	780.82
Kainji	420.89	411.73	9,874.28	402.89	908.61	869.72
Odukpani	364.40	273.73	6,616.76	217.68	608.44	468.28
Okpai	343.43	295.68	6,618.15	229.74	609.43	495.01
Olorunsogo Gas	190.87	118.10	3,392.32	84.40	311.44	182.32
Olorunsogo NIPP	-	29.01	-	22.43	-	48.96
Omoku	60.00	57.42	1,194.15	46.86	109.85	101.30
Omotosho Gas	166.87	106.55	3,233.74	84.79	297.19	182.99
Omotosho NIPP	84.82	92.67	627.64	79.96	57.86	171.37
Paras Energy	43.47	52.28	850.31	47.25	78.23	102.17
Rivers IPP	139.82	151.11	2,201.53	128.21	203.13	276.60
Sapele	77.91	94.28	682.68	63.94	62.40	139.14
Sapele NIPP	56.71	50.45	895.34	37.65	82.50	82.00
Shiroro	447.92	316.13	8,268.33	289.14	760.85	623.76
Trans Amadi	68.90	91.52	1,319.75	83.12	121.57	179.57
Total	5,465.72	4,712.34	103,056.30	98,482.66	9,480.21	8,848.04

Appendix II: Monthly Energy Received and Billed by DisCos in 2021/Q4 and 2022/Q1

DisCos	Energy Received (GWh)						Energy Billed (GWh)						Billing Efficiency	
	2021/Q4			2022/Q1			2021/Q4			2022/Q1			2021/Q4	2022/Q1
	Oct	Nov	Dec	Jan	Feb	Mar	Oct	Nov	Dec	Jan	Feb	Mar	%	%
Abuja	316	344	361	343	315	307	217	225	235	213	213	217	64.62%	66.63%
Benin	207	224	221	254	227	237	174	191	183	208	188	201	83.73%	83.26%
Eko	265	235	240	296	252	216	243	160	163	251	221	194	88.77%	87.18%
Enugu	214	307	295	257	247	242	157	272	269	180	169	167	68.64%	69.17%
Ibadan	329	350	363	348	286	266	233	241	255	253	208	201	70.39%	73.55%
Ikeja	339	374	374	397	336	306	315	340	342	336	299	274	88.53%	87.55%
Jos	118	122	125	122	130	126	87	90	93	97	97	93	75.25%	76.01%
Kaduna	184	211	210	207	185	180	147	156	161	166	153	145	75.00%	81.12%
Kano	131	172	178	191	170	139	107	128	137	141	126	105	75.87%	74.39%
Port Harcourt	177	161	167	171	168	150	130	138	129	130	136	135	81.11%	81.84%
Yola	65	71	73	74	74	81	32	33	33	43	42	46	51.14%	57.09%
All Discos	2345	2570	2607	2661	2390	2250	1840	1973	2000	2018	1853	1779	76.56%	77.38%

Appendix III: Monthly Revenue Performance by DisCos in 2021/Q4 and 2022/Q1

DisCos	Total Billing (₦' Billion)						Revenue Collected (₦' billion)						Collection Efficiency	
	2021/Q4			2022/Q1			2021/Q4			2022/Q1			2021/Q4	2022/Q1
	Oct	Nov	Dec	Jan	Feb	Mar	Oct	Nov	Dec	Jan	Feb	Mar	%	%
Abuja	12271	12994	12155	11909	12133	12452	10341	11745	9873	10870	10126	9424	85.41%	83.36%
Benin	9450	9142	9925	10284	10144	10569	5028	5312	5099	5061	5563	5476	54.14%	51.94%
Eko	13171	13160	13858	12462	11715	10339	10688	11050	11285	10305	9525	8965	82.17%	83.42%
Enugu	8683	8897	9744	9661	8925	8866	5889	6648	6114	6217	6532	5433	68.26%	66.23%
Ibadan	11954	12901	13372	12835	11148	10815	7859	8854	8045	7355	7415	7071	64.77%	62.77%
Ikeja	15721	15205	16554	16357	14918	13252	13745	14682	14077	13636	13933	13053	89.52%	91.23%
Jos	4879	5014	5146	5630	5727	5580	1938	2790	1852	2441	2573	2134	43.75%	42.20%
Kaduna	8245	8608	8117	8708	8107	7335	2874	3200	2549	2956	2421	2108	34.53%	30.99%
Kano	6215	6708	6899	6605	6690	5720	4310	4606	4439	4029	4056	3701	67.38%	61.98%
Port Harcourt	6626	6189	6256	6509	7284	7241	4173	4271	4177	4474	4761	4338	66.18%	64.53%
Yola	1497	1547	2010	1877	1926	1978	962	924	774	993	1209	1035	52.63%	56.00%
All DisCos	98712	100365	104036	102837	98716	94147	67807	74082	68283	68337	68116	62738	69.34%	67.36%

Notes of the table:

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

Appendix IV: Monthly DisCos Invoices & Remittances to MO in 2021/Q4 and 2022/Q1

DisCos	Invoice (₦' Billion)						Remittance (₦' billion)						Remittance Performance	
	2021/Q4			2022/Q1			2021/Q4			2022/Q1			2021/Q4	2022/Q1
	Oct	Nov	Dec	Jan	Feb	Mar	Oct	Nov	Dec	Jan	Feb	Mar	%	%
Abuja	2.02	1.88	2.01	1.67	1.50	1.45	1.57	6.25	1.76	1.54	1.88	1.08	161.88%	97.31%
Benin	1.73	1.62	1.75	1.50	1.31	1.36	0.98	0.99	0.91	1.10	0.74	0.59	56.44%	58.42%
Eko	1.87	1.84	1.88	1.56	1.40	1.41	1.89	1.86	1.93	0.78	1.25	1.16	101.40%	72.99%
Enugu	1.73	1.55	1.69	1.47	1.22	1.41	1.2	1	1.08	0.43	0.67	0.59	66.01%	41.29%
Ibadan	2.36	2.3	2.35	2.04	1.73	1.88	1.43	1.26	1.21	1.11	0.75	1.63	55.52%	61.80%
Ikeja	2.71	2.63	2.59	2.18	1.66	1.68	1.72	3.32	2.4	0.41	1.34	1.25	93.84%	54.43%
Jos	0.95	1	1.09	0.92	0.78	0.81	0.83	1.1	0.57	0.59	0.33	0.33	82.44%	49.76%
Kaduna	1.16	1.22	1.46	1.27	0.94	0.72	0.19	0.23	0.22	1.70	0.09	0.03	16.63%	61.70%
Kano	0.79	0.76	1.19	1.01	1.00	0.91	0.44	0.43	0.55	1.25	0.47	0.31	51.77%	69.45%
Port Harcourt	1.24	1.08	1.22	1.11	0.91	0.96	0.78	0.7	0.71	0.16	1.23	0.44	61.88%	61.29%
Yola	0.3	0.29	0.3	0.28	0.30	0.42	0.09	0.1	0.06	0.08	0.06	0.38	28.05%	51.04%
All DisCos	16.87	16.18	17.52	15.01	12.75	13.01	11.13	17.23	11.39	9.14	8.81	7.79	78.59%	63.12%
Ajaokuta Steel (₦'M)	0.03	0.03	0.03	22.67	21.46	25.32	0	0	0	0	0	0	0	0
Other Bilateral($'M)	0.004	0.005	0.005	4.21	4.36	4.91	0	0	0	0	0	0	0	0

Notes: 1. Where the remittance by a DisCo for a given period is more than the invoice received (Remittance performance >100%), it reflects payment for outstanding bills/arrears

Appendix V: Monthly DisCos Invoices & Remittances to NBET in 2021/Q4 and 2022/Q1

DisCos	Invoice (₦' Billion)						Remittance (₦' billion)						Remittance Performance	
	2021/Q4			2022/Q1			2021/Q4			2022/Q1			2021/Q4	2022/Q1
	Oct	Nov	Dec	Jan	Feb	Mar	Oct	Nov	Dec	Jan	Feb	Mar	%	%
Abuja	8.42	8.49	8.55	8.85	8.24	8.06	5.85	0	6.66	6.18	6.98	6.00	55.00%	79.97%
Benin	6	5.86	6.36	6.69	6.13	6.26	2.38	2.5	2.31	1.98	3.27	2.57	56.43%	50.61%
Eko	7.76	7.49	8.03	8.02	7.17	6.60	6.71	6.47	6.62	6.75	6.38	5.43	132.66%	102.45%
Enugu	6.15	6.09	6.48	6.77	6.42	6.33	3.08	3.34	3.51	3.52	3.55	2.65	82.74%	54.30%
Ibadan	9.01	9	9.29	9.41	8.27	7.97	4.86	4.38	4.1	4.45	3.58	3.12	56.82%	53.30%
Ikeja	10.02	9.83	10.66	10.81	9.62	9.19	9.53	9.34	8.22	10.09	7.77	6.85	93.40%	99.84%
Jos	3.42	3.44	3.59	3.79	3.54	3.63	1.62	1.09	0.8	1.10	1.11	1.07	100.73%	49.50%
Kaduna	5.5	5.38	5.49	5.70	5.22	5.15	0.81	0.9	0.73	0.69	0.48	0.20	16.73%	9.79%
Kano	4.99	4.97	5.3	5.47	5.00	4.55	2.68	2.68	2.35	2.44	2.37	1.53	52.64%	50.88%
Port Harcourt	4.53	4.25	4.43	4.52	4.55	4.46	2.1	1.46	1.45	1.35	4.09	1.84	54.37%	67.99%
Yola	2.13	2.12	2.18	2.27	2.18	2.28	0.34	0.37	0.23	0.34	0.23	0.00	27.97%	-
All DisCos	67.92	66.9	70.37	72.30	66.33	64.49	39.96	32.52	36.96	38.88	39.81	31.27	68.34%	66.70%
Ajaokuta Steel (₦'M)	129.31	134.65	116.66	123.46	119.54	144.48	0	0	0	0	0	0	0	0
Other Bilateral($'M)	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes of the table:

1. DisCos and NBET are Electricity Distribution Companies and Nigeria Bulk Electricity Trader respectively.
2. Remittance performances to NBET have been adjusted for MRT

Appendix VI: Category of Complaints Received by Discos in 2022/Q1

DISCO	COMPLAINTS RECEIVED	COMPLAINTS RESOLVED	UNRESOLVED COMPLAINTS	METER	INTERRUPTION	VOLTAGE	LOADSHEDDING	BILLING	DISCONNECTION	DELAY	OTHERS	RESOLUTION RATE
Abuja	27,251	26,948	303	5,895	5,219	2,959	2,394	3,846	4,204	2,029	705	99%
Benin	9,546	9,163	383	1,512	1,982	334	608	1,866	740	464	2,040	96%
Eko	37,938	37,412	526	19,269	6,223	1,026	899	5,519	1,855	1,245	1,902	99%
Enugu	29,028	23,466	5,562	4,153	3,614	3,269	2,932	5,953	4,761	2,944	1,402	81%
Ibadan	15,102	14,179	923	9,798	1,390	397	302	1,362	1,283	350	220	94%
Ikeja	36,802	33,542	3,260	5,852	4,954	3,699	3,886	6,624	6,522	3,611	1,654	91%
Jos	18,878	18,475	403	14,701	1,697	294	-	1,989	142	-	55	98%
Kaduna	8,363	7,425	938	1,770	3,730	560	-	1,842	185	3	273	89%
Kano	13,037	12,969	68	2,893	2,463	1,400	676	3,352	1,839	209	205	99%
Port Harcourt	46,152	45,646	506	13,343	5,746	2,314	3,015	8,883	5,302	1,886	5,663	99%
Yola	1,290	1,268	22	451	168	20	7	408	161	53	22	98%
All DisCos	243,387	230,493	12,894	79,637	37,186	16,272	14,719	41,644	26,994	12,794	14,141	94.70%

Appendix VII: Complaints Handled by Forum Offices in 2021/Q4 and 2022/Q1

S/N	Forum Offices	2021/Q4: Customers Complaints				2022/Q1: Customers Complaints			
		Complaints Received	Complaints Resolved	Complaints Pending	Resolution Rate	Complaints Received	Complaints Resolved	Complaints Pending	Resolution Rate
1	Abakaliki, Ebonyi State	53	42	11	79%	41	28	13	68%
2	Abuja, FCT	64	52	12	81%	62	47	15	76%
3	Asaba, Delta State	76	52	24	68%	84	80	4	95%
4	Awka, Anambra State	70	48	22	69%	77	67	8	87%
5	Bauchi, Bauchi State	2	0	2	0%	34	25	9	74%
6	Benin, Edo State	32	12	20	38%	67	45	22	67%
7	Birnin Kebbi, Kebbi State	39	27	12	69%	48	31	17	65%
8	Calabar, C/Rivers State	190	151	39	79%	142	114	28	80%
9	Dutse, Jigawa State	84	74	10	88%	72	54	18	75%
10	Eko, Lagos State	8	5	3	63%	15	10	4	67%
11	Enugu, Enugu State	14	10	4	71%	10	3	7	30%
12	Gombe, Gombe State	239	140	99	59%	231	126	105	55%
13	Gusau, Zamfara State	553	338	215	61%	354	222	132	63%
14	Ibadan, Oyo State	44	25	19	57%	39	37	2	95%
15	Ikeja, Lagos State	14	14	0	100%	2	1	1	50%
16	Ilorin, Kwara State	2	0	2	0%	28	20	8	71%
17	Jos, Plateau State	153	108	33	71%	174	133	41	76%
18	Kaduna, Kaduna State	24	23	0	96%	25	18	7	72%
19	Kano, Kano State	20	18	1	90%	3	3	0	100%
20	Katsina, Katsina State	9	8	1	89%	4	0	4	0%
21	Lafia, Nasarawa State	24	10	11	42%	13	6	7	46%
22	Lokoja, Kogi State	9	3	6	33%	7	6	1	86%
23	Makurdi, Benue State	22	4	11	18%	32	16	7	50%
24	Osogbo, Osun State	148	133	15	90%	197	177	20	90%
25	Owerri, Imo State	29	18	11	62%	23	18	5	78%
26	Port Harcourt, Rivers State	168	156	12	93%	225	176	49	78%
27	Sokoto, Sokoto State	20	16	4	80%	8	3	5	38%
28	Umuahia, Abia State	99	55	37	56%	77	44	22	57%
29	Uyo, Akwa Ibom State	134	81	53	60%	156	83	73	53%
30	Yola, Adamawa State	16	13	3	81%	29	20	9	69%
31	**All Forum Offices**	2359	1636	692	69%	2279	1613	643	71%

Appendix VIII: Category of Complaints Received by Forum Offices in 2021/Q4 and 2022/Q1

Forum Office	2021 Q4								2022/Q1							
	Billing	Disconnection	Con. Delay	Interruption	Metering	Load Shedding	Voltage	Others	Billing	Disconnection	Con. Delay	Interruption	Metering	Load Shedding	Voltage	Others
Abakaliki, Ebonyi State	49	0	0	0	4	0	0	0	41	0	0	0	0	0	0	0
Abuja, FCT	10	0	0	0	50	0	0	4	6	0	0	0	52	0	0	4
Asaba, Delta State	66	4	0	0	5	0	0	1	74	1	0	0	4	0	0	5
Awka, Anambra State	55	2	0	0	10	0	0	3	54	0	0	0	23	0	0	0
Bauchi, Bauchi State	1	1	0	0	0	0	0	0	20	4	0	0	8	0	0	2
Benin, Edo State	28	1	0	1	2	0	0	0	55	4	1	2	3	0	0	2
B/Kebbi, Kebbi State	34	1	0	0	3	0	0	1	44	0	0	0	3	0	0	1
Calabar, C/Rivers State	137	13	0	2	34	0	0	4	95	6	0	5	33	0	0	3
Dutse, Jigawa State	38	8	0	0	38	0	0	0	35	16	0	0	20	0	0	1
Eko, Lagos State	4	1	0	0	3	0	0	0	9	0	0	0	6	0	0	0
Enugu, Enugu State	13	0	0	0	0	0	0	1	8	0	0	0	2	0	0	0
Gombe, Gombe State	177	10	0	2	24	0	0	26	151	19	0	3	30	0	0	28
Gusau, Zamfara State	152	158	65	112	63	0	0	3	291	0	0	0	63	0	0	0
Ibadan, Oyo State	26	0	0	0	18	0	0	0	12	6	0	0	19	0	0	2
Ikeja, Lagos State	1	12	0	0	0	0	0	1	1	0	0	0	1	0	0	0
Ilorin, Kwara State	2	0	0	0	0	0	0	0	13	0	0	0	9	0	1	5
Jos, Plateau State	143	4	0	0	2	0	0	4	154	7	0	0	8	0	0	5
Kaduna, Kaduna State	8	11	0	0	1	0	0	4	10	2	0	0	3	0	0	10
Kano, Kano State	10	7	0	0	0	0	0	3	3	0	0	0	0	0	0	0
Katsina, Katsina State	6	0	0	0	2	0	0	1	4	0	0	0	0	0	0	0
Lafia, Nasarawa State	7	13	0	4	0	0	0	0	7	0	0		6	0	0	0
Lokoja, Kogi State	0	7	0	0	0	2	0	0	5	1	0	0	1	0	0	0
Makurdi, Benue State	15	0	0	0	7	0	0	0	32	0	0	0	0	0	0	0
Osogbo, Osun State	92	6	0	0	37	0	0	13	106	5	0	0	81	0	0	5
Owerri, Imo State	15	8	0	0	1	0	0	5	15	4	0	0	1	0	1	2
P/Harcourt, Rivers State	107	25	0	0	29	0	0	7	141	12	0	0	42	5	10	15
Sokoto, Sokoto State	18	0	0	0	0	0	0	2	6	0	0	0	0	0	0	2
Umuahia, Abia State	79	2	3	0	13	0	0	2	58	6	1	1	10	0	0	1
Uyo, Akwa Ibom State	88	12	1	3	15	0	3	12	116	7	2	3	22	0	2	4
Yola, Adamawa State	9	4	0	2	1	0	0	0	17	3	0	6	0	0	1	2
All Forum Offices	1390	310	69	126	362	2	3	97	1,583	103	4	20	450	5	15	99

Appendix IX: Monthly Cash Flow of the Commission between October 2021 and March 2022

	Summary for 2021/Q4 (₦' Million)				Summary for 2022/Q1 (₦' Million)			
	Oct.	Nov.	Dec.	Total	Jan.	Feb.	Mar.	Total
A. Revenue								
Operating Levy (i.e., MC)	3,780.70	1,666.50	1,496.30	6,943.50	2,017.89	1,385.74	12.20	3,415.83
Other IGR	37.91	138.29	37.78	213.98	46	34.45	85.94	166.39
Total Revenue	3,818.61	1,804.79	1,534.08	7,157.48	2,063.89	1,420.19	98.14	3,582.22
B. Expenditure								
Personnel Cost	181.14	731.6	735.1	1,647.84	354.18	209.72	580.32	1144.22
Regulatory Expenses	146.01	242.64	336.65	725.3	11.06	204.91	26.1	242.07
A & G Maintenance	43.17	17.51	39.54	100.22	1.9	34.86	29.42	66.18
Total Expenditure	370.32	991.75	1,111.29	2,473.36	367.14	449.49	635.84	1,452.47
C. Net Cash Flow (A-B)	3,448.29	813.04	422.79	4684.12	1696.75	970.7	-537.7	2,129.75
Outstanding Liabilities				4,361.18				4,087.34

Notes of the table: MC is Market Charges; IGR Internal Generated Revenue; and A&G is Admin and General

Appendix X: Meter Installation through the MAP and NMMP Intervention

Discos	Meters contracted	Meters installed in 2019	Meters installed in 2020	Meters installed in 2021	Meters installed in 2022/Q1	Total number installations
Abuja	1,000,475	63,925	105,253	87,987	705	257,870
Benin	664,646	1,169	11,154	72,256	6,336	90,915
Eko	283,178	5,422	32,353	71,362	3,263	112,400
Enugu	713,926	17,410	54,603	97,433	8,852	178,298
Ibadan	1,103,867	4,771	38,403	94,309	30,404	167,887
Ikeja	1,186,114	22,876	160,469	126,051	18,169	327,565
Jos	593,473	15	4,673	87,977	1,966	94,631
Kaduna	519,152	43	8,258	18,236	8,493	35,030
Kano	562,747	22	3,314	87,736	199	91,271
Port Harcourt	220,044	7,775	36,546	92,543	7,123	143,987
Yola	749,376	-	478	5,565	-	6,043
Total	7,596,998	123,428	455,504	841,455	85,510	1,505,897

Appendix XI: Meter Installation through the NMMP Intervention

Discos	Meters contracted	Meters installed in 2019	Meters installed in 2020	Meters installed in 2021	Meters installed in 2022/Q1	Total number installations
Abuja	100,475	-	17,777	82,698	-	100,475
Benin	90,870	-	-	71,152	6,336	77,488
Eko	79,178	-	55	63,659	2,972	66,686
Enugu	92,381	-	-	92,025	-	92,025
Ibadan	114,952	-	4,985	93,761	10,966	109,712
Ikeja	111,703	-	24	111,679	-	111,703
Jos	93,473	-	983	87,977	1,966	90,926
Kaduna	69,152	-	1,555	15,835	7,042	24,432
Kano	87,747	-	11	87,736	-	87,747
Port Harcourt	82,720	-	14,212	68,508	-	82,720
Yola	85,376	-	478	5,565	-	6,043
Total	1,008,026	-	40,080	780,595	29,282	849,957

Appendix XII: Meter Installation through the MAP Intervention

Discos	Meters contracted	Meters installed in 2019	Meters installed in 2020	Meters installed in 2021	Meters installed in 202/Q1	Total number installations
Abuja	900,000	63,925	87,476	5,289	705	157,395
Benin	573,776	1,169	11,154	1,104	-	13,427
Eko	204,000	5,422	32,298	7,703	291	45,714
Enugu	621,545	17,410	54,603	5,408	8,852	86,273
Ibadan	988,915	4,771	33,418	548	19,438	58,175
Ikeja	1,074,411	22,876	160,445	14,372	18,169	215,862
Jos	500,000	15	3,690	-	-	3,705
Kaduna	450,000	43	6,703	2,401	1,451	10,598
Kano	475,000	22	3,303	-	199	3,524
Port Harcourt	137,324	7,775	22,334	24,035	7,123	61,267
Yola	664,000	-	-	-	-	-
Total	6,588,971	123,428	415,424	60,860	56,228	655,940

Appendix XIII: Categories of complaints at the Forum Offices 2022/Q1

S/N	FORUM OFFICES	COMPLAINTS B/F	CURRENT COMPALINTS	COMPLAINTS RECEIVED	COMPLAINTS RESOLVED	COMPLAINTS REJECTED	COMPLAINTS WITHDRAWN	PENDING COMPLAINTS	NO OF HEARINGS	BILLING	DISCONNECTION	DELAY	INTERRUPTION	METER	LOADSHEDDING	VOLTAGE	OTHERS	RESOLUTION RATE
1	ABAKALIKI	11	30	41	28	0	0	13	3	41								68%
2	ABUJA	12	50	62	47	0	0	15	3	6	0	0	0	52	0	0	4	76%
3	ASABA	24	60	84	80	0	0	4	4	74	1			4			5	95%
4	AWKA	22	55	77	67	0	2	8	5	54				23				87%
5	BAUCHI	25	9	34	25	0	0	9	1	20	4	0	0	8	0	0	2	74%
6	BENIN	20	47	67	45	0	0	22	4	55	4	1	2	3	0	0	2	67%
7	CALABAR	12	36	48	31	0	0	17	3	44	0	0	0	3	0	0	1	65%
8	EKO	39	103	142	114	0	0	28	3	95	6	0	5	33	0	0	3	80%
9	ENUGU	10	62	72	54	0	0	18	4	35	16			20			1	75%
10	GOMBE	7	8	15	10	0	1	4	1	9	0	0	0	6	0	0	0	67%
11	GUSAU	0	10	10	3	0	0	7	0	8	0	0	0	2	0	0	0	30%
12	IBADAN	99	132	231	126	0	0	105	4	151	19	0	3	30	0	0	28	55%
13	IKEJA	92	262	354	222	0	0	132	5	291	0	0	0	63	0	0	0	63%
14	ILORIN	12	27	39	37			2	2	12	6			19			2	95%
15	JIGAWA	0	2	2	1	0	0	1	0	1				1			0	50%
16	JOS	20	8	28	20	0	0	8	1	13	0	0	0	9	0	1	5	71%
17	KADUNA	88	86	174	133	0	0	41	7	154	7	0	0	8	0	0	5	76%
18	KANO	0	25	25	18	0	0	7	1	10	2	0	0	3	0	0	10	72%
19	KATSINA	2	1	3	3	0	0	0	0	3	0	0	0	0	0	0	0	100%
20	KEBBI	0	4	4	0	0	0	4	0	4	0	0	0	0	0	0	0	0%
21	LAFIA	5	8	13	6	0	0	7	1	7				6				46%
22	LOKOJA	4	3	7	6	0	0	1	1	5	1	0		1	0	0	0	86%
23	MAKURDI	13	19	32	16	9	0	7	0	32								50%
24	OSHOGBO	20	177	197	177		0	20	3	106	5			81			5	90%
25	OWERRI	11	12	23	18	0	0	5	2	15	4	0	0	1	0	1	2	78%
26	P/H	0	225	225	176	0	0	49	4	141	12	0	0	42	5	10	15	78%
27	SOKOTO	0	8	8	3	0	0	5	0	6	0	0	0	0	0	0	2	38%
28	UMUAHIA	37	40	77	44	0	11	22	3	58	6	1	1	10	0	0	1	57%
29	UYO	89	67	156	83	0	0	73	1	116	7	2	3	22	0	2	4	53%
30	YOLA	3	26	29	20	0	0	9	1	17	3	0	6	0	0	1	2	69%
	TOTAL	**677**	**1,602**	**2279**	**1,613**	**9**	**14**	**643**	**67**	**1,583**	**103**	**4**	**20**	**450**	**5**	**15**	**99**	**71%**

Appendix XIV: Categories of complaints received by the DisCos in 2022/Q1

DISCO	COMPLAINTS RECEIVED	COMPLAINTS RESOLVED	COMPLAINTS UNRESOLVED	METER	INTERRUPTION	VOLTAGE	LOADSHEDDING	BILLING	DISCONNECTION	DELAY	OTHERS	RESOLUTION RATE
Abuja	27,251	26,948	303	5,895	5,219	2,959	2,394	3,846	4,204	2,029	705	99%
Benin	9,546	9,163	383	1,512	1,982	334	608	1,866	740	464	2,040	96%
Eko	37,938	37,412	526	19,269	6,223	1,026	899	5,519	1,855	1,245	1,902	99%
Enugu	29,028	23,466	5,562	4,153	3,614	3,269	2,932	5,953	4,761	2,944	1,402	81%
Ibadan	15,102	14,179	923	9,798	1,390	397	302	1,362	1,283	350	220	94%
Ikeja	36,802	33,542	3,260	5,852	4,954	3,699	3,886	6,624	6,522	3,611	1,654	91%
Jos	18,878	18,475	403	14,701	1,697	294	-	1,989	142	-	55	98%
Kaduna	8,363	7,425	938	1,770	3,730	560	-	1,842	185	3	273	89%
Kano	13,037	12,969	68	2,893	2,463	1,400	676	3,352	1,839	209	205	99%
Port Harcourt	46,152	45,646	506	13,343	5,746	2,314	3,015	8,883	5,302	1,886	5,663	99%
Yola	1,290	1,268	22	451	168	20	7	408	161	53	22	98%
Total	243,387	230,493	12,894	79,637	37,186	16,272	14,719	41,644	26,994	12,794	14,141	94.70%

Table XV: List and Addresses of NERC Forum Offices as March 2022

	Forum Office	*Location*	*Telephone*	*Email*
1	*Abakaliki, Ebonyi State*	3, Ezekuna Crescent, Off Nsugbe Street, Abakaliki Ebonyi State	9037808590	abakalikiforum@nerc.gov.ng
2	*Abuja, FCT*	14, Road 131, Gwarinpa, Federal Capital Territory, Abuja	8146862225	abujaforum@nerc.gov.ng
3	*Asaba, Delta State*	Denis Osadebe Way, Beside Mobil Filling Station, Asaba, Delta State	9062277247	asabaforum@nerc.gov.ng
4	*Awka, Anambra State*	Plot 80, Aroma Junction Layout, Opp. CBN, Awka, Anambra State	9037808594	awkaforum@nerc.gov.ng
5	*Bauchi, Bauchi State*	37, Old Jos Road, GRA, Bauchi, Bauchi State	9062924607	bauchiforum@nerc.gov.ng
6	*Benin, Edo State*	34, Akpakpava Street, Benin City, Edo State	9037808592	beninforum@nerc.gov.ng
7	*B/Kebbi, Kebbi State*	8, Ahmadu Bello Way, Opp. Kebbi State Govt House, Kebbi State	9062863161	birninkebbiforum@nerc.gov.ng
8	*Calabar, C/Rivers State*	Plot 109, MCC Road by Ibok Street, Calabar, Cross River State	9062863159	calabarforum@nerc.gov.ng
9	*Dutse, Jigawa State*	Dutse G.R.A, Dutse, Jigawa State	7031704827	jigawaforum@nerc.gov.ng
10	*Eko, Lagos State*	61, Odunlami Street, Off Marina, Lagos Island, Lagos State	8106807261	ekoforum@nerc.gov.ng
11	*Enugu, Enugu State*	John Anichukwu Close, Plot 7 Mkpokiti Pocket Layout, Enugu, Enugu State	8146862230	enuguforum@nerc.gov.ng
12	*Gombe, Gombe State*	Government Layout GDP/2, Along Ministry of Education Road, Gombe State	8140440079	gombeforum@nerc.gov.ng
13	*Gusau, Zamfara State*	2 Canteen Daji, J. B. Yakubu Road, Gusau, Zamfara State	9062863163	gusauforum@nerc.gov.ng
14	*Ibadan, Oyo State*	Jibowu Str, Opp. Magara Police Station, Iyaganku, G.R.A, Ibadan, Oyo State	8146862252	ibadanforum@nerc.gov.ng
15	*Ikeja, Lagos State*	199, Obafemi Awolowo Way, Alausa, Ikeja, Lagos State	8106807298	ikejaforum@nerc.gov.ng
16	*Ilorin, Kwara State*	30, Stadium Road, Off Taiwo Road, Ilorin, Kwara State	9062924603	ilorinforum@nerc.gov.ng
17	*Jos, Plateau State*	5a, Ray-field Road, Jos, Plateau State	9037808597	josforum@nerc.gov.ng
18	*Kaduna, Kaduna State*	22, Ahmadu Bello Way, Opposite NNDC Building, Kaduna, Kaduna State	8106807299	kadunaforum@nerc.gov.ng
19	*Kano, Kano State*	2, Miller Road, Bompai, Nasarawa G.R.A, Kano, Kano State	8146862222	kanoforum@nerc.gov.ng
20	*Katsina, Katsina State*	7, Abuja Crescent, Off Hassan Usman Katsina Road, Katsina, Katsina State	7031704821	katsinaforum@nerc.gov.ng
21	*Lafia, Nasarawa State*	Manyi Street, Off Jos Road, Bukan Sidi, Lafia, Nasarawa State	9062924599	lafiaforum@nerc.gov.ng
22	*Lokoja, Kogi State*	Hassan Kastina Rd, Opp. State Civil Service Commission, Zone 8 Police HQ, Lokoja, Kogi State.	9062924601	lokojaforum@nerc.gov.ng
23	*Makurdi, Benue State*	Hephzibah Plaza, Atom Kpera Road, Opp. Makurdi Int'l School, Benue State	9062277249	makurdiforum@nerc.gov.ng
24	*Osogbo, Osun State*	51, Isiaka Adeleke Way, Along Okefia-Alekuwodo Rd, Osogbo, Osun State	9062924604	osogboforum@nerc.gov.ng
25	*Owerri, Imo State*	1, C.B Anyanwu Rd, Housing Area B, Exclusive Garden, Owerri	9062277245	owerriforum@nerc.gov.ng
26	*P/Harcourt, Rivers State*	The Vhelberg Imperial Hotel, Plot 122 & 122a, Bank Anthony Avenue, Off Ordinance Rd, P/Harcourt	8146862223	phforum@nerc.gov.ng
27	*Sokoto, Sokoto State*	1, Garba Duba Road, Sokoto, Sokoto State	9062863157	sokotoforum@nerc.gov.ng
28	*Umuahia, Abia State*	House 2, Adelabu Str., Amaokwe Housing Estate, Umuahia Ibeku, Abia State	9062277251	umuahiaforum@nerc.gov.ng
29	*Uyo, Akwa Ibom State*	63, Osongama Road, Off Oron/Uyo Airport Road, Uyo, Akwa Ibom State	9062863165	uyoforum@nerc.gov.ng
30	*Yola, Adamawa State*	5, Nguroje Str., Karewa Extension, Jimeta, Yola, Adamawa State	9037808535	yolaforum@nerc.gov.ng

NIGERIAN ELECTRICITY REGULATORY COMMISSION
PLOT 1387| CADASTRAL ZONE A00| CENTRAL BUSINESS DISTRICT|
P.M.B. 136| GARKI| ABUJA
www.nerc.gov.ng