



# NIGERIAN ELECTRICITY REGULATORY COMMISSION



## QUARTERLY REPORT 20 24



**ELECTRICITY ON DEMAND**

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The Nigerian Electricity Regulatory Commission (NERC) quarterly report is prepared in compliance with Section 56(3) of the Electricity Act 2023, which mandates the Commission to submit 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, as well as consumer affairs. 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 issue freely from the Commission's Website: [www.nerc.gov.ng](http://www.nerc.gov.ng)

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## List of Abbreviations

ADR	Alternative Dispute Resolution
AEDC	Abuja Electricity Distribution Company Plc
ATC&C	Aggregate Technical, Commercial & Collection Loss
BEDC	Benin Electricity Distribution Company Plc
CAPEX	Capital Expenditure
CCU	Customers Complaint Unit
CEET	Compagnie Energie Electrique du Togo
CTC	Competition Transition Charge
DisCos	Distribution Companies
DSOs	Distribution System Operators
EA	Electricity Act
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 hour
IBEDC	Ibadan Electricity Distribution Company Plc
IEDN	Independent Electricity Distribution Network
IE	Ikeja Electric Plc
JEDC	Jos Electricity Distribution Company Plc
KAEDC	Kaduna Electricity Distribution Company Plc
KEDC	Kano Electricity Distribution Company Plc
kWh	Kilowatt hour
MAP	Meter Assets Provider
MDA	Ministries, Departments and Agencies
MO	Market Operator
MTS	MYTO Target Sales
MW	Megawatts
MWh	Megawatt 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
PAC	Partial Activation of Contract
PCC	Partial Contracted Capacity
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



**01 Executive Summary**



## 1.0 SUMMARY

Pursuant to Section 34(1)(e) of the Electricity Act 2023 which states that "the Commission shall ensure the safety, security, reliability, and quality of service in the production and delivery of electricity to consumers", the Nigerian Electricity Regulatory Commission (NERC or the Commission) continues to monitor the technical, operational, and commercial performance of the Nigerian Electricity Supply Industry (NESI). The Commission publishes quarterly reports to appraise the public on the overall performance of the NESI.

### Operational Performance

The Operational performance parameters reported in 2024/Q1 include the available generation capacity, plant availability factor, total quarterly generation, load factor, and generation mix of the twenty-seven (27) grid-connected power plants. Other parameters reported include the frequency, voltage and overall stability performance of the national grid during the quarter.

**a. Available Generation Capacity:** There were twenty-seven (27) grid-connected power plants in 2024/Q1 consisting of nineteen (19) gas, four (4) hydro, two (2) steam, and two (2) gas/steam-powered plants. The average available generation capacity across all the plants during the quarter was 4,249.10MW representing a -13.68% decrease (-673.16MW) compared to the 4,922.26MW recorded in 2023/Q4 (Figure A). Seventeen (17) out of the twenty-seven (27) grid-connected plants recorded decreased available generation capacities in 2024/Q1 compared to 2023/Q4.

*The average available generation capacity in 2024/Q1 was 4,249.10MW*

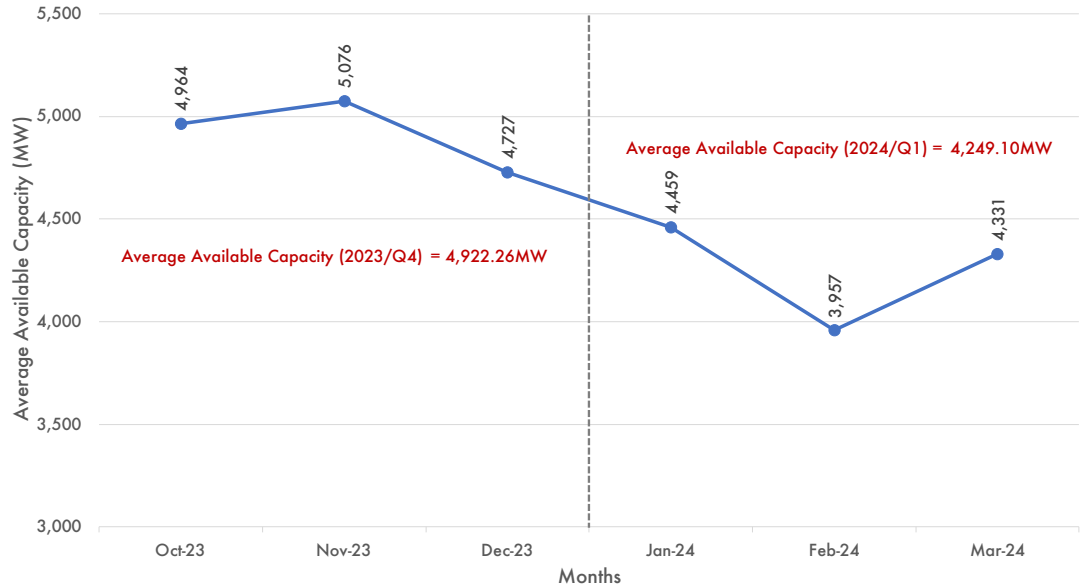
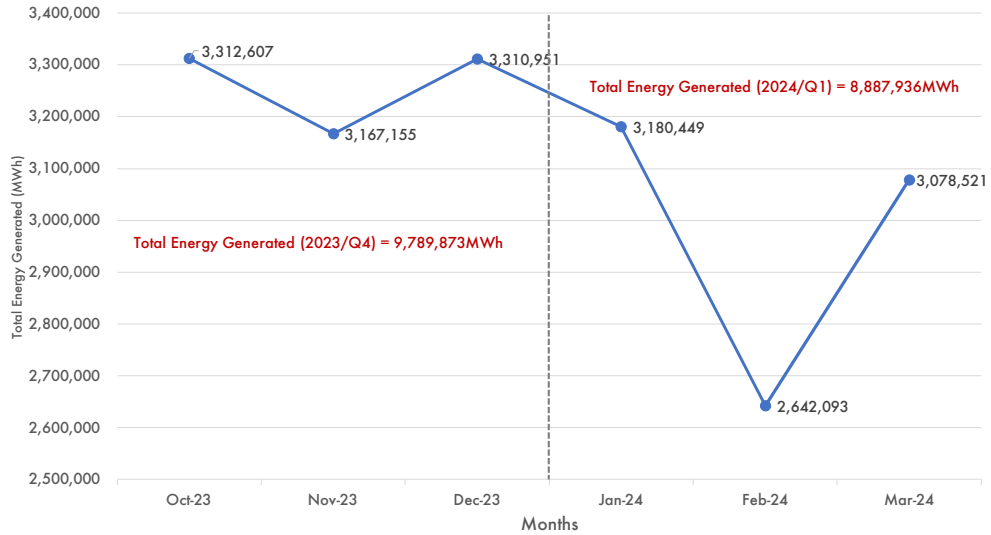


Figure A: Available Generation Capacity (October 2023 - March 2024)

*The total electricity generated in 2024/Q1 was 8,887.93GWh*

**b. Total Quarterly Generation:** In 2024/Q1, the average hourly generation of available units decreased by -8.22% (-364.25MWh/h) from 4,433.82MWh/h in 2023/Q4 to 4,069.57MWh/h. The total electricity generated in the quarter also decreased by -9.21%<sup>1</sup> (-901.94GWh) from 9,789.87GWh in 2023/Q4 to 8,887.93GWh (Figure B). The decrease in gross energy generation during the quarter was primarily due to the decrease in the available generation capacities of the grid-connected power plants compared to 2023/Q4.

<sup>1</sup> The percentage change in total generation and average hourly generation is different across Q4/2023 vs Q1/2024 because the number of days in each of the quarters is not the same (92/91 days). When the number of the days in the quarters being compared are the same, the percentage change in total generation will be the same with the percentage change in average hourly generation.



**Figure B: Total Generation (October 2023 – March 2024)**

The significant decrease in the total amount of energy generated in February compared to energy generated in January can largely be attributed to the decrease in energy generation from Egbin ST (Gas) (-142.19MWh), Rivers IPP (-105.60MWh), Olorunsogo NIPP (-53.32MWh), and Geregú (-41.49MWh) power plants. Omotosho NIPP did not generate in February due to gas unavailability.

**c. Grid Performance:** In 2024/Q1, the average lower daily (49.00Hz) and average upper daily (50.68Hz) system frequencies were outside the normal operating limits (49.75Hz - 50.25Hz) but remained within the lower and higher bound stress limits (48.75Hz - 51.25Hz). The average lower daily (297.60kV) and average upper daily (353.18kV) system voltages were however outside the prescribed regulatory limits (313.50kV - 346.50kV). The Commission is aware of the system risk posed by the continuous operations of the grid outside the normal operating limits and continues to push the SO to improve its system coordination activities accordingly.

There were two (2) incidents on the national grid during 2024/Q1 - one (1) partial and one (1) total collapse. The partial collapse occurred on 04 February 2024 while the total collapse occurred on 28 March 2024. In line with section 20.1 of the Grid Code, the SO is expected to submit to the Commission, a detailed report containing the root

causes of the incidents leading to the system disruptions and mitigation plans to avoid a recurrence of similar incidents in the future.

### Commercial Performance

The commercial performance of the 2024/Q1 report covers energy offtake performance, billing efficiency, collection efficiency, aggregate technical, commercial, and collection loss, as well as the market remittance of relevant market participants. The Commission monitors the financial performance of the NESI to ensure efficient and commensurate cash flow along the value chain for the sustainability of the industry.

**a. Energy Offtake Performance:** In 2024/Q1, the average energy offtake by DisCos at their trading points was 3,283.87MWh/h which was a decrease of -429.29MWh/h (-11.56%) compared to the 3,713.16MWh/h recorded in 2023/Q4.

**b. Billing Efficiency:** The total energy received by all DisCos in 2024/Q1 was 7,171.93GWh while the energy billed to end-use customers was 5,769.52GWh, translating into an overall billing efficiency of 80.45%. This represents an increase of +2.00 pp relative to the 78.45% recorded in 2023/Q4.

**c. Collection Efficiency:** The total revenue collected by all DisCos in 2024/Q1 was ₦291.62 billion out of ₦368.65 billion billed to customers. This translates to a collection efficiency of 79.11% which represents an increase of +5.32pp when compared to 2023/Q4 (73.79%).

**d. Aggregate Technical, Commercial and Collection (ATC&C) Loss:** ATC&C provides a consolidated report of how much revenue a DisCo can collect relative to how much it should have collected based on the volume of energy it received (and sold to customers). It is the indicator that evaluates the actual energy and revenue loss in electricity distribution systems.

The ATC&C loss in 2024/Q1 was 36.36% comprising - technical and commercial loss (19.55%) and collection loss (20.83%). The ATC&C loss improved by 5.75pp compared to 2023/Q4 (42.11%).

*A total of ₦291.62 billion was collected by all DisCos in 2024/Q1 out of the ₦368.65 billion billed to customers.*

In 2024/Q1, Ikeja was the only DisCo that recorded a lower ATC&C (15.81%) than its target (18.73%). The inability of DisCos to achieve their respective ATC&C targets means that they are not able to recover the full revenues they require to provide returns to investors and in some instances – they may not even fully recover the cost of delivering electricity to the customers. Ultimately, both cases may lead to the erosion of their long-term financial sustainability.

**e. Market remittance:** In 2024/Q1, the cumulative upstream invoice payable by DisCos was ₦114.12 billion, consisting of ₦65.96 billion for DRO-adjusted generation costs from NBET<sup>2</sup> and ₦48.16 billion for transmission and administrative services by the Market Operator (MO). Out of this amount, the DisCos collectively remitted a total sum of ₦110.62 billion (₦65.52 billion for NBET and ₦45.10 billion for MO) with an outstanding balance of ₦3.50 billion. This translates to a remittance performance of 96.93% in 2024/Q1 compared to the 69.88% recorded in 2023/Q4. The disaggregated DisCos remittance performance to the market for 2024/Q1 is presented in Figure C.

**f. Remittance by Special and Bilateral Customers:** In 2024/Q1, none of the four (4) international bilateral customers serviced by the MO made any payment against the \$14.19 million invoice issued to them by the MO for services rendered in 2024/Q1. Similarly, none of the bilateral customers within the country made any payment against the cumulative invoice of ₦1,860.11 million issued to them by the MO for services rendered in 2024/Q1<sup>3</sup>.

<sup>2</sup> The NBET invoice payable by the DisCos for 2024/Q1 was only ₦65.96 bn because the FGN has taken responsibility for ~90% (₦633.30 bn) of the total generation costs in the form of subsidies arising from the freezing of end-use customer tariffs at the rates that became effective in December 2022.

<sup>3</sup> It is noteworthy that both local and international bilateral customers made payments during 2024/Q1 for outstanding MO invoices from previous quarters; two (2) international customers paid \$5.96 million while eight (8) local customers paid ₦505.71 million. The details of these payments are contained in Appendix VII.

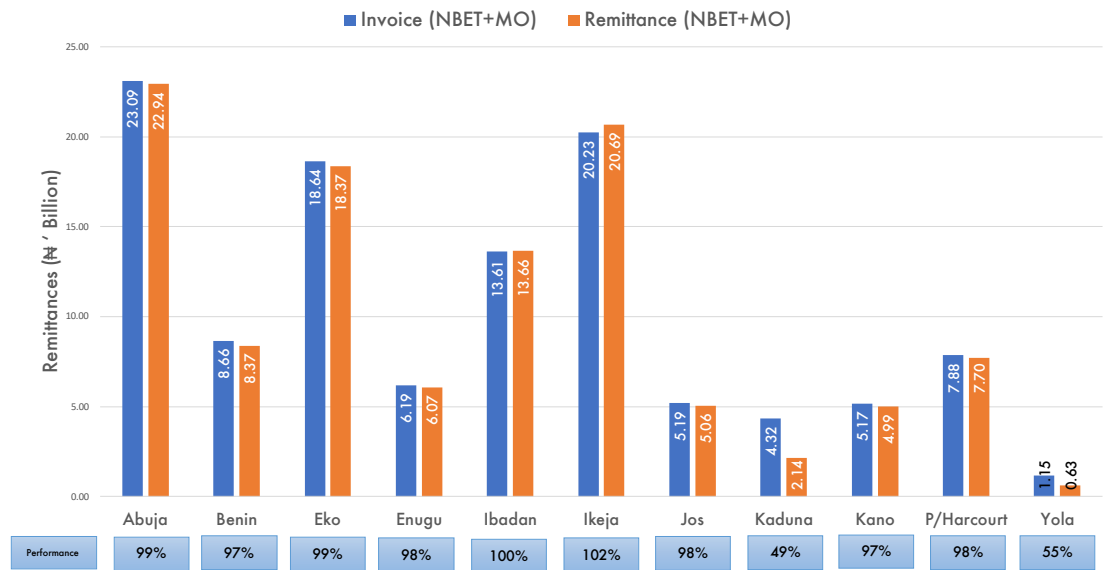


Figure C: MRO adjusted invoices and remittances in 2024/Q1

### Regulatory Functions

The EA 2023, section 34(2)(d), empowers the Commission to licence and regulate persons engaged in the generation, transmission, system operation, distribution, supply and trading of electricity” in the NESI. Additionally, the Commission regulates market entry or exit by sector players and issues Regulations, Guidelines and Orders that guide the operations of licensees, permit holders and registered operators in the sector.

a. **Regulations/Orders:** The Commission issued one (1) Regulation and thirty-six (36) new Orders in 2024/Q1. They include:

- [NERC-R-001-2024](#) – Eligible Customer Regulations, 2024.
- [NERC/2023/023–NERC/2023/033](#) – Multi-Year Tariff Order (MYTO) 2024 for the Distribution Companies.
- [NERC/2023/034](#) – Multi-Year Tariff Order (MYTO) 2024 for the Transmission Company of Nigeria Plc.
- [NERC/2023/035](#) – Order on Performance Improvement Plan of the Transmission Company of Nigeria.
- NERC/2024/001 – Order on the Regulatory Intervention in Kaduna Electricity Distribution Plc.

*The Commission issued one (1) Regulation and thirty-six (36) new Orders in 2024/Q1.*

- [NERC/2024/004 - NERC/2024/014](#) – Order on Non-Compliance with Capping of Estimated Bill by DisCos for the period January – September 2023.
- NERC/2024/016 - NERC/2024/036 – February 2024 Supplementary Order to the Multi-Year Tariff Order for the DisCos.

**b. Licences and Permits:** The Commission issued thirty-two (32) licences, permits and certifications in 2024/Q1. They include:

*Thirty-two (32) licences, permits and certifications were issued in 2024/Q1.*

- Nine (9) new off-grid generation licences with a total nameplate capacity of 109.69MW.
- Three (3) new electricity trading licences.
- Nine (9) captive generation permits with a total nameplate capacity of 52.57MW.
- Three (3) permits and two (2) registration certificates for mini-grids.
- Six (6) certifications for Meter Service Providers.

### Consumer Affairs

**a. Consumer Education and Enlightenment:** In line with its commitment to ensure continuous customer education and enlightenment, the Commission continued to implement customer enlightenment programs within the quarter. In addition to various mass enlightenment programs hosted across traditional media and social media channels, town hall meetings were also used to inform customers of other general service delivery matters in the industry. In March 2024, the Commission convened town hall meetings in Kano (7th-9th March) and Lagos (21st-23rd March) where issues around service-based tariff, capping, metering, and customer redress mechanisms were discussed.

*A total of 123,604 meters were installed in 2024/Q1.*

**b. Metering:** A total of 123,604 meters were installed in 2024/Q1, representing an increase of 8,423 installations (+7.31%) compared to the 115,181 meters installed in 2023/Q4. The new installations increased the net end-user metering rate in the NESI by 0.40pp between 2023/Q4 (44.39%) and 2024/Q1 (44.79%). During the quarter, 114, 477 meters (92.62% of the total installations) were

installed under the MAP framework while 14 meters were installed under the NMMP framework. The Vendor Financed framework accounted for 7,540 meter installations while 1,573 meter installations were recorded under the DisCo Financed framework. The metering by the respective DisCos in the quarter under review is presented in Figure D.

The Commission expects DisCos to utilise a combination of the five (5) meter financing frameworks that have been provided in the 2021 [Meter Asset Provider and National Mass Metering Regulations](#) (NERC – R – 113 – 2021) to close their respective metering gaps. As a safeguard for customers against exploitation due to the lack of meters, the Commission has continued to issue monthly energy caps for all feeders in each DisCo. This sets the maximum amount of energy that may be billed to an unmetered customer for the respective month based on gross energy received by the DisCo and consumption by metered customers.

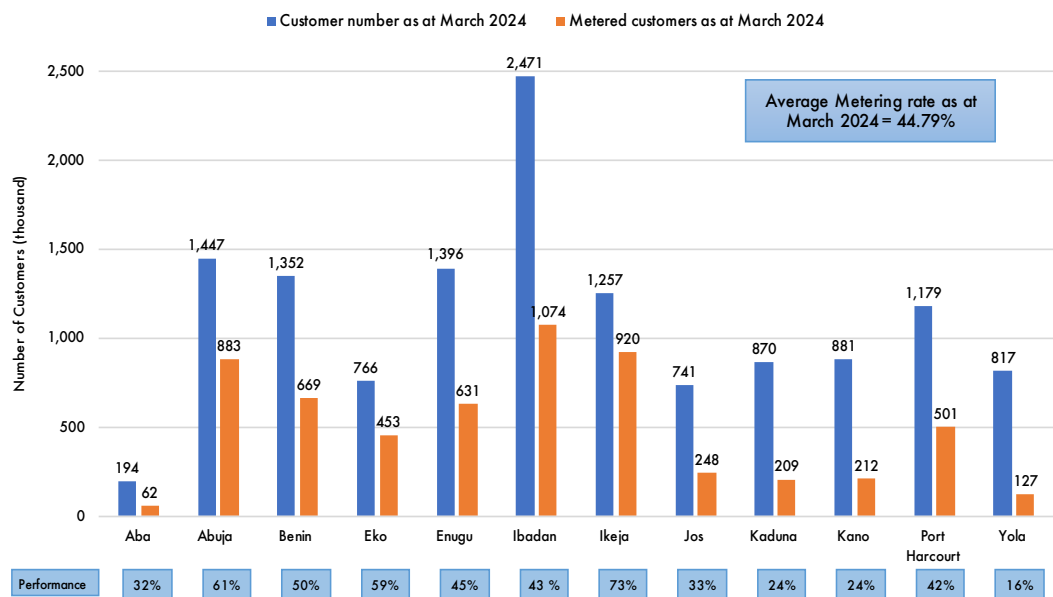


Figure D: Status of Customer metering as of March 2024

**c. Customer Complaints:** The DisCos cumulatively received 291,380 complaints from consumers in 2024/Q1. This represents a decrease of -19,337 (-6.22%) compared to the 310,717 complaints received in 2023/Q4. Metering, billing, and service interruption were the



prevalent issues of customer complaints, accounting for more than 75% of the total complaints during the quarter.

*In 2024/Q1, the Forum Offices resolved 57.55% of the total appeals in seventy-two (72) sittings.*

**d. Forum Offices:** Pursuant to the provisions of its Customer Protection Regulations 2023 (CPR 2023), the Commission set up Forum Offices across the country to review unresolved disputes from the DisCos' Complaint Handling Units (DisCos-CCU). The total number of active appeals across the Forum Offices in 2024/Q1 was 2,429 made up of 1,653 new appeals in 2024/Q1 and 776 pending appeals from 2023/Q4. During the period, the forum panels held seventy-two (72) sittings and resolved 1,398 (57.55%) of the appeals filed at Forum Offices nationwide; the resolution rate was 9.85pp lower than the 67.47% achieved in 2023/Q4.

The Commission continues to take measures that will ensure a more efficient customer complaint resolution process starting with improvements in the quality of complaint resolution at the DisCo-CCU. To this end, the CPR 2023 contains updates to the customer service standards expected from the DisCos in line with international best practices.

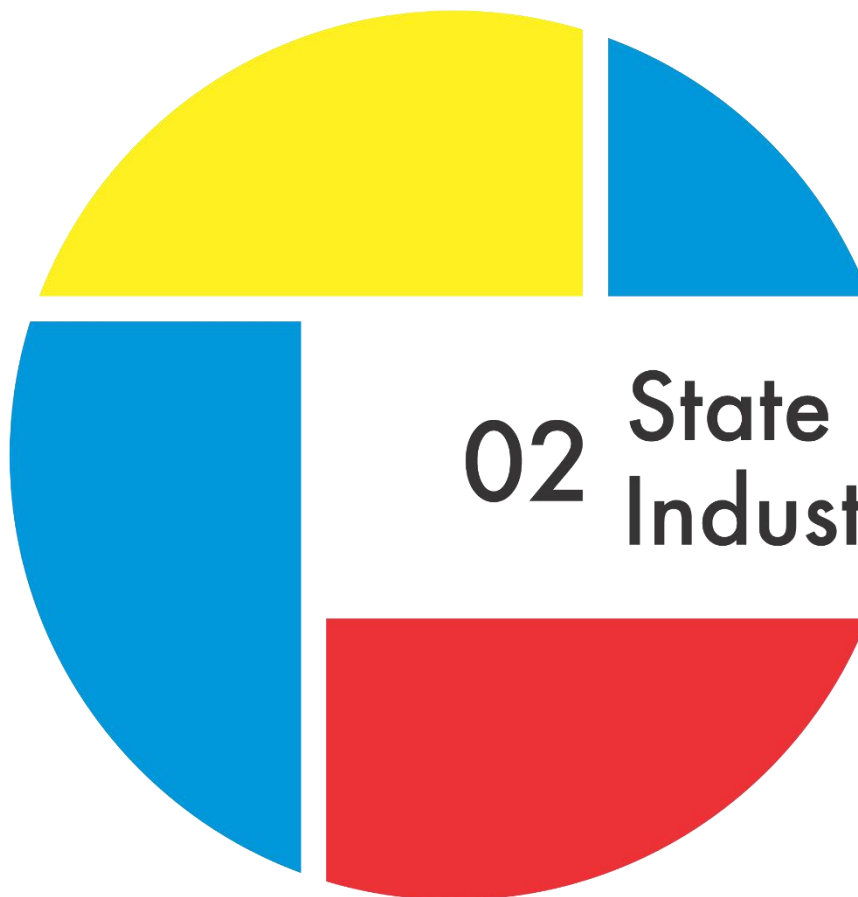
*Investigations have been launched into all reported accidents in the NESI.*

**e. Health & Safety:** The total number of accidents in 2024/Q1 was fifty-five (55) which resulted in 31 injuries and 23 fatalities. The Commission has launched investigations into all the accidents and will continue to work with all sector stakeholders to improve the overall health and safety of the NESI.

## Key Facts on NESI Performance in Q1 of 2024

4,249.10MW	Average Available Generation Capacity; -673.13MW (-13.68%) decrease compared to 4,922.26MW in 2023/Q4
8,887.93GWh	Total Quarterly Generation; -901.94GWh (-9.21%) decrease compared to 9,789.87GWh in 2023/Q4
4,069.57MWh/h	Average Hourly Generation; -364.25MWh/h (-8.22%) decrease compared to 4,433.82MWh/h in 2023/Q4
95.77%	Load Factor; +5.69pp increase compared to 90.08% in 2023/Q4
25.95%	Share of total quarterly generation from Hydropower Plants; -1.65pp decrease compared to 27.61% in 2023/Q4
8.48%	Transmission Loss Factor; -0.01pp decrease compared to 8.49% in 2023/Q4 and +1.48pp above the MYTO allowance - 7.00%
3,283.87MWh/h	Total energy received by the DisCos; -429.29MWh/h (-11.56%) decrease compared to 3,713.16MWh/h in 2023/Q4
5,769.52GWh	Energy billed to customers; -662.70GWh (-10.30%) decrease compared to 6,423.22 GWh in 2023/Q4
₦291.62 billion	Total Revenue collected by the DisCos; ₦3.33 billion (-1.13%) decrease compared to ₦294.95 billion in 2023/Q4
80.45%	Cumulative billing efficiency across all DisCos; +2.00pp increase compared to 78.45% in 2023/Q4
79.11%	Cumulative collection efficiency across all DisCos; +5.32pp increase compared to 73.79% in 2023/Q4
36.36%	Aggregate Technical, Commercial and Collection Loss; -5.75 pp decrease compared to 42.11% in 2023/Q4

₦114.20 billion	Combined invoice from NBET (DRO-adjusted) and MO to DisCos; ₦155.85 billion (-57.71%) decrease compared to ₦270.05 billion in 2023/Q4
₦110.62 billion	Total amount remitted by DisCos; ₦78.10 billion (-65.79%) decrease compared to ₦188.70 billion in 2023/Q4
96.93%	DisCos' overall remittance performance; +27.05pp increase compared to 69.88% in 2023/Q4
123,604	Number of new meters Installed; 8,423 more installations (+7.31%) compared to the 115,181 meters installed in 2023/Q4
291,380	Total complaints received; -6.22% decrease compared to 310,717 complaints received in 2023/Q4
57.55%	Forum Office complaint resolution rate; -9.92pp decrease compared to 67.47% in 2023/Q4
23	Number of fatalities; 13 fewer deaths compared to 36 in 2023/Q4
31	Number of injuries; 1 more injury compared to 30 in 2023/Q4



# 02 State of the Industry

## 2.0 STATE OF THE INDUSTRY

Pursuant to Section 34(1)(e) of the Electricity Act 2023 which states that "the Commission shall ensure the safety, security, reliability, and quality of service in the production and delivery of electricity to consumers", the Nigerian Electricity Regulatory Commission (NERC or the Commission) continues to monitor the technical, operational, and commercial performance of the Nigerian Electricity Supply Industry (NESI). Through this regulatory function, the Commission oversees all licensed operators in the NESI to ensure they provide stable, reliable, and safe electricity to all consumers.

### 2.1 Operational Performance

The operational performance of the NESI is a measure of how effectively available resources are utilised to generate, transmit and supply electricity to end-use consumers in a safe manner. In evaluating the operational performance of the NESI in 2024/Q1, the following Key Performance Indicators (KPIs) were considered:

- Available generation
- Plant availability factor
- Total quarterly generation
- Generation load factor
- Generation mix

#### 2.1.1 Available Generation

In 2024/Q1 the average available generation capacity of the 27 grid-connected power plants decreased by -13.68% (-673.16MW) from the 4,922.26MW recorded in 2023/Q4 to 4,249.10MW; this was driven by the decrease in available capacities of seventeen (17) out of the twenty-seven (27) grid-connected power plants.

The average available generation capacity of selected power plants in 2024/Q1 relative to 2023/Q4 is presented in Figure 1. The most significant decreases in the average available capacity in 2024/Q1 compared to 2023/Q4 were recorded in Shiroro (-26.58%), Egbin ST (-21.71%), Jebba (-21.70%), Delta GS (-16.21%), Kainji (-10.64%), and Afam VI (-10.30%) power plants. Conversely, there were significant increases in the average available capacities of some power plants

including Geregu NIPP (+42.65%), Odukpani (+35.75%), Olorunsogo NIPP (+24.21%) and Paras (+20.39) in 2024/Q1 compared to 2023/Q4.

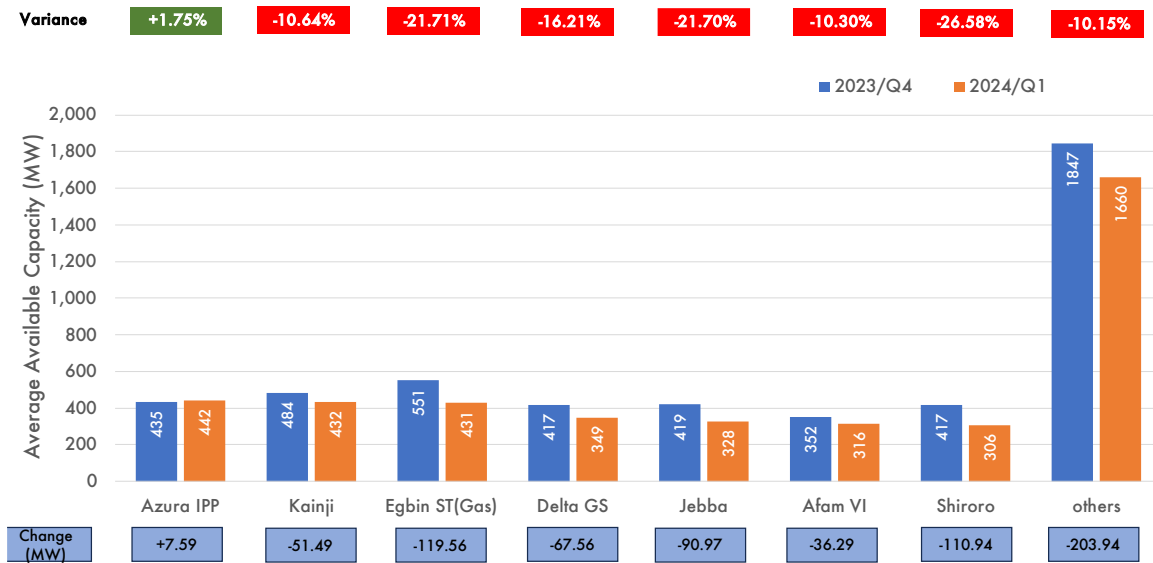


Figure 1: Average Available Capacity (MW) in 2023/Q4 vs. 2024/Q1

### 2.1.2 Plant Availability Factor

The availability factor of a plant is measured as a ratio of the maximum rated output of the plant declared by the operator (available capacity) relative to the maximum rated output specified by the manufacturer (installed capacity). The available capacity of a plant may change from time to time due to several factors including i) atmospheric conditions at the plant; ii) mechanical availability of the plant (planned and unplanned outages); iii) feedstock availability, etc. The formula for the plant availability factor (PAF) is represented by equation 1.

$$\text{Plant availability factor} = \frac{\text{average available capacity (MW)}}{\text{installed capacity (MW)}} \times 100 \quad (1)$$

The plant availability factor is a critical parameter for evaluating the overall health of the upstream segment of the NESI. In 2024/Q1, the overall plant availability factor of all grid-connected plants was 33.53%. This represents a decrease of -5.31 percentage points (pp) from the 38.84% recorded in 2023/Q4 and shows that more than 66% of the installed capacity in the NESI was unavailable. The lack of generation capacity at the upstream segment evidenced by the low PAF poses major

risks for any attempts to boost the volume of energy supplied to the consumers through the National Grid.

Overall, nine (9) plants had availability factors above 50% with the Azura IPP plant recording the highest availability factor of 95.98%. On the other end of the scale, the Ihovbor NIPP and Alaoji NIPP plants recorded a PAF of 1.23% and 0% respectively.

This is the second consecutive quarter where Alaoji NIPP has recorded a 0% PAF due to gas pressure issues i.e. available gas cannot be delivered to the plant at the pressure required for the turbines to operate. The management of the Niger Delta Power Holding Company (NDPHC) is working with its Gas Supplier and other relevant stakeholders to implement measures to resolve the issues hindering gas supply to the plant including:

- A gas swap arrangement between the various suppliers using the pipelines that will allow gas to be delivered to the Alaoji plant- this is a temporary measure to be implemented in the shortest possible time to ensure delivery of gas to the plant
- The construction of a bypass line that will redirect gas flow to avoid nodes with high-pressure threshold
- The installation of compressors by the gas supplier to boost the gas pressure delivery regime

The PAF of all grid-connected plants is contained in Table 1. The hydropower plants; Dadin Kowa (-29.44pp), Shiroro (-18.49pp), Jebba (-15.96pp) and Kainji (-6.78pp) recorded decreases in PAF in 2024/Q1 compared to 2023/Q4. The decrease in the PAF of the hydropower plants is consistent with the expected impact of seasonality on river flows. The capacities of hydropower plants are limited by water availability from January to July every year.

Table 1: Plant Availability Factor (%) in 2023/Q4 vs. 2024/Q1

Plant	Installed capacity (MW)	Average Available Capacity (MW) 2023/Q4	Average Available Capacity (MW) 2024/Q1	Plant Availability Factor (%) 2023/Q4	Plant Availability Factor (%) 2024/Q1
Azura IPP	461	434.89	442.49	94.34	95.98
Paras	96	73.51	88.50	76.58	92.19
Dadin Kowa Hydro	40	37.31	25.54	93.28	63.84
Ibom	191	153.26	113.50	80.24	59.42
Jebba	570	419.21	328.24	73.55	57.59
Kainji	760	483.90	432.41	63.67	56.90
Okpai	480	291.22	272.54	60.67	56.78
Geregu	435	208.13	225.30	47.85	51.79
Shiroro	600	417.33	306.39	69.56	51.07
Afam VI	650	352.49	316.20	54.23	48.65
Odukpani	625	205.09	278.42	32.81	44.55
Delta GS	900	416.74	349.18	46.30	38.80
Omoku	150	52.92	51.58	35.27	34.39
Egbin ST(Gas)	1,320	550.68	431.12	41.72	32.66
Geregu NIPP	435	86.09	122.80	19.79	28.23
Omotosho	304	110.90	84.59	36.48	27.83
Olorunsogo	304	89.87	79.91	29.56	26.29
Trans Amadi	100	25.48	26.03	25.48	26.03
Rivers IPP	180	123.01	43.10	68.34	23.94
Taopex Energy	60	20.14	9.53	33.57	15.89
Sapele ST	720	73.91	74.41	10.27	10.33
Olorunsogo NIPP	690	53.44	66.37	7.74	9.62
Afam IV - V	726	39.73	43.90	5.47	6.05
Sapele GT NIPP	452	94.26	17.41	20.85	3.85
Omotosho NIPP	500	83.60	14.09	16.72	2.82
Ihovbor NIPP	450	25.16	5.54	5.59	1.23
Alaoji NIPP	472	0.00	0.00	0.00	0.00
<b>Total</b>	<b>12,671</b>	<b>4,922.26</b>	<b>4,249.10</b>	<b>38.84</b>	<b>33.53</b>

\*Red-PAF <50, Amber- PAF 51≥80, Green- PAF>80

### 2.1.3 Total Quarterly Generation

The hourly output produced by all the units in a power plant fluctuates based on grid demand, mechanical operability of the unit(s), and the availability of feedstock. Plants are only dispatched when the load on the grid is sufficient to offtake the energy



while operating within acceptable technical limits. The factors that determine the dispatch of a plant include:

- Plant availability (mechanical and feedstock)
- Load offtake on the grid
- Financial competitiveness of the plant in the economic merit order dispatch

The average hourly generation on the grid in 2024/Q1 was 4,069.57MWh/h, which translates to 8,887.93GWh in total generation (equation 2). The hourly generation decreased by -8.22% (-364.25MWh/h) in 2024/Q1 compared to the hourly generation in 2023/Q4 (4,433.82MWh/h) while the total generation decreased by -9.21% (-901.94GWh) compared to the 9,789.87GWh generated in 2023/Q4<sup>4</sup>.

$$\text{Total generation} = \text{Ave. hourly generation (MWh)} \times 24\text{hrs} \times \text{total number of days in the quarter} \quad (2)$$

There was a decrease in the average hourly generation and total generation of nineteen (19) out of the twenty-seven (27) grid-connected power plants in 2024/Q1 compared to 2023/Q4. This was largely driven by the decrease in available generation capacity (-13.68%) as reported in section 2.1.1.

The quarter-on-quarter performance of the seven (7) power plants with the highest average hourly generation in 2024/Q1 is presented in Figure 2. Relative to 2023/Q4, the average hourly generation of Jebba (-21.17%), Egbin ST (Gas) (-13.31%), Shiroro (-12.90%), Delta GS (-12.57%), Kainji (-6.28%) and Afam VI (-6.58%) power plants decreased in 2024/Q1. Conversely, the average hourly generation of Azura IPP (+0.64%) increased in 2024/Q1 compared to 2023/Q4. The average hourly generation of the remaining power plants categorised as “others” decreased by -3.51% across the two quarters.

Cumulatively, the average hourly generation of the 3 largest grid-connected hydropower plants (Jebba, Shiroro and Kainji) reduced by -19.19% in 2024/Q1

<sup>4</sup> The percentage change in total generation and average hourly generation was different across 2024/Q1 vs 2023/Q4 because the number of days in each of the quarters was different (91 days in 2024/Q1 and 92 days in 2023/Q4). When there is a difference between the number of the days of the quarters being compared, the percentage in total generation will be different from the percentage change in average hourly generation.

relative to 2023/Q4. This is consistent with expectations associated with seasonal variation in the first quarter explained in section 2.1.2.

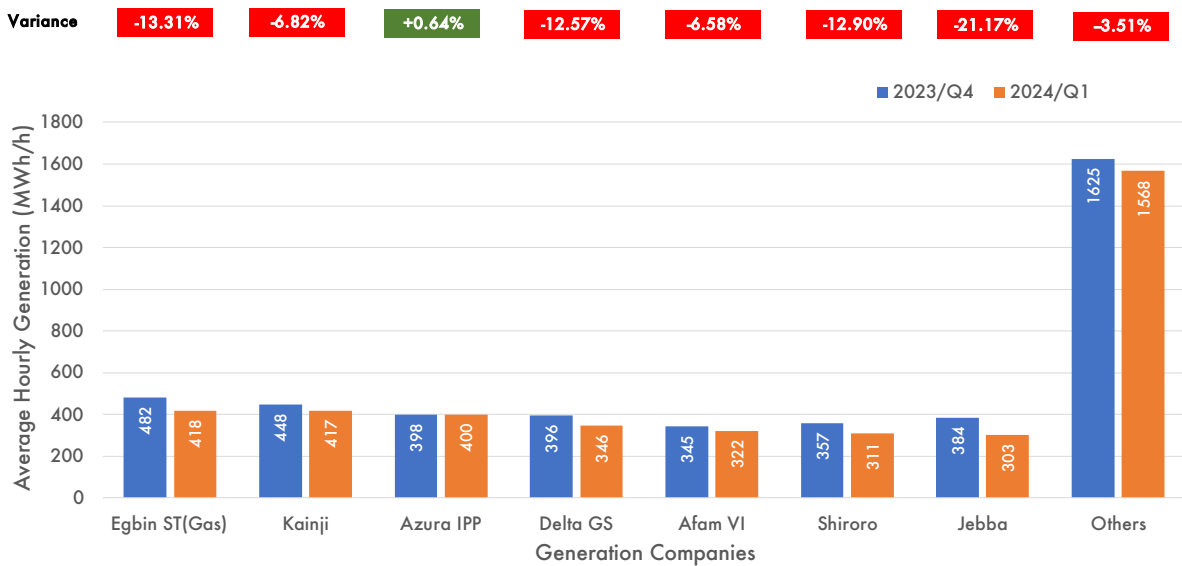


Figure 2: Average Hourly Generation in 2023/Q4 vs. 2024/Q1

The total generation from thermal plants during the quarter decreased by -7.14% (-505.77 GWh) compared to 2023/Q4, with fifteen (15) out of the twenty-three (23) thermal plants recording decreases in their total generation (Table 2). Out of the eight (8) thermal plants that recorded increases in generation, Geregu NIPP (+49.38%), Trans Amadi (+32.65%), and Odukpani (+31.49%) recorded the largest increases.

Total generation from the Sapele GT NIPP power plant in 2024/Q1 dropped to 24.13GWh compared to 173.63GWh generated in 2023/Q4 (-86.10%) driven by gas constraints and mechanical faults. One of the four (4) units of the plant was shut down for 89 days out of the 91 days in the quarter due to high vibration, and influx of condensates.

Generation from Omotosho NIPP was 26.00GWh in 2024/Q1 compared to 143.12GWh in 2023/Q4 (-81.83%). All of its four (4) units were shut down for 88 days out of the 91 days in the quarter due to unavailability of gas.

Table 2: Total Generation (GWh) in 2023/Q4 vs. 2024/Q1

Plant	Total Generation 2023/Q4 (GWh)	Total Generation 2024/Q1 (GWh)	Change (GWh)	Change (%)
Odukpani	444.43	584.38	139.95	31.49
Geregu NIPP	179.05	267.47	88.42	49.38
Geregu	429.19	492.69	63.49	14.79
Paras	131.39	162.22	30.83	23.46
Olorunsogo NIPP	121.10	149.22	28.11	23.22
Trans Amadi	54.07	71.72	17.65	32.65
Sapele ST	152.20	162.02	9.82	6.45
Omoku	144.19	147.12	2.93	2.03
Alaoji NIPP	0.40	0.00	-0.40	-100.00
Azura IPP	878.22	874.27	-3.95	-0.45
Afam IV - V	101.21	94.98	-6.23	-6.15
Taopex Energy	34.18	23.56	-10.62	-31.07
Ibom	155.50	143.14	-12.36	-7.95
Okpai	534.13	518.22	-15.91	-2.98
Olorunsogo	199.08	178.41	-20.67	-10.38
Dadin Kowa Hydro	77.71	54.96	-22.75	-29.28
Ihovbor NIPP	38.03	10.67	-27.36	-71.95
Omosho	237.91	184.82	-53.08	-22.31
Afam VI	761.07	703.24	-57.84	-7.60
Kainji	988.78	911.34	-77.44	-7.83
Shiroro	787.96	678.84	-109.12	-13.85
Omosho NIPP	143.12	26.00	-117.12	-81.83
Delta GS	873.42	755.33	-118.09	-13.52
Rivers IPP	236.55	94.51	-142.03	-60.05
Sapele GT NIPP	173.63	24.13	-149.50	-86.10
Egbin ST(Gas)	1065.23	913.40	-151.82	-14.25
Jebba	848.10	661.25	-186.85	-22.03
<b>Total</b>	<b>9,789.87</b>	<b>8,887.93</b>	<b>-901.94</b>	<b>-9.21</b>

#### 2.1.4 Generation Load Factor

The load factor is a measure of the utilisation of a power plant's available capacity, calculated as the ratio of the average electricity generated over a period to the maximum possible generation (assuming all the available capacity is utilised all the time over the period). A higher load factor means better capacity utilisation thereby reducing the cost per unit of energy and increasing profitability, as fixed costs are spread over a larger amount of dispatched energy. The load factor (also known as the dispatch rate) reflects both the demand for energy and a plant's ability to supply it. The formula for load factor is represented by equation 3.

$$\text{Load Factor} = \frac{\text{Total Energy Generated (MWh)}}{\text{Ave. Available Capacity (MW)} \times 24 \text{hrs} \times \text{period (in days)}} \times 100 \quad (3)$$

The overall load factor for all grid-connected power plants in 2024/Q1 was 95.77%; meaning that on average, only 4.23% of available energy (MWh) was not dispatched during the quarter. The 95.77% load factor recorded in 2024/Q1 represents an increase of +5.69pp from the 90.08% load factor recorded in 2023/Q4. An increase in load factor when there are decreases in available generation capacity and total generation continues a trend that has been observed over previous quarters. This indicates that the total energy delivered to the National Grid largely remains constant thus the inverse relationship between available capacity and load factor.

The load factors of the seven (7) power plants with the highest dispatch rates in 2024/Q1 are presented in Figure 3. Ten (10) power plants (Omoku, Trans Amadi, Taopex, Olorunsogo NIPP, Olorunsogo, Afam VI, Shiroro, Rivers IPP, Geregu, and Omotosho) recorded dispatch rates of 100% while eleven (11) other power plants recorded dispatch rates above 90%. All hydropower plants recorded dispatch rates above 90% pursuant to the Commission’s Order (Order No: NERC/182/2019)<sup>5</sup> on mandatory and priority dispatch of hydropower plants.

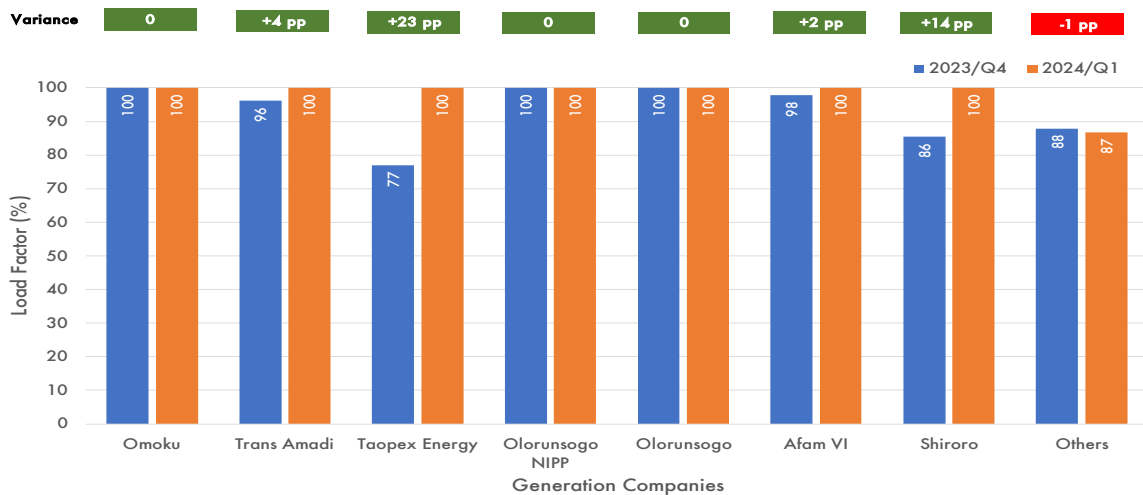


Figure 3: Load Factor (%) in 2023/Q4 vs. 2024/Q1

<sup>5</sup> The stipulates that hydropower plants which are the cheapest energy generation source, should be dispatched with priority to reduce wholesale energy costs for consumers

### 2.1.5 Generation Mix

The electricity generation mix refers to the combination of fuels used to generate electricity over a period. The composition of the generation mix varies across countries and is influenced by factors such as natural resource availability, government policies, environmental considerations, type of power plants, energy demand, and seasonal fluctuations. An ideal energy mix must balance the three key elements of the energy trilemma: i) Energy Security<sup>6</sup>; ii) Energy Sustainability<sup>7</sup>; and iii) Energy Affordability/Equity<sup>8</sup>. The formula for the share of electricity generated by fuel source is given by equation 4.

$$\text{Share of fuel}_i = \frac{\text{Total electricity generated from fuel } i \text{ (MWh)}}{\text{Total electricity generated from all fuel sources (MWh)}} \times 100 \quad (4)$$

The share of electricity generated from different fuel sources in 2023/Q4 and 2024/Q1 are presented in Figure 4. The contribution from hydropower plants to total generation (2,306.39GWh) decreased by -14.66% (-396.16GWh) in 2024/Q1 compared to 2023/Q4 (2,702.56GWh). However, this only translated to a -1.65pp decrease in the contribution of hydropower to the energy mix over the same period; 27.61% (2,702.56GWh) in 2023/Q4 compared to 25.95% (2,306.39GWh) in 2024/Q1, due to the -9.21% (-901.94MW) decrease in total generation explained in section 2.1.3.

<sup>6</sup> This reflects a nation's capacity to meet current and future energy demands reliably, withstand and bounce back from system shocks with minimum disruption to supplies.

<sup>7</sup> This represents the transition of a nation's energy system towards mitigating and avoiding potential environmental harm and climate change impacts.

<sup>8</sup> This reflects a nation's ability to provide universal access to affordable, fairly priced and abundant energy for domestic and commercial use.

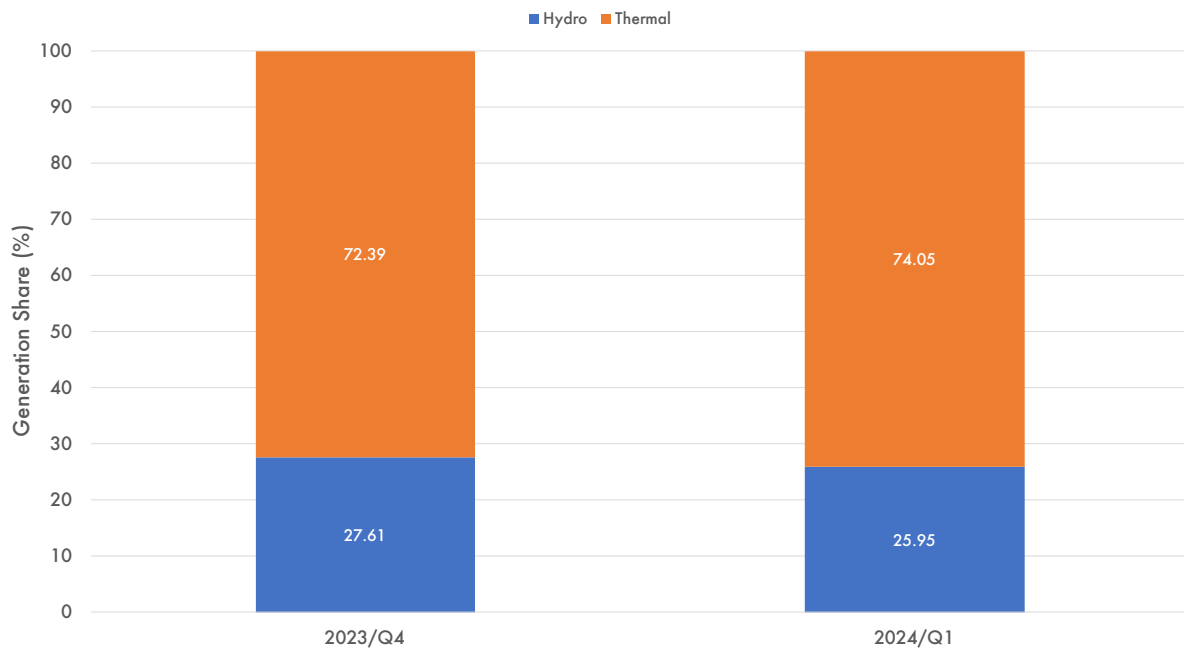


Figure 4: Generation Share (%) in 2023/Q4 and 2024/Q1

## 2.2 Grid Performance

The Transmission Company of Nigeria (TCN) has the responsibility of transporting energy from power plants to DisCos and currently holds two licenses; Transmission Service Provider (TSP) and System Operator (SO). The TSP owns and maintains the transmission infrastructure while the SO is responsible for maintaining system stability, load balance, load dispatch, and undertaking market operations responsibilities. To assess the performance of the grid, the Commission focuses on the following four (4) Key Performance Indicators (KPIs) that relate to power transmission:

- Transmission loss factor
- Stability of grid frequency
- Voltage fluctuation
- Incidence of system collapse

### 2.2.1 Transmission Loss Factor

Transmission Loss Factor (TLF) refers to the proportion of the total energy sent out by the power plants that was either lost in transmission or utilised in the transmission station i.e., neither delivered to the DisCos nor exported to bilateral customers (local and international). 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 over a given period. The formula for TLF is represented by equation 5:

$$\text{TLF} = \left( 1 - \frac{\text{Energy delivered to all DisCos+Energy Exported}}{\text{Energy Sent out by all GenCos}} \right) \times 100 \quad (5)$$

The average TLF in 2024/Q1 was 8.48% (Figure 5). A TLF of 8.48% indicates that for every 100MWh of energy injected into the grid, 8.48MWh of energy was undelivered to DisCos and international customers due to losses in the transmission network or consumption at the transmission substation. The TLF recorded in 2024/Q1 represents a marginal decrease (improvement) of -0.01pp from 8.49% recorded in 2023/Q4.

The 8.48% TLF recorded in 2024/Q1 represents an underperformance of -1.48pp relative to the MYTO target for 2024 - 7.00%<sup>9</sup>. The TLF target represents the maximum efficient loss in transmission that is paid by the customers. Exceeding the TLF target means that the Transmission Service Provider (TSP) will not earn its full revenue requirement because there is no provision to recover revenues needed to cover the excess (inefficient) losses. It is incumbent on the TSP and SO to undertake detailed studies to identify the root cause of why the actual TLF has consistently exceeded the targets set in the MYTO.

<sup>9</sup> The 7.00% TLF target set by the Commission for 2024 is -0.25pp lower than the TLF target for 2023 (7.25%). This is in recognition of the expected improvements in the quality of transmission infrastructure and consequential reduction in system losses stemming from the implementation of the TCN Performance Improvement Plan 2024-2026 as approved by the Commission.

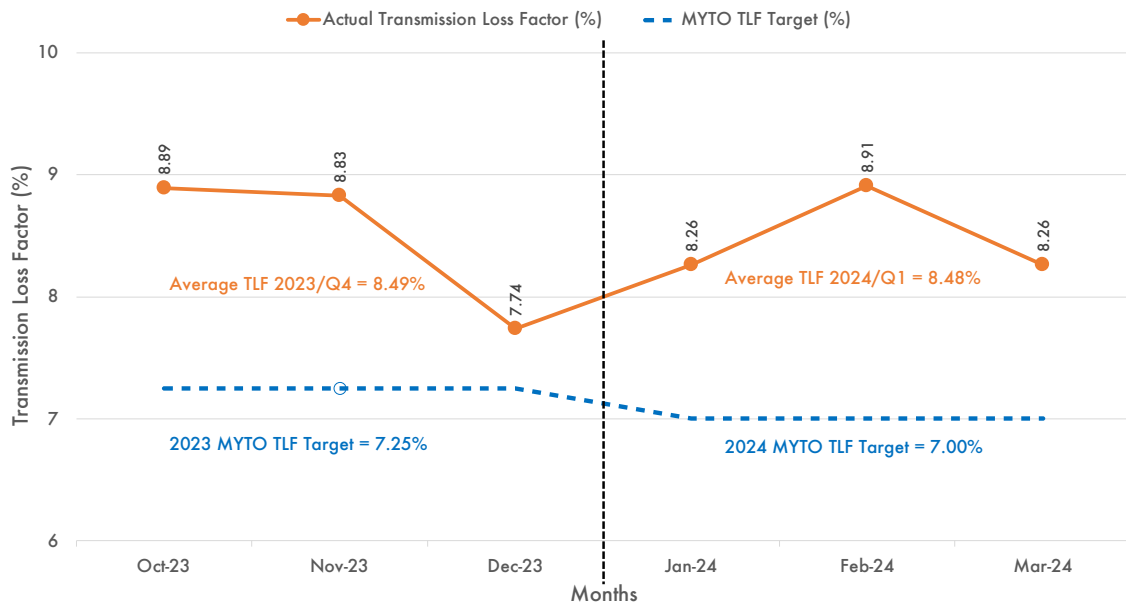


Figure 5: Actual Transmission Loss Factor (%) vs. MYTO TLF Target (%) Oct 2023 – Mar 2024

### 2.2.2 Grid Frequency

Frequency is a crucial power quality parameter that industrial customers are particularly concerned about due to the sensitivity of their heavy-duty machinery. In industrial production assembly lines, the machines are designed to operate exclusively within pre-set frequency tolerance limits and therefore often have a low tolerance for frequency fluctuations.

As specified in section 10.1.2 of the Grid Code, the standard frequency for operation on the Grid is 50Hz. The code provides that under normal circumstances, the grid can operate within a deviation of  $\pm 0.5\%$  i.e. between a lower limit of 49.75Hz and an upper limit of 50.25Hz. Section 10.1.2 of the Grid Code further provides that in extreme circumstances, the grid may operate within a deviation of  $\pm 2.5\%$  i.e. system frequency may reach a lower bound stress limit of 48.75Hz and an upper bound stress limit of 51.25Hz.

A system’s stability over a given period is measured by its ability to operate as close as possible to the 50Hz benchmark set in the Grid Code; this means that the lower the range between the average upper daily system frequency and the average lower daily system frequency, the more stable the system has been.



During 2024/Q1, the average upper daily system frequency was 50.68Hz, while the average lower daily system frequency was 49.00Hz, which translates to a range of 1.68Hz. Comparatively, in 2023/Q4, the average upper daily system frequency was 50.66Hz, while the average lower system frequency was 49.06Hz, with a range of 1.60Hz. The +5.00% (+0.08Hz) increase in the average quarterly frequency range recorded in 2024/Q1 relative to 2023/Q4 indicates a decline in the operational performance of the National Grid.

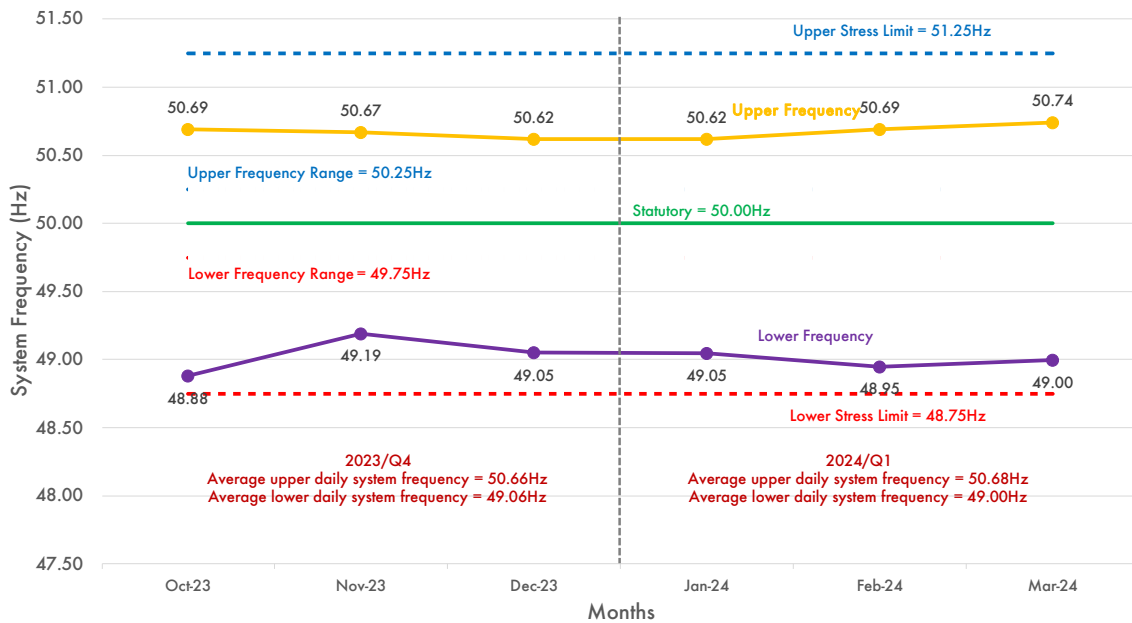


Figure 6: Monthly System Frequency from Oct 2023 - Mar 2024

Figure 6 shows that the average monthly upper and lower bounds of the system frequency were all outside the normal operation limits but within the stress limits throughout the quarter which is consistent with the frequency pattern in 2023/Q4. The consistent operation of the grid outside the normal frequency limits during the quarter indicates an imbalance in the supply and demand of electricity on the grid which is primarily caused by the lack of a Supervisory Control and Data Acquisition (SCADA) system. The System Operator (SO) has invested in an IoT-based solution to improve real-time visibility into the operations of the Grid. However, the inability to remotely operate the entire system as would be possible under the SCADA system continues to pose challenges to the SO’s ability to operate the grid within the normal frequency limits provided in the grid code.

### 2.2.3 Voltage Fluctuation

To guarantee the quality of electricity delivered to end users, the Grid Code specifies a nominal system voltage of 330kV with a tolerance range of  $\pm 5\%$  (313.50kV to 346.50kV in the lower and upper bounds respectively). Fluctuations in grid voltage, including spikes, dips, flickers, and brownouts, can cause significant harm to consumers and result in substantial commercial losses. Extreme voltage fluctuations, particularly at the distribution network level, can cause severe damage to industrial machines, thereby compelling industrial customers to seek alternative electricity supply outside of the National Grid.

The system voltage pattern from Oct 2023 to Mar 2024 is illustrated in Figure 7. The average upper and lower operating voltage bounds for the transmission network in 2024/Q1 were 353.18kV and 297.60kV respectively; both values are outside the respective allowable limits which indicates that the grid performance did not comply with the standard specified in the Grid Code. By way of comparison, the range between the Grid's average upper and lower operating voltage for 2024/Q1 was 55.57kV which is higher than the 49.71kV (average upper and lower voltages of 347.88kV and 298.17kV respectively) that was recorded in 2023/Q4. This finding confirms the conclusion from section 2.2.2 that there was a decline in the operational efficiency of the National Grid in 2024/Q1 relative to 2023/Q4.

The Commission continues to engage with TCN and other stakeholders to ensure sustained efforts at keeping the system voltage within the regulated limits, providing a safe and reliable electricity supply to end users.

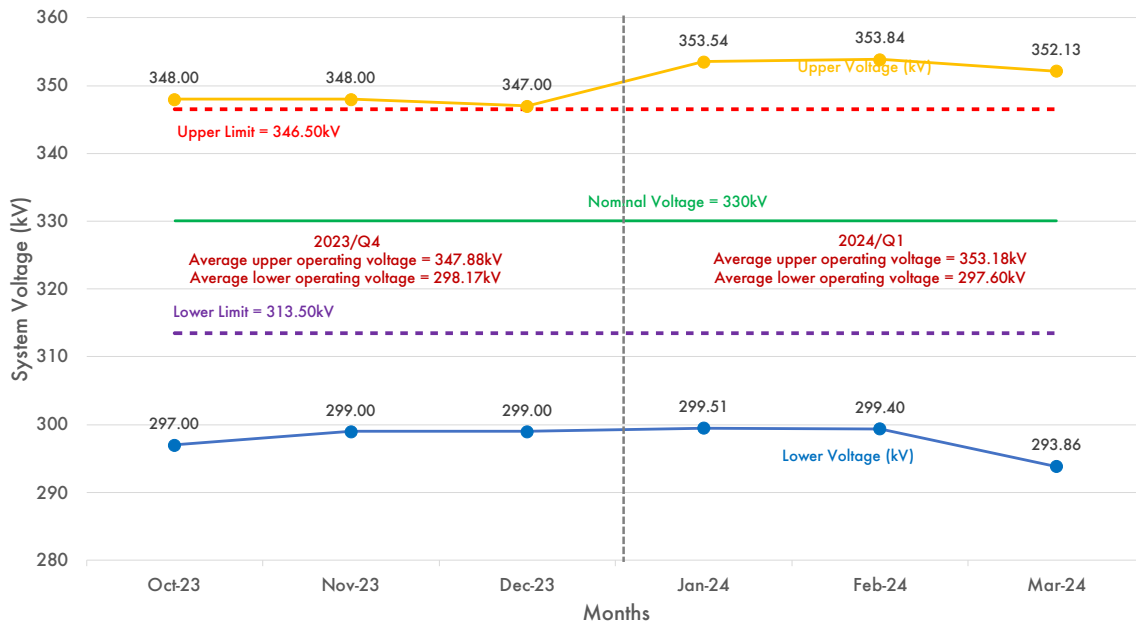


Figure 7: Monthly System Voltage (kV) from Oct 2023 - Mar 2024

### 2.2.4 System Collapse

The national power grid is a vast network of electrical transmission lines that link power stations to end-use customers across the nation and is designed to function within specific stability boundaries, including voltage ( $330\text{kV} \pm 5.0\%$ ) and frequency ( $50\text{Hz} \pm 0.5\%$ ). Any deviation from these stability ranges can result in decreased power quality and, in severe cases, cause widespread power outages ranging from a partial collapse of a section of the grid to a full system-wide blackout.

While the SO is responsible for ensuring that all parameters are maintained within their respective tolerance thresholds, the primary parameter that the SO tracks to avoid system disturbances is frequency. When the electricity demand is higher than the supply, the grid frequency drops. Conversely, if supply surpasses demand, the frequency increases. In reaction to the grid operating at a frequency outside of the normal operation range (especially when the frequency is too low), safety settings on generation units can cause the units to shut down. This often exacerbates the frequency imbalance on the grid thereby leading more generation units to shut down and causing a partial or total system collapse.

After a system collapse occurs, the cause of the collapse will be assessed to determine where the fault originated, and if need be, such an area will be isolated.

The System Operator will then give a directive for the restoration of the grid by restarting selected power plants. Grid restoration is the process of energising a power grid to normal operation after a disruption. It commences immediately after the cause of the collapse has been identified and isolated/resolved, and is usually completed within six (6) hours (completion means the provision of electricity to all parts of the Country that were receiving supply from the grid before the collapse).

Two (2) incidents of grid collapse- one partial and one total collapse, were recorded in 2024/Q1. The details of events leading to the two (2) incidents are contained in Table 3.

**Table 3: System Collapse in 2024/Q1**

SN	Date	Immediate Cause	Remote Cause	Inference
1	4 <sup>th</sup> February, 2024	<p>A sudden reduction in gas supply along the Western axis led to the tripping of units at Sapele (PB202) and Egbin (G.S 1, 2 &amp; 6) which led to a loss of 29.2MW and 343.84MW respectively causing system instability. Consequentially, this initiated the cascading tripping of three (3) lines:</p> <ol style="list-style-type: none"> <li>I. Ughelli/Benin 330kV line 1,</li> <li>II. Ughelli/Sapele 330kV line</li> <li>III. Aba/Itu 132kV</li> </ol> <p>These trippings caused the grid to separate into two (2) islanded mode operations - Island 1 and Island 2.</p> <p>The frequency on Island 2 which covered nine (9) out of the ten (10) TCN regions - excluding PH reduced frequency from 50Hz to 47.70Hz. This led to an overloading of the units at Kainji, Jebba, Shiroro and Dadin Kowa which shut down in response thereby causing a total system blackout on Island 2.</p>	<p>The cascading tripping of Sapele Steam on gas constraint (29.2MW) and Egbin Generating Units on units' fault transmitters (343.8MW) initiated the instability.</p> <p>Transmitters are used at the power plants to monitor vital parameters such as temperature, pressure, flow, and emissions. They enable real-time data acquisition, analysis, and remote control.</p>	<p>There is a need to improve the relay coordination within the NESI to ensure that generating units and transmission lines trip in the right sequence to prevent cascaded failures on the national grid.</p>

2	28 <sup>th</sup> March, 2024	Thirteen (13) thermal stations <sup>10</sup> tripped due to a drop in system frequency from 50Hz to 48.02Hz. This further worsened the system instability and led to the tripping of Kainji, Jebba, Dadin Kowa and Shiroro hydro power stations on under frequency protection resulting in the loss of 1020.63MW; this caused the entire national grid to collapse.	At 16:27:20, four (4) units of Egbin power plant (ST2 ,3, 4 and 5) and four (4) units Sapele Steam (PB202, 203, 205, 210) cumulatively lost a total generation of 626.96MW (caused by lack of adequate gas supply) which initiated system instability by causing the system frequency to dip from 50Hz to 48.02Hz.	The failure of the Under-frequency relay to shed the appropriate load coupled with the fact that there is no spinning reserve in the system made it impossible to prevent the system collapse. TCN needs to work with the DisCos to review the adequacy of the current underfrequency relay configuration.
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<sup>10</sup> Geregu Gas, Geregu NIPP, Azura-Edo, Ibom Power, Olorunsogo Gas, Omoku, Trans-Amadi, Omotosho Gas, Paras Energy, Afam VI, Delta, Okpai and Odukpani NIPP

## 2.3 Commercial Performance

The commercial performance of the NESI is a measure of the flow of funds from customers to upstream electricity industry players. The financial performance is critical because funds are required to keep all the players along the value chain operational. In evaluating the commercial performance of the NESI for 2024/Q1, the following parameters were considered:

- Energy offtake performance
- Energy billed and billing efficiency
- Revenue and collection efficiency
- Aggregate Technical, Commercial and Collection (ATC&C) loss
- Remittances to the Market Operator (MO) and the Nigerian Bulk Electricity Trading Company (NBET).

### 2.3.1 Energy offtake performance

The Partial Activation of Contract (PAC) regime, which took effect in July 2022, defines the target volume of energy to be off-taken by DisCos at any time as their Partially Contracted Capacity (PCC). As explained in prior reports, under the PAC regime, DisCos have take-or-pay obligations on their PCC which means that they must pay for available capacity irrespective of their offtake. This structure is consistent with international best practices for long-term contract-based power procurement and ensures that GenCos earn capacity payments to compensate them for availability.

The PAC regime also mandates GenCos or TCN to compensate DisCos through Liquidated Damages (LDs) in the event of capacity shortfalls. Under the single-buyer model being operated in the NESI, when there is a shortfall in generation, LDs from GenCos are treated as net-offs in the invoices issued to NBET thereby reducing the net payables due from DisCos.

When there is sufficient generation capacity, every DisCo will be directed by the SO to offtake its entire PCC. When generation falls below the required target, the SO prorates the available capacity among all DisCos based on their respective PCCs<sup>11</sup> – “Available PCC”. The ratio between a DisCo’s energy offtake and the available

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<sup>11</sup>Commencing 2023/Q3, the Commission developed a mechanism whereby the top 3 DisCos get their full allocation provided that generation is above 4,100MW which is the minimum grid stability requirement; the rest of the capacity is pro-rated based on PCC for the remaining DisCos. When available generation is below 4,100MW, generation allocation to all the DisCos is pro-rated based on PCC.

PCC is known as the “energy offtake performance”. The formula for determining a DisCo’s energy offtake performance is represented by equation 6.

$$\text{Energy Offtake performance (\%)} = \left( \frac{\text{Energy Offtake}}{\text{Available PCC}} \right) \times 100 \quad (6)$$

Considering the large disparity between energy on the national grid and customer demand, it is expected that DisCos will offtake 100% of their available PCC at all times. However, the Commission continues to observe with concern that many DisCos do not take their full PCC due to a combination of technical limitations as well as load rejection by the DisCos largely due to commercial reasons i.e., high commercial and collection losses in certain areas.

It is noteworthy that when DisCos have offtake ratios below 100%, this means that they incur increased wholesale energy costs as they still have to pay NBET/GenCos for unused capacity. The tariff methodology utilised by the Commission does not allow DisCos to recover the resultant additional wholesale energy costs from customers.

In 2024/Q1, the average energy offtake by DisCos at their trading points was 3,283.87MWh/h, which represents a decrease of -11.56% (-429.29MWh/h) when compared to 3,713.16MWh/h off-take in 2023/Q4. The cumulative energy offtake performance of DisCos was 92.35% which is -1.05pp less than the 93.40% achieved in 2023/Q4. The data above indicate that while a significant portion of the reduction in the average energy offtake was driven by the reduction in the available generation as explained in 2.1.1, the DisCos also recorded a reduction in their energy offtake performance.

Disaggregated DisCo performance shows that all the DisCos except Eko DisCo took more than 90% of its PCC during the quarter. Eight (8) DisCos recorded decreases in their offtake performances between 2023/Q4 and 2024/Q1 with Abuja and Eko DisCos recording the highest decreases of -3.73pp and -2.22pp respectively. Conversely, Jos and Enugu DisCos recorded significant increases of +5.79pp and +5.39pp respectively, in their energy offtake performance between 2023/Q4 and 2024/Q1 (Table 4).

Table 4: DisCo energy offtake performance in 2023/Q4 vs. 2024/Q1

DisCos	2023/Q4			2024/Q1		
	Energy Offtake (MWh/h)	Available PCC (MWh/h)	Offtake Performance %	Energy Offtake (MWh/h)	Available PCC (MWh/h)	Offtake Performance %
Abuja	565.22	589.12	95.94	512.36	555.63	92.21
Benin	301.00	322.79	93.25	263.71	287.03	91.88
Eko	470.56	509.40	92.38	433.15	485.76	89.17
Enugu	308.70	351.26	87.88	252.54	270.77	93.27
Ibadan	447.62	463.19	96.64	383.51	398.90	96.14
Ikeja	557.93	591.74	94.29	511.83	555.53	92.13
Jos	192.82	227.16	84.88	181.15	199.79	90.67
Kaduna	247.24	256.78	96.28	203.25	216.09	94.06
Kano	240.54	257.06	93.57	201.61	218.00	92.48
PH	261.70	289.07	90.53	243.14	260.52	93.33
Yola	119.82	124.77	96.03	97.61	106.03	92.06
All DisCos	3,713.16	3,975.34	93.40	3,283.87	3,556.05	92.35

The Commission will continue to undertake regulatory activities that will compel DisCos to improve their operational capacities to facilitate the maximum utilisation of energy that is made available by the GenCos.

### 2.3.2 Energy billed and billing efficiency

Billing efficiency measures the proportion of energy billed to customers (including metered and unmetered customers) relative to the total energy supplied to a given area over a period. The key drivers of billing losses are: i) technical - energy loss in distribution lines; ii) commercial - DisCo's inability to account for 100% of the energy supplied. Commercial losses could either be a result of theft on the part of the customer i.e. a meter bypass, or other factors under the DisCo's control such as poor customer enumeration, and the proliferation of inaccurate meters. A billing efficiency of 70% means that only ₦70.00 worth of electricity is billed out of ₦100.00 worth of electricity distributed by DisCos. The formula for billing efficiency is represented by equation 7.

$$\text{Billing Efficiency} = \left( \frac{\text{Total energy billed to customers (kWh)}}{\text{Total energy received by the Network (kWh)}} \right) \times 100 \quad (7)$$

The total energy offtake by all DisCos in 2024/Q1 was 7,171.97GWh and the total energy billed was 5,769.52GWh, which translates to a billing efficiency of 80.45%. A billing efficiency of 80.45% implies that for every ₦100 worth of energy received



by DisCos in 2024/Q1, ₦19.55 was not billed to end users. Comparatively, the total energy received and billed in 2023/Q4 were 8,198.65GWh and 6,432.22GWh respectively, which translated to a billing efficiency of 78.45%. This means that at the aggregated level, the NESI recorded a +2.00pp increase in billing efficiency between 2023/Q4 and 2024/Q1.

Disaggregated performance of the DisCos shows that Eko recorded the highest billing efficiency - 89.75%, while Kaduna recorded the lowest billing efficiency - 56.66%. A quarter-on-quarter comparison of billing efficiency showed that six (6) DisCos recorded improvements in their billing efficiencies in 2024/Q1 relative to 2023/Q4 with Kaduna and Kano recording the most significant increases of +12.29pp and +6.79pp respectively. Conversely, five (5) DisCos recorded decreases in billing efficiency with Yola (-9.64pp) and Ikeja (-5.58pp) DisCos recording the most significant decreases (Table 5).

**Table 5: Energy Received and Billing Efficiency by DisCos in 2023/Q4 vs. 2024/Q1**

DisCos	2023/Q4			2024/Q1		
	Energy Offtake (GWh)	Energy Billed (GWh)	Billing Efficiency (%)	Energy Offtake (GWh)	Energy Billed (GWh)	Billing Efficiency (%)
Abuja	1,248.00	884.00	70.83	1,119.00	846.00	75.60
Benin	664.61	566.18	85.19	575.95	488.82	84.87
Eko	1,039.00	934.00	89.89	964.00	849.00	89.75
Enugu	681.61	509.40	74.73	551.55	443.77	80.46
Ibadan	988.35	800.06	80.95	837.59	716.51	85.54
Ikeja	1,231.92	1,069.74	86.84	1,117.83	908.33	81.26
Jos	425.75	337.84	79.35	395.62	300.84	76.04
Kaduna	545.90	242.22	44.37	443.90	251.51	56.66
Kano	531.11	361.88	68.14	440.32	329.93	74.93
Port Harcourt	577.83	473.78	81.99	531.01	451.40	85.01
Yola	264.57	253.12	95.67	213.19	183.40	86.03
All DisCos	8,198.65	6,432.22	78.45	7,171.93	5,769.52	80.45

DisCos have the responsibility of developing strategies to improve their billing efficiencies. These can include reinforcing DisCos' infrastructure to reduce technical losses, improving consumer enumeration and customer service, improving the metering rate, implementing measures that will encourage timely bill payments and rolling out initiatives to curb energy theft.

### 2.3.3 Revenue and collection efficiency

Collection efficiency is the ratio of the amount that has been collected from customers relative to the amount billed to them by the DisCos. The significant under-recovery of the invoices issued to customers by DisCos is driven by a lack of willingness of customers to pay bills when due, unsatisfactory DisCos' services and inadequate customer metering among other challenges. A collection efficiency of 70% for instance implies that for every ₦100.00 worth of energy billed to customers by DisCos, approximately ₦30.00 remained unrecovered from the billed customers. The formula for collection efficiency is represented by equation 8.

$$\text{Collection Efficiency} = \left( \frac{\text{Total Revenue Collected (₦)}}{\text{Total Billed Amount (₦)}} \right) \times 100 \quad (8)$$

The total revenue collected by all DisCos in 2024/Q1 was ₦291.62 billion out of the ₦368.65 billion that was billed to customers. This translates to a collection efficiency of 79.11%. In comparison, the total revenue collected by all DisCos in 2023/Q4 was ₦294.95 billion out of the ₦399.69 billion billed to customers which translated to a 73.79% collection efficiency. The 79.11% collection efficiency recorded in 2024/Q1 is +5.32pp higher than the efficiency recorded in 2023/Q4 (73.79%).

The summary of the revenue collection performance of all DisCos is contained in Table 6. Ikeja and Eko DisCos recorded the highest collection efficiencies of 103.61%<sup>12</sup> and 86.24% respectively, conversely, Yola DisCo recorded the lowest collection efficiency of 43.03%. A comparison of DisCos performance in 2023/Q4 and 2024/Q1 showed that ten (10) DisCos recorded improvements in collection efficiency in 2024/Q1 when compared to 2023/Q4 with Jos DisCo recording the highest increase of +13.99pp. Only Ibadan DisCo recorded a decline (-0.70pp) in collection efficiency during the period.

<sup>12</sup> Collection efficiency >100% is due to collections on outstanding bills from previous months

Table 6: Revenue Collection Performance (%) of DisCos in 2023/Q4 vs. 2024/Q1

DisCos	2023/Q4			2024/Q1		
	Total Billings (₦' Billion)	Revenue Collected (₦' Billion)	Collection Efficiency (%)	Total Billings (₦' Billion)	Revenue Collected (₦' Billion)	Collection Efficiency (%)
Abuja	57.47	46.23	80.44	58.30	48.60	83.36
Benin	34.36	22.39	65.12	29.40	22.46	76.39
Eko	59.68	50.19	84.10	56.52	48.74	86.24
Enugu	30.63	23.33	76.16	26.40	21.24	80.45
Ibadan	46.46	31.82	68.48	44.79	30.35	67.78
Ikeja	62.90	59.75	95.00	55.86	57.88	103.61
Jos	23.42	10.96	46.82	21.85	13.29	60.81
Kaduna	14.87	9.07	61.00	13.59	9.60	70.66
Kano	23.32	14.32	61.40	21.58	13.62	63.09
Port Harcourt	28.85	20.18	69.96	27.69	20.39	73.66
Yola	17.74	6.71	37.85	12.68	5.46	43.03
All DisCos	399.69	294.95	73.79	368.65	291.62	79.11

The increase in billing efficiency (+2.00pp) and collection efficiency (+5.32pp) recorded in 2024/Q1 compared to 2023/Q4 when there is a significant reduction in the energy offtake (-12.52%) continues a trend that has been observed previously. As explained in the 2023/Q4 report (section 2.3.2), the trend observed in the NESI over past quarters is that there is an inverse relationship between energy offtake and billing/collection efficiencies whereby a decrease in energy offtake would result in an increase in billing/collection efficiency. One driving factor behind this trend is that when there is lower energy offtake, DisCos often allocate the energy to areas where they record reduced billing and collection inefficiencies.

The most proven method to improve energy accountability and revenue recovery is accurate customer enumeration and the installation of end-use customer meters. DisCos are expected to utilise one or more metering frameworks provided for in the NERC MAP and NMMP metering regulation (2021) to improve end-use customer metering in their franchise area. This will reduce commercial and collection losses and will ensure the flow of funds to upstream market participants in the sector.

Furthermore, DisCos must continue to evaluate options for improving the optimisation of their energy delivery in line with the Service Based Tariff (SBT) regime to ensure that sufficient energy is supplied to customer groups/clusters with the highest collection efficiencies.

### 2.3.4 Aggregate Technical, Commercial and Collection (ATC&C) Loss

The Aggregate Technical, Commercial and Collection (ATC&C) loss is a summation of billing losses incurred by a DisCo due to its inability to bill 100% of energy delivered to customers (technical and commercial losses) and the collection losses arising from the DisCo's inability to collect 100% of the bills issued to customers. The ATC&C loss is a critical performance-setting parameter for tariff computation as the MYTO makes allowance for target ATC&C loss levels for each DisCo.

The target ATC&C reflects the efficient operational losses which the DisCo is expected to incur in its operations and this is recoverable from the allowed tariffs. The ATC&C target usually reduces over time as the DisCo makes investments that are geared towards improving its operational efficiency. ATC&C loss is made up of the following components:

- a. Technical Loss: heat loss due to load flow in electrical lines and transformation loss in transformers.
- b. Commercial Loss: due to discrepancy in meter reading, erroneous billing, unmetered consumption, or energy theft;
- c. Collection Loss: unpaid bills.

The formula for ATC&C loss is represented by equation 9.

$$\text{ATC\&C Loss} = [1 - (\text{billing efficiency} \times \text{collection efficiency})] \times 100 \quad (9)$$

Any DisCo that can outperform its allowed ATC&C (i.e., has a lower actual ATC&C than the target used to compute its cost-reflective tariff) will earn more returns on its set tariffs. Conversely, any DisCo that fails to meet its allowed ATC&C (i.e., has a higher actual ATC&C than the target), will be unable to earn the expected returns on its set tariffs and could risk long-term financial challenges.

The aggregate ATC&C loss recorded across all 11 DisCos in 2024/Q1 was 36.36%, which comprised 19.55% in technical and commercial losses, and 20.83% in collection loss (Table 7). The aggregate ATC&C loss of 36.36% recorded in 2024/Q1 is 8.86pp higher than the allowed aggregate efficient loss target (27.50%) applied in the computation of the tariffs in the MYTO. This means that cumulatively, DisCos recorded losses that are 8.86pp higher than what was allowed to be recovered from the customers – these inefficient losses that are not recoverable from customers will adversely affect DisCos' profitability.

The ATC&C loss for 2024/Q1 (36.36%) reduced by -5.75pp compared to 42.11% recorded in 2023/Q4. All the DisCos recorded decreases in ATC&C loss in 2024/Q1 compared to 2023/Q4 with the highest decreases recorded by Kaduna (-12.97pp) and Benin (-9.35) during the period (Table 7).

Ikeja DisCo outperformed its allowed ATC&C in 2024/Q1 by achieving an actual ATC&C of 15.81% which is lower than the set target of 18.73%. This means that during the quarter, Ikeja DisCo was able to earn 100% of its revenue requirement for the period which should allow it to cover all market obligations as well as operational costs. It is worth noting that Ikeja DisCo has the lowest ATC&C target amongst all the DisCos, therefore outperforming this low target is a commendable achievement.

The other DisCos did not achieve their target ATC&C in 2024/Q1 with the widest variance (target – actual) being recorded by Kaduna (-34.96pp), Kano (-27.73pp) and Jos (-21.04pp). The failure of the DisCos to meet their allowed loss targets means they are unable to meet revenue requirements, thereby compromising their long-term financial position. The Commission is working with all the DisCos to take remedial actions through customer enumeration and increased revenue assurance to improve their ATC&C loss.

**Table 7: ATC&C Loss (%) by DisCos in 2023/Q4 vs. 2024/Q1**

DisCo	MYTO Target (%)	ATC&C (%)		Variance (pp)	
	2024	2023/Q4	2024/Q1	2023/Q4	2024/Q1
Abuja	25.00	43.02	36.98	-23.75	-11.98
Benin	25.00	44.52	35.17	-27.15	-10.17
Eko	20.07	24.40	22.61	-10.22	-2.52
Enugu	25.00	43.08	35.61	-31.77	-10.61
Ibadan	25.00	44.56	42.02	-29.09	-17.02
Ikeja	18.73	17.50	15.81	-6.13	2.92
Jos	32.72	62.84	53.76	-35.57	-21.04
Kaduna	25.00	72.93	59.96	-66.33	-34.96
Kano	25.00	58.16	52.73	-42.31	-27.73
Port Harcourt	25.00	42.64	37.39	-21.19	-12.39
Yola	56.00	63.79	62.36	-3.19	-6.98
All DisCos					
MYTO Level	27.50				
Total Technical, Commercial & Collection losses	-	42.11	36.36		
Technical & Commercial losses	-	21.55	19.55		
Collection losses	-	26.21	20.83		

### 2.3.5 Market Remittance

Under the escrow mechanism set up by the CBN in 2013 as part of the Nigerian Electricity Market Stabilisation Facility (NEMSF) intervention, all the collections of the DisCos are escrowed. The DisCos only have access to their revenues after relevant deductions towards their loan 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 NBET and TCN. This was to cover the cost of energy taken from GenCos, transmission charges (payable to the TSP) and the MO's 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 below the payment of market obligations in the waterfall.

#### 2.3.5.1 Market Remittance to NBET

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 subsidies. For ease of administration, the subsidy is only applied to the generation cost payable by DisCos to NBET at source in the form of a DisCo's Remittance Obligation (DRO). The DRO represents the total GenCo invoice that is billed to the DisCos by NBET based on what the allowed DisCo tariffs can cover<sup>13</sup>. The DRO regime replaced the Minimum Remittance Obligation<sup>14</sup> (MRO) framework in January 2024 and DisCos are expected to pay 100% of their DROs. The transition to the DRO regime was necessitated by the risk of unpaid tariff subsidy debts encumbering the balance sheets of the DisCos thereby preventing them from raising finance to undertake critical investments. DisCos are also expected to remit 100% of the invoices received from the MO for transmission and administrative service costs.

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<sup>13</sup> The outstanding portion of GenCo invoice not covered by allowed tariffs and thus not billed to the DisCos is to be covered by the FGN in the form of tariff subsidies.

<sup>14</sup> For the MRO framework, DisCos are invoiced 100% of energy cost but only expected to pay MRO share of the invoice

The total NBET invoices and final obligation for each DisCo (based on DRO) during 2024/Q1 are summarised in Table 8. It is important to note that due to the absence of cost-reflective tariffs across all DisCos, the Government incurred a subsidy obligation of ₦633.30 billion (90.57% of total NBET invoice) in 2024/Q1 (average of ₦211.10 billion per month). Across 2024/Q1, this represents an increase of +₦380.56 billion (+150.56%) compared to the ₦252.76 billion (average of ₦84.25 billion per month) incurred in 2023/Q4; this increase is largely attributable to the Government's policy to harmonise exchange rates<sup>15</sup> while also issuing a policy directive that end-user customer tariffs remain at the rates that came into effect in December 2022.

In 2024/Q1, the DRO-adjusted invoice from NBET to the DisCos was ₦65.96 billion<sup>16</sup> while the total remittance made was ₦65.52 billion, which translates to a 99.33% remittance performance. Comparatively, in 2023/Q4, the MRO-adjusted invoice from NBET to DisCos was ₦223.32 billion and the total remittance was ₦156.40 billion, which translated to a 69.92% remittance performance. This means that the remittance performance of DisCos to NBET increased by +29.41pp in 2024/Q1 compared to 2023/Q4; largely attributable to the 37.48% reduction in the cumulative DisCo obligation across the quarters.

**Table 8: Total NBET Invoice and Final Obligation (DRO) of DisCos for 2024/Q1**

DisCos	Total NBET Invoice (₦' billion)	Final Obligation (₦' billion)
Abuja	109.51	15.60
Benin	56.13	4.74
Eko	94.19	12.28
Enugu	53.29	2.47
Ibadan	80.01	7.84
Ikeja	108.80	12.80
Jos	39.59	2.35
Kaduna	42.68	1.27
Kano	42.69	2.24
Port Harcourt	51.65	4.20
Yola	20.91	0.18
<b>All DisCos</b>	<b>699.26</b>	<b>65.96</b>

<sup>15</sup> For tariff calculation, the Commission applies the official FX rate as published by the Central Bank of Nigeria. Data from the CBN website show that the FX rate moved from an average of ₦460 to \$1 in May to an average of ₦1,330 to \$1 by 31 March 2024

<sup>16</sup> Total NBET invoice for 2024/Q1 without adjustment for MRO is ₦699.26 billion

Disaggregated remittance performance of the DisCos to NBET in 2024/Q1 showed that Nine (9) DisCos recorded remittance performances  $\geq 100\%$ , while Kano and Kaduna DisCos recorded 99.82% and 53.82% remittance performances respectively (Figure 8). A quarter-on-quarter analysis showed that all the DisCos recorded improvements in remittance performance to NBET in 2024/Q1 compared to 2023/Q4. Kano (+47.20 pp) and Jos (+46.56 pp) recorded the highest improvements in remittance performance to NBET.

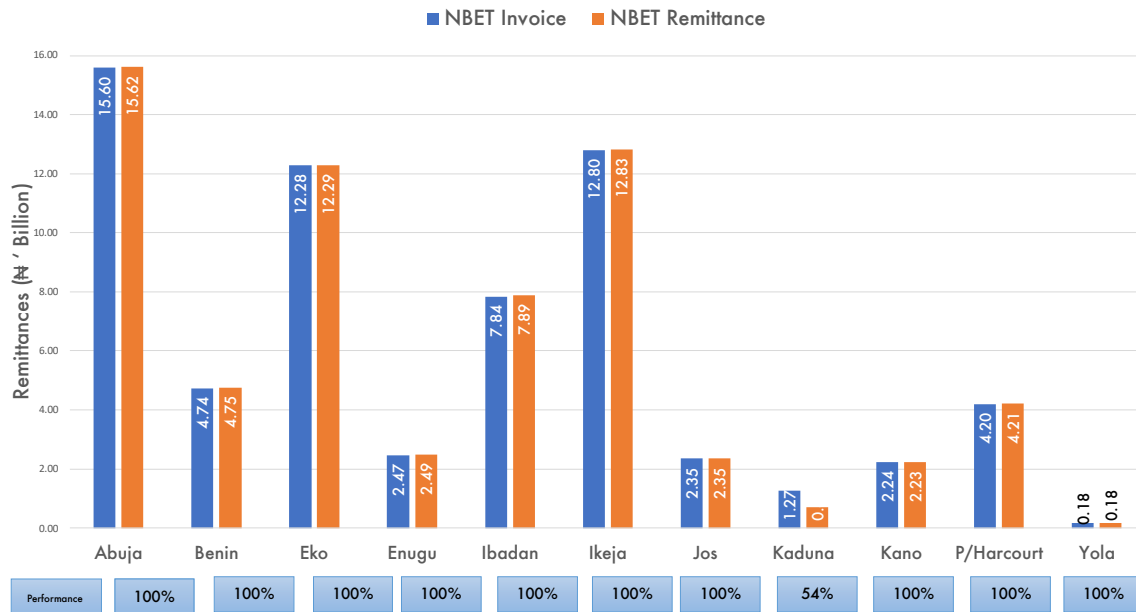


Figure 8: DisCos Remittance Performances to NBET in 2024/Q1

As indicated above, the significant increase in the remittance performance (+29.41pp) of DisCos to NBET during the quarter (2024/Q1) is directly attributable to the fact that the DisCos share of the GenCo invoice reduced from 46.91% in 2023/Q4 to 9.43% in 2024/Q1. The non-timely release of subsidy payments to GenCos has contributed to some of the issues that were discussed in section 2.1.3 – as of 31<sup>st</sup> May 2024, (₦398.30 bn) 63% of the subsidy incurred for 2024/Q1 had not been paid to the GenCos. The Commission continues to engage with key stakeholders to align on a path that will keep tariff subsidies at sustainable levels to support the long-term financial viability of the sector.



### 2.4.5.2 Market Remittance to MO

The Market Operator issues invoices to DisCos for energy transmission and administrative services. In 2024/Q1, DisCos made a total remittance of ₦45.10 billion against the cumulative invoice of ₦48.16 billion issued by the MO. This payment translates to 93.64% remittance performance and is a +23.98pp increase when compared to 69.66% remittance performance recorded in 2023/Q4 where DisCos remitted ₦32.55 billion out of ₦46.73 billion invoice issued by the MO.

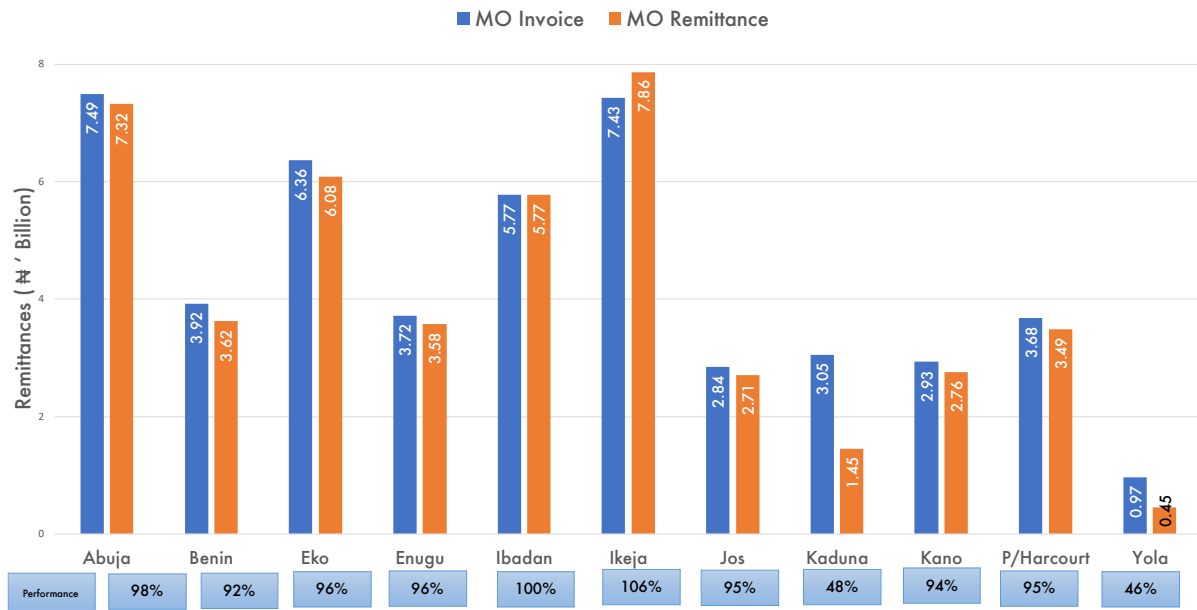


Figure 9: DisCos Remittance Performances to MO in 2024/Q1

Disaggregated remittance performance of the DisCos to MO showed that Ikeja and Ibadan DisCos recorded the highest remittance performances of 105.79%<sup>17</sup> and 100.00% respectively while Kaduna and Yola had the lowest remittance performances of 47.54% and 46.39% (Figure 9). Between 2023/Q4 and 2024/Q1, only Yola DisCo (-2.69pp) recorded a decline in remittance performance to MO. The remaining ten (10) DisCos recorded improvements in MO remittance performance with Jos (+41.41pp), Kano (+41.33pp), and Enugu (+40.42pp) recording the most significant improvements.

<sup>17</sup> Remittances above 100% is due to payment of outstanding invoices from previous quarters

### 2.4.5.3 Market Remittance to NBET and MO

The cumulative DisCos' remittance to NBET and MO in 2024/Q1 is presented in Table 9.

**Table 9: DisCos Remittance Performances to NBET and MO in 2024/Q1**

DisCos	MRO Adjusted Invoice (₦' Billion)			Actual Remittance (₦' Billion)			Remittance Performance (%)	
	NBET	MO	NBET + MO	NBET	MO	NBET + MO	2023/Q4	2024/Q1
Abuja	15.60	7.49	23.09	15.62	7.32	22.94	75.13	99.35
Benin	4.74	3.92	8.66	4.75	3.62	8.37	73.80	96.65
Eko	12.28	6.36	18.64	12.29	6.08	18.37	96.87	98.55
Enugu	2.47	3.72	6.19	2.49	3.58	6.07	55.25	98.06
Ibadan	7.84	5.77	13.61	7.89	5.77	13.66	68.49	100.37
Ikeja	12.80	7.43	20.23	12.83	7.86	20.69	78.70	102.27
Jos	2.35	2.84	5.19	2.35	2.71	5.06	53.51	97.50
Kaduna	1.27	3.05	4.32	0.69	1.45	2.14	9.27	49.54
Kano	2.24	2.93	5.17	2.23	2.76	4.99	52.67	96.52
P/Harcourt	4.20	3.68	7.88	4.21	3.49	7.70	74.34	97.72
Yola	0.18	0.97	1.15	0.18	0.45	0.63	86.88	54.78
All DisCos	65.96	48.16	114.12	65.52	45.10	110.62	69.88	96.93

### 2.4.5.4 Market Remittance by Other Customers

The remittances made by bilateral customers (local and international) and special customers for invoices issued in 2024/Q1 by the MO are detailed in Table 10. None of the four (4) international bilateral customers being supplied by GenCos in the NESI made payment against the cumulative invoice of \$14.19 million issued by the MO for services rendered in 2024/Q1 (Table 10). Also, no remittances were made by bilateral customers within the country against the cumulative invoice of ₦1,860.11 million issued to them by the MO for services rendered in 2024/Q1 (Table 10).

It is however noteworthy that some bilateral customers (both local and international customers) made payments during 2024/Q1 for outstanding MO invoices from previous quarters; cumulatively, a total of \$5.96 million was paid by two (2) international customers. Similarly, the MO received ₦505.71 million from eight (8) local bilateral customers as payment towards debts that were incurred pre-2024/Q1. The details of these payments are contained in Appendix VII.

As indicated in previous reports, the Commission expects the MO to invoke the provision of the market rules to curtail the payment indiscipline being exhibited by local and international bilateral customers.

The special customer (Ajaokuta Steel Co. Ltd and the host community) did not make any payment towards the ₦1.27 billion (NBET) and ₦0.09 billion (MO) invoices received in 2024/Q1. This continues a longstanding trend of non-payment by this customer and the Commission has communicated the need for intervention on this issue to the relevant FGN authorities. A continuation of the non-payment may trigger total disconnection from the grid.

**Table 10: Invoices and Remittances of Other Customers in 2024/Q1**

	NBET			MO		
	Invoice (Million)	Remittance (Million)	Performance (%)	Invoice (Million)	Remittance (Million)	Performance (%)
	2024 /Q1	2024 /Q1	2024 /Q1	2024 /Q1	2024 /Q1	2024 /Q1
<b>International Customers</b>						
PARAS-SBEE (\$)	-	-	-	3.15	0.00	0.00
TRANSCORP-SBEE (\$)	-	-	-	4.46	0.00	0.00
MAINSTREAM-NIGELEC (\$)	-	-	-	1.21	0.00	0.00
ODUKPANI-CEET (\$)	-	-	-	5.36	0.00	0.00
<b>Total</b>	-	-	-	14.19	0.00	0.00
<b>Bilateral Customers</b>						
MSTM/INNER GALAXY (₦)	-	-	-	788.15	0.00	0.00
MSTM/KAM IND. (₦)	-	-	-	36.05	0.00	0.00
MSTM/KAM INT. (₦)	-	-	-	0.00	0.00	0.00
NDPHC/SUNFLAG (₦)	-	-	-	15.81	0.00	0.00
NDPHC/WEEWOOD (₦)	-	-	-	84.00	0.00	0.00
NORTH SOUTH/STAR P (₦)	-	-	-	36.20	0.00	0.00
TRANS AMADI/ OAU (₦)	-	-	-	31.93	0.00	0.00
MSTM/ADFV (₦)	-	-	-	44.85	0.00	0.00
OMOTOSHO II/EKEDC (₦)	-	-	-	0.00	0.00	0.00
OMOTOSHO II/PULKIT (₦)	-	-	-	23.85	0.00	0.00
MAINSTREAM/PRISM (₦)	-	-	-	242.63	0.00	0.00
ALAOJI GENCO/APLE (₦)	-	-	-	369.86	0.00	0.00
TAOPEX/KAM INT (₦)	-	-	-	50.20	0.00	0.00
TAOPEX/KAM STEEL (₦)	-	-	-	50.28	0.00	0.00
MSTM ZEBERCED (₦)	-	-	-	35.99	0.00	0.00

	NBET			MO		
	Invoice (Million) 2024 /Q1	Remittance (Million) 2024 /Q1	Performance (%) 2024 /Q1	Invoice (Million) 2024 /Q1	Remittance (Million) 2024 /Q1	Performance (%) 2024 /Q1
TRANS AMADI (FMPI) (₦)	-	-	-	6.28	0.00	0.00
JEBBA/QUANTUM STEEL				44.03	0.00	0.00
Total	-	-	-	1,860.11	0.00	0.00
Special Customer						
AJAOKUTA STEEL (₦)	1.265	0	0	95.61	0	0

1. NBET, MO, SBEE, CEET and NIGELEC are Nigeria Bulk Electricity Trader, Market Operator, Société Beninoise d'Énergie Electrique, Compagnie Energie Electrique du Togo and Société Nigerienne d'électricite, respectively.



# 03 Regulatory Functions

## 3.0 REGULATORY FUNCTIONS

Pursuant to Section 34 (2)(d) of the EA which empowers the Commission to “licence and regulate persons engaged in the generation, transmission, system operation, distribution, supply and trading of electricity”, the Commission issues licences to applicants that have met the eligibility requirements for the respective licences. Each licence issued by the Commission contains the appropriate terms and conditions which seek to ensure that licensed entities undertake their operations in accordance with industry best practices.

In addition to the licensed activities, the Commission also issues authorisations for companies to undertake activities in the NESI. The instruments the Commission uses include – permits and certificates. Permits are authorisations that the Commission issues to entities that perform a regulatory activity with fewer licensing requirements while certificates are issued by the Commission to entities certified to have the skilled manpower to carry out specific activities in the NESI.

### 3.1 Regulations/Orders

Regulations are a set of rules that the Commission may issue periodically to optimise the performance of licensees to give effect to the objects of the EA 2023. Orders are a series of directions/instructions that the Commission issues to licensees to perform certain actions or desist from acting in a particular manner. While regulations provide the structure and procedures for enforcing laws, orders are more situational and immediate in their impact.

#### 3.1.1 Regulations

In 2024/Q1, the Commission issued the updated Eligible Customer Regulations (ECR). The new Regulation repealed the Eligible Customer Regulations 2017 and incorporated the changes which are highlighted below:

- A. *Unification of the ECR and the Competition Transition Charge (CTC) Guidelines:* The ECR and the CTC guidelines have been unified into a single document for ease of reference and information retrieval.
- B. *Revised Threshold for Eligibility:* The minimum consumption threshold to qualify as a prospective eligible customer has been reviewed from 2MWh/h to 6MWh/h-20MWh/h depending on the class of eligible

customer. The 5 classes of eligible customers along with their respective consumption thresholds are:

- i. Point-to-Point Connection (6MWh/h)*
- ii. New Connection to 33kV Network (10MWh/h)*
- iii. Existing DisCo's Customer Transitioning to Eligibility (10MWh/h)*
- iv. Existing Customer Connected to Transmission Network (20MWh/h)*
- v. New Connection to Transmission Network (20MWh/h)*

C. *Revision of methodology for the calculation of CTC:* Under the new ECR, the CTC will now be calculated as the difference between the actual tariff payable by the potential EC under the prevalent MYTO Order and the approved weighted end-user tariff of the DisCo until the time when there is a major tariff review for the DisCo to reset key MYTO parameters.

D. *Market Participation Agreement (market registration):* The stages in the application for eligible customers have been reviewed to ensure the sequence of application conform with market norms while also reducing the administrative costs for the applicants until the project is cleared to have met critical requirements. As part of this, the execution of a market participation agreement between the prospective eligible customer and the market operator has been made a condition subsequent (post-approval documentation) for an eligible customer after the permit has been granted by the Commission. The three stages of eligible customer application are:

- i. Eligibility Status (Pre-approval) Requirements*
- ii. Eligibility Approval Requirements*
- iii. Post-Approval Documentation*

E. *Confirmation of Non-Indebtedness:* The DisCo serving an applicant for eligibility status has now been mandated to respond to an official request for a letter of non-indebtedness within 21 working days. Failure to respond within the timeline shall be deemed as a state of non-indebtedness by the Commission.

F. *Customers supplied by 11kV lines are no longer eligible for an EC permit:* The phase II of the ECR implementation which seeks to allow a customer or group of end users whose consumption is more than 2MWh/h over a

month, and connected to a metered 11kV delivery point, to apply for an EC permit has been expunged. This is primarily because the minimum threshold for eligible customers has been revised to 6MWh/h and the maximum load on an 11kV line is 5MW; hence an eligible customer cannot be supplied by an 11kV line. The phase II implementation has been removed from the ECR until such a time the market is considered robust enough for EC transactions at an 11kV voltage level.

### 3.1.2 Orders

During the quarter, the Commission issued thirty-six (36) Orders to guide the activities of licensees. The details of the Orders are outlined below:

A. Order Nos: [NERC/2023/023–NERC/2023/033](#) (11 Orders issued to 11 DisCos) – Multi-Year Tariff Order (MYTO) 2024 for the Distribution Companies. The Orders became effective on the 1st of January 2024 and sought to;

- i. Ensure that prices charged by DisCos are fair to customers and are sufficient to allow them to fully recover the efficient cost of operation, including a reasonable return on the capital invested in the business in accordance with Section 116 of the EA.
- ii. Reset industry parameters and performance obligations to incentivise improvement of efficiency and service experience of electricity consumers.
- iii. Ensure sustained improvement in meter deployment and quality of supply in line with the DisCos' proposal and service improvement commitment.
- iv. Ensure that tariffs payable by customers are commensurate and aligned with the quality and availability of power supply committed to customer clusters by the DisCos.
- v. Provide a framework for the settlement of imbalances between TCN and DisCos on delivery and off-take of available energy in accordance with the Market Rules, Vesting Contracts and other industry documents.
- vi. Support payment securitisation of market contracts and market discipline.
- vii. Support transition to bilateral contracts and procurement of bulk energy to meet the supply needs of customers.

A major change under these Orders was the increase in the frequency of minor tariff reviews from half-yearly (every 6 months) to monthly. This transition was necessitated by the need for near real-time adjustment of macro-economic indices in



tariff determination thereby minimising the risk of financial imbalances across the NESI value chain over extended periods.

B. Order No: [NERC/2023/034](#) – Multi-Year Tariff Order (MYTO) 2024 for the Transmission Company of Nigeria Plc. The Order became effective on the 1st of January 2024 and has the following objectives;

- i. Ensure sustained improvement in service delivery through the implementation of the performance improvement plan of the TCN for 2024-2027.
- ii. Ensure that prices charged by the TCN are fair to customers and are sufficient to allow TCN to recover the efficient cost of operation, including a reasonable return on the capital invested in the business in line with Section 116 of the EA.
- iii. Provide appropriate incentives towards ensuring continuous improvement in the TCN's performance in reducing network losses.
- iv. Steer the market to gradually transition to cost-reflective tariffs and activate market contracts in line with the requirements of the Market Rules.
- v. Reaffirm the obligation of the System Operation Division of the TCN to comply with the economic merit order dispatch prescribed in this Order.
- vi. Reaffirm the obligation of the Transmission System Provider under the TCN for the payment of generation capacity charge and loss of revenue to DisCos based on the deviation between energy delivered to a DisCo and the MYTO allocation from the TCN's inability to deliver power to the affected DisCo.
- vii. Reaffirm the obligation of DisCos for the payment of lost revenue in favour of the TCN in line with the provisions of the executed service agreement.

C. Order No: [NERC/2023/035](#) – Order on Performance Improvement Plan of the Transmission Company of Nigeria. The Order became effective on the 1st of January 2024 and sought to approve a performance improvement plan for the TCN to undertake the needed interventions towards the improvement of network performance requirements in alignment with the current and future energy demands of the NESI. Over the period 2024 – 2026, the proposed interventions are developed to achieve the following;

- i. Efficient dispatch of generation and reduced transmission losses

- ii. Complete short- and medium-term system visibility
- iii. Improve transmission line performance
- iv. Improve network reliability and frequency control
- v. Improve the meter management system
- vi. Improve long-term network visibility, communication and SCADA
- vii. Enhance network protection systems
- viii. Improve grid safety and security
- ix. Empower employees with quality training and competitive remuneration.

The Order further specifies the specific major output targets for the TCN. They include;

- i. Reduce transmission loss factor to 6.50% in 2026
- ii. Reduce network interruptions (partial/full grid collapse) from an annual average of nine (9) to one (1).
- iii. Meet 100% of the DisCos' energy needs as approved by the Commission.
- iv. Achieve improved system reliability and eliminate system collapse
- v. Achieve 100% visibility of the grid through the implementation of SCADA
- vi. Achieve 100% energy accountability
- vii. Reduce accidents and improve safety and protection in grid operations
- viii. Automated control of the grid and TCN processes.

D. Order No: NERC/2024/001 – Order on the Regulatory Intervention in Kaduna Electricity Distribution Plc. The Order became effective on the 1st of January 2024 and sought to;

- i. Intervene in Kaduna DisCo's pervasive failure and non-performance.
- ii. Dissolve the board of directors of Kaduna DisCo pursuant to section 75(2)(a) of the Electricity Act (EA) 2023.
- iii. Appoint an administrator and special directors to manage the affairs of Kaduna DisCo pursuant to section 75(2)(a) of the EA.

- iv. Invoke the powers conferred on the Commission for the sale of the undertaking on the basis of the highest and best price offered for the undertaking.

Prior to the issuance of the Order, Kaduna DisCo had consistently failed to meet its obligations to the market in contravention of the EA 2023 as well as the terms and conditions of its electricity distribution licence issued by the Commission. The Commission had several engagements with the management, board and shareholders of Kaduna DisCo to address the utility's failing performance but these meetings did not yield improvements in the performance of the DisCo.

In addition, the Chief Finance Officer of Kaduna DisCo confirmed vide a letter to the Commission that the utility was not in a position to comply with the basic market requirement of providing a bank guarantee in favour of NBET in compliance with the Market Rules and subsisting Orders of the Commission. Consequently, pursuant to Section 75 of the EA 2023, all directors of Kaduna DisCo were removed from office and the board of directors dissolved. A new administrator was appointed by the Commission who shall be responsible for the management of the day-to-day affairs of the Kaduna DisCo pending the finalisation of the sale of the undertaking to a new core investor.

E. Order No: [NERC/2024/004](#) - [NERC/2024/014](#) (11 Orders issued to 11 DisCos)— Order on Non-Compliance with Capping of Estimated Bill by DisCos for the period January – September 2023. The Order became effective on the 12th of February 2024 and has the following objectives;

- i. Ensure rectification of DisCos' billing above the approved monthly caps and application of appropriate credit adjustments to the customers' accounts.
- ii. Ensure that DisCos act with diligence and integrity by promptly adjusting any estimated billing that exceeds the approved capping limit.
- iii. Strengthen transparency and accountability in the billing processes within the NESI.
- iv. Establish a framework to publicly disclose the list of beneficiaries from the rectification process which will empower customers to assert their rights and verify the accuracy of their bills.

The DisCos were mandated by the Commission to reconcile customers' accounts at the February 2024 billing cycle and issue credit adjustments for customers that were overbilled between January and September 2023. In addition, a deduction of 10% of the naira value of the total overbilling for the period shall be applied to DisCos' annual operating expenses over 12 months. The summary of credit adjustments and regulatory sanctions for the DisCos is contained in Table 11.

**Table 11: DisCos' Credit Adjustments and Regulatory Sanction**

DisCos	No. of Overbilled Customers	Credit Adjustments (₦' Million)	Regulatory Deduction (₦' Million)
Abuja	300,013	17,874.61	1,787.46
Benin	198,309	10,497.60	1,049.76
Eko	64,043	14,137.66	1,413.76
Enugu	302,062	11,866.26	1,186.62
Ibadan	69,628	333,680.58	33,368.05
Ikeja	300,079	20,951.66	2,095.16
Jos	466,621	13,319.60	1,331.96
Kaduna	27,027	1,145.27	114,527.71
Kano	25,644	196,975.09	19,697.50
Port Harcourt	249,532	14,187.63	1,418.76
Yola	18,955	541,888.62	54,188.86
<b>Total</b>	<b>2,021,913</b>	<b>105,052.86</b>	<b>10,505.28</b>

F. Order No: NERC/2024/016 - NERC/2024/036 (11 Orders issued to 11 DisCos) – February 2024 Supplementary Order to the Multi-Year Tariff Order for the DisCos. The Order became effective on the 1st of March 2024 and sought to reflect the changes in the pass-through indices (not within the control of licensees) including inflation rates, NGN/US\$ exchange rate, available generation capacity and gas price for the determination of cost-reflective tariff. The Order also obligated DisCos to procure a minimum of 10% of their 2024 load allocation from embedded generation to improve supply reliability and sustain the delivery of SBT minimum service level commitments.

The Commission continued to monitor compliance with the provisions of other existing regulations, orders, and standards governing the NESI during the quarter.

### 3.2 Licences and Permits Issued or Renewed

In addition to issuing licences for electricity generation, transmission, distribution, trading and system operations in the NESI, the Commission also issues permits for captive power generation and mini-grid development. In 2024/Q1, the Commission issued nine (9) new off-grid generation licences (gross capacity – 109.69MW) and three (3) new trading licences (Table 12).

Table 12: Licences issued in 2024/Q1

SN	Licensee	Location	Capacity (MW)	License Type	Fuel Type
New					
1	Golden Penny Power Limited	Lagos State	26.40	Off-grid	Gas
2	Golden Penny Power Limited	Oyo State	11.80	Off-grid	Gas
3	Golden Penny Power Limited	Oyo State	10.90	Off-grid	Gas
4	Golden Penny Power Limited	Cross River State	4.50	Off-grid	Gas
5	Golden Penny Power Limited	Ogun State	14.00	Off-grid	Gas
6	Golden Penny Power Limited	Lagos State	32.40	Off-grid	Gas
7	Daybreak Power Solutions	Niger State	2.19	Off-grid	Solar
8	TIS Renewable Energy Limited	Lagos State	6.00	Off-grid	Gas
9	Auro Nigeria Private Limited	Kaduna State	1.50	Off-grid	Gas
10	Watts Exchange Limited	Abuja	NA	Trading	NA
11	Centum Dopemu Energy Services Ltd	Ogun State	NA	Trading	NA
12	DMD Electric Limited	Lagos State	NA	Trading	NA

### 3.3 Captive Power Generation Permits

Captive power generation permits are issued to entities that aim to own and maintain power plants for generating power for consumption and not for sale to a third party. The Commission issued nine (9) captive power generation permits in 2024/Q1 with a total nameplate capacity of 52.57MW. Details of the permit holders, location and plant capacities are listed in Table 13.

Table 13: Captive Generation Plants approved in 2024/Q1

S/N	Company Name	Location	Capacity (MW)
1	SweetCo Foods Limited	Oyo State	1.50
2	African Steel Mills Nigeria Limited	Lagos State	20.00
3	West African Ceramics Limited	Kogi State	10.00
4	Royal Engineered Stones Limited	Kogi State	4.00
5	Armilo Plastics Limited	Lagos State	1.13
6	MTN Nigeria Communication Limited	Lagos State	5.46
7	MTN Nigeria Communication Limited	Lagos State	3.28
8	MTN Nigeria Communication Limited	Lagos State	3.60
9	MTN Nigeria Communication Limited	Lagos State	3.60

### 3.4 Mini-grid Permits and Registration Certificates

Pursuant to section 165(1)(m) of the EA 2023 which states that the Commission shall “award licence of mini-grid concessions to renewable energy companies to exclusively serve a specific geographical location indicating aggregate electricity to be generated and distributed from a site with obligation to serve customers to request service”, the Commission continues to encourage the development and utilisation of renewable energy by issuing permits and registration certificates for mini-grid development.

A permit is issued to a mini-grid developer for the construction, operation, maintenance, and where applicable ownership of mini-grids with distribution capacity above 100kW and generation capacity up to 1MW. The Commission also issues registration certificates to a mini-grid developer for one or more systems with distribution capacity below 100kW. Following the satisfactory evaluation of mini-grid applications, the Commission issued three (3) mini-grid permits and two (2) registration certificates in 2024/Q1. The details of the permits and registration certificates are presented in Table 14.

Table 14: Mini-grid Permits and Registration Certificates issued in 2024/Q1

S/N	Name	Location	Type	Capacity (kW)
<b>Permits</b>				
1	Havenhill Synergy Limited	Osun State	Isolated	100.00
2	Havenhill Synergy Limited	Osun State	Isolated	50.00

S/N	Name	Location	Type	Capacity (kW)
3	Havenhill Synergy Limited Registration Certificates	Osun State	Isolated	132.00
4	NXT Grid Nigeria Limited	Kaduna State	Isolated	91
5	Prince Albert Company Limited	Cross River State	Isolated	100

### 3.5 Meter Service Providers/Meter Asset Providers

A Meter 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.

The Commission certified six (6) MSPs – four (4) meter installer companies, and two (2) meter manufacturers in 2024/Q1. Details of the certified MSPs are contained in Table 15.

Table 15: Meter Service Providers certified in 2024/Q1

S/N	Name	Authorisation Type
<b>Meter Service Providers</b>		
1	Genobet Limited	Installer A1
2	Mojec Meter Asset Management	Installer A1
3	Epagad International Services Limited	Installer A1
4	Abdulrahman Ahmadu Zubairu	Installer C2
5	Smart Meters Company Limited	Manufacturer
6	Crestflow Energy Limited	Manufacturer

Class "A1" Certification authorises a holder to undertake installations of (i) Low Voltage single-phase and three-phase Metering systems for installation exceeding 750 metering Systems/Contract, and (ii) Installations at grid voltages exceeding 5 Metering Systems. Class "C1" Certification authorises a holder to undertake installations of Low Voltage Distribution single-phase and three-phase Metering Systems exceeding 500 Metering Systems/Contract.

### 3.6 Public Consultation and Stakeholder Engagement

Pursuant to Section 34(2)(c) of the EA 2023, which mandates the Commission to "establish appropriate consumer rights and obligations regarding the provision and

use of electricity services”, the Commission conducts public awareness, hearings<sup>18</sup> and consultations with NESI stakeholders. Public consultations are intended to educate customers on the Commission’s activities, its various regulatory instruments as well as overall customer rights and obligations. During the quarter (2024/Q1) the Commission conducted hearings to consider the petitions filed by different stakeholders on issues pertaining to the provision and utilisation of electricity services. The details of the hearings are contained in Table 16.

**Table 16: Hearings conducted by the Commission in 2024/Q1**

S/N	Petitioner	Petition	Parties	Date of Hearing
1	Enugu Electricity Distribution Company (EEDC)	Petition against the Commission's Order (NERC/2024/006) on Non-compliance with the capping of estimated bills by EEDC	EEDC/NERC	18th March 2024
2	Ikeja Electric (IE)	Petition against the Order on Non-compliance with the capping of estimated bills by IE	IE/NERC	19th March 2024
3	Eko Electricity Distribution Company Plc (EKEDP)	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by EKEDC	EKEDC/NERC	19th March 2024
4	Benin Electricity Distribution Company (BEDC)	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by BEDC	BEDC/NERC	20th March 2024
5	Port Harcourt Distribution Company (PHEDC)	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by PHEDC	PHEDC/NERC	20th March 2024
6	BEDC/OOSS/LEKAN	Petition by Benin Electricity Distribution Company, Obas of Ondo South Senatorial District and the Licenced Electricity Contractors Association of Nigeria against the grant of an Independent Electricity Distribution Network to Anyigba Independent Electricity Distribution Network Limited	BEDC/OOSS/LECAN/Anyigba IEDN	11th March 2024
7	Eko Electricity Distribution Company Plc (EKEDP)	Petition by EKEDC against the grant of an Independent Electricity Distribution Network licence to MILLWATER Agbara Power Limited	EKEDC/MILLWATER Agbara	11th March 2024
8	Ibadan Electricity Distribution Company (IBEDC)	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by IBEDC	IBEDC/NERC	30th May 2024

<sup>18</sup> Hearings are proceedings pursuant to the provisions of the Act through which the Commission seeks additional information on petitions or any matter filed before it by market participants or consumers in order to make a final decision.



As part of its routine activities, the Commission holds engagements with various stakeholders as necessary. The details of these engagements are shared with the public via the Commission's social media accounts ([LinkedIn](#), [X](#) and [Instagram](#)).

### 3.7 Compliance and Enforcement

Section 64(1) of the EA 2023 mandates all licensees to comply with the provisions of their licence, regulations, codes, orders and other requirements issued by NERC. The Commission is responsible for evaluating the compliance of all its licensees/permit-holders and carrying out enforcement actions against infractions based on the provisions of the Act as well as other relevant regulatory instruments.

Pursuant to the provisions of Section 76 of the EA 2023, the Commission issued five (5) Rectification Directives (RD) to licensees and one (1) Notice of Intention to Commence Enforcement (NICE) for different breaches/default (full list and further details can be found in Table 17). Furthermore, the Commission issued the Order on Non-compliance with Capping of Estimated Bills; Orders [NERC/2024/004-NERC/2024/014](#) (explained in section 3.1), which mandated DisCos to reconcile customers' accounts and issue credit adjustments for customers that were overbilled between January and September 2023. The Order also specified financial sanctions in the form of deductions from the allowed annual OpEx allowances in the tariffs against DisCos that overbilled customers. The Commission is committed to ensuring that all licensees comply with the codes and standards of the NESI as well as other provisions of their licences.

### 3.8 Alternative Dispute Resolution

Pursuant to the provisions of section 42.3.7 of the Market Rule, the Commission has established an Alternative Dispute Resolution (ADR) process to resolve disputes between market participants in the NESI. This includes the constitution of a Dispute Resolution Panel (DRP) and the appointment of a Dispute Resolution Counsellor (DRC). No disputes were brought before the DRP during this quarter.

Table 17: Compliance and Enforcement Actions of the Commission in 2024/Q1

SN	RD/NICE	Licensee	Issued Date	Deadline Date
<b>Rectification Directive</b>				
1	Non-compliance with Benin Forum Office decision in complaint number BENFO/NERC/869/2023.	Benin DisCo	04 January 2024	16 January 2024
2	Non-compliance with the Umuahia Forum decision in complaint number UMFO/NERC/10/2022/C0771.	Aba Power	18 January 2024	01 February 2024
3	Non-compliance with the Ikeja Forum decisions in complaint number IFO/NERC/2023/09/9520 and IFO/NERC/2023/09/9522	Ikeja DisCo	05 February 2024	12 February 2024
4	Non-compliance with the Ikeja Forum decisions in complaint number IFO/NERC/2022/11/8402.	Ikeja DisCo	06 February 2024	13 February 2024
5	Failure to submit the February 2024 metering report	Kano DisCo	27th March 2024	29th March 2024
<b>Notice to Commence Enforcement Action (NICE)</b>				
6	Failure to file compliance returns	Wapsila Nigeria Limited	15 January 2024	29 January 2024



## 4.0 CONSUMER AFFAIRS

### 4.1 Consumer Education and Enlightenment

The Commission's main consumer education and enlightenment mechanisms are townhall meetings and customer complaints resolution meetings. These are used to enlighten consumers/stakeholders on the Commission's activities, regulations, customer rights and obligations as well as to ensure swift resolution of complaints. These fora also provide avenues for the Commission to gather feedback from customers which is beneficial to the Commission in its decision-making processes.

In 2024/Q1, the Commission held two (2) town hall meetings; Kano (7th-9th March) and Lagos (21st-23rd March). Some of the major issues that were discussed at these town hall meetings include:

- Serviced Based Tariff (SBT) provisions
- Capping of estimated bills for unmetered customers
- Electricity customer rights and obligations
- Electricity customer redress mechanisms
- Unauthorised electricity access
- Metering frameworks and
- Strategies by the Commission to ensure improved overall service delivery to customers.

The Commission also continued to fund the airing of radio jingles across radio stations throughout the country. These jingles educate customers on complaints redress mechanisms and give addresses of NERC Forum Offices.

### 4.2 Metering End-Use Customers

As of 31st March 2024, only 5,989,727 (44.79%) out of the 13,372,524 registered electricity customers across the twelve (12) DisCos were metered (breakdown contained in Table 18).

Table 18: Metering Progress as of 2024/Q1

DisCos	Total No. of Registered Customers	No. of Metered Customers	Metering Rate
Aba	194,354	62,321	32.07%
Abuja	1,446,609	883,443	61.07%
Benin	1,351,811	669,362	49.52%
Eko	766,329	452,875	59.10%
Enugu	1,396,440	630,606	45.16%
Ibadan	2,471,429	1,074,187	43.46%
Ikeja	1,257,046	920,448	73.22%
Jos	741,266	248,110	33.47%
Kaduna	870,449	209,090	24.02%
Kano	880,603	211,537	24.02%
Port Harcourt	1,179,194	500,821	42.47%
Yola	816,994	126,927	15.54%
Total	13,372,524	5,989,727	44.79%

During 2024/Q1, 123,604 end-user customers were metered which translates to a 7.31% increase compared to the 115,181 meter installations recorded in 2023/Q4. Ikeja and Ibadan DisCos recorded the highest number of meter installations accounting for 21.41% and 20.67% respectively, of the total installations in 2024/Q1. Relative to 2023/Q4, five (5) DisCos recorded improvements in the number of meter installations with Eko (+119.82%), Aba (+97.90%) and Ikeja (+89.99%) DisCos recording the greatest improvements. Conversely, Port Harcourt (-38.50%) and Yola (-32.00%) DisCos recorded the biggest decline in the number of meters installed in 2024/Q1 compared to 2023/Q4 (Table 19).

Table 19: Meter Deployment by DisCos 2023/Q4 vs. 2024/Q1

DisCos	Total No. Metered Customers as of 2024/Q1	No. of Customers Metered in 2024/Q1	No. of Customers Metered in 2023/Q4	Change in Metering (%)
Aba	62,321	7,817	3,950	97.90%
Abuja	883,443	21,493	21,868	-1.71%
Benin	669,362	10,455	10,889	-3.99%
Eko	452,875	4,636	2,109	119.82%
Enugu	630,606	13,932	11,559	20.53%
Ibadan	1,074,187	25,551	33,493	-23.71%
Ikeja	920,448	26,458	13,926	89.99%
Jos	248,110	2,738	2,826	-3.11%
Kaduna	209,090	3,017	2,689	12.20%
Kano	211,537	398	442	-9.95%
Port Harcourt	500,821	6,278	10,208	-38.50%
Yola	126,927	831	1,222	-32.00%
Total	5,989,727	123,604	115,181 <sup>19</sup>	7.31%

Out of the 123,604 end-use customers metered in 2024/Q1, 92.62% of customers were metered under the MAP framework, 6.10% were metered under Vendor Financed, 1.27% were metered under DisCo Financed and 0.01% were metered under the NMMP framework<sup>20</sup>. Further details on the metering progress under the

<sup>19</sup> Upon data reconciliation, the number of meters installed across all metering schemes in 2023/Q4 was 115,181 as against 111,225 reported in the 2023/Q4 report.

<sup>20</sup> There are 5 metering frameworks contained in the Commission's updated MAP & NMMP Regulations (NERC-R-113-2021). They are:

- Meter Asset Provider: This framework aims to provide for the provision and maintenance of end-user meters as a service by third-party investors on which customers benefitting from such meters pay a Metering Service Charge (MSC) to cover the cost of metering service.
- National Mass Metering Programme: This is a policy intervention with support from the CBN for the provision of long-term (10-year tenure) single-digit interest loans to DisCos strictly for the provision of locally manufactured/assembled meters to customers.
- Vendor Finance: This is a mutual agreement between a DisCo and a Local Meter Manufacturer/Assembler (LMMA) or Meter Asset Provider (MAP) on a deferred payment arrangement where the base cost of meters shall not exceed the regulated price approved by the Commission.
- Self-funded by DisCos: This involves procurement of meters from other sources outside the MAP and NMMP framework. The allowable costs of meters, accessories, installation and warranties should not exceed the regulated pricing approval by the Commission and the terms of supply should not be in conflict with terms of existing MAP and NMMP contracts.
- Other External Efficient Meter Financing: The Commission has also approved other external meter financing that are efficient, cost-effective, and in tune with the terms of existing MAP and NMMP contracts.

NMMP, MAP as well as Vendor and DisCo financed frameworks are presented in appendices IX, X and XI respectively.

Under the MAP framework, a total of 114,477 meters were installed in 2024/Q1 representing a +1.62% increase compared to the 112,654 MAP meter installations recorded in 2023/Q4. Ibadan (25,551), Ikeja (25,478) and Abuja (21,440) DisCos recorded the highest number of installations under the MAP framework during the quarter with 22.32%, 22.26% and 18.73% of the total installations respectively. Jos (1,165), Kano (831) and Yola (398) DisCos recorded the least installations under the MAP framework with 1.02%, 0.73% and 0.35% of the installations respectively.

Since October 2023, only Kaduna DisCo has metered customers under the NMMP framework; 14 customers were metered in 2024/Q1 representing a decrease of -33.33% from 21 customers that were metered in 2023/Q4 under the framework. Abuja, Eko, Ibadan, Ikeja, Jos and Port Harcourt DisCos have exhausted their meter allocations under the NMMP phase 0 and hence have achieved a 100% utilisation rate. Benin, Kaduna and Yola still have significant allocations under the NMMP which they have not utilised.

A total of 7,540 customers were metered under the Vendor financed framework in 2024/Q1. Aba, Abuja, Benin and Ikeja are the only DisCos that have taken advantage of this metering framework. During the quarter, Aba, Ikeja, Abuja and Benin installed 6,471, 980, 53, and 36 meters respectively, under the framework. These correspond to +351.26%, +26.29%, -35.38% and -83.18% change respectively compared to the 1,434, 776, 82, and 214 installations in 2023/Q4. Only Jos DisCo (1,573) recorded meter installations under the DisCo financed framework in 2024/Q1.

### 4.3 Customers Complaints

In furtherance of its mandate as contained in section 119(1)(c) of the EA 2023 which states that “the Commission shall develop in consultation with licensees, the customer complaints handling standard and procedure”, the Commission provides various channels for customers to lodge complaints against their service providers. The primary channels available for customers to lodge complaints in the NESI are:

A. NERC Customer Complaint Unit (NERC-CCU): This is a unit at the Consumer Affairs Division of the Commission dedicated to the receipt and resolution of complaints received directly from customers. Customers can lodge complaints at the NERC CCU via emails, letters or phone calls (through the NESI Call Centre).

B. DisCo Customer Complaint Unit (DisCo-CCU): This is a department in DisCo that is dedicated to the receipt and resolution of complaints from customers. DisCos submit monthly customer complaints reports which the Commission reviews to identify cases where regulatory intervention is necessary.

C. NERC Forum Offices: Forum offices serve as the “court of second instance” for customers not happy with the resolution of their complaints at the DisCo-CCU. The Commission set up Forum Offices to hear and resolve customer complaints not satisfactorily resolved at the DisCo-CCUs. As of 31 March 2024, the Commission had thirty-two (32) 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 contained in Appendix XV.

The Forum Office is managed by the forum secretariat while the hearings are conducted by five (5) forum panel members who are not staff of the Commission, as stipulated in the Customer Protection Regulation (CPR) 2023. The forum panels hear and resolve customer complaints in the state in which it is situated, if there is no Forum Office in a state, the Commission determines which neighbouring Forum Office will oversee customer complaints from the state. The composition of the forum panel is as follows:

1. A legal practitioner with experience in alternative dispute resolution nominated by the Nigerian Bar Association (NBA).
2. A financial expert nominated by either the Manufacturers Association of Nigeria, Nigerian Association of Chambers of Commerce, Industry, Mines and Agriculture (NACCIMA) or any other reputable organisation.
3. A qualified electrical engineer nominated by either the Council for Regulation of Engineering in Nigeria (COREN) or the Nigerian Society of Engineers (NSE).
4. A nominee of the Federal Competition and Consumer Protection Commission (FCCPC).



5. A representative of an NGO based in the distribution company's operating area nominated by the Commission.

D. Power Outage Reporting System (PORS): This is a mobile application designed for electricity customers to report outages in real time. The pilot phase for the operationalisation of the PORS has already started with AEDC and there are clear timelines for the extension of the system to other DisCos once the pilot phase is completed.

#### 4.3.1 NERC CCU

In 2024/Q1, 2,946 complaints were received at the Commission's CCU and 980 were resolved. A total of 1,566 complaints were received from customers of Ikeja DisCo accounting for 52.82% of the total. Conversely, Kano DisCo had the lowest number of complaints with just 3 (0.10%).

The most common issues among the 2,946 complaints received were billing (39.58%), metering (31.09%), and service interruption (15.14%). The three (3) complaints categories cumulatively accounted for 85.81% of the total complaints in the quarter (Figure 10). The complaints on billing that were resolved during the quarter resulted in a credit adjustment on customers' bills to the tune of ₦77,962,350.80 (Appendices XIII and XIV).

The Commission notes the poor resolution rate (33.27%) of complaints lodged at the NERC CCU in 2024/Q1 and is taking steps to improve the speediness of complaints resolution by DisCos. The complaint resolution meeting organised by the Commission between DisCos and customers provides for "on-the-spot" resolution of customer complaints by DisCos. If the complaints raised at the meeting cannot be resolved on the spot, the Commission provides reasonable timelines for resolution and has put in place a tracking mechanism to monitor compliance.

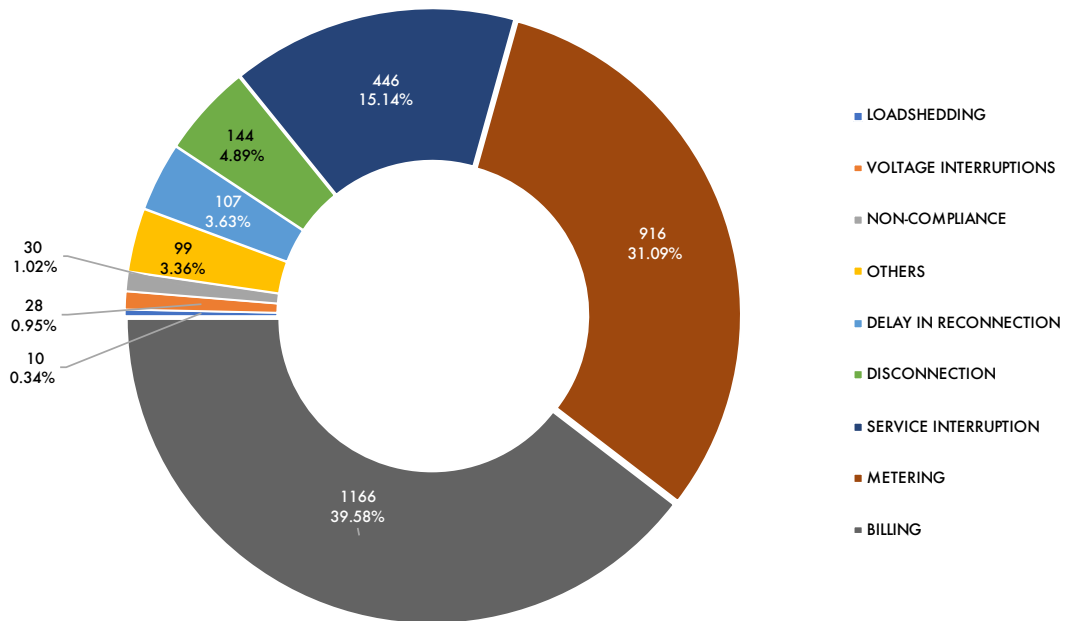


Figure 10: Category of Complaints Received at the Commission's CCU in 2024/Q1

#### 4.3.2 DisCo CCUs

The number of complaints received by DisCos in 2023/Q4 and 2024/Q1 are contained in Table 20. The total number of complaints received in 2024/Q1 was 291,380 across all DisCos; this translates to a -6.22% decrease compared to the 310,717 received in 2023/Q4. Ibadan DisCo received the highest number of complaints (53,737) representing 18.44% of total complaints received. Yola DisCo received the least number of complaints (2,785) representing 0.96% of total complaints received.

Table 20: Complaints Received by DisCos in 2023/Q4 vs. 2024/Q1

DisCos	No. of Complaints Received in 2023/Q4	No. of Complaints Received in 2024/Q1	Change in No. of complaints received	Change in No. of complaints received (%)
Aba	2,110	3,328	1,218	57.73%
Abuja	30,051	27,476	-2,575	-8.57%
Benin	8,890	6,877	-2,013	-22.64%
Eko	52,561	47,900	-4,661	-8.87%
Enugu	42,364	35,584	-6,780	-16.00%
Ibadan	54,218	53,737	-481	-0.89%

DisCos	No. of Complaints Received in 2023/Q4	No. of Complaints Received in 2024/Q1	Change in No. of complaints received	Change in No. of complaints received (%)
Ikeja	24,857	22,995	-1,862	-7.49%
Jos	18,287	18,931	644	3.52%
Kaduna	7,506	6,900	-606	-8.07%
Kano	13,257	11,413	-1,844	-13.91%
PH	53,467	53,454	-13	-0.02%
Yola	3,149	2,785	-364	-11.56%
<b>Total</b>	<b>310,717</b>	<b>291,380</b>	<b>-19,337</b>	<b>-6.22%</b>

Aba (+57.73%) and Jos (+3.52%) DisCos recorded increases in the number of customer complaints received in 2024/Q1 compared to 2023/Q4. Conversely, the remaining ten (10) DisCos recorded decreases in the number of customer complaints received with significant decreases recorded by Benin (-22.64%), Enugu (-16.00%), Kano (-13.91%) and Yola (-11.56%).

The most common issues among the 291,380 complaints received by DisCos in 2024/Q1 were metering (57.47%), billing (9.76%), and service interruption (8.53%). These three (3) complaints categories cumulatively accounted for 75.76% of the total complaints in the quarter (Figure 11).

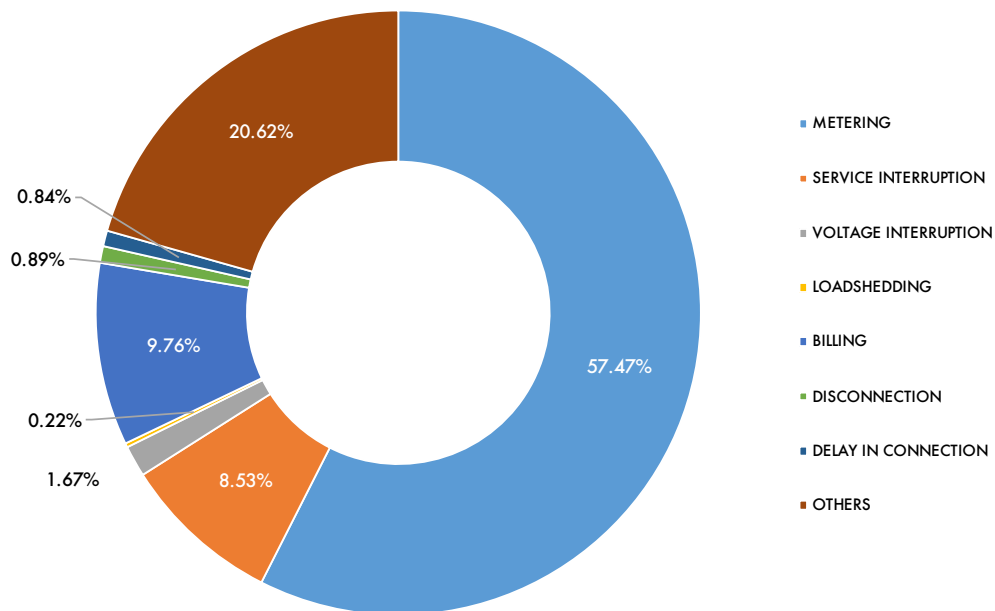


Figure 11: Category of Complaints Received by DisCos in 2024/Q1

### 4.3.3 Forum Offices

The summary of the appeals received across the Forum Offices is presented in Table 21. Through 2024/Q1, there were 2,429 active appeals (776 pending appeals from 2023/Q4 and 1,653 new appeals in 2024/Q1) across the 32 Forum Offices. This represents a -11.93% decrease compared to the 2,758 active appeals in the previous quarter (2023/Q4) which can be attributed to the significant decrease in the backlog of appeals carried over. Compared to 2023/Q4, the pending appeals carried over in the quarter (2024/Q1) decreased by 266 (-25.53%) while new appeals increased by 63 (+3.67%). The Forum Offices serving Ibadan DisCo have the highest number of active appeals (695) while the Forum Office serving Yola DisCo has the fewest (23) in 2024/Q1.

The total number of Forum sittings in 2024/Q1 reduced by -11% from 81 sittings in 2023/Q4 to 72. Partly as a direct result of this, cumulatively, the Forum Offices recorded a decrease of -9.92pp from the 2023/Q4 resolution rate between 2023/Q4 and 2024/Q1; 67.47% vs. 57.55%. The Commission will continue its efforts to ensure that the forum panels sit regularly to increase the resolution rate and reduce the number of pending appeals carried over across quarters.

**Table 21: Appeals handled by Forum Offices in 2024/Q1**

DisCos	Forum Offices	Appeals Received <sup>1</sup>	Appeals Resolved <sup>2</sup>	Appeals Pending <sup>3</sup>	No of Sittings
Abuja	Abuja, Lafia & Lokoja	50	40	10	6
Aba	Umuahia	5	4	1	1
Benin	Asaba & Benin	143	99	43	7
Eko	Eko	207	159	45	6
Enugu	Abakaliki, Akwa, Enugu, Owerri, & Umuahia	367	169	144	13
Ibadan	Ibadan, Abeokuta, Ilorin & Osogbo	695	376	272	19
Ikeja	Ikeja	537	240	297	6
Jos	Bauchi, Gombe, Jos & Makurdi	48	23	17	0
Kaduna	Gusau, Kaduna, Kebbi & Sokoto	43	20	19	2
Kano	Jigawa, Kano & Katsina	36	21	11	1
P/Harcourt	Calabar, Port Harcourt & Uyo	272	222	45	8
Yola	Yola	26	25	0	3
<b>All DisCos</b>	<b>All Forum Offices</b>	<b>2,429</b>	<b>1,398</b>	<b>904</b>	<b>72</b>

<sup>1</sup>Appeals received include outstanding appeals from the preceding quarter. <sup>2</sup> Appeals resolved excludes 64 appeals withdrawn and 63 appeals rejected. <sup>3</sup> Appeals are still within the regulatory timeframe of 2 months to resolve.

The breakdown of the various categories of appeals received at the Forum Offices in 2024/Q1 is contained in Figure 12. Similar to 2023/Q4, appeals related to billing were the most prevalent, accounting for 59.59% of the total appeals received (2023/Q4 - 60.43%). Appeals related to metering and disconnection represented 25.83% and 5.75% of the appeals, respectively. The Commission is working on interventions to improve the quality of customer complaint resolution at the DisCo-CCU to resolve effectively and reduce the number of appeals filed at the Forum Offices.

In addition to establishing additional Forum Offices and other customer complaint resolution channels, the Commission will continue to explore strategies to improve the operational efficiency of Forum Offices.

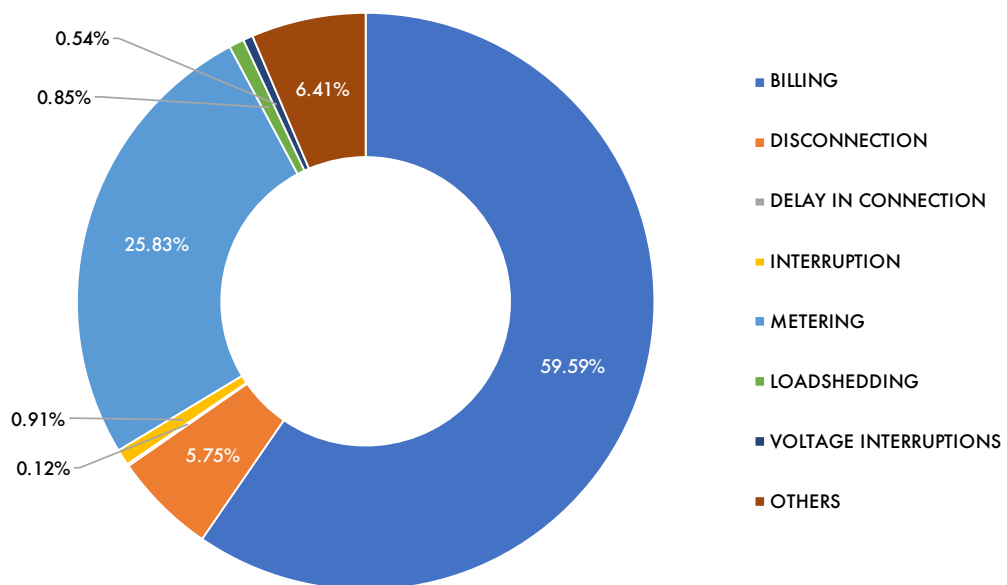


Figure 12: Category of Complaints Received by Forum Offices in 2024/Q1

#### 4.4 Health and Safety

Pursuant to Section 34(1)(e) of the EA 2023 which mandates the Commission to “ensure the provision of safe and reliable electricity to consumers”, the Commission monitors the health and safety performance of the NESI. Licensees are mandated to submit monthly Health and Safety reports to the Commission in accordance with the

requirements of their licence. In 2024/Q1, out of the 99 mandatory health and safety reports expected to be received from licensees, only 82 reports were received. The licensees with outstanding reports (March 2024) are listed below:

- GenCos: Transfam Power (Afam IV-V), Mabon (Dadin Kowa), Egbin Power (Egbin), First Independent Power Limited (Eleme & Trans Amadi), Paras Energy (Paras), and Shell (Afam VI)
- DisCos: Abuja, Eko, Ikeja, Jos, Kano, Yola, and the Nigeria Electricity Supply Corporation Limited (NESCO)
- TCN: System Operator (SO) and Transmission Service Provider (TSP)

The Commission will continue to enforce 100% reporting compliance by licensees as contained in the terms and conditions of their respective licences, and apply sanctions where applicable.

Statistics of accidents in the NESI for 2024/Q1 are presented in Table 22. Relative to 2023/Q4, the safety performance within the NESI improved with the number of fatalities decreasing significantly by -36.11% (36 to 23) while the number of accidents and injuries increased marginally (+1.85 % and +3.33% respectively).

**Table 22: Health and Safety (H&S) Reports in 2023/Q4 vs. 2024/Q1**

Item	2023/Q4	2024/Q1	Net Change
Number of Accidents	54	55	+1
Number of fatalities (employees & third parties)	36	23	-13
Number of Injuries	30	31	+1

During the quarter (2024/Q1), NESCO and Yola were the only DisCos that did not record any casualties<sup>21</sup> while Egbin was the only GenCo with a safety accident. Out of the fifty-four (54) casualties reported in the quarter, the licensees with the highest number of casualties were Eko (13), Benin (8), Jos (6) and Aba (6) which represented 24.07%, 14.81%, 11.11% and 11.11% respectively. Cumulatively, DisCos accounted for 96.30% of casualties recorded in 2024/Q1 continuing a trend observed in previous quarters (98.48% in 2023/Q4) that the distribution segment is the biggest contributor to safety issues experienced in the NESI. The

<sup>21</sup> Casualty refers to the count of injuries and deaths arising from any safety accident/incident.

accident report showing all licensees with casualties during the quarter is detailed in Figure 13.

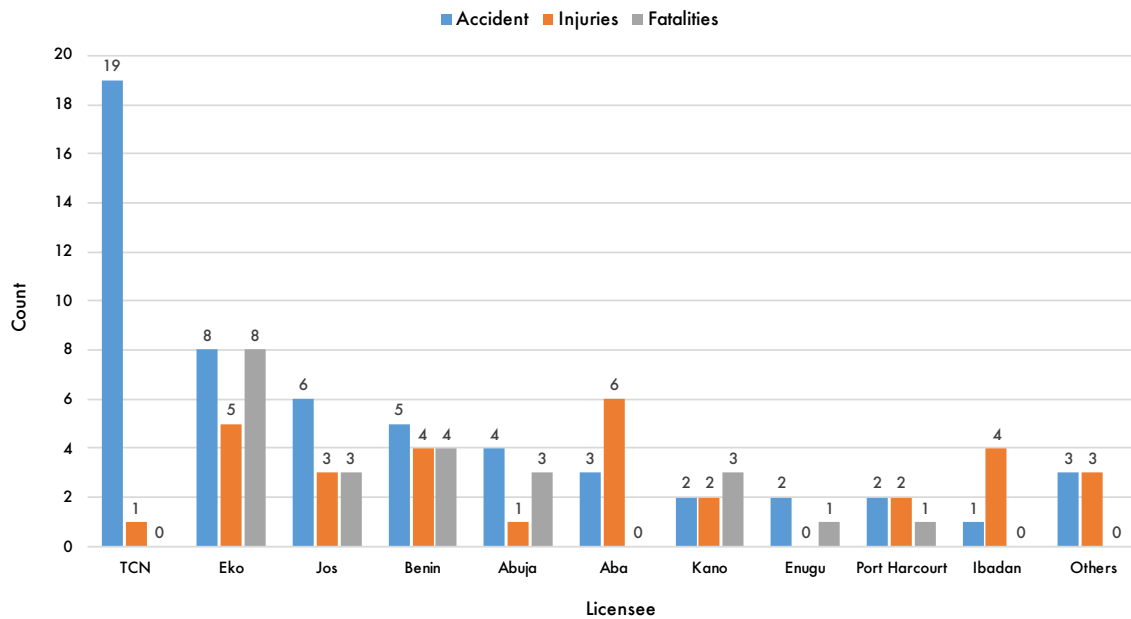


Figure 13: Accident Report for 2024/Q1

The details of the major causes of casualties (deaths and injuries) recorded in 2024/Q1 are listed below:

- Wire snaps: 6 deaths and 6 injuries
- Illegal/unauthorised access: 5 deaths and 2 injuries
- Acts of vandalism: 2 deaths and 5 injuries
- Unsafe acts/conditions: 10 deaths and 12 injuries
- Falls from height: 2 injuries

The Commission has initiated investigations into all reported accidents and will enforce appropriate actions against licensees where necessary. Furthermore, the Commission continues to closely monitor the implementation of licensees’ accident reduction strategy for the NESI while the sector’s health and safety code is undergoing a review process.

The Commission also implements various programs aimed at improving the health and safety performance of the NESI. In March 2024, a quarterly peer review meeting was held with the compliance and regulatory officers of licensees to discuss the reporting obligations of licensees as well as health and safety matters. During

the meeting, licensees' scorecards on compliance with health and safety standards, forum office decisions, and key performance indicators were discussed while highlighting areas of improvement. The Commission shall continue to ensure that all licensees comply with the subsisting performance standards in the NESI.

Furthermore, the Commission oversees settlement processes between licensees and families of accident victims in the NESI. This is to ensure transparency of the settlement process and to help the victim's family secure fair compensation for losses suffered.



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# 05 Appendix

## 5.0 Appendix

## Appendix I: Definition of Terms

Term	Definition
Accident	This is an incident that happens unexpectedly and unintentionally, typically resulting in damage, injury, or fatality
Available Capacity	This is the maximum rated output (MW) of a power plant over a specified period declared by the operator when restricted by factors such as feedstock availability, mechanical availability, environmental conditions, etc.
Bilateral customers	These are customers who purchase electricity directly from GenCos without a middleman (e.g., bulk trader).
Cost-reflective tariff	This is a tariff that if charged to consumers will allow for 100% recovery of the costs incurred in the production, transmission, distribution, and supply of electricity as well as guaranteeing regulatory approved profit margin for the operators.
Energy offtake	This is the process by which distribution companies receive and supply energy to end-use consumers
Feedstock	This refers to the type of fuel (e.g., gas, water) required to power a generating plant
Installed capacity	This is the maximum rated output of a power plant under specific conditions designated by the manufacturer
Load factor	This is a measure of the utilisation of a power plant's capacity, calculated as the ratio of the average electricity generated over a period to the maximum possible generation (assuming all the available capacity is utilised).
Mini-grid	This is an electricity supply system with its own power generation capacity, supplying electricity to more than one customer and which can operate in isolation from or be connected to a distribution network
Orders	A series of directives/instructions issued by the Commission to Licensees in response to a particular event/situation
Plant Availability Factor	This is a parameter that measures the proportion of a plant's installed capacity which is available for the generation of electric energy.
Regulations	A set of rules that the Commission may issue from time to time to optimise the performance of licensees to give effect to the object of the EA 2023
Service-based tariff	Service-based tariff is a pricing system under which consumers are charged varying tariffs dependent on the average number of hours of supply they receive per day.
Total Energy Generated	This refers to the total energy generated (GWh) by a power plant during the period under review

## Appendix II: Energy Generation in 2023/Q4 vs. 2024/Q1

GenCos	Available Capacity (MW)		Average Daily Generation (MWh)		Quarterly Generation (GWh)	
	2023/Q4	2024/Q1	2023/Q4	2024/Q1	2023/Q4	2024/Q1
Afam IV - V	39.73	43.90	1,100.11	1,043.75	101.21	94.98
Afam VI	352.49	316.20	8,272.52	7,727.88	761.07	703.24
Alaoji NIPP	0.00	0.00	4.37	0.00	0.40	0.00
Azura IPP	434.89	442.49	9,545.86	9,607.38	878.22	874.27
Dadin Kowa Hydro	37.31	25.54	844.71	603.96	77.71	54.96
Delta GS	416.74	349.18	9,493.71	8,300.36	873.42	755.33
Egbin ST(Gas)	550.68	431.12	11,578.57	10,037.42	1,065.23	913.40
Gbarain NIPP	0.00	0.00	0.00	0.00	0.00	0.00
Geregu	208.13	225.30	4,665.16	5,414.13	429.19	492.69
Geregu NIPP	86.09	122.80	1,946.20	2,939.19	179.05	267.47
Ibom	153.26	113.50	1,690.27	1,573.01	155.50	143.14
Ihovbor NIPP	25.16	5.54	413.40	117.24	38.03	10.67
Jebba	419.21	328.24	9,218.50	7,266.51	848.10	661.25
Kainji	483.90	432.41	10,747.61	10,014.77	988.78	911.34
Odukpani	205.09	278.42	4,830.74	6,421.78	444.43	584.38
Okpai	291.22	272.54	5,805.74	5,694.73	534.13	518.22
Olorunsogo	89.87	79.91	2,163.91	1,960.59	199.08	178.41
Olorunsogo NIPP	53.44	66.37	1,316.34	1,639.76	121.10	149.22
Omoku	52.91	51.58	1,567.27	1,616.69	144.19	147.12
Omotosho	110.90	84.59	2,585.93	2,031.00	237.91	184.82
Omotosho NIPP	83.60	14.09	1,555.64	285.72	143.12	26.00
Paras	73.51	88.50	1,428.20	1,782.68	131.39	162.22
Rivers IPP	123.01	43.10	2,571.14	1,038.57	236.55	94.51
Sapele GT NIPP	94.26	17.41	1,887.30	265.17	173.63	24.13
Sapele ST	73.91	74.41	1,654.37	1,780.49	152.20	162.02
Shiroro	417.33	306.39	8,564.80	7,459.76	787.96	678.84
Taopex Energy	20.14	9.53	371.57	258.92	34.18	23.56
Trans Amadi	25.48	26.03	587.73	788.18	54.07	71.72
<b>Total</b>	<b>4,922.26</b>	<b>4,249.10</b>	<b>106,411.66</b>	<b>97,669.63</b>	<b>9,789.87</b>	<b>8,887.94</b>

## Appendix III: Monthly energy offtake and energy billed by DisCos in 2023/Q4 and 2024/Q1

DisCos	Energy Offtake (GWh)						Energy Billed (GWh)						Billing Efficiency	
	2023/Q4			2024/Q1			2023/Q4			2024/Q1			2023/Q4 (%)	2024/Q1 (%)
	Oct	Nov	Dec	Jan	Feb	Mar	Oct	Nov	Dec	Jan	Feb	Mar		
Abuja	417	415	416	403	329	387	299	301	284	290	277	279	70.89	75.60
Benin	226	212	227	213	174	189	192	180	195	183	145	161	85.19	84.87
Eko	337	354	348	357	262	327	304	317	313	322	236	291	89.89	89.75
Enugu	229	211	242	209	161	182	167	160	183	165	138	141	74.73	80.46
Ibadan	335	342	312	265	291	282	255	270	276	254	220	242	80.95	85.54
Ikeja	412	415	405	414	317	387	358	360	351	321	267	321	86.84	81.26
Jos	146	132	148	137	118	140	114	106	119	111	92	97	79.35	76.04
Kaduna	189	185	172	154	135	155	77	83	82	81	84	86	44.37	56.66
Kano	175	178	178	155	133	152	109	125	128	116	103	111	68.14	74.93
Port Harcourt	188	182	208	195	165	171	155	150	169	163	138	150	81.99	85.01
Yola	95	97	72	75	67	71	91	94	68	66	58	59	95.67	86.03
All DisCos	2,749	2,723	2,727	2,577	2,149	2,444	2,121	2,145	2,165	2,072	1,759	1,938	78.45	80.45

## Appendix IV: Monthly revenue performance and collection efficiency by DisCos in 2023/Q4 and 2024/Q1

DisCos	Total Billing (₦' Million)						Revenue Collected (₦' Million)						Collection Efficiency	
	2023/Q4			2024/Q1			2023/Q4			2024/Q1			2023/Q4 (%)	2024/Q1 (%)
	Oct	Nov	Dec	Jan	Feb	March	Oct	Nov	Dec	Jan	Feb	March		
Abuja	19,335	19,609	18,530	19,029	18,665	20,608	15,685	15,343	15,206	15,559	16,287	16,775	80.44	83.36
Benin	11,749	10,920	11,694	10,897	8,828	9,673	7,500	7,609	7,269	7,610	7,315	7,531	65.12	76.39
Eko	19,189	20,090	20,398	21,249	15,834	19,438	16,229	16,819	17,139	16,301	15,714	16,726	84.10	86.24
Enugu	10,214	9,750	10,666	9,753	8,158	8,489	7,556	8,058	7,714	7,379	6,956	6,905	76.16	80.45
Ibadan	14,922	15,696	15,842	15,286	14,036	15,464	10,491	11,003	10,324	10,036	10,264	10,054	68.48	67.78
Ikeja	20,681	20,947	21,269	20,137	17,084	18,636	19,573	20,171	20,010	17,590	19,585	20,701	95.00	103.61
Jos	7,852	7,444	8,121	8,106	6,689	7,053	3,217	4,037	3,711	3,880	4,886	4,520	46.82	60.81
Kaduna	4,717	5,161	4,989	4,506	4,311	4,775	2,789	2,876	3,404	3,240	3,167	3,197	61.00	70.66
Kano	7,166	8,104	8,048	7,399	6,903	7,280	4,733	5,029	4,557	5,059	4,359	4,197	61.40	63.09
Port Harcourt	9,449	9,132	10,267	10,040	8,502	9,145	6,540	6,777	6,864	6,623	6,527	7,243	69.96	73.66
Yola	6,490	6,539	4,708	4,428	4,041	4,107	2,300	2,246	2,167	1,990	1,959	1,507	37.85	43.03
All DisCos	131,763	133,392	134,531	130,830	113,051	124,668	96,612	99,969	98,365	95,269	97,018	99,335	73.79	79.11

## Appendix V: DisCos monthly invoices &amp; remittances to NBET in 2023/Q4 and 2024/Q1

DisCos	Invoice (₦' Billion)						Remittance (₦' Billion)						Remittance Performance	
	2023/Q4			2024/Q1			2023/Q4			2024/Q1			2023/Q4 (%)	2024/Q1 (%)
	Oct	Nov	Dec	Jan	Feb	Mar	Oct	Nov	Dec	Jan	Feb	Mar		
Abuja	11.41	12.26	16.60	5.67	4.62	5.31	10.63	9.41	10.10	5.69	4.62	5.31	74	100
Benin	4.69	4.89	6.85	1.73	1.44	1.56	4.69	3.54	3.90	1.75	1.44	1.56	74	100
Eko	9.07	10.20	12.40	4.63	3.46	4.19	9.07	10.20	11.50	4.64	3.46	4.19	98	100
Enugu	6.18	6.34	8.47	1.02	0.69	0.76	3.60	4.01	3.97	1.04	0.69	0.76	55	100
Ibadan	7.00	7.84	9.16	2.82	2.42	2.60	4.97	4.71	6.37	2.86	2.42	2.60	67	100
Ikeja	10.40	11.46	15.67	4.75	3.66	4.38	9.74	11.46	8.19	4.79	3.66	4.38	78	100
Jos	2.54	2.64	3.43	0.81	0.73	0.81	1.16	1.90	1.57	0.81	0.73	0.81	54	100
Kaduna	3.96	4.21	4.96	0.43	0.40	0.44	0.32	0.42	0.48	0.26	0.27	0.15	9	54
Kano	4.04	4.39	5.21	0.79	0.69	0.76	2.17	2.59	2.42	0.80	0.69	0.74	53	100
Port Harcourt	4.26	4.61	6.53	1.51	1.30	1.39	3.53	3.35	4.53	1.52	1.30	1.39	74	100
Yola	0.67	0.72	0.28	0.06	0.05	0.06	0.67	0.72	0.28	0.66	0.55	0.58	100	100
All DisCos	64.22	69.54	89.56	24.23	19.46	22.26	50.54	52.30	53.30	24.24	19.33	21.95	70	99

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  
2. All data is based on MRO

## Appendix VI: DisCos monthly invoices &amp; remittances to MO in 2023/Q4 and 2024/Q1

DisCos	Invoice (₦' Billion)						Remittance (₦' Billion)						Remittance Performance	
	2023/Q4			2024/Q1			2023/Q4			2024/Q1			2023/Q4 (%)	2024/Q1 (%)
	Oct	Nov	Dec	Jan	Feb	Mar	Oct	Nov	Dec	Jan	Feb	Mar		
Abuja	2.33	2.31	2.46	2.33	2.29	2.86	2.17	1.78	1.50	2.28	1.77	3.27	77	98
Benin	1.28	1.19	1.33	1.26	1.18	1.48	1.18	0.86	0.76	1.16	0.84	1.62	74	92
Eko	2.00	2.01	2.11	2.10	1.81	2.45	1.90	1.92	2.02	2.01	1.34	2.73	95	96
Enugu	1.36	1.35	1.47	1.23	1.11	1.38	0.79	0.85	0.69	1.18	0.84	1.56	56	96
Ibadan	1.81	1.90	2.03	1.83	1.79	2.15	1.78	1.14	1.41	1.83	1.42	2.52	75	100
Ikeja	2.23	2.34	2.52	2.42	2.15	2.85	2.09	2.33	1.31	2.35	1.64	3.88	81	106
Jos	0.93	0.86	0.93	0.83	0.91	1.09	0.42	0.62	0.42	0.79	0.61	1.23	54	95
duna	1.08	1.03	1.02	0.92	0.93	1.19	0.09	0.10	0.10	0.53	0.49	0.42	9	48
Kano	0.99	0.95	1.04	0.90	0.87	1.16	0.53	0.56	0.48	0.84	0.63	1.28	53	94
Port Harcourt	1.02	1.07	1.18	1.17	1.14	1.37	0.85	0.78	0.82	1.10	0.85	1.54	75	95
Yola	0.11	0.10	0.37	0.88	0.36	0.52	0.11	0.10	0.07	0.89	0.27	0.93	49	46
All DisCos	15.14	15.13	16.46	15.10	14.71	18.50	11.92	11.05	9.58	14.16	10.78	20.16	70	93

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 VII: Monthly bilateral and international customers invoices &amp; remittances to MO in 2024/Q1

International Customers	Jan-24		Feb-24		Mar-24		2024/Q1		2024/Q1 Remittance Performance (%)	Other Remittances (\$'million)
	Invoice (\$'million)	Remittance (\$'million)	Invoice (\$'million)	Remittance (\$'million)	Invoice (\$'million)	Remittance (\$'million)	Invoice (\$'million)	Remittance (\$'million)		
PARAS - SBEE	1.17	0.00	0.85	0.00	1.13	0.00	3.15	0.00	0.00	1.95
TRANSCORP/SBEE	1.27	0.00	1.75	0.00	1.43	0.00	4.46	0.00	0.00	3.03
MAINSTREAM/NIGELEC	0.00	0.00	0.05	0.00	1.16	0.00	1.21	0.00	0.00	0.00
ODUKPANI/CEET	1.84	0.00	1.63	0.00	1.89	0.00	5.36	0.00	0.00	0.97
Total	4.28	0.00	4.29	0.00	5.62	0.00	14.19	0.00	0.00	5.96
Bilateral Customers	Invoice (₦'million)	Remittance (₦'million)	Invoice (₦'million)	Remittance (₦'million)	Invoice (₦'million)	Remittance (₦'million)	Invoice (₦'million)	Remittance (₦'million)	2024/Q1 Remittance Performance (%)	Other Remittances (₦'million)
ALAOJI GENCO/APLE	135.02	0.00	97.01	0.00	137.83	0.00	369.86	0.00	0.00	0.00
MSTM/ADFV	13.34	0.00	13.35	0.00	18.16	0.00	44.85	0.00	0.00	12.77
MSTM/INNER GALAXY	244.60	0.00	260.84	0.00	282.71	0.00	788.15	0.00	0.00	297.91
MSTM/KAM IND.	15.65	0.00	9.12	0.00	11.29	0.00	36.06	0.00	0.00	16.88
MSTM/KAM INT.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAINSTREAM/PRISM	86.29	0.00	78.17	0.00	78.17	0.00	242.63	0.00	0.00	50.50
MSTM/ZEBERCED	12.33	0.00	11.39	0.00	12.27	0.00	35.99	0.00	0.00	12.01
NORTH SOUTH/STAR P	12.43	0.00	11.13	0.00	12.65	0.00	36.21	0.00	0.00	22.31
NDPHC/SUNFLAG	5.55	0.00	5.12	0.00	5.14	0.00	15.81	0.00	0.00	0.00
OMOTOSHO II/EKEDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OMOTOSHO II/PULKIT	8.09	0.00	7.76	0.00	8.00	0.00	23.85	0.00	0.00	0.00
NDPHC/WEEWOOD	26.72	0.00	25.83	0.00	31.45	0.00	84.00	0.00	0.00	78.37
TAOPEX/KAM INT	18.30	0.00	16.47	0.00	15.43	0.00	50.20	0.00	0.00	0.00
TAOPEX/KAM STEEL	21.72	0.00	15.07	0.00	13.50	0.00	50.29	0.00	0.00	0.00
TRANSAMADI/FMPI	2.66	0.00	2.01	0.00	1.61	0.00	6.28	0.00	0.00	0.00
TRANS AMADI/ OAU	10.16	0.00	11.73	0.00	10.03	0.00	31.92	0.00	0.00	19.49
JEBBA/QUANTUM STEEL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	627.86	0.00	576.62	0.00	655.64	0.00	1,860.11	0.00	0.00	505.71

Notes: 1. Other payments reflect payments made within 2024/Q1 to settle outstanding invoices from previous quarters



## Appendix VIII: Meter installation for all Frameworks (MAP, NMMP, Vendor and DisCo Financed)

DisCos	Meters contracted	Meters installed in 2019	Meters installed in 2020	Meters installed in 2021	Meters installed in 2022	Meters installed in 2023 Q1-Q3	Meters installed in 2023/Q4	Meters installed in 2024/Q1	Total installations since 2019
Aba	24,000	-	-	-	-	5,967	3,950	7,817	17,734
Abuja	1,000,475	63,925	105,253	87,987	83,494	83,286	21,868	21,493	467,306
Benin	664,646	1,169	11,154	72,838	6,771	23,455	10,889	10,455	136,731
Eko	283,178	5,422	32,353	64,618	44,577	34,733	2,109	4,636	188,458
Enugu	713,926	17,410	54,603	96,836	57,751	61,697	11,559	13,932	314,038
Ibadan	1,106,294	4,771	38,403	94,309	146,044	92,266	33,493	25,551	434,837
Ikeja	1,186,114	22,876	160,469	125,460	145,364	135,787	13,926	26,458	630,900
Jos	606,096	15	4,673	88,827	19,190	9,854	2,826	2,738	127,270
Kaduna	519,152	43	8,258	17,942	34,385	7,350	2,689	3,017	74,485
Kano	562,747	22	3,314	80,969	3,476	1,614	442	398	90,235
Port Harcourt	220,044	7,775	36,546	92,543	33,549	38,781	10,208	6,278	225,680
Yola	749,376	-	478	5,955	30,386	5,967	1,222	831	56,515
<b>Total</b>	<b>7,612,048</b>	<b>123,428</b>	<b>455,504</b>	<b>828,284</b>	<b>604,987</b>	<b>506,856</b>	<b>115,181</b>	<b>123,604</b>	<b>2,764,189</b>

## Appendix IX: Meter installation through the NMMP Framework as of 2024/Q1

DisCos	Meters contracted	Meters installed in 2019	Meters installed in 2020	Meters installed in 2021	Meters installed in 2022	Meters installed in 2023 Q1-Q3	Meters installed in 2023/Q4	Meters installed in 2024/Q1	Total installations since 2020
Aba	-	-	-	-	-	-	-	-	-
Abuja	100,475	-	17,777	82,698	-	-	-	-	100,475
Benin	90,870	-	-	71,734	6,108	2,314	-	-	80,156
Eko	79,178	-	69	56,915	15,694	6,328	-	-	79,010
Enugu	92,381	-	-	91,238	274	-	-	-	91,512
Ibadan	117,379	-	4,985	93,761	18,626	7	-	-	117,379
Ikeja	111,703	-	24	111,679	-	-	-	-	111,703
Jos	96,096	-	-	86,474	8,709	529	-	-	95,765
Kaduna	69,152	-	1,621	15,175	30,724	78	21	14	47,633
Kano	87,747	-	11	80,969	2,500	-	-	-	83,480
Port Harcourt	82,720	-	14,212	68,508	-	-	-	-	82,720
Yola	85,376	-	88	5,955	30,386	16,574	-	-	53,003
<b>Total</b>	<b>1,013,076</b>	<b>-</b>	<b>38,787</b>	<b>765,106</b>	<b>113,021</b>	<b>25,830</b>	<b>21</b>	<b>14</b>	<b>942,836</b>

## Appendix X: Meter installation through the MAP Framework as of 2024/Q1

DisCos	Meters contracted	Meters installed in 2019	Meters installed in 2020	Meters installed in 2021	Meters installed in 2022	Meters installed in 2023 Q1-Q3	Meters installed in 2023/Q4	Meters installed in 2024/Q1	Total installations since 2019
Aba	12,000	-	-	-	-	5,959	2,516	1,346	9,821
Abuja	900,000	63,925	87,476	5,289	82,293	81,414	21,786	21,440	363,623
Benin	573,776	1,169	11,154	1,104	422	18,506	10,675	10,419	53,449
Eko	204,000	5,422	32,298	7,703	28,883	28,405	2,109	4,636	109,456
Enugu	621,545	17,212	54,752	5,405	57,372	61,697	11,559	13,932	221,929
Ibadan	988,915	4,771	33,418	548	127,418	92,259	33,493	25,551	317,458
Ikeja	1,074,411	23,265	160,616	13,781	145,364	134,454	13,150	25,478	516,108
Jos	500,000	13	3,769	27	3,317	9,325	2,826	1,165	20,442
Kaduna	450,000	129	7,352	2,767	3,565	7,219	2,668	3,003	26,703
Kano	475,000	22	3,303	-	976	1,614	442	398	6,755
Port Harcourt	137,324	7,775	22,334	24,035	33,549	38,781	10,208	6,278	142,960
Yola	664,000	-	-	-	-	1,459	1,222	831	3,512
<b>Total</b>	<b>6,588,971</b>	<b>123,703</b>	<b>416,472</b>	<b>60,659</b>	<b>483,159</b>	<b>475,133</b>	<b>112,654</b>	<b>114,477</b>	<b>1,782,395</b>

## Appendix XI: Meter installation through Vendor and DisCo Finance Frameworks as of 2024/Q1

DisCos	Vendor Finance					DisCo Finance							
	Meters installed in 2022	Meters installed in 2023 Q1-Q3	Meters installed in 2023/Q4	Meters installed in 2024/Q1	Total installations	Meters installed in 2019	Meters installed in 2020	Meters installed in 2021	Meters installed in 2022	Meters installed in 2023 Q1-Q3	Meters installed in 2023/Q4	Meters installed in 2024/Q1	Total installations since 2019
Aba	-	8	1,434	6,471	7,913	-	-	-	-	-	-	-	-
Abuja	1,201	1,872	82	53	3,208	-	-	-	-	-	-	-	-
Benin	241	2,635	214	36	3,126	-	-	-	-	-	-	-	-
Eko	-	-	-	-	-	-	-	-	-	-	-	-	-
Enugu	-	-	-	-	-	106	193	193	105	-	-	-	597
Ibadan	-	-	-	-	-	-	-	-	-	-	-	-	-
Ikeja	-	1,333	776	980	3,089	-	-	-	-	-	-	-	-
Jos	-	-	-	-	-	-	-	2,326	7,164	-	-	1,573	11,063
Kaduna	-	-	-	-	-	-	-	-	96	53	-	-	149
Kano	-	-	-	-	-	-	-	-	-	-	-	-	-
Port Harcourt	-	-	-	-	-	-	-	-	-	-	-	-	-
Yola	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1,442</b>	<b>5,840</b>	<b>2,506</b>	<b>7,540</b>	<b>17,336</b>	<b>106</b>	<b>193</b>	<b>2,519</b>	<b>7,365</b>	<b>53</b>	<b>-</b>	<b>1,573</b>	<b>11,809</b>

## Appendix XII: Category of complaints received by DisCos in 2024/Q1

DisCos	Complaints Received	Complaint Categories							
		Metering	Interruption	Voltage	Loadshedding	Billing	Disconnection	Delay	Others
Aba	3,328	2,222	87	45	4	572	147	4	247
Abuja	27,476	11,045	1,686	138	420	1,346	672	0	12,169
Benin	6,877	170	666	60	122	1,235	74	1	4,549
Eko	47,900	22,709	5,178	568	0	3,058	0	0	16,387
Enugu	35,584	27,905	2,140	369	6	2,647	158	240	2,119
Ibadan	53,737	44,108	1,316	214	0	5853	101	0	2,145
Ikeja	22,995	11,957	1,632	202	58	2,348	537	1,964	4,297
Jos	18,931	10,151	1,533	337	4	5,777	110	1	1,020
Kaduna	6,900	2,418	3,301	498	13	389	179	11	91
Kano	11,413	9,514	685	57	0	1,082	34	0	41
Port Harcourt	53,454	23,675	5,917	1,980	0	4,128	573	221	16,960
Yola	2,785	1,589	706	398	13	11	14	0	52
All DisCos	291,380	167,463	24,847	4,866	640	28,446	2,599	2,442	60,077

## Appendix XIII: Category of complaints received at the Commission's CCU in 2024/Q1

DisCos	Complaints Received	Complaints Resolved	Credit Adjustment (₦'000)	Complaint Categories								
				Metering	Interruption	Voltage	Loadshedding	Billing	Non-Compliance	Disconnection	Delay	Others
Aba	3	0	0.00	1	0	0	0	0	2	0	0	0
Abuja	67	13	547.89	13	11	2	0	26	3	8	0	4
Benin	11	6	17,312.00	0	1	0	0	8	2	0	0	0
Eko	8	0	0.00	1	0	0	0	3	2	0	0	2
Enugu	12	3	0.00	0	3	0	0	5	3	0	0	1
Ibadan	14	6	3,170.00	2	0	0	0	6	1	3	0	2
Ikeja	29	13	6,513.20	3	2	0	0	6	17	0	0	1
Jos	1	0	0.00	0	0	0	0	1	0	0	0	0
Kaduna	5	2	0.00	0	4	0	0	1	0	0	0	0
Kano	1	0	0.00	0	1	0	0	0	0	0	0	0
Port Harcourt	9	0	0.00	2	1	0	0	4	0	1	0	1
Yola	1	0	0.00	0	0	0	0	1	0	0	0	0
All DisCos	161	43	27,543.09	22	23	2	0	61	30	12	0	11

## Appendix XIV: Category of complaints received at the NESI Call Centre in 2024/Q1

DisCos	Complaints Received	Complaints Resolved	Credit Adjustment (₦'000)	Complaint Categories							
				Metering	Interruption	Voltage	Loadshedding	Billing	Disconnection	Delay	Others
Aba	5	1	0.00	1	1	0	0	3	0	0	0
Abuja	100	20	476.21	16	33	2	0	37	9	0	3
Benin	66	28	5,199.19	11	14	1	0	32	6	0	2
Eko	695	325	4,724.84	259	147	8	7	223	25	9	17
Enugu	50	10	793.20	7	6	1	0	28	8	0	0
Ibadan	198	53	53.98	72	36	3	0	72	3	1	11
Ikeja	1,527	454	38,818.53	503	149	5	3	653	71	95	48
Jos	34	15	352.76	6	7	2	0	12	2	0	5
Kaduna	9	3	0.00	3	3	0	0	2	1	0	0
Kano	2	2	0.00	0	2	0	0	0	0	0	0
Port Harcourt	95	26	0.00	14	25	3	0	42	7	2	2
Yola	4	0	0.00	2	0	1	0	1	0	0	0
All DisCos	2,785	937	50,418.71	894	423	26	10	1,105	132	107	88

## Appendix XV: List and addresses of NERC Forum Offices as of March 2024

S/N	Forum Office	Location	Telephone	Email
1	Abakaliki, Ebonyi State	3, Ezekuna Crescent, Off Nsugbe Street, Abakaliki Ebonyi State	9037808590	<a href="mailto:abakalikiforum@nerc.gov.ng">abakalikiforum@nerc.gov.ng</a>
2	Abeokuta, Ogun State	33, First Avenue, Ibara Housing Estate, Ibrar GRA, Abeokuta	9139381008	<a href="mailto:abeokutaforum@nerc.gov.ng">abeokutaforum@nerc.gov.ng</a>
3	Abuja, FCT	14, Road 131, Gwarinpa, Federal Capital Territory, Abuja	8146862225	<a href="mailto:abujaforum@nerc.gov.ng">abujaforum@nerc.gov.ng</a>
4	Ado-Ekiti, Ekiti State	Km 5, Iwokoro Road, Ado Ekiti, Ekiti State	9169978242	<a href="mailto:ado-ekitiforum@nerc.gov.ng">ado-ekitiforum@nerc.gov.ng</a>
5	Asaba, Delta State	Denis Osadebe Way, Beside Mobil Filling Station, Asaba, Delta State	9062277247	<a href="mailto:asabaforum@nerc.gov.ng">asabaforum@nerc.gov.ng</a>
6	Awka, Anambra State	Plot 80, Aroma Junction Layout, Opp. CBN, Awka, Anambra State	9037808594	<a href="mailto:awkaforum@nerc.gov.ng">awkaforum@nerc.gov.ng</a>
7	Bauchi, Bauchi State	37, Old Jos Road, GRA, Bauchi, Bauchi State	9062924607	<a href="mailto:bauchiforum@nerc.gov.ng">bauchiforum@nerc.gov.ng</a>
8	Benin, Edo State	34, Akpakpava Street, Benin City, Edo State	9037808592	<a href="mailto:beninform@nerc.gov.ng">beninform@nerc.gov.ng</a>
9	B/Kebbi, Kebbi State	8, Ahmadu Bello Way, Opp. Kebbi State Govt House, Kebbi State	9062863161	<a href="mailto:birninkebbiforum@nerc.gov.ng">birninkebbiforum@nerc.gov.ng</a>
10	Calabar, C/Rivers State	Plot 109, MCC Road by Ibok Street, Calabar, Cross River State	9062863159	<a href="mailto:calabarforum@nerc.gov.ng">calabarforum@nerc.gov.ng</a>
11	Dutse, Jigawa State	Dutse G.R.A, Dutse, Jigawa State	7031704827	<a href="mailto:jigawaforum@nerc.gov.ng">jigawaforum@nerc.gov.ng</a>
12	Eko, Lagos State	61, Odunlami Street, Off Marina, Lagos Island, Lagos State	8106807261	<a href="mailto:ekoforum@nerc.gov.ng">ekoforum@nerc.gov.ng</a>
13	Enugu, Enugu State	John Anichukwu Close, Plot 7 Mkpokiti Pocket Layout, Enugu, Enugu State	8146862230	<a href="mailto:enuguforum@nerc.gov.ng">enuguforum@nerc.gov.ng</a>
14	Gombe, Gombe State	Government Layout GDP/2, Along Ministry of Education Road, Gombe State	8140440079	<a href="mailto:gombeforum@nerc.gov.ng">gombeforum@nerc.gov.ng</a>
15	Gusau, Zamfara State	2 Canteen Daji, J. B. Yakubu Road, Gusau, Zamfara State	9062863163	<a href="mailto:gusauforum@nerc.gov.ng">gusauforum@nerc.gov.ng</a>
16	Ibadan, Oyo State	Jibowu Str, Opp. Magara Police Station, Iyaganku, G.R.A, Ibadan, Oyo State	8146862252	<a href="mailto:ibadanforum@nerc.gov.ng">ibadanforum@nerc.gov.ng</a>
17	Ikeja, Lagos State	199, Obafemi Awolowo Way, Alausa, Ikeja, Lagos State	8106807298	<a href="mailto:ikejaforum@nerc.gov.ng">ikejaforum@nerc.gov.ng</a>
18	Ilorin, Kwara State	30, Stadium Road, Off Taiwo Road, Ilorin, Kwara State	9062924603	<a href="mailto:ilorinform@nerc.gov.ng">ilorinform@nerc.gov.ng</a>
19	Jos, Plateau State	5a, Ray-field Road, Jos, Plateau State	9037808597	<a href="mailto:josforum@nerc.gov.ng">josforum@nerc.gov.ng</a>
20	Kaduna, Kaduna State	22, Ahmadu Bello Way, Opposite NNDC Building, Kaduna, Kaduna State	8106807299	<a href="mailto:kadunaforum@nerc.gov.ng">kadunaforum@nerc.gov.ng</a>
21	Kano, Kano State	2, Miller Road, Bompai, Nasarawa G.R.A, Kano, Kano State	8146862222	<a href="mailto:kanoforum@nerc.gov.ng">kanoforum@nerc.gov.ng</a>
22	Katsina, Katsina State	7, Abuja Crescent, Off Hassan Usman Katsina Road, Katsina, Katsina State	7031704821	<a href="mailto:katsinaforum@nerc.gov.ng">katsinaforum@nerc.gov.ng</a>
23	Lafia, Nasarawa State	Manyi Street, Off Jos Road, Bukan Sidi, Lafia, Nasarawa State	9062924599	<a href="mailto:lafiaforum@nerc.gov.ng">lafiaforum@nerc.gov.ng</a>
24	Lokoja, Kogi State	Hassan Kastina Rd, Opp. State Civil Service Commission, Zone 8 Police HQ, Lokoja, Kogi State.	9062924601	<a href="mailto:lokojaforum@nerc.gov.ng">lokojaforum@nerc.gov.ng</a>
25	Makurdi, Benue State	Hephzibah Plaza, Atom Kpera Road, Opp. Makurdi Int'l School, Benue State	9062277249	<a href="mailto:makurdiforum@nerc.gov.ng">makurdiforum@nerc.gov.ng</a>
26	Osogbo, Osun State	51, Isiaka Adeleke Way, Along Okefia-Alekuwodo Rd, Osogbo, Osun State	9062924604	<a href="mailto:osogboforum@nerc.gov.ng">osogboforum@nerc.gov.ng</a>
27	Owerri, Imo State	1, C.B Anyanwu Rd, Housing Area B, Exclusive Garden, Owerri	9062277245	<a href="mailto:owerriforum@nerc.gov.ng">owerriforum@nerc.gov.ng</a>
28	P/Harcourt, Rivers State	The Vhelberg Imperial Hotel, Plot 122 & 122a, Bank Anthony Avenue, Off Ordinance Rd, P/Harcourt	8146862223	<a href="mailto:phforum@nerc.gov.ng">phforum@nerc.gov.ng</a>
29	Sokoto, Sokoto State	1, Garba Duba Road, Sokoto, Sokoto State	9062863157	<a href="mailto:sokotoforum@nerc.gov.ng">sokotoforum@nerc.gov.ng</a>
30	Umuahia, Abia State	House 2, Adelabu Str., Amaokwe Housing Estate, Umuahia Ibeku, Abia State	9062277251	<a href="mailto:umuahiaforum@nerc.gov.ng">umuahiaforum@nerc.gov.ng</a>
31	Uyo, Akwa Ibom State	63, Osongama Road, Off Oron/Uyo Airport Road, Uyo, Akwa Ibom State	9062863165	<a href="mailto:uyoforum@nerc.gov.ng">uyoforum@nerc.gov.ng</a>
32	Yola, Adamawa State	5, Nguroje Str., Karewa Extension, Jimeta, Yola, Adamawa State	9037808535	<a href="mailto:yolaforum@nerc.gov.ng">yolaforum@nerc.gov.ng</a>



## Appendix XVI: Appeals handled by Forum Offices in 2023/Q4 and 2024/Q1

S/N	Forum Offices	2023/Q4				2024/Q1			
		Appeals Received	Appeals Resolved	Appeals Pending	Resolution Rate	Appeals Received	Appeals Resolved	Appeals Pending	Resolution Rate
1	Abakaliki, Ebonyi State	67	52	15	77.61%	41	17	21	41.46%
2	Abeokuta, Ogun State	122	17	42	13.93%	122	42	33	34.43%
3	Abuja, FCT	52	44	8	84.62%	35	27	8	77.14%
4	Ado-Ekiti	3	1	2	33.33%	16	10	6	62.50%
5	Asaba, Delta State	68	22	44	32.35%	72	50	21	69.44%
6	Awka, Anambra State	97	83	14	85.57%	101	56	45	55.45%
7	Bauchi, Bauchi State	4	4	0	100.00%	6	6	0	100.00%
8	Benin, Edo State	66	45	21	68.18%	55	39	16	0.00%
9	Calabar, C/Rivers State	37	30	7	81.08%	3	3	0	0.00%
10	Dutse, Jigawa State	6	5	1	83.33%	27	17	10	62.96%
11	Eko, Lagos State	156	101	55	64.74%	7	5	2	71.43%
12	Enugu, Enugu State	125	78	26	62.40%	207	159	45	76.81%
13	Gombe, Gombe State	9	7	2	77.78%	201	82	68	40.80%
14	Gusau, Zamfara State	8	4	4	50.00%	12	0	11	0.00%
15	Ibadan, Oyo State	209	144	64	68.90%	8	2	6	25.00%
16	Ikeja, Lagos State	692	470	222	67.92%	142	114	28	80.28%
17	Ilorin, Kwara State	77	70	7	90.91%	537	240	297	44.69%
18	Jos, Plateau State	9	9	0	100.00%	60	26	34	43.33%
19	Kaduna, Kaduna State	16	6	9	37.50%	17	12	5	70.59%
20	Kano, Kano State	23	16	2	69.57%	22	13	7	59.09%
21	Katsina, Katsina State	15	14	1	93.33%	26	15	7	57.69%
22	Kebbi, Kebbi State	26	21	5	80.77%	3	1	2	33.33%
23	Lafia, Nasarawa State	13	7	6	53.85%	8	3	3	37.50%
24	Lokoja, Kogi State	5	3	2	60.00%	10	10	0	100.00%
25	Makurdi, Benue State	7	0	4	0.00%	5	3	2	0.00%
26	Osogbo, Osun State	483	358	125	74.12%	13	5	1	38.46%
27	Owerri, Imo State	26	22	4	84.62%	371	194	177	52.29%
28	Port Harcourt, Rivers State	92	84	5	91.30%	15	9	6	60.00%
29	Sokoto, Sokoto State	11	8	3	72.73%	69	57	8	82.61%
30	Umuahia, Abia State	14	10	4	71.43%	5	2	3	40.00%
	Umuahia 2, Abia State	3	0	3	0.00%	9	5	4	55.56%
31	Uyo, Akwa Ibom State	146	84	62	57.53%	5	4	1	80.00%
32	Yola, Adamawa State	71	42	27	59.15%	176	148	27	84.09%
	All Forum Offices	2,758	1,861	796	67.48%	2,429	1,398	904	57.55%

Appendix XVII: Category of appeals received by Forum Offices in 2023/Q4 and 2024/Q1

Forum Office	2023/Q4								2024/Q1							
	Billing	Disconnection	Con. Delay	Interruption	Metering	Load Shedding	Voltage	Others	Billing	Disconnection	Con. Delay	Interruption	Metering	Load Shedding	Voltage	Others
Abakaliki, Ebonyi State	36	0	0	0	0	0	0	0	25	0	0	0	1	0	0	0
Abeokuta, Ogun State	40	1	0	4	37	11	1	9	48	1	0	1	16	5	0	9
Abuja, FCT	3	0	0	0	25	0	0	4	1	0	0	0	22	0	0	4
Ado-Ekiti, Ekiti State	3	0	0	0	0	0	0	1	10	0	0	0	1	0	0	3
Asaba, Delta State	43	1	1	0	6	0	0	4	19	3	0	0	3	0	0	3
Awka, Anambra State	57	9	0	0	7	0	0	1	68	5	0	0	13	0	0	1
Bauchi, Bauchi State	2	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0
Benin, Edo State	36	1	0	0	4	0	0	2	24	1	0	1	4	0	1	3
B/Kebbi, Kebbi State	14	1	0	1	10	0	0	4	0	0	0	0	1	0	0	2
Calabar, C/Rivers State	3	0	0	0	1	0	0	2	11	1	0	1	4	0	0	3
Dutse, Jigawa State	45	5	0	6	51	0	0	3	3	1	0	0	2	0	0	0
Eko, Lagos State	47	12	0	0	8	0	0	6	53	13	0	5	73	0	1	7
Enugu, Enugu State	1	0	0	0	1	0	0	0	150	5	0	0	19	0	0	1
Gombe, Gombe State	1	0	0	0	0	0	0	0	4	0	0	0	5	0	1	0
Gusau, Zamfara State	112	5	0	0	46	0	0	3	1	2	0	0	0	0	0	1
Ibadan, Oyo State	269	24	0	0	82	0	0	16	60	4	0	1	12	0	0	1
Ikeja, Lagos State	31	1	0	0	14	0	0	2	171	22	1	0	100	2	0	19
Ilorin, Kwara State	3	0	0	1	2	0	1	4	34	3	0	0	11	0	0	5
Jos, Plateau State	5	3	0	0	3	0	0	3	8	0	0	0	4	1	0	4
Kaduna, Kaduna State	2	2	0	1	1	0	0	9	5	5	0	0	1	0	0	2
Kano, Kano State	2	2	0	0	2	0	1	1	4	4	0	6	2	2	0	6
Katsina, Katsina State	4	0	0	0	4	0	0	0	1	0	0	0	0	0	0	1
Lafia, Nasarawa State	6	0	0	0	2	0	0	1	2	0	0	0	2	0	0	0
Lokoja, Kogi State	1	1	0	0	0	0	0	1	3	0	0	0	0	0	0	0
Makurdi, Benue State	6	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0
Osogbo, Osun State	113	5	0	0	75	0	0	8	158	2	0	0	81	0	0	5
Owerri, Imo State	6	3	0	0	1	0	0	0	6	2	0	0	3	0	0	0
P/Harcourt, Rivers State	60	5	0	1	11	1	0	5	38	5	0	0	13	4	0	4
Sokoto, Sokoto State	2	2	0	0	0	0	1	1	2	0	0	0	0	0	0	0
Umuahia, Abia State	4	1	1	0	0	0	0	0	4	0	1	0	0	0	0	1
Umuahia 2, Abia State	1	2	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Uyo, Akwa Ibom State	59	15	0	0	18	0	0	24	50	16	0	0	19	0	5	21
Yola, Adamawa State	20	2	0	0	17	0	0	1	7	0	0	0	11	0	1	0
All Forum Offices	1,037	103	2	14	429	12	4	115	985	95	2	15	427	14	9	106



## NIGERIAN ELECTRICITY REGULATORY COMMISSION

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