NIGERIAN ELECTRICITY REGULATORY COMMISSION

2024 Annual Report & Accounts

ELECTRICITY ON DEMAND

2024 Annual Report & Accounts

Nigerian Electricity Regulatory Commission
Plot 1387 Cadastral Zone A00
Central Business District
PMB 136, Garki Abuja
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Our Mission

Promote and ensure investor-friendly industry and efficient market structure to meet the needs of Nigeria for safe, adequate, reliable and affordable electricity.

Our Vision

"Electricity on demand"

Our Motto

"Keeping the lights on"

Core Values

Leadership

Excellence, transparency, courage and discipline;

Professionalism

Proficiency, diligence, respect, fairness and accountability;

Teamwork

Creating an environment of loyalty, trust, collaboration, and stakeholder engagement;

Good Governance

Making decisions in a fair, transparent and consistent manner, in compliance with the laws of Nigeria and our regulations.

NIGERIAN ELECTRICITY REGULATORY COMMISSION
NERC

NERC Annual Report & Accounts is prepared in compliance with section 56 (1) of the Electricity Act 2023, which mandates the Commission to keep proper accounts and other records relating to such accounts in respect of all the Commission's activities, funds and property, including such particular account and records as the Minister may require. The report presents the Commission's regulatory and corporate activities, audited financial statements and analyses of the state of the Nigerian Electricity Supply Industry (NESI) covering operational, technical and commercial performances as well as consumer affairs. The Commission presents this report to a wide spectrum of stakeholders, including financial and market analysts, potential investors, government institutions and the private sector.

NERC Annual Report & Account is freely available to the Nigerian Electricity Supply Industry stakeholders, government agencies and corporations. Individuals, on request, can also obtain any particular issue without a charge. Please direct all inquiries, comments and suggestions on the report to:

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LIST OF ABBREVIATIONS

ADR	Alternative Dispute Resolution
AEDC	Abuja Electricity Distribution Plc
ANAN	Association of National Accountants of Nigeria
ATC&C	Aggregate Technical, Commercial & Collection Losses
BCR	Business Continuity Regulations
BEDC	Benin Electricity Distribution Plc
BPE	Bureau of Public Enterprises
CA	Consumer Affairs
CAPEX	Capital Expenditure
CAPMI	Credited Advance Payment for Metering Implementation
CEET	Compagnie Energie Electrique du Togo
CPC	Consumer Protection Council
DisCos	Distribution Companies
DSOs	Distribution System Operators
EA	Electricity Act
ECN	Electricity Corporation of Nigeria
EEDC	Enugu Electricity Distribution Plc
EKEDP	Eko Electricity Distribution Plc
EPM	Engineering Performance and Monitoring
EPSRA	Electric Power Sector Reform Act
FCT	Federal Capital Territory
FMS	Financial and Management Services
GenCos	Generation Companies
GWh	Gigawatt hours
IBEDC	Ibadan Electricity Distribution Plc
ICAN	Institute of Chartered Accountants of Nigeria
IEDN	Independent Electricity Distribution Network
IE	Ikeja Electric Plc
IPP	Independent Power Plant
JED	Jos Electricity Distribution Plc
KAEDC	Kaduna Electricity Distribution Plc
KEDCO	Kano Electricity Distribution Plc
LLC	Legal Licencing and Compliance
MAN	Manufacturers Association of Nigeria
MAP	Meter Assets Provider
MCR	Market Competition and Rates
MO	Market Operator
MW	Megawatts
MWh	Megawatt hours
MYTO	Multi-Year Tariff Order

NACCIMA	Nigerian Association of Chambers of Commerce Industry, Mines and Agriculture
NAEE	Nigerian Association for Energy Economics
NBA	Nigerian Bar Association
NBET	Nigerian Bulk Electricity Trading plc
NDA	Niger Dams Authority
NEPA	National Electric Power Authority
NEPP	National Electric Power Policy
NERC	Nigerian Electricity Regulatory Commission
NESCO	Nigerian Electricity Supply Company Limited
NESI	Nigerian Electricity Supply Industry
NICE	Notice of Intention to Commence Enforcement
NIGELEC	Nigerien Electricity Society
NIM	Nigerian Institute of Management
NIPP	National Integrated Power Project
NSE	Nigerian Society of Engineers
PP	Percentage Points
PHCN	Power Holding Company of Nigeria
PHED	Port Harcourt Electricity Distribution Plc
PRS	Planning Research and Strategy
REC	Regulation on Eligible Customers
SBEE	Société Béninoise d'Energie Electrique
TCN	Transmission Company of Nigeria Plc
TLF	Transmission Loss Factor
YEDC	Yola Electricity Distribution Plc

Executive Summary

A. Legal and Regulatory Framework

B. Human Resource Management

C. Corporate Governance

D. Regulation, Licensing & Compliance

E. Consumer Affairs

F. Electricity Tariffs

G. State of the Nigerian Electricity Supply Industry (NESI)

LEGAL AND REGULATORY FRAMEWORK

In 2023, the Electricity Act (EA) was enacted, repealing the Electric Power Sector Reform Act (EPSRA) of 2004 and other acts related to the Nigerian electricity market. The EA aims to create a more efficient, competitive, and liberalised market with private sector participation and ensure legislative consistency across various segments and stakeholders in the sector. It also recognises the Nigerian Electricity Regulatory Commission (NERC or the 'Commission') as the apex regulator for the Nigerian power sector and further reinforces NERC's role in driving competition and accountability in the electricity market.

NERC continues to fulfil its principal functions as outlined in Sections 34(1) and 34(2) of the EA, positioning itself to provide robust regulatory interventions as the power sector transitions to a more competitive market structure.

Reporting Obligations: In compliance with the provisions of Section 34(1)(g) of the EA, the Commission published four quarterly reports (Q1-Q4) of its activities for 2024. The reports analysed the state of the Nigerian electricity supply industry (NESI), covering operational and/or commercial performances of the grid-connected operators. The reports also contained detailed updates on the regulatory functions of the Commission during each quarter as well as information on consumer affairs (focused on customer complaint management and customer metering).

Furthermore, in compliance with the provisions of Section 56(2) of the EA which mandates the Commission to, *"no later than three months after the end of the financial year, prepare audited financial statements",* the Commission engaged KPMG to audit the Commission's accounts for the year ended 31 December 2024.

HUMAN RESOURCE MANAGEMENT

Staff Composition: In 2024, the count of the Commission's total manpower was two hundred and fifty-four (254) broken down as follows –

- Seven (7) Commissioners
- Thirty-seven (37) Management staff
- One Hundred and Thirty-eight (138) Mid-management staff
- Fifty (50) Senior staff
- Twenty-two (22) junior staff

The members of staff are a mix of experienced professionals from diverse disciplines, including Engineering, Economics, Sciences, Finance, Accounting, Social Sciences, Law and other fields relevant to the needs of the Commission.

The Commission's workforce cadre in 2024 is contained in Table A. It also shows the gender split of the Commission's workforce, with women representing 31% of the total. In line with the provisions of the EA 2023, the Commission continues to promote equitable female representation within the Commission and the wider NESI.

Table A: Cadre and Gender Distribution of the Commission's Staff in 2024

No	Position	Cadre		Gender representation		
				Male	Female	Total
1	General Manager	Mgt. Staff	15%	3	1	4
2	Deputy General Manager			5	3	8
3	Assistant General Manager			17	8	25
4	Principal Manager	Mid-Mgt. staff	56%	17	16	33
5	Senior Manager			29	10	39
6	Manager			29	5	34
7	Assistant Manager	Senior staff	20%	19	13	32
8	Analysts			32	18	50
9	Junior Staff	Junior staff	9%	21	1	22
	Total			172	75	247

Note: The staff's distribution in this table excludes the Commissioners and their Aides

Capacity Development: The Commission places a premium on staff capacity development, and on account of this, members of staff attended the required regulatory, management and leadership courses in 2024.

CORPORATE GOVERNANCE

Structure of the Commission: In 2024, the Commission maintained the same core organisational structure it operated in 2023, with its activities being split across seven (7) Divisions, which are listed below:

- Chairman's Office (CO)
- Consumer Affairs (CA)
- Engineering Performance & Monitoring (EPM)
- Finance & Management Services (FMS)
- Legal, Licensing & Compliance (LLC)
- Market Competition & Rates (MCR)
- Planning, Research & Strategy (PRS)

The seven (7) Divisions of the Commission are further subdivided into twenty-four (24) Units. Each Division is headed by a commissioner, who is responsible for overseeing the affairs of the Division. A management staff not lower than the rank of Assistant General Manager (AGM) coordinates the day-to-day activities of each Division and reports to the Commissioner.

Strategic Goals: The Strategic Plan III (SP3) sets out the high-level aspirations for the NESI as well as the role of NERC in their attainment for the years 2024 – 2026. While also building upon the progress recorded under the SP II (2021 – 2023), the SP III takes particular cognisance of the major shifts expected in the NESI arising from the amendment of the 1999 constitution and the provisions of the EA 2023. Specifically, the plan provides for the realisation of the six (6) pillars listed below:

1. Commercially Viable Electricity Market
2. Technically Robust Infrastructure
3. Market Development & Customer Satisfaction
4. Industry Governance & Coordination
5. Compliance & Enforcement
6. Operational Excellence

These pillars were crafted to align with the overall objectives of the Commission as outlined in Section (34) of the EA, while also being consistent with the overarching policy directives issued by the Federal Government of Nigeria.

Highlights of the Commission's activities in 2024: The Commission's activities are guided by its strategic goals as well as overarching government policy and macroeconomic trends. The highlights of some of the Commission's activities for the year 2024 are summarised below –

A. Regulatory Instruments/Interventions: In 2024, the Commission issued 397 regulatory instruments. Pursuant to its quasi-judicial mandate as provided in the EA 2023, the Commission also carried out 18 hearings during the year.

B. External stakeholder engagement: The Commission is committed to ensuring that stakeholders of the NESI are kept abreast of key initiatives of the Commission as well as performance standards for licensees in the NESI. In 2024, the Commission undertook targeted campaigns through traditional and social media channels covering pertinent industry issues, including capping of estimated bills, power sector recovery program, metering, health & safety, as well as consumer rights and obligations. The Commission also engaged power sector policymakers and relevant civil society organisations in capacity development.

C. Upholding customer care standards and Protection: In 2024, the Commission carried out critical activities towards ensuring effective consumer protection and engagement. These include:

   i. Customer Education/Town Hall meetings in nine (9) states of the federation
   ii. Training of Forum members in April 2024, aimed at enhancing members' capacity in handling consumer disputes presented at the NERC forum offices in the different states.
   iii. An experiential Peer Review and Capacity Building Workshop for Key Customer Service Staff of DisCos held in

Jos, Plateau state, from 16 to 17 May 2024, to foster knowledge sharing and capacity building among stakeholders.

iv. The annual Commission Essay Competition and award ceremony for secondary school students aimed at promoting consumer rights awareness and engagement.

D. Improving health/safety and technical robustness of the grid system: Some of the key activities implemented during the year include –

i. Facilitation of IoT metering of all 33kV and 11kV feeders in the NESI.
ii. The establishment of the baseline status of the deployment of Advanced Metering Infrastructure (AMI) and integration of modules into the DisCos' operations.
iii. Completion of the technical audit of the interconnected transmission and distribution system.
iv. Integration of technical standards for renewable energy-based power generation in the revised Nigerian Electricity Supply and Installations Standards (NESIS) Regulations.
v. Completion of the emergency review of the Grid Code.
vi. Development of guidelines for conducting safety audits by licensees in the NESI.

REGULATION, LICENSING AND COMPLIANCE

The breakdown of the regulatory instruments issued by the Commission in 2024 is contained in Table B.

Table B: Regulatory Instruments issued by the Commission in 2024

SN	Regulatory Instruments	Number
1	Regulations	2
2	Orders	167
3	Licences/Permits	168
4	Rectification Directives	28
5	Notice to Commence Enforcement Action	29
6	Fines	3
	Total	397

Regulations: The Commission issued two (2) new regulations in 2024 as detailed below:

- Eligible Customer Regulations (NERC-R-001-2024): The Eligible Customer Regulation was issued in March 2024 and repealed the Eligible Customer Regulations 2017. The changes incorporated by the new Regulation include: revision of licensing procedures; unification of the ECR and the Competition Transition Charge (CTC) guidelines; revision of the threshold for eligibility; revision of the duration for confirmation of non-indebtedness.

- NERC Regulations on the Procedure for Electricity Tariff Reviews 2024: The NERC Regulation on the Procedure for Electricity Tariff Reviews 2024 was issued in September 2024. The objectives of the regulations include:
  - Provide detailed procedures for conducting electricity tariff reviews in Nigeria in line with the provisions of the EA and MYTO methodology
  - Provide clarity on the responsibilities of parties regarding the tariff review processes, filing arrangements, timelines, fees and documentation required for the tariff review process in the NESI.

Orders: The Commission issued one hundred and sixty-seven (167) Orders to licensees in 2024. The Orders are listed in Table C below:

Table C: Orders issued by the Commission in 2024

S/N	Order No	Title of Order	Effective Date
1-11	NERC/2023/023-033	Multi-Year Tariff Order (MYTO) 2024 for the Distribution Companies	01 Jan 2024
12	NERC/2023/034	Multi-Year Tariff Order (MYTO) 2024 for the Transmission Company of Nigeria Plc	01 Jan 2024
13	NERC/2023/035	Order on Performance Improvement Plan of the Transmission Company of Nigeria	01 Jan 2024
14	NERC/2024/001	Order on the Regulatory Intervention in Kaduna Electricity Distribution Plc	01 Jan 2024
15-25	NERC/2024/004-014	Order on Non-Compliance with Capping of Estimated Bill by DisCos for the period January – September 2023	12 Feb 2024
26	NERC/2024/039	Transfer of Regulatory Oversight of the Electricity Market in Enugu State from the Nigerian Electricity Regulatory Commission to the Enugu State Electricity Regulatory Commission (EERC)	01 May 2024
27	NERC/2024/040	Order on the Deregulation of Meter Prices for Meters Deployed under the Meter Asset Provider Scheme	01 May 2024
28-29	NERC/2024/041-042	Transfer of Regulatory Oversight of the Electricity Market in Ekiti State from the Nigerian Electricity Regulatory Commission to the Ekiti State Electricity Regulatory Bureau (EERB)	01 May 2024
30	NERC/2024/043	Transfer of Regulatory Oversight of the Electricity Market in Ondo State from the Nigerian Electricity Regulatory Commission to the Ondo State Electricity Regulatory Bureau (OSERB)	01 May 2024
31	NERC/2024/044	NESI Interim Order on Transmission System Dispatch Operations, Cross-Border Supply and Related Matters 2024	01 May 2024
32	NERC/2024/045	Order on the Establishment of the Independent System Operator (ISO)	01 May 2024
33	NERC/2024/072	Order on the Operationalisation of Tranche A of the Meter Acquisition Fund (MAF)	24 June 2024
34	NERC/2024/073	Transfer of Regulatory Oversight of the Electricity Market in Imo State from the Nigerian Electricity Regulatory Commission to the Imo State Electricity Regulatory Commission (ISERC)	01 July 2024

S/N	Order No	Title of Order	Effective Date
35-45	NERC/2024/086-096	Order on Performance Monitoring Framework for the Distribution Companies	08 July 2024
46	NERC/2024/097	Revised Order on the Transition Accounting Treatment of Tariff-Related Liabilities in the Financial Records of Market Participants - July 2024	05 July 2024
47	NERC/2024/058	Order on the Transition to Bilateral Trading in the NESI	25 July 2024
48	NERC/2024/002	Order on the Nomenclature of Generating Plants	01 Aug 2024
49	NERC/2024/110	Transfer of Regulatory Oversight of the Electricity Market in Oyo State from the Nigerian Electricity Regulatory Commission to the Oyo State Electricity Regulatory Commission (OSERC)	06 Aug 2024
50	NERC/2024/111	Transfer of Regulatory Oversight of the Electricity Market in Edo State from the Nigerian Electricity Regulatory Commission to the Edo State Electricity Regulatory Commission (ESERC)	21 Aug 2024
51	NERC/2024/125	Transfer of Regulatory Oversight of the Electricity Market in Kogi State from the Nigerian Electricity Regulatory Commission to the Kogi State Electricity Regulatory Commission (KSERC)	13 Sep 2024
52-53	NERC/2024/112-113	Transfer of Regulatory Oversight of the Electricity Market in Lagos State from the Nigerian Electricity Regulatory Commission to the Lagos State Electricity Regulatory Commission (LASERC)	05 Dec 2024
54	NERC/2024/162	Addendum -1 to the Order on Performance Monitoring Framework for Distribution Companies July 2024	23 Dec 2024
55-57	NERC/2024/163-165	Transfer of Regulatory Oversight of the Electricity Market in Ogun State from the Nigerian Electricity Regulatory Commission to the Ogun State Electricity Regulatory Commission (OGERC)	24 Dec 2024

Note: In addition to the Orders contained in Table B, the Commission also issued a total of one hundred and ten (110) MYTO Supplementary Orders to DisCos in 2024. The Supplementary Orders 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.

Licensing and Permits: Following the satisfactory evaluation of applications, the Commission issued one hundred and sixty-eight (168) licenses, permits and certifications in 2024 as contained in Table D.

Table D: Licenses, Permits and Certifications Issued by the Commission in 2024

SN	License/Permit	Number
1	On-grid generation	3
2	Off-grid generation	22
3	System Operator	1
4	Trading Licence	9
5	Captive power	24
6	Mini-grid registration	7
7	Mini-grid permit	27
8	Meter service providers permit	36
9	MAP permit	39
	Total	168

Compliance Monitoring and Enforcement: In 2024, the Commission issued twenty-eight (28) Rectification Directives (RD), twenty-nine (29) Notices of Intention to Commence Enforcement Actions (NICE) and three (3) fines against licensees for violations of rules and infractions. These include non-compliance with the Commission's orders, directives and rulings, failure to comply with forum panel decisions without filing appeals within the stipulated timeframe, as well as health and safety infractions.

CONSUMER AFFAIRS AND STAKEHOLDER ENGAGEMENTS

Consumer Affairs: The Commission conducted nine (9) town hall/customer complaints resolution meetings in 2024. The meetings were conducted as detailed below:

- Kano, Kano State; 07-09 March 2024
- Lagos, Lagos State; 21-23 March 2024
- Abuja, FCT; 19 March 2024
- Enugu, Enugu State; 18-20 April 2024
- Gombe, Gombe State; 18-20 July 2024
- Calabar, Cross River State; 08-10 August 2024
- Lokoja, Kogi State; 12-14 September 2024
- Osogbo, Osun State; 10-12 October 2024

- Kaduna, Kaduna State; 12-14 December 2024

Customer Complaints: The Customer Protection Regulation issued by the Commission in 2023 enumerates the standards and procedures for handling customer complaints in line with international best practices. The Regulation further provides various channels for customers to lodge complaints against their service providers. The complaints reporting channels include:

- NERC Customer Complaints Unit (NERC-CCU)
- DisCo Customer Complaint Unit (DisCo-CCU)
- NERC Forum Office
- Power Outage Reporting System (PORS) for customers to report outages in real-time.

In 2024, the NERC-CCU received 16,882 complaints and 4,858 were resolved, corresponding to a 28.78% resolution rate. A review of the customer complaints data presented in Figure A indicates that metering, billing, service interruption, and customer band issues were the most common customer complaints, accounting for 89.62% (15,130) of the total complaints at the NERC-CCU.

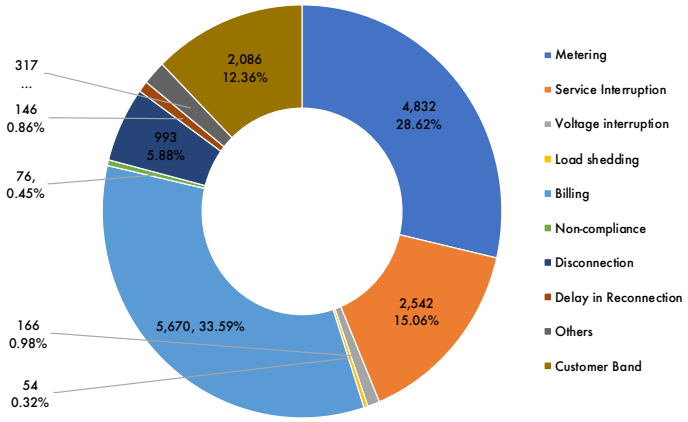


Figure A: Category of Complaints Received at the NERC-CCU in 2024

The total number of complaints received across all DisCo-CCUs in 2024 was 1,183,198. Metering, billing, and service interruption were the most common complaints issues accounting for 72.33% (855,757) of the total (Figure B).

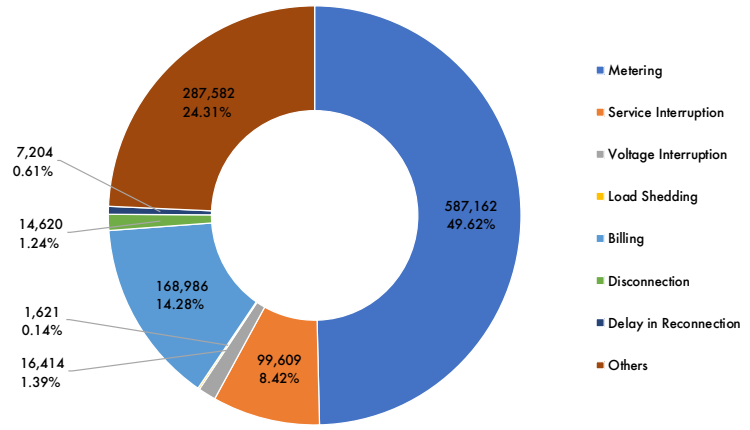


Figure B. Category of Complaints Received at the DisCo-CCUs in 2024

There was a total of 8,351 active appeals (7,575 new appeals and 776 pending appeals) across all Forum Offices in 2024. The Forum Offices held 308 sittings and resolved 83.06% (6,936) of the total active appeals. Billing and metering were the most prevalent complaints within the year, accounting for 52.81% and 29.77% of the total, respectively (Figure C).

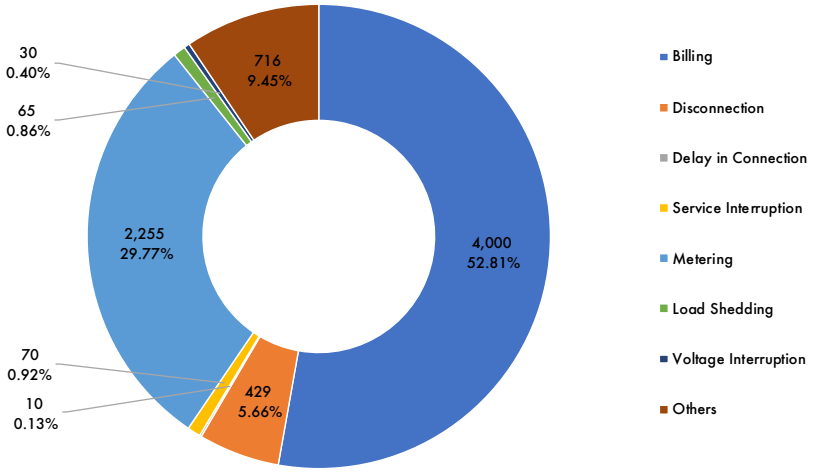


Figure C: Category of Complaints Received by all Forum Offices in 2024

Stakeholder Engagements: The Commission held all four (4) quarterly NESI stakeholder consultation meetings for the year to discuss important industry issues and to review compliance and performance. The Commission also organised workshops to

engage stakeholders on the implementation of the new Electricity Act 2023.

In July 2024, the Commission convened a summit on Accelerating Scale-up of Renewable and Distributed Energy Resources in Nigeria. The summit provided a platform for stakeholders to discuss strategies, regulatory frameworks, and financing options to drive the adoption and incorporation of renewable and distributed energy access in the country.

Other stakeholder engagement activities of the Commission during the year include:

- Capacity building workshop for members of the Nigerian Bar Association (NBA)
- Seminar for judges from the Federal and State High Courts as well as the National Industrial Court
- Capacity building workshop for representatives of Civil Society Organisations (CSO) and Community Based Organisations (CBO)
- Workshop on Technical Codes for Operators in the NESI
- Workshop for NESI stakeholders on feeder naming and other asset nomenclature for the NESI
- Training on Average Participation Method for Regional Electricity Transmission by ECOWAS Regional Electricity Regulatory Authority (ERERA).

ELECTRICITY TARIFFS

Multi-Year Tariff Order (MYTO): In compliance with the provisions of Section 116 of the EA 2023, the Commission has since 2007 adopted the Multi-Year Tariff methodology for the determination of tariffs to be charged by electricity distribution companies in the NESI.

The MYTO is an incentive-based regulation that seeks to reward performance above certain benchmarks, reduce technical and non-technical/commercial losses and lead to cost recovery as well as improved performance standards from all industry operators in the NESI.

The MYTO methodology uses a building blocks approach in setting transmission and distribution tariffs, which provides the joint benefit of price cap and incentive-based regulation. The generation tariff is determined using a benchmark Long Run Marginal Cost (LRMC) of the most economically efficient new entrant. The group of parameters which the Commission considers in determining or reviewing tariffs include:

- Macroeconomic indices
- Aggregate Technical and Commercial Losses (ATC&C) targets and trajectories
- Capital Expenditure (CAPEX)
- Operational Expenditure (OPEX)
- Energy Offtake

Tariff Subsidies: When the allowed end-user electricity tariffs (allowed tariff) are lower than the cost-reflective tariff as computed by the Commission, the Government undertakes to cover the resultant gap (between the cost-reflective and allowed tariff) in the form of tariff shortfall funding. In 2024, the gross subsidy obligation of the FGN was ₦1,949.17 billion (Figure D).

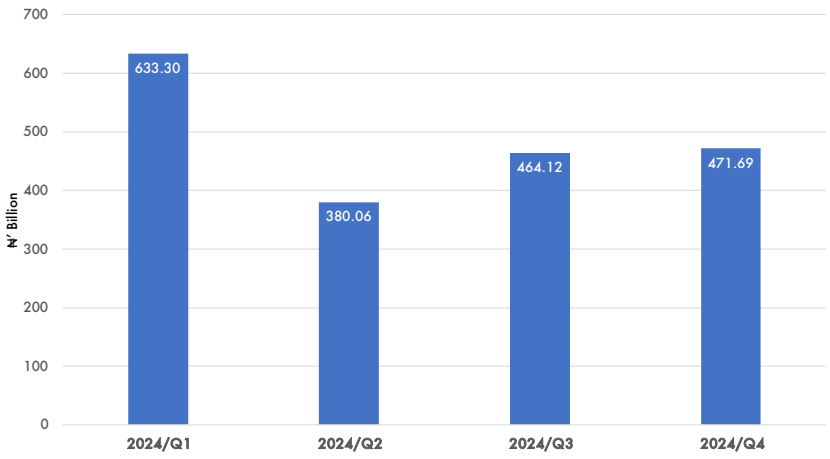


Figure D: FGN subsidy obligation in 2024

STATE OF THE INDUSTRY

Operational report: The operational performance of the NESI is a measure of how effectively available resources are utilised to generate electricity. Optimum operational performance is essential to ensure adequate and safe electricity generation, transmission, and distribution. The summary of the NESI's operational performance report for 2024 is provided below.

Available Capacity and Generation: In 2024, the average daily available generation capacity of the grid-connected power plants was 4,853.69MW. The overall availability factor for all grid-connected plants was 37.43%, which indicates that more than 62% of the installed capacity in the NESI was not available in 2024. The total generation during the year was 37,093.70GWh, which translates to an average hourly generation of 4,222.87MWh/h. Hydropower plants contributed 11,469.85GWh (30.92%) to the total generation in 2024.

Indices on the Performance of the National Grid: The average lower and upper daily system frequencies of the grid in 2024 were 49.28Hz and 50.83Hz, respectively (range of 1.55Hz); these values are within the stress limit specified in the Grid Code[1] (Lower stress limit; 48.75Hz and Upper stress limit; 51.25Hz).

The average lower and upper operating voltage of the grid in 2024 were 299.42kV and 352.55kV, respectively (range of 53.13kV); these values are outside the normal operating limits specified in the Grid Code (Lower limit; 313.50kV and Upper limit; 346.50kV)

The NESI also recorded nine (9) incidents of system collapses in 2024. The data for system collapse incidents between 2020 and 2024 are contained in Table E.

Table E: System Collapses in 2020 - 2024

	No. of Collapses				
Category of Collapse	2020	2021	2022	2023	2024
Partial Collapses	0	2	2	0	5
Total Collapses	4	2	4	3	4

[1] The normal operating range specified in the Grid Code is 49.75Hz – 50.25Hz.

Metering: As of 31 December 2024, only 6,288,642 (46.57%) of the registered 13,503,342 customers in the NESI were metered. DisCos installed 572,055 end-use customer meters in 2024 using the different metering frameworks as detailed in Table F.

Table F: Meter Installations under the Metering Frameworks

S/N	Framework	Meter Installations in 2024
1	NMMP	289
2	MAF	4,076
3	MAP	508,103
4	Vendor Financed	27,965
5	DisCo Financed	31,622
	Total	572,055

The summary of customer metering by respective DisCos is contained in Figure E.

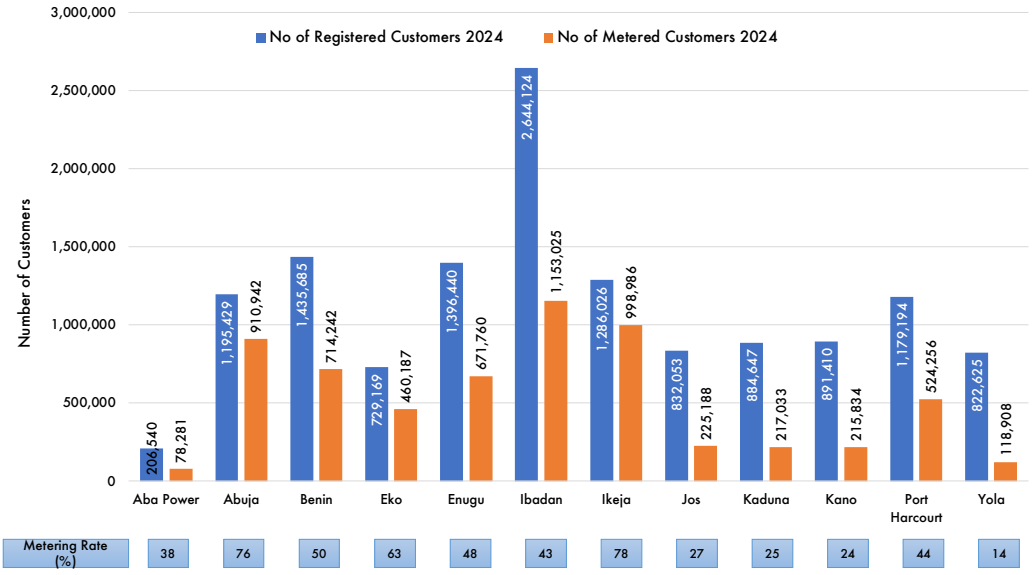


Figure E: Metering Status in 2024

Commercial report: The commercial performance of the NESI is a measure of the flow of funds from customers to upstream electricity industry players. The key parameters that are used in evaluating commercial performance include:

- Energy offtake performance of DisCos
- Energy billed and billing efficiency
- Revenue and collection efficiency

- Remittances by downstream market participants to the Market Operator (MO) and the Nigerian Bulk Electricity Trading Company (NBET)

Energy offtake performance: In 2024, the total energy received by DisCos at their trading points was 29,126.27GWh. With the Commission's effort to achieve market maturity and improved upstream payments, energy offtake by DisCos transitioned from the MYTO allocation[2] to the Partial Activation of Contract (PAC) regime in July 2022, which enabled the DisCos to determine their unconstrained power requirements in absolute Megawatts (MW) known as their Partially Contracted Capacity (PCC).

The DisCos energy offtake performance in 2024 was 94.55%. All DisCos took less energy than their PCC, with Enugu (98.18%) and Benin (98.03%) recording the highest offtake performances. Yola (85.04%) DisCo, which is the only DisCo with offtake performance below 90%, recorded the lowest offtake performance during the year.

Billing and Collection efficiencies: Figure F shows the billing and collection efficiencies by all DisCos in 2024. Out of the 29,126.27GWh total energy received by all DisCos, 23,919.68GWh was billed to the end-users, resulting in a gross billing efficiency of 82.12%.

The total billing to electricity consumers by the DisCos was ₦2,196.71 billion, but only ₦1,659.76 billion was collected, leaving an outstanding of ₦536.95 billion. This corresponds to a collection efficiency of 75.56%.

[2] Under the MYTO allocation regime, the allocation of energy to DisCos was based solely on the ratios contained in the vesting contracts signed upon privatisation. Also, there was limited enforcement of PPA contracts which led to the non-recognition of capacity (and its associated payments) for most of the grid-connected power plants.

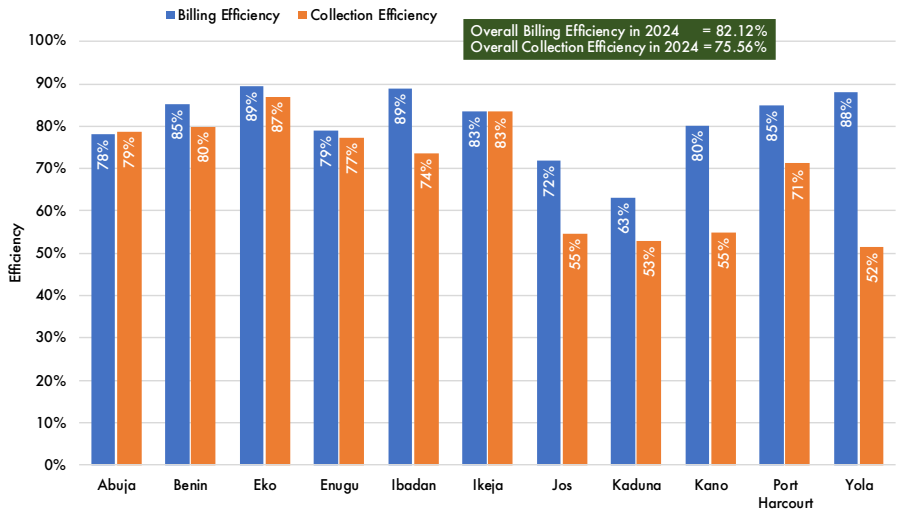


Figure F: DisCos Billing and Collection Efficiencies in 2024

Market Remittances by DisCos: In 2024, NBET and MO issued a gross invoice of ₦1,370.35[3] billion to all the DisCos for energy costs and administrative services. DisCos remitted a gross sum of ₦1,184.88 billion, leaving a total deficit of ₦185.47 billion. This translates to an overall remittance performance of 86.47%

The disaggregated DisCo's remittance performances to NBET and MO in 2024 are presented in Figure G.

Eko, Ikeja and Abuja DisCos had the highest remittance performances with 99.33%, 94.43% and 90.42% respectively to NBET in 2024, while Kaduna achieved the lowest remittance performance to NBET (32.77%). The highest remittance performances to the MO were recorded by Yola, Ikeja, Eko and Abuja at 96.73%, 95.71%, 93.12% and 92.97% respectively, while Kaduna recorded the lowest MO remittance performance of 26.29%.

[3] The NBET portion of the total invoice issued to DisCos is the DisCos Remittance Obligation (DRO).

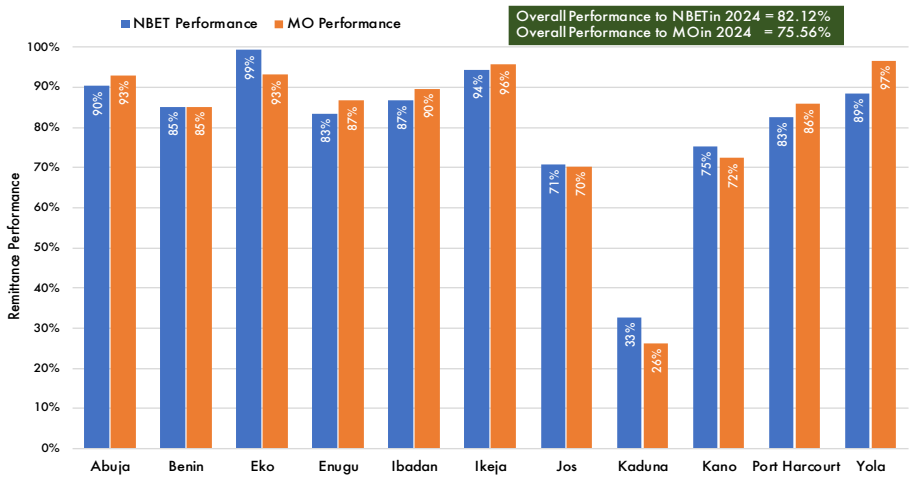


Figure G: DisCos' Remittance Performance in 2024

Market Remittances by Special and Bilateral Customers: In 2024, the NESI continued to provide electricity to 3 international bilateral customers - i) Societe Beninoise d'Energie Electrique; ii) Compagnie Energie Electrique du Togo; iii) Societe Nigerienne d'electricite. Cumulatively, these 3 customers received an invoice of $56.07 million from MO and made a payment of $42.06 million. This corresponds to a remittance performance of 75.01%. There were seventeen (17) active domestic bilateral customers in 2024. Cumulatively, these customers received a total invoice of ₦7,929.25 million from MO and made a payment of ₦5,970.85 million, corresponding to a remittance performance of 75.30%.

Chapter One:
Legal and Regulatory Framework

1.1 Background to the creation of the Commission

1.2 Regulatory Functions

1.3 Legal Framework

1.4 Reporting Obligations

1.1 Background to the creation of the Commission

Nigerian Electric Power Policy (NEPP)

In March 2001, the Federal Government of Nigeria (FGN) released the Nigerian Electric Power Policy (NEPP) in an attempt to arrest the challenges that had plagued the electricity supply in Nigeria over the prior decades and heralded the prevalence of rolling blackouts to electricity consumers. These problems were caused by several factors, including –

- Gross inadequacy of available generation due to a lack of investments in new generation plants and poor maintenance of installed plants
- Poor and aged transmission and distribution infrastructure arising from limited investments and consequently driving high technical losses along the network
- Overall financial unsustainability and illiquidity of the electricity market caused by a combination of non-cost reflectiveness of tariffs and extreme levels of commercial losses.

The NEPP was adopted in 2002 and kick-started the reform efforts of the FGN in the power sector which were ultimately geared towards transitioning the electricity market from a state-owned vertically integrated monopoly into a competitive, liberalised market with significant private sector participation at all steps of the value chain.

Electric Power Sector Reform Act (EPSRA)

One of the critical milestones under the reform program of the power sector was the enactment of the Electric Power Sector Reform Act (EPSRA) in 2004. The EPSRA gave legal authority and support to the reforms and repealed the National Electric Power Authority (NEPA) Act of 1972.

The National Electric Power Authority (NEPA) was transitioned to the Power Holding Company of Nigeria (PHCN) which was subsequently unbundled into 18 separate companies consisting of six (6) Generation, one (1) Transmission and eleven (11) Distribution companies; thereby opening the market for private sector investment/participation.

Furthermore, section (31) of the EPSRA provided for the establishment of the Nigerian Electricity Regulatory Commission ("NERC" or the "Commission"), which was mandated to serve as an independent regulatory body to drive the power sector reform by ensuring fairness, transparency, and a level playing field for all stakeholders. The Commission was officially inaugurated on 31 October 2005, with its headquarters in Abuja.

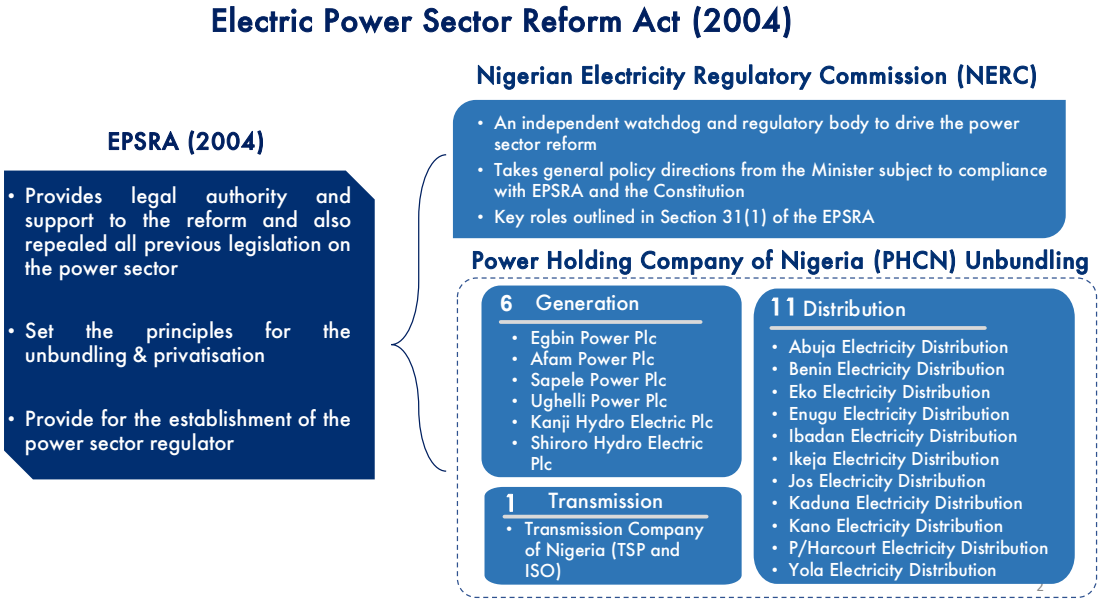


Figure 1.1: Major reforms under the EPSRA 2004

Electricity Act (EA)

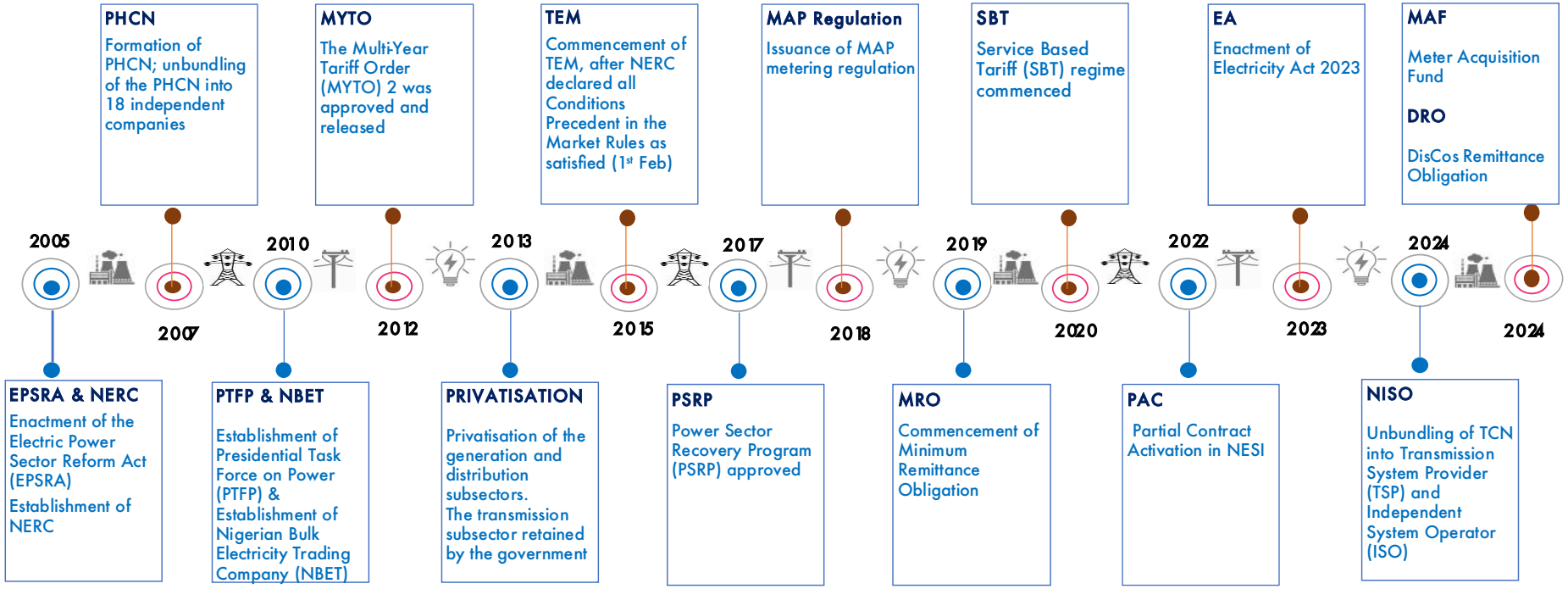
In recognition of the evolution of the Nigerian electricity market following almost a decade of privatisation of the generation and distribution segments of the market as well as the need to push the market towards more efficient competition, the Electricity Act 2023 was enacted in June 2023. The EA 2023 repealed the EPSRA 2004 and the four underlisted Acts related to the Nigerian electricity market:

- The Hydroelectric Power Producing Areas Development Commission Act, No. 7, 2010
- The Hydroelectric Power Producing Areas Development Commission Act, 2010 (Amendment) Act, 2013
- The Hydroelectric Power Producing Areas Development Commission Act, 2010 (Amendment) Act, 2018
- The Nigerian Electricity Management Service Agency Act (NEMSA Act) 2015

By consolidating the various Acts that previously governed the sector, the EA 2023 seeks to ensure legislative consistency across the various segments and stakeholders in the sector. In addition to recognising NERC as the apex regulator for the Nigerian power sector, the EA 2023 has given the Commission significantly increased enforcement powers. This is essential for allowing the Commission to put in place a robust accountability framework with adequate deterrence for all market participants.

Since its inception, the Commission has continued to position itself to give robust regulatory interventions as the power sector transitions from a state-owned monopoly to a more competitive market structure. The various reforms that sought to bring competition and consequently improved service delivery in NESI since 2005 are highlighted in Figure 1.2.

Figure 1.2: Highlights of Reforms in the NESI (2005 – 2024)



1.2 Regulatory Functions

The principal functions of the Commission as outlined under section 34(1) of the EA are as follows -

A. To create, promote, and preserve efficient electricity industry and market structures, and ensure the optimal utilisation of resources for the provision of electricity services
B. To maximise access to electricity services by promoting and facilitating consumer connections to distribution systems in both rural and urban areas
C. To ensure that an adequate supply of electricity is available to consumers
D. To ensure that the prices charged by licensees are fair to consumers and are sufficient to allow the licensees to finance their activities and to allow for reasonable earnings for efficient operation
E. To ensure the safety, security, reliability, and quality of service in the production and delivery of electricity to consumers
F. To ensure that regulation is fair and balanced for licensees, consumers, investors, and other stakeholders
G. To present quarterly reports to the President and National Assembly on its activities
H. To issue directives and carry out such measures to ensure the gradual development and smooth operation of the various stages of the market
I. To promote the development and utilisation of renewable energy services and increase the contribution of renewable energy in Nigeria's energy mix
J. To promote cost-reflective and service-reflective tariffs and ensure gradual elimination of cross subsidies within a specified timeframe; and

K. To promote gender mainstreaming and local content requirements within the NESI

1.3 Legal Framework

To enable the Commission to achieve its core functions, the EA 2023 has conferred various powers on the Commission which are summarised below:

A. Licensing: Section 34(2)(d) of the EA empowers the Commission to licence and regulate persons engaged in the generation, transmission, system operation, distribution, supply and trading of electricity.
B. Enforcement and Sanctioning: Sections (63 and 64) of the EA describe the conditions of licences and the Commission's power to regulate the activities of its licensees. The Commission is empowered with the legal authority to inquire into the activities of a person engaging or seeking to engage in any of the activities requiring a licence as defined in the EA. The Commission is also authorised to probe violations and impose penalties (including fines, imprisonment, forfeiture of undertakings as well as licence cancellation) on any licensee who contravenes the terms and conditions of its licences.
C. Generation of Electricity: Section (80) of the EA 2023 directs the Commission to promote electricity generation from renewable energy sources. In granting licences, the Commission is mandated to promote embedded generation, hybridised generation, co-generation, and electricity generation from renewable sources such as solar energy, wind, small hydro, biomass and other renewable sources.
D. Transmission of Electricity: Sections (108 - 112) of the Act mandate the Commission to oversee electricity transmission in the NESI. In addition to specifying the demarcation of the National Control Centre, the Act also

specifies the Commission's powers with respect to third-party investment in the national grid as well as independent transmission network operators. The Commission is granted clear powers with respect to its role in ensuring the economic viability of investments.

E. Distribution and Supply of Electricity: Sections (113 – 115) of the Act mandate the Commission to oversee the Distribution and Supply of Electricity in the NESI. Section 113(2) empowers the Commission to conduct biennial reviews of distribution licensees, ensuring power source adequacy, distribution system maintenance, and effective consumer complaint resolution.

   With respect to Distribution/Supply, the Commission only retains the powers conferred by Sections (113-115) pending the establishment of State Electricity Regulators (SERCs). Pursuant to the amendment of the constitution, Section 230(2) of the EA provides the process for NERC to transfer regulatory oversight of intra-state electricity matters to the States of the Federation upon the creation of their own electricity market and State electricity regulatory authority. With the exception of a few instances[4], electricity distribution operates entirely on an intra-state basis, which means that upon the expiration of the 180-day transition period provided in the EA, NERC no longer has regulatory powers over electricity distribution within any State that has passed its electricity law.

F. Tariffs and Subsidies: The Commission is mandated to oversee tariff regulation and subsidy management in accordance with Sections (116) and (117) of the Act, ensuring that licensees operate efficiently and recover their full costs with a reasonable return on investment. The activities subject to tariff regulation as

[4] When there is a distribution line crossing state lines, the respective distribution companies are required to install boundary meters to measure the volume of electricity trade happening within each state.

enshrined in the Act include generation, trading, transmission, distribution[5], supply, and system operations.

G. Consumer Protection and Licensee Performance Standards[6]: Sections (119 - 120) of the Act mandate the Commission to develop various consumer standards and procedures in collaboration with licensees. These include customer service standards, quality of service and supply standards, customer complaint handling procedures, assistance procedures for customers facing bill payment difficulties, procedures for disconnecting non-paying customers, procedures for responding to emergencies, etc.

H. Competition and Market Power: The Commission plays a pivotal role in overseeing competition and market power within the NESI, as outlined in Section (121) of the Act. The Commission is mandated to report to the Minister of Power, on an annual basis, on the industry's potential for additional competition. The Commission is also mandated to prevent the abuse of market power through various decision-making processes such as the grant of licences, pricing, and approval of mergers or affiliations. In case of identified market power abuses, the Commission is empowered to undertake enforcement actions such as issuing cease orders and levying fines as it deems appropriate.

I. Renewable Energy and Energy Efficiency: Sections (164 - 171) of the Act empower the Commission to actively support and regulate the development

[5] As explained above, the Commission's oversight of distribution is limited to States that are yet to pass their electricity laws. If the Federal Government commits to providing a universal subsidy scheme across all states, e.g. PCAF, the Commission may be engaged as the administrator based on the provisions of the EA.

[6] As explained above, the Commission's oversight of distribution is limited to States that are yet to pass their electricity laws. Consumer protection is a sub-activity within distribution, so once a state takes over regulatory oversight of its intrastate electricity market, it will set the consumer protection protocols within the state.

and utilisation of renewable energy through measures, including the simplification of licensing procedures, issuance of regulations, and establishment of technical standards.

1.4 Reporting Obligations

1.4.1 Quarterly Reports

Pursuant to Section 34(1)(g) of the EA, which states that - *"the Commission shall present quarterly reports to the President and the National Assembly on its activities"*, the Commission has published its four (4) quarterly reports for 2024. The reports contain analyses of the state of the Nigerian electricity industry (covering both the operational and commercial indices), regulatory functions, and consumer affairs.

1.4.2. Financial Reports

The financial activities of the Commission and the associated reporting requirements are governed by sections 56(1) and 56(2) of the EA 2023. Section 56(1) stipulates that *"the Commission shall ensure that proper accounts and other records relating to such accounts are kept in respect of all the Commission's activities, funds and property, including such particular accounts and records as the Minister may require"*. Section 56(2) of the EA states that *"the Commission shall, not later than three months, after the end of the financial year, prepare and submit to the Auditor General of the Federation and National Assembly, a statement of accounts in respect of that financial year."*

In compliance with the provisions above, the Commission engaged KPMG to audit the Commission's accounts for the year that ended on 31 December 2024. The audited statements of the report for 2024 are provided in Chapter 8.

Chapter Two:
Human Resource Management

2.1 Board of Commissioners

2.2 Management Staff

2.3 Secretary of the Commission

2.4 Forum Office Secretaries

2.5 Staff Composition

2.6 Capacity Development

2.7 Promotion, Awards and Retirement

2.1 Board of Commissioners

Engr. Sanusi Garba
Chairman/CEO

Musiliu O. Oseni, PhD
Vice Chairman
Commissioner – Market Competition & Rates

Chidi Ike
Commissioner– Engineering Performance & Monitoring

Dafe C. Akpeneye
Commissioner– Legal, Licensing & Compliance

Aisha Mahmud Mrs.
Commissioner– Consumer Affairs

Nathan R. Shatti
Commissioner– Finance & Management Services

Yusuf Ali, PhD
Commissioner– Planning Research & Strategy

2.2 Management Staff

The Management cadre for staff of the Commission is composed of the General Manager (GM), Deputy General Manager (DGM), and Assistant General Manager (AGM) levels. The GM is the highest attainable for full time staff of the Commission. GMs (or the most senior staff) usually act as the administrative heads of the division and work closely with the Commissioners, who provide executive oversight to the Division. In a Commissioner's absence, the designated division head may take over some of the executive responsibilities of the Commissioner. As of 31 December 2024, the Commission had a total of thirty-seven (37) staff in the management cadre- GM: 4, DGM: 8, AGM: 25.

Table 2.1: General Managers of the Commission as of December 2024

S/N	Name	Designation	Date Appointed
1	Dr Usman Abba-Arabi *mni*	GM, Public Affairs, Chairman's Office (CO)	01 January 2018
2	Abdulkadir B. Shettima	GM, Consumer Affairs	01 January 2018
3	Zubairu T. Ahmadu	GM, Legal Licencing & Compliance (LLC)	01 January 2021
4	Maryam Y. Abubakar (Mrs)	GM, Finance and Management Services (FMS)	01 January 2021

Table 2.2: Other Management Staff of the Commission

S/N	Name	Position	Unit and Division
1	Ada Ozoemena	DGM	Chairman's Office
2	Abba I. Terab	DGM	Tariff & Rates, MCR
3	Abdussalam Yusuf	DGM	Research, PRS
4	Abdullah Adamu	DGM	ICT, FMS
5	Sule Friday E.	DGM	Human Resources, FMS
6	Hafsat Abdullahi Mustafa	DGM	Public Affairs, CO
7	Hauwa Yakubu	DGM	Compliance, LLC
8	Abu Kadiri	DGM	Engineering & Standards, EPM
9	Arit Uya	AGM	Licensing, LLC
10	Michael Faloseyi	AGM	Public Affairs, CO
11	Kanneng Gwon	AGM	Human Resources, FMS
12	Zubair B. Zubair	AGM	Consumer Affairs, CA
13	Ene Effiom	AGM	Consumer Complaints, CA

14	John D. Joseph	AGM	Engineering & Standards, EPM
15	Jonathan Okoronkwo	AGM	Health, Safety & Environment, EPM
16	Mary Anahve	AGM	Public Affairs, CO
17	Rasheed Busari	AGM	General Administration, FMS
18	Habib Kidaji	AGM	Corporate Planning & Strategy, PRS
19	Saidu Lawal	AGM	Customer Complaints, CA
20	Regina Osuagwu	AGM	Consumer Affairs, CA
21	Umar Mohammed	AGM	Renewable & DMU, PRS
22	Emeka Onyegbule	AGM	Market Competition and Rates
23	Ahmed Ndanusa	AGM	Chairman's Office, CO
24	Anthony Essien	AGM	Consumer Affairs, CA
25	Okpale Daisy	AGM	Licensing, LLC
26	Imam Mohammed	AGM	Health, Safety & Environment, EPM
27	Ntui Colombus	AGM	Legal, Licencing & Compliance
28	Bala Ado Shehu	AGM	Finance and Accounts, FMS
29	Iloeje Chukwuemeka	AGM	ICT, FMS
30	Azikiwe Chigozie V	AGM	Market Analysis, MCR
31	Ebehijele Edeh	AGM	RFRA, MCR
32	Mary-Anne Oragunye	AGM	Finance and Accounts, FMS
33	Pius Bako	AGM	Consumer Affairs, CA

2.3 Secretary of the Commission

The Commission has a secretariat which is responsible for providing administrative support to the Commission as well as the coordination and preparation of the minutes of the meeting of the Board of Commissioners. The Secretariat is domiciled within the Chairman's office and is headed by the Commission Secretary. As of 31 December 2024, the Commission's Secretary was –

Ada Ozoemena (Mrs) DGM, *Secretariat, CO*

2.4 Forum Office Secretaries

Pursuant to sections 43(9) and 44(1) of the 2023 Customer Protection Regulation (CPR 2023), the Commission operated twenty-seven (27) forum offices across the Country as of 31 December 2024. Forum offices are intended to provide redress for customers in instances where their complaints are not satisfactorily addressed at the DisCo Customer Complaint Unit (DisCo-CCU). Each Forum Office is managed by the forum secretary, while the hearings are conducted by five (5) forum panel

members[7] who are not staff of the Commission, pursuant to the provisions of the CPR 2023. The list of the Commission's forum secretaries as of 31 December 2024 is contained in Appendix A.1.

2.5 Staff Composition

The total manpower of the Commission in 2024 was two hundred and fifty-four (254) persons, inclusive of the seven (7) commissioners. The Commissioners and members of staff are experienced professionals from diverse backgrounds and disciplines ranging from Engineering, Law, Sciences, Economics, Accounting and Finance, amongst others. The detailed distribution of staff by Division, cadre and gender is presented in the sections below:

2.5.1 Distribution by Division

The distribution of staff in the year across the different Divisions is presented in Table 2.3. The Finance & Management Services Division had the highest number of staff-sixty-five (65), representing 26.32% of the total Commission's staff, while the Planning, Research & Strategy Division only represented 6.48% of the Commission's staff strength - sixteen (16) staff.

[7] 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.

Table 2.3: Distribution of the Commission's Staff by Divisions in 2024

S/N	Divisions	Number of Staff	Percentage Share
1	Chairman's Office	31	13%
2	Consumer Affairs	61	25%
3	Engineering, Performance & Monitoring	22	9%
4	Finance & Management Services	65	26%
5	Legal, Licensing & Compliance	28	11%
6	Market, Competition & Rates	24	10%
7	Planning, Research & Strategy	16	6%
	Total	247	100%

Note: 1. The staff distribution excludes the seven Commissioners and their aides

2.5.2 Distribution by Cadre

The distribution of staff by cadre as of 31 December 2024 is presented in Table 2.4. The Commission had thirty-seven (37) management staff, one hundred and thirty-eight (138) mid-management staff, fifty (50) senior staff and twenty-two (22) junior staff, representing 15%, 56%, 20% and 9%, respectively, of the total staff count.

Table 2.4: Distribution of the Commission's Staff by Cadre in 2024

S/N	Position	Number of Staff	Cadre	Total Number of Staff	Percentage Share
1	General Manager	4	Management Staff	37	15%
2	Deputy General Manager	8			
3	Assistant General Manager	24			
4	Principal Manager	33	Mid-management staff	138	56%
5	Senior Manager	39			
6	Manager	34			
7	Assistant Manager	32	Senior Staff	50	20%
8	Analyst I	31			
9	Analyst II	19			
10	Junior Staff	22	Junior Staff	22	9%
	Total	247	All	247	100%

Note: The staff distribution excludes the seven Commissioners and their Aides

2.5.3 Distribution by Gender

The distribution of staff by gender as of 31 December 2024, as illustrated in Figure 2.1 shows that approximately 31% of the professional workforce of the Commission is female, which aligns with the Commission's commitment to gender balance.

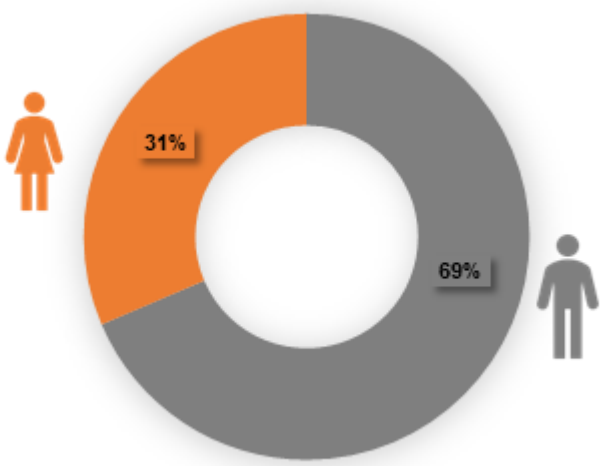


Figure 2.1: Distribution of the Commission's Staff by Gender in 2024

2.6 Capacity Development

The Commission places a high premium on the capacity development of its staff as it recognises that the quality of personnel impacts significantly on the quality of its operations and activities. In 2024, the Commission continued the implementation of its capacity-building strategy by providing training to staff based on skill gaps. Staff were also sponsored to attend workshops, conferences, and meetings on issues pertinent to the discharge of the Commission's functions.

Members of staff of the Commission were sponsored to attend annual conferences of their respective professional bodies which included the CIPM- Chartered Institute of Personnel Management of Nigeria, NIPR- Nigerian Institute of Public Relations, NIM- Nigerian Institute of Management, ICAN- Institute of Chartered Accountants

of Nigeria, ANAN- Association of National Accountants of Nigeria, NSE- Nigerian Society of Engineers and the NBA- Nigerian Bar Association.

2.7 Promotion, Awards and Retirement

In pursuit of a merit-based work environment that incentivises excellence among its staff, the Commission conducts transparent promotion exercises annually for eligible staff based on the provisions of the "Conditions of Service". At the end of the 2024 exercise, staff who satisfied the stipulated requirements were duly promoted.

The Commission also held an award ceremony to recognise staff who had exhibited excellence in the delivery of their duties. Long-service awards were also presented to staff who had achieved notable milestones in the number of years of meritorious service they have delivered to the Commission.

Over the course of 2024, six (6) people exited the services of the Commission– five (5) retirements and one (1) resignation.

Chapter Three:
Corporate Governance

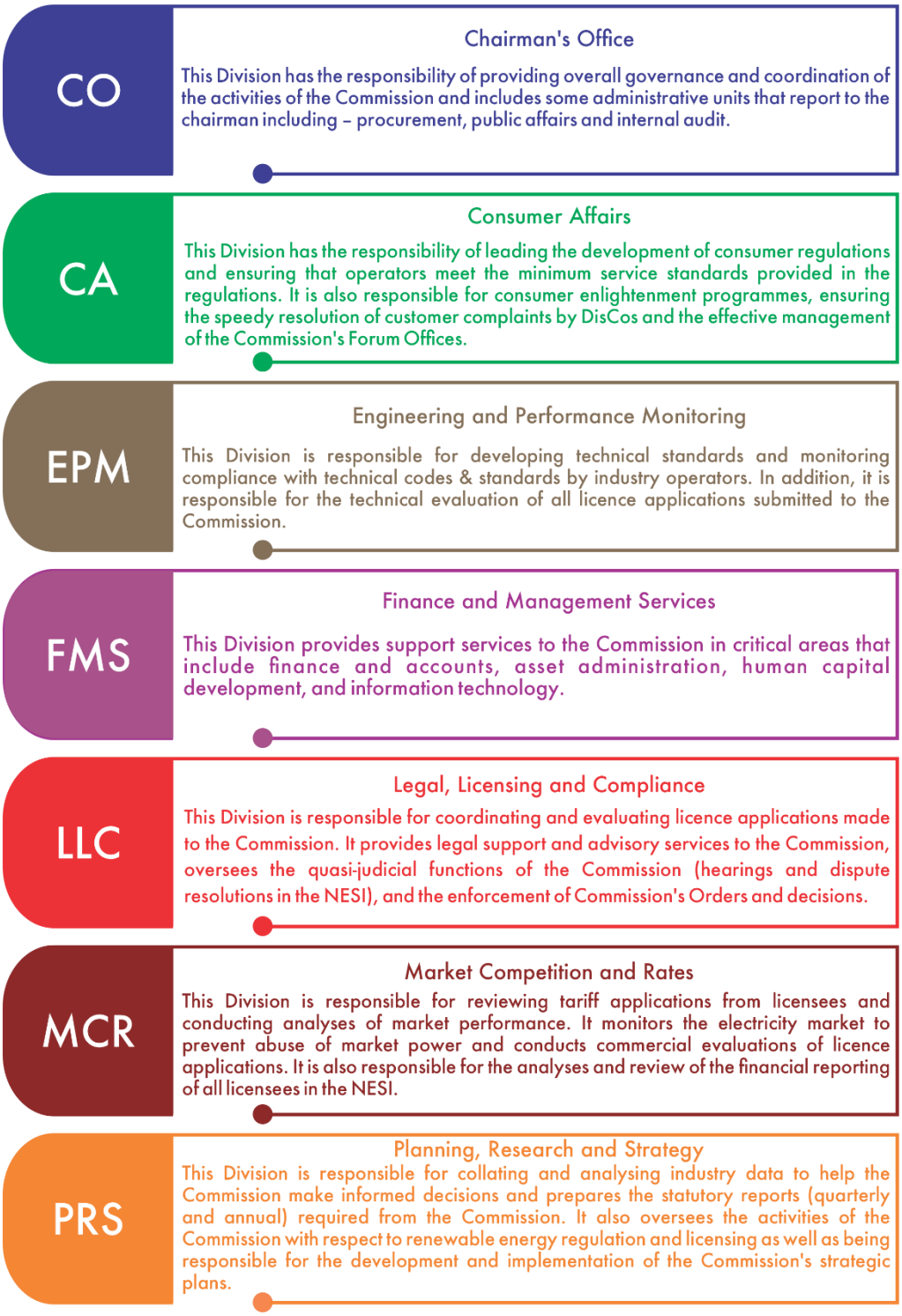
3.1 Structure of the Commission

3.2 NERC Strategic Plan 2024-2026 (SP - III)

3.3 Highlights of the Commission's activities in 2024

3.1 Structure of the Commission

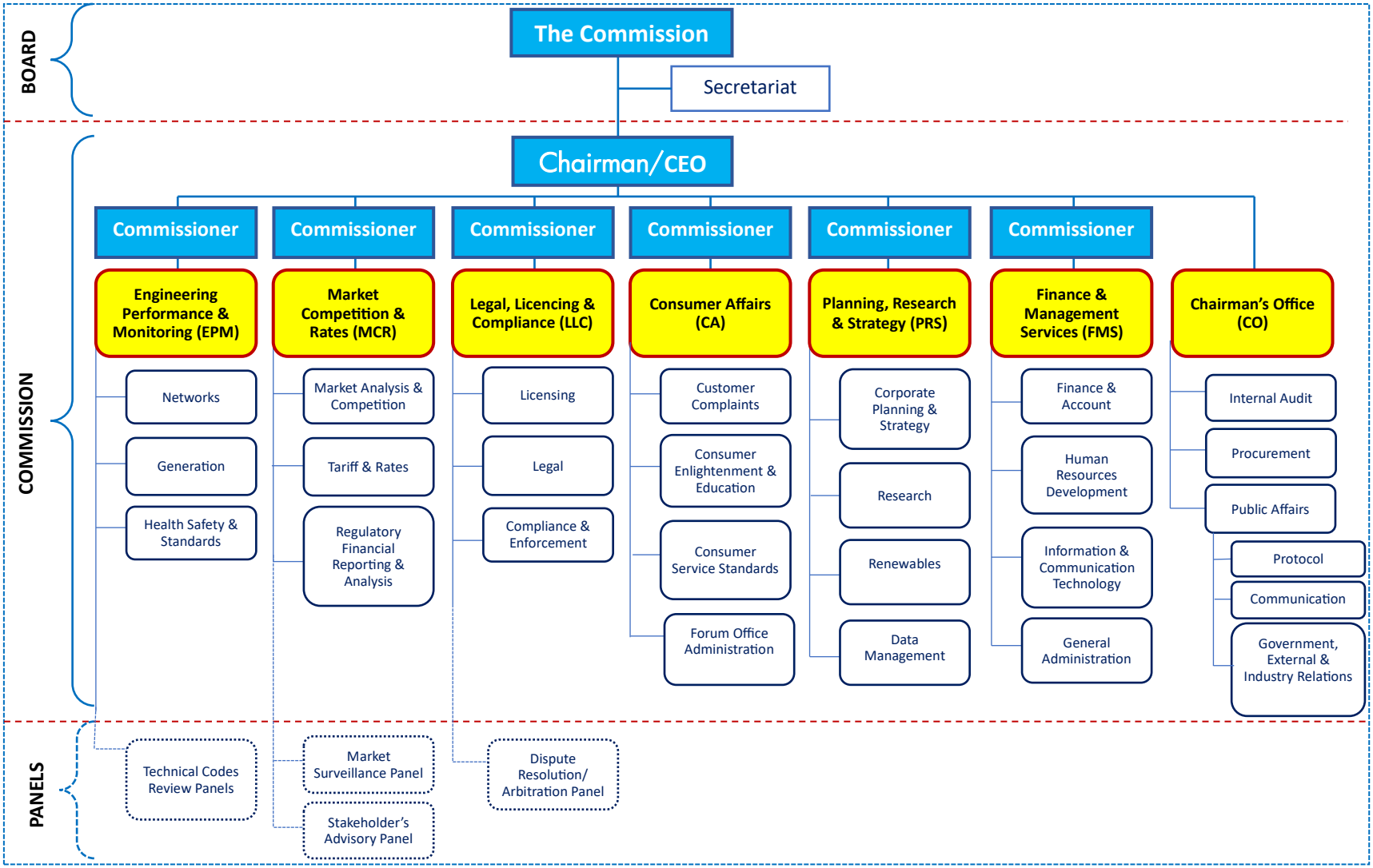
The Commission maintained the same core organisational structure as of 2023, with seven (7) divisions and 24 units.



This structure has been put in place to enhance the adequate flow of responsibility and authority along functional lines and staffing with professionally qualified personnel with the requisite skills and experiences to carry out their functions appropriately.

The current organisational structure of the Commission is represented in Figure 3.1. Each unit is tasked with unique roles and responsibilities that culminate in divisional functions to drive the actualisation of the Commission's goals.

Figure 3.1: Structure of the Commission as of December 2024



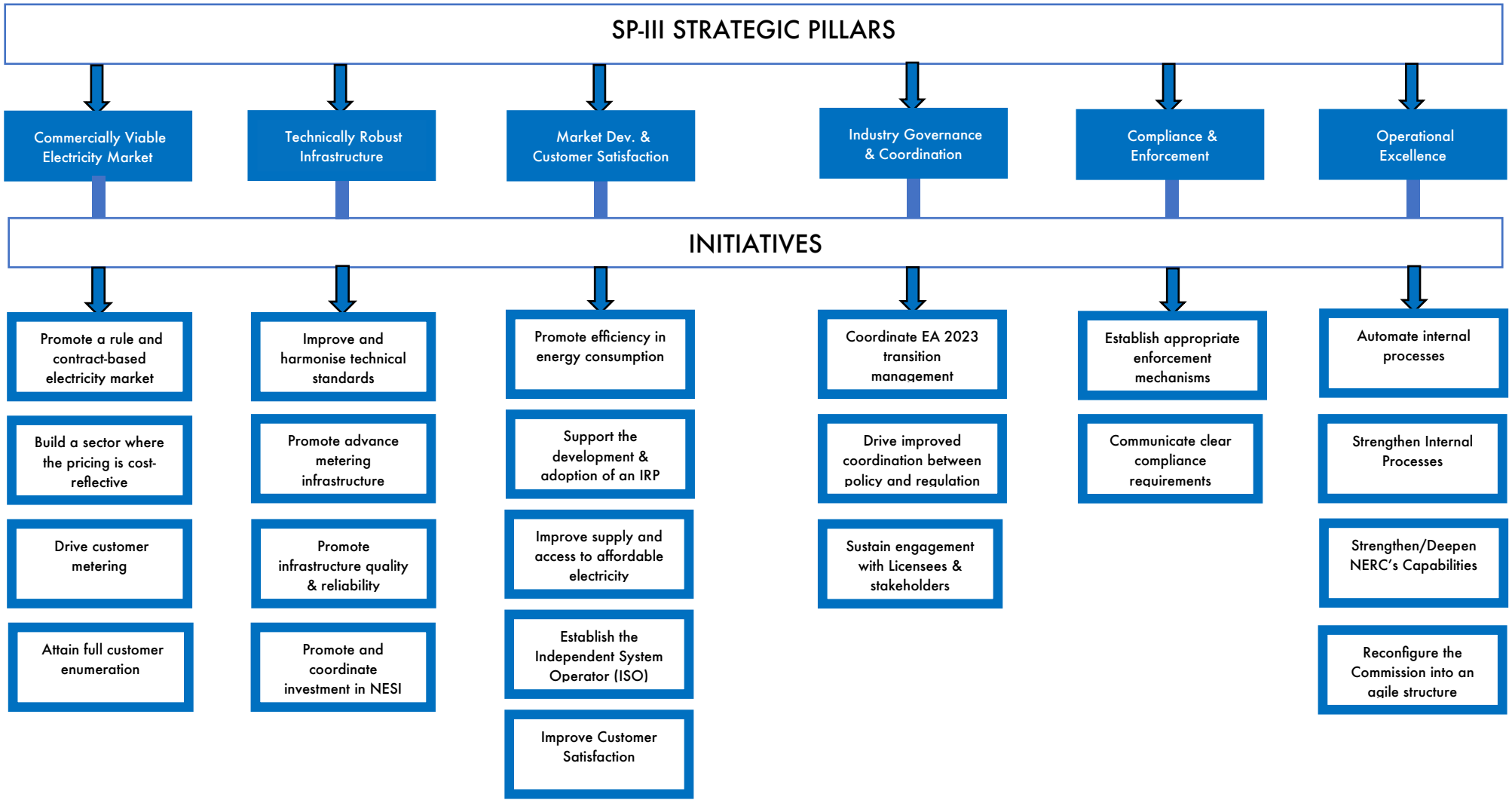
3.2 NERC Strategic Plan 2024-2026 (SP - III)

The Strategic Plan III (SP3) sets out the high-level aspirations for the NESI as well as the role of NERC in their attainment for the years 2024 – 2026. While also building upon the progress recorded under the SP II (2021 – 2023), the SP III takes particular cognisance of the major shifts expected in the NESI arising from the amendment of the 1999 constitution and the provisions of the EA 2023. The six (6) *strategic pillars* that underpin the SP III are summarised below:

1. Commercially viable electricity market: Improve liquidity, enable a cost-reflective electricity market, efficient subsidy management and reasonable returns on investments.
2. Technically robust infrastructure: Ensure the quality, integrity and adequacy of infrastructure across all spectrum of the market.
3. Market Development & Customer Satisfaction: Ensure increased access and availability of electricity through the promotion of innovation, customer satisfaction and effective energy supply approaches and enabling the diversity and efficacy of the energy mix.
4. Industry governance and coordination: Collaborate with stakeholders across the NESI to ensure a collaborative and impactful development of the electricity sector and drive the implementation of the EA 2023.
5. Compliance & Enforcement: Enforce compliance with technical and commercial standards.
6. Operational Excellence: Optimise processes, technology and capabilities and adopt an agile operating model to become a performance-driven organisation.

The initiatives for each of the pillars are highlighted in Figure 3.2. For the year 2024, the strategic plan focused on strengthening NERC's corporate capacity to ensure that the Commission is well placed to lead the sectoral reforms which the SP III seeks to achieve.

Figure 3.2: NERC Strategic Plan (SP-III)



3.3 Highlights of the Commission's activities in 2024

At all times, the Commission's activities are guided by the provisions of EA 2023, the 2024 - 2026 strategic plan as well as overarching government policy and macroeconomic trends. To this end, highlights of some of the Commission's activities for the year 2024 are summarised below -

A. Regulatory Instruments/Interventions: In 2024, the Commission issued 397 regulatory instruments, as detailed in Table 3.1. Pursuant to its quasi-judicial mandate as provided in the EA 2023, the Commission also carried out 18 hearings during the year.

Table 3.1: Regulatory Instruments issued by the Commission in 2024

SN	Regulatory Instruments	Number
1	Regulations	2
2	Orders	167
3	Licences/Permits	168
4	Rectification Directives	28
5	Notice to Commence Enforcement Action	29
6	Fines	3
	Total	397

B. External stakeholder engagement: The Commission is committed to ensuring that stakeholders of the NESI are kept abreast of key initiatives of the Commission as well as performance standards for licensees in the NESI. In 2024, the Commission undertook targeted campaigns through traditional and social media channels covering pertinent industry issues, including capping of estimated bills, power sector recovery program, metering, health & safety as well as consumer rights and obligations. The Commission also engaged power sector policymakers and relevant civil society organisations in capacity development. The external stakeholder engagements conducted by the Commission during 2024 include:

   i. Biannual Health & Safety licensees managers meeting – x2

ii. Quarterly NESI meetings – x4
iii. Seminar in collaboration with the National Judicial Institute (NJI) for justices of the Supreme Court and the Court of Appeal
iv. Engagement with the staff of the Federal Competition and Consumer Protection Commission (FCCPC), the Nigerian Bar Association (NBA), and the Nigerian Data Protection Commission (NDPC)
v. Peer review meetings with regulatory compliance officers of licensees
vi. Radio jingles and social media campaigns

C. Upholding customer care standards and Protection: In 2024, the Commission carried out critical activities towards ensuring effective consumer protection and engagement. These include:
   i. Customer Education/Town Hall meetings in nine (9) states of the federation
   ii. Training of Forum members in April 2024, aimed at enhancing members' capacity in handling consumer disputes.
   iii. An experiential Peer Review and Capacity Building Workshop for Key Customer Service Staff of DisCos held in Jos, Plateau state, from 16 to 17 May 2024, to foster knowledge sharing and capacity building among stakeholders.
   iv. The annual Commission Essay Competition and award ceremony for secondary school students aimed at promoting consumer rights awareness and engagement.

D. Improving health/safety and technical robustness of the grid system: Some of the key activities implemented during the year include –
   i. Facilitation of IoT metering of all 33kV and 11kV feeders in the NESI.

ii. The establishment of the baseline status of the deployment of Advanced Metering Infrastructure (AMI) and integration of modules into the DisCos' operations.

iii. Completion of the technical audit of the interconnected transmission and distribution system.

iv. Integration of technical standards for renewable energy-based power generation in the revised Nigerian Electricity Supply and Installations Standards (NESIS) Regulations.

v. Completion of the emergency review of the Grid Code.

vi. Development of guidelines for conducting safety audits by licensees in the NESI.

E. Enhanced transparency and stakeholder involvement: Pursuant to the provisions of the EA 2023 and NERC Regulations on the Procedure of Electricity Tariff Reviews in the NESI 2014, in evaluating the tariff review applications made by DisCos, the Commission introduced the rate-case hearings. This is consistent with international best practice in rate-setting and provides a platform for customers, customer advocacy groups and intervenors (industry experts and representatives of established organisations related to the power sector) to interrogate the submissions made by the DisCos in support of their applications. Following a formal application for a review of its allowed tariffs, the Commission conducted a rate case hearing for Aba Power Limited Electric (APL) in December 2024.

Chapter Four:
Regulation, Licensing & Compliance

4.1 Regulations, Orders and Directives

4.2 Regulations

4.3 Orders

4.4 Directives

4.5 Licensing

4.6 Permits and Certificates

4.7 Compliance Monitoring and Enforcement

4.8 Hearings and Alternative Dispute Resolution among Market Participants

4.1 Regulations, Orders and Directives

Section 34 of the Electricity Act 2023 (EA 2023, the Act) provides that the Commission is empowered to *"licence and regulate persons engaged in the generation, transmission, system operation, distribution, supply and trading of electricity"* in the NESI. In exercising the powers conferred on it by the EA 2023, the Commission primarily engages with participants in the Nigerian Electricity Supply Industry (NESI) through selected regulatory instruments as prescribed by law. The regulatory instruments utilised by the Commission include –

A. Regulations: these are detailed legal rules and bye-laws formulated by the Commission pursuant to sections 46(2), 64, 215 and 226 of the Electricity Act, to govern and conduct operations within the electricity sector, ensure adherence to statutory requirements, and give effect to the implementation of the Act.
B. Orders: these are authoritative commands, legally binding instructions, and directions issued by the Commission pursuant to sections 47, 64 and 215 of the Electricity Act, requiring licensees to perform certain actions, cease, desist from specific activities, or act in a particular way.
C. Licences: these are authorisations granted by the Commission pursuant to sections 34(2)(d), 63(1), 64, and 215 of the Electricity Act, that allow entities to operate in activities such as the generation, transmission, trading and distribution of electricity under specified terms and conditions.
D. Permits: these are authorisations issued by the Commission pursuant to sections 63(2), 64 and 215 of the Electricity Act, for specific activities, such as the generation of electricity for own use or authorisation to participate as a meter service provider.

E. Guidelines: these are advisory documents, instructions, or rules issued by the Commission pursuant to sections 64 and 215 of the Electricity Act, that recommend practices and standards to sector participants, and licensees on the procedure or process for a thing or an activity to be done or carried out to achieve best practices and maintain consistency in operations.

F. Directives: these are enforceable orders issued by the Commission pursuant to sections 64 and 215 of the Electricity Act, to address specific issues, implement policies, or ensure compliance with regulatory objectives.

G. Rules: these are binding principles, instructions, and directives issued by the Commission pursuant to sections 10, 64, and 215 of the Electricity Act, that outline mandatory procedures, requirements, and standards for sector participants and or licensees which must be adhered to.

H. Codes: these are comprehensive sets of rules, principles, guidelines and technical standards issued or approved by the Commission pursuant to sections 10, 34(2)(b), 64 and 215 of the Electricity Act, governing various aspects of the electricity sector, including safety, reliability, and performance, ensuring uniformity and high standards in technical and operational practices across the sector.

In issuing regulatory instruments to licensees, the Commission is guided by the provisions of the EA 2023, NERC business rules regulation (NERC-R-0306) and other extant rules. Regulatory instruments are used to steer the NESI in the direction of overarching government policy, taking due cognisance of the changes in the macroeconomic environment.

4.2 Regulations

Section 227 of the EA 2023 empowers the Commission to "*make regulations prescribing all matters which by this Act are required or permitted to be prescribed or which, in the opinion of the Commission, are necessary or convenient to be prescribed for carrying out or giving effect to the Act*". Regulations are a set of rules that the Commission may issue periodically to optimise the performance of licensees to give effect to the object of the EA 2023. The Commission issued two (2) new regulations in 2024, as summarised below:

A. The Eligible Customer Regulations 2024.
B. The NERC Regulations on the Procedure for Electricity Tariff Reviews 2024.

A. NERC-R-001-2024: The Eligible Customer Regulations 2024 (ECR) was issued in March 2024 and repealed the Eligible Customer Regulations 2017. The highlight of the changes contained in the new Regulation is contained 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. 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.

CTC/kWh = Actual tariff payable by the EC applicant – (Weighted average tariff for Non-MD customers of the DisCo x Collection efficiency for the DisCo's Non-MD customers)

The monthly amount payable as CTC shall be computed as CTC/kWh multiplied by the average monthly energy billed to the customer during the 90 days (i.e., 3 months) preceding the application.

d. Revision of the EC application process: The stages in the application for eligible customers have been reviewed to ensure the sequence of application conforms with market norms. The new processes also sought to reduce 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 revised 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. If the DisCo fails to respond within the timeline, the EC applicant shall be deemed not to be indebted to the DisCo by the Commission.

f. Redefinition of voltage threshold for qualification as EC: 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.

B. NERC-R-002-2024: The NERC Regulation on the Procedure for Electricity Tariff Reviews 2024 was issued in September 2024. The objectives of the regulations include:

i. Provide detailed procedures for conducting electricity tariff reviews in Nigeria in line with the provisions of the EA and MYTO methodology

ii. Provide clarity on the responsibilities of parties regarding the tariff review processes, filing arrangements, timelines, fees and documentation required for the tariff review process in the NESI.

The regulation seeks to establish clear procedures and timelines for electricity tariff reviews and ensure that the commercials of the NESI are predictable for both

investors and electricity consumers. The regulation specifies three (3) types of tariff reviews in the NESI, each serving a unique purpose. The types of tariff reviews include:

i. Minor review or other short period the Commission may determine: This is conducted monthly or other shorter periods as may be determined by the Commission. Minor reviews seek to adjust tariffs to accommodate major changes in macroeconomic indices and other tariff review parameters, including generation fuel costs, inflation rates, and exchange rate fluctuations. This is to ensure that tariffs remain reflective of prevailing economic conditions without undergoing a comprehensive tariff review.
ii. Major review: The MYTO methodology provides for a major review of electricity tariffs every five (5) years, where all tariff assumptions are subject to a comprehensive review in a bid to ensure the viability and efficiency of the NESI. This includes a review of operational costs, capital expenditure, and efficiency levels of licensees.
iii. Extra-Ordinary review: This is an unscheduled review prompted by events that substantially impact the operations of licensees such as natural disasters, economic crises/recession, significant policy shifts, etc.

4.3 Orders

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. Orders issued to licensees are situational and immediate in their impact and compliance. The Commission issued one hundred and sixty-seven (167) Orders to licensees in 2024. The summary of the Orders issued by the Commission in 2024 is provided below:

A. NERC/2024/001 – Order on the Regulatory Intervention in Kaduna Electricity Distribution Plc. The Order became effective on 01 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 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 via 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 60% of the shares in the undertaking to a new core investor.

B. NERC/2023/023 – NERC/2023/033 – Multi-Year Tariff Order (MYTO) 2024 for the Distribution Companies (11 Orders issued to 11 DisCos). The Orders became effective on 01 January 2024 and sought to;

i. Ensure that prices charged by DisCos are fair to customers and are sufficient to allow DisCos 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 the 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. Consequently, starting March

2024, the Commission issued monthly MYTO supplementary Orders to the DisCo to adjust their tariffs in response to changes in macroeconomic indices[8].

C. 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

[8] The Commission issued a total of one hundred and ten (110) MYTO Supplementary Orders to DisCos in 2024. The Orders 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. However, due to the subsistence of the policy direction of the FGN on electricity subsidy, which mandates that tariffs for Band B-E customer categories shall remain frozen at the rates payable in December 2022, subject to further policy direction by the government, only customers in Band A experienced any change in their tariffs between May and July 2024. Furthermore, all end-use customer tariffs remained unchanged between July and December 2024 in line with the subsistence of the policy direction of the FGN on electricity subsidy which mandates a freeze on tariffs across all bands (A-E) at rates payable in July 2024.

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.

D. NERC/2023/035 – Order on Performance Improvement Plan of the Transmission Company of Nigeria. The Order became effective on 01 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 were 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 specified specific major output targets for the TCN. These included;

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.

E. NERC/2024/004 – NERC/2024/014 – Order on Non-Compliance with Capping of Estimated Bill by DisCos for the period January – September 2023 (11 Orders issued to 11 DisCos). The Order became effective on 12 February 2024 with 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 during the February 2024 billing cycle and issue credit adjustments for customers who were overbilled between January and September 2023. In addition, a deduction of 10% of the naira value of the total overbilling for the period was applied to DisCos' annual operating expenses over 12 months. The summary of credit adjustments and regulatory sanctions for the DisCos is contained in Table 4.1.

Table 4.1: DisCos' Credit Adjustments and Regulatory Sanction

DisCos	No. of Overbilled Customers	Credit Adjustments (₦'Million)	DisCo OpEx 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
Total	2,021,913	105,052.86	10,505.28

F. NERC/2024/039 – Transfer of Regulatory Oversight of the Electricity Market in Enugu State from the Nigerian Electricity Regulatory Commission to the Enugu State Electricity Regulatory Commission (EERC). The Order became effective on 01 May 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Enugu State from the Commission to EERC in accordance with the Constitution of the Federal Republic of Nigeria (CFRN) and EA.

ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Enugu State from the Commission to EERC in accordance with the CFRN and the EA.

iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Enugu State from the Commission to EERC.

The Order mandated Enugu Electricity Distribution Company (EEDC) to incorporate, within 60 days, a subsidiary under the Companies and Allied Matters Act (CAMA) for the assumption of its responsibilities for intrastate supply and distribution of electricity in Enugu State.

G. NERC/2024/040 – Order on the Deregulation of Meter Prices for Meters Deployed under the Meter Asset Provider Scheme. The Order became effective on 01 May 2024 and sought to deregulate the prices of meters deployed under the MAP scheme.

The Order provides that prices of meters under the MAP scheme shall be determined through a competitive bidding process, and customers will be provided with a choice of authorised meter vendors. The Order provided for the following meter to be deployed under the MAP scheme - basic electronic meters, Internet of Things (IoT) meters, DIN Rail meters. Current Limiters are also allowed by the Order but are subject to full compliance with the NESI Metering Code and the requirements/specifications of the DisCos.

H. NERC/2024/041 and NERC/2024/042 – Transfer of Regulatory Oversight of the Electricity Market in Ekiti State from the Nigerian Electricity Regulatory Commission to the Ekiti State Electricity Regulatory Bureau (EERB). The Orders became effective on 01 May 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Ekiti State from the Commission to EERB in accordance with the CFRN and EA.
ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Ekiti State from the Commission to EERB in accordance with the CFRN and the EA.
iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Ekiti State from the Commission to EERB.

The Orders mandated Benin Electricity Distribution Company (NERC/2024/041) and Ibadan Electricity Distribution PLC (NERC/2024/042) to incorporate within 60 days, a subsidiary each under the CAMA for the assumption of responsibilities for intrastate supply and distribution of electricity in their respective franchise areas in Ekiti State.

I. NERC/2024/043 – Transfer of Regulatory Oversight of the Electricity Market in Ondo State from the Nigerian Electricity Regulatory Commission to the Ondo State Electricity Regulatory Bureau (OSERB). The Order became effective on 01 May 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Ondo State from the Commission to OSERB in accordance with the CFRN and EA.

ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Ondo State from the Commission to OSERB in accordance with the CFRN and the EA.

iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Ondo State from the Commission to OSERB.

The Order mandated Benin Electricity Distribution Company (BEDC) to incorporate, within 60 days, a subsidiary under the CAMA for the assumption of its responsibilities for intrastate supply and distribution of electricity in Ondo State.

J. NERC/2024/044 – NESI Interim Order on Transmission System Dispatch Operations, Cross-Border Supply and Related Matters 2024. The Order became effective on 01 May 2024 and sought to;

i. Serve as an interim measure to guide the operations of the System Operator (SO) and the TCN to implement SOPs, operational support tools and other requirements to improve transparency and fairness of grid operations in delivering better services to all customers of the transmission system.

ii. Place interim caps on capacities supplied to international customers for 6 months from the effective date of the Order, thus minimising the displacement and impact on domestic supply obligations by GenCos and overall risks to the Nigerian Electricity Market, even when there is a limitation in generation.

Following the implementation of the April 2024 Supplementary MYT Order, the Commission observed the sub-optimal grid dispatch operation which

compromised DisCo's ability to deliver on the SBT committed service levels. The Commission noted the SO's practice of managing generation availability by limiting DisCos' load offtake/allocation while prioritising international off-takers and eligible customers. This Order thus sought to ensure an equitable adjustment to load allocation for all off-takers (DisCos, international customers and eligible customers) in the event of a drop in generation and other grid imbalance situations.

K. NERC/2024/045 – Order on the Establishment of the Independent System Operator (ISO). The Order became effective on 01 May 2024 with the following objectives;

i. Ensure compliance with the provisions of the EA on the incorporation of the ISO.
ii. Provide clear directives on the timelines for the incorporation of the ISO.
iii. Outline the procedure for the transfer of the assets and liabilities of the market and system operations portion of the business that currently vests in the TCN to the ISO.

The Order mandated the Bureau of Public Enterprises (BPE) to incorporate a private company limited by shares to carry out market and system operation functions stipulated in the EA. The Order specified that the name of the company shall be the Nigerian Independent System Operator of Nigeria Limited (NISO) and it will be responsible for managing all assets and liabilities pertaining to market and system operation as well as carry out all market and system operation-related contractual rights and obligations novated to it by the TCN. The Order further stated that the initial subscribers to the NISO shall be the BPE and the Ministry of Finance Incorporated (MOFI).

L. NERC/2024/072 – Order on the Operationalisation of Tranche A of the Meter Acquisition Fund (MAF). The Order became effective on 24 June 2024 with the following objectives;

i. Provide a transparent and functional framework for operationalising the first tranche of metering under the MAF scheme.
ii. Provide the eligibility conditions for access to the first tranche of funding under MAF.
iii. Provide the terms of payment, monitoring and evaluation, and other conditions for manufacturers and MAPs participating in the scheme.

The Order provided that DisCos shall utilise the first tranche of disbursement from the MAF scheme based on contributions made by DisCos as of the April 2024 market settlement to procure and install meters for unmetered Band A customers within their franchise areas. The Order also specified the reporting requirements of the various parties to the Commission with respect to the operationalisation of the MAF (Table 4.2).

Table 4.2: Reporting requirements on the Operationalisation of MAF

Reporting Party	Type of Report	Frequency	Receiving Party
Fund Manager (FM)	Fund Performance Report	Quarterly	NERC
	Risk Management Report	One-off	NERC
DisCo	Meter Deployment Plan	One-off	NERC/FM
	Monthly Meter Deployment Report	Monthly	NERC/FM
MAPs/LMMAs	Meter Installation Report	Weekly	DisCo/FM/NERC

LMMAs - Local meter manufacturer or assembler

M. NERC/2024/073 – Transfer of Regulatory Oversight of the Electricity Market in Imo State from the Nigerian Electricity Regulatory Commission to the Imo State Electricity Regulatory Commission (ISERC). The Order became effective on 01 July 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Imo State from the Commission to ISERC in accordance with the CFRN and EA.
ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Imo State from the Commission to ISERC in accordance with the CFRN and the EA.
iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Imo State from the Commission to ISERC.

The Order mandated EEDC to incorporate within 60 days a subsidiary under the CAMA for the assumption of its responsibilities for intrastate supply and distribution of electricity in Imo State.

N. NERC/2024/086 – NERC/2024/096 - Order on Performance Monitoring Framework for the Distribution Companies (11 Orders issued to 11 DisCos). The Order became effective on 08 July 2024 and specifies seven (7) Key Performance Indicators (KPIs)[9] on which the management of DisCos shall be assessed by the Commission. The objectives of the Order include;

[9] i) Energy off-take relative to Partial Contracted Capacity (PCC), ii) Revenue recovery rate, iii) Compliance with reporting of Uniform System of Account (USoA), iv) Compliance with API feeder streaming, v) Compliance with the Order on capping of estimated bills, vi) Compliance with the implementation of forum decisions, vii)

i. Hold the top management of DisCos accountable for compliance with reporting requirements and implementation of directives of the Commission in line with the terms and conditions of their licenses.
ii. Drive increased operational performance across the DisCos, thereby improving energy delivery to customers.
iii. Drive DisCos towards achieving customer-centric operations and enhanced efficiency, which will consequently boost customer satisfaction.
iv. Reinforce market discipline and ensure that DisCos' commercial performance sets them on the path of long-term financial sustainability.

The order provided that the top management of DisCos shall be accountable for achieving the KPIs and their performance shall be assessed periodically based on the review cycle for each KPI as contained in the Order. Furthermore, the Orders contain the consequential regulatory intervention which the Commission may exercise when a DisCo fails to comply with the targets set for each KPI.

O. NERC/2024/097 – Revised Order on the Transition Accounting Treatment of Tariff-Related Liabilities in the Financial Records of Market Participants - July 2024. The Order became effective on 05 July 2024, and the objectives include:

i. Ensure that no new tariff shortfall liability accrues in the financial records of DisCos.
ii. Completely remove the encumbrances relating to tariff shortfall liabilities in the books of DisCos to improve their creditworthiness for the purpose of raising capital towards the improvement of electricity networks and service delivery.

Compliance with service standards for the resolution of complaints received through the NERC contact centre and NERC headquarters

iii. Re-affirm the list of funding sources available to NBET and authorise NBET to issue credit notes to DisCos against payments made to GenCos covering tariff shortfall liabilities to include funds provided under various sources[10].

Over the years, the incidence of non-cost reflective tariffs in the NESI has resulted in the accumulation of tariff shortfall liabilities in the financial records of DisCos thereby eroding their creditworthiness. Tariff-related revenue shortfalls represent the policy cost of providing subsidies to customers as defined by the FGN. The continued recognition of this FGN obligation as liabilities in the financial records of DisCos is therefore considered inappropriate under the current market structure. The Order provides that NBET shall invoice DisCos for the approved "DisCos' Remittance Obligation" (DRO) as the full and final energy invoice to the DisCos on a monthly basis and record the applicable tariff shortfall portion of the monthly generation invoices as a receivable from the FGN.

P. NERC/2024/058 – Order on the Transition to Bilateral Trading in the NESI. The Order became effective on 25 July 2024 and was driven by the recognition that the global best practice for bulk energy trading involves the execution of fully effective PPAs between GenCos and DisCos. The PPAs are backed by effective fuel supply agreements and bank guarantees to cover payment obligations to ensure an electricity market with certainty in performance obligations. The objectives of the Order include:

i. Steer the electricity market towards bilateral contracting for energy and capacity between generation and/or trading licensees with distribution

[10] i) Payment Assurance Facility or other funding sources in the PSRP financing plan; ii) Direct budgetary appropriation to NBET; iii) Payments made by the Federal Ministry of Finance (FMoF) to GenCos for the purpose of settling NBET's obligation arising from shortfall; iv) Other payments by FMoF from other miscellaneous sources; v) Payments made by NBET from any other source not explicitly listed in the Order

licensees thus limiting the fiscal exposure of the Federal Government to market risks.

ii. Foster a more competitive market structure as envisioned by the EA by repositioning NBET from its current role as the sole bulk electricity trader in the NESI.

iii. Transition the contractual framework for bulk energy trading in the NESI to "take-or-pay" contracts thereby fostering increased certainty and market discipline among market participants.

iv. Allow DisCos to explore opportunities for increased optimisation/firming up of their wholesale energy offtake, and a reduction of their vesting contract capacity with NBET for take-and-pay PPAs, thus providing certainty of availability of generation and improvement in quality of supply to end-users.

Q. NERC/2024/002 – Order on the Nomenclature of Generating Plants. The Order became effective on 01 August 2024 and was developed to standardise the naming convention of all licensed generation licensees in the NESI. The Order specified the names by which generation licensees shall be identified in all formal records by the SO. The objectives of the Order include;

i. Establish a clear and standardised methodology to identify different power-generating plants to make it easier for stakeholders, including utility companies, grid operators, and the public to recognise and distinguish between various types of power plants.

ii. Achieve standardisation in the nomenclature of generation assets within the NESI to allow for easy identification and network data reporting.

iii. Develop a naming convention that can be seamlessly deployed into the Supervisory Control and Data Acquisition (SCADA) platform, thereby enhancing the safety and efficiency of operations in NESI.

iv. Ensure the alignment of references by operators in the industry and enhance the safe operation of the transmission network with all apparatus connected to the grid.

R. NERC/2024/110 – Transfer of Regulatory Oversight of the Electricity Market in Oyo State from the Nigerian Electricity Regulatory Commission to the Oyo State Electricity Regulatory Commission (OSERC). The Order became effective on 06 August 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Oyo State from the Commission to OSERC in accordance with the Constitution of the Federal Republic of Nigeria (CFRN) and EA.

ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Oyo State from the Commission to OSERC in accordance with the CFRN and the EA.

iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Oyo State from the Commission to OSERC.

The Order mandated Ibadan Electricity Distribution Plc (IBEDC) to incorporate within 60 days, a subsidiary under the CAMA for the assumption of responsibilities for intrastate supply and distribution of electricity in Oyo State.

S. NERC/2024/111 – Transfer of Regulatory Oversight of the Electricity Market in Edo State from the Nigerian Electricity Regulatory Commission to the Edo State

Electricity Regulatory Commission (ESERC). The Order became effective on 21 August 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Edo State from the Commission to ESERC in accordance with the CFRN and EA.
ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Edo State from the Commission to ESERC in accordance with the CFRN and the EA.
iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Edo State from the Commission to ESERC.

The Order mandated Benin Electricity Distribution Plc (BEDC) to incorporate within 60 days, a subsidiary under the CAMA for the assumption of its responsibilities for intrastate supply and distribution of electricity in Edo State.

T. NERC/2024/125 – Transfer of Regulatory Oversight of the Electricity Market in Kogi State from the Nigerian Electricity Regulatory Commission to the Kogi State Electricity Regulatory Commission (KSERC). The Order became effective on 13 September 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Kogi State from the Commission to KSERC in accordance with the CFRN and EA.
ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Kogi State from the Commission to KSERC in accordance with the CFRN and the EA.

iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Kogi State from the Commission to KSERC.

The Order mandated Abuja Electricity Distribution Plc (AEDC) to incorporate within 60 days, a subsidiary under the CAMA for the assumption of its responsibilities for intrastate supply and distribution of electricity in Kogi State.

U. NERC/2024/112 and NERC/2024/113 – Transfer of Regulatory Oversight of the Electricity Market in Lagos State from the Nigerian Electricity Regulatory Commission to the Lagos State Electricity Regulatory Commission (LASERC). The Orders became effective on 05 December, 2024 with the following objectives:

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Lagos State from the Commission to LASERC in accordance with the CFRN and EA.
ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Lagos State from the Commission to LASERC in accordance with the CFRN and the EA.
iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Lagos State from the Commission to LASERC.

The Orders mandated Eko Electricity Distribution Plc (NERC/2024/112) and Ikeja Electric Plc (NERC/2024/113) to each incorporate within 60 days, a subsidiary under the CAMA for the assumption of the responsibilities for intrastate supply and distribution of electricity in their respective franchise areas in Lagos State.

V. NERC/2024/162 – Addendum -1 to the Order on Performance Monitoring Framework for Distribution Companies July 2024. The Order became effective on 23 December 2024 and has the following objectives:

i. Improve regulatory efficiency by aligning the frequency of KPI evaluations with data availability, ensuring timely and effective interventions.
ii. Enhance compliance and enforcement measures by refining the regulatory framework to support DisCos in achieving performance targets.

The Commission noted that the evaluation of compliance with two (2) Key Performance Indicators (Energy offtake relative to PCC and Compliance with Reporting of Uniform System of Accounts) is dependent on data which are available only at the end of the market cycle which may delay the implementation of consequential regulatory interventions. Thus, this order sought to adjust the evaluation frequency and the associated consequential regulatory interventions for non-compliance with the aforementioned KPIs.

W. NERC/2024/163, NERC/2024/164 and NERC/2024/165 – Transfer of Regulatory Oversight of the Electricity Market in Ogun State from the Nigerian Electricity Regulatory Commission to the Ogun State Electricity Regulatory Commission (OGERC). The Orders became effective on 24 December 2024 with the following objectives;

i. Commence the process of the transfer of regulatory oversight for the intrastate electricity market in Ogun State from the Commission to OGERC in accordance with the CFRN and EA.

ii. Provide a transition plan for the transfer of regulatory oversight for the intrastate electricity market in Ogun State from the Commission to OGERC in accordance with the CFRN and the EA.

iii. Address ensuing transitional matters arising from the transfer of regulatory oversight for the intrastate electricity market in Ogun State from the Commission to OGERC.

The Orders mandated Eko Electricity Distribution Company (NERC/2024/163), Ikeja Electric Plc (NERC/2024/164) and Ibadan Electricity Distribution Company (NERC/2024/165) to each incorporate within 60 days, a subsidiary under the CAMA for the assumption of the responsibilities for intrastate supply and distribution of electricity in their respective franchise areas in Ogun State.

4.4 Directives

Regulatory directives issued by the Commission are designed to ensure compliance with laws, policies, and regulations within the NESI. In 2024, the Commission issued one (1) directive, as detailed below:

A. NERC/2024/003 – Directive to Independent System Operator for the utilisation of Zungeru Hydro Electricity Generation Company Limited for managing grid imbalances caused by insufficient generation. The directive was to be effective from 16 May 2024 until 31 August 2024.

The Directive was issued further to the Commission's Order on the Transmission System Dispatch Operation, Cross-Border Supply and Related Matters (NERC/2024/044) and in the overriding public interest of ensuring continuous improvement in electricity supply to Nigerians. The Directive was issued to ensure that the Zungeru power plant continued to inject power onto the National

grid pending the finalisation of its long-term contractual arrangements with prospective off-takers.

4.5 Licensing

Section 63 (1) of the EA 2023 states that *"without prejudice to the right of the States of the Federation to make laws and establish markets for the generation, transmission, system operation, distribution and supply of electricity within their respective territories, no person, except in accordance with a licence issued pursuant to the provisions of this Act or deemed to have been issued under section 213 (b) or as provided under this Act, shall construct, own, operate an undertaking other than an undertaking specified under subsection (2) of this section, or in any way engage in the business of: "*

A. Electricity generation, excluding captive generation
B. Electricity transmission
C. Electricity distribution
D. Electricity supply
E. Electricity trading
F. System operation

The Commission as empowered by the EA 2023 regulates activities in the NESI and grants licences for electricity generation, transmission, distribution, trading and system operations in the NESI. The various types of licences granted by the Commission include:

A. Generation Licence: This type of licence grants the holder the right to construct, own, operate and maintain a generation station for the generation and supply of electricity. The holder of a generation licence can sell electricity and ancillary services to approved licensees including electricity trading companies, distribution

companies, eligible customers, single buyers etc. There are three (3) types of generation licences:

i. On-grid electricity licence: This licence allows the holder to generate electricity and connect to the national grid for sale to any of the licensee groups provided for in the Act. The holder is required to enter into a connection agreement with the Transmission Company of Nigeria.
ii. Embedded generation licence: This licence grants the licensee the right to electricity generation and evacuation through an existing distribution facility system or an independent distribution licensee. The embedded generator licensee is required to enter into a power purchase agreement with an electricity distribution licensee (DisCo), or the operator of an independent electricity distribution network. Unlike grid-connected generators, energy from embedded generation plants is evacuated at 33kV or lower.
iii. Off-grid electricity generation licence: This authorises a licensee to generate and sell power to a single buyer (or community) without connection to the national grid.

As of December 2024, the total nameplate capacity of the thirty (30) operational grid-connected power plants licensed by the Commission was 14,039MW. Five (5) out of the thirty (30) power plants are hydropower plants while the remaining are gas-fired thermal plants. Further details about the licenced grid-connected power plants are contained in Table 4.3.

Table 4.3: Details of licenced grid-connected Power Plant as of December 2024

SN	Old Plant Name	New Plant Name	Location	Ownership [11]	Turbine Type[12]	Installed Capacity (MW)	Fuel Type
1	AES	AES_1	Lagos	IPP	OC	294	Gas
2	Afam IV-V	Afam_1	Rivers	Privatised	OC	726	Gas
3	Afam VI	Afam_2	Rivers	IPP	CC	650	Gas
4	Alaoji	Alaoji_1	Abia	NIPP	CC	500	Gas
5	Azura IPP	Ihovbor_2	Benin	IPP	OC	461	Gas
6	Odukpani	Odukpani_1	Cross River	NIPP	OC	625	Gas
7	Egbin	Egbin_1	Lagos	Privatised	GS	1,320	Gas
8	Geregu	Geregu_1	Kogi	Privatised	OC	435	Gas
9	Geregu NIPP	Geregu_2	Kogi	NIPP	OC	435	Gas
10	Ibom Power	Ibom Power_1	Akwa Ibom	IPP	OC	190	Gas
11	Ihovbor NIPP	Ihovbor_1	Edo	NIPP	OC	500	Gas
12	Okpai	Okpai_1	Delta	IPP	CC	480	Gas
13	Olorunsogo	Olorunsogo_1	Ogun	Privatised	OC	335	Gas
14	Olorunsogo NIPP	Olorunsogo_2	Ogun	NIPP	CC	750	Gas
15	Omoku	Omoku_1	Rivers	IPP	OC	150	Gas
16	Gbarain	Gbarain_1	Rivers	NIPP	OC	120	Gas
17	Omotosho	Omotosho_1	Ondo	Privatised	OC	335	Gas
18	Omotosho NIPP	Omotosho_2	Ondo	NIPP	OC	500	Gas
19	Sapele ST	Sapele Steam_1	Delta	Privatised	GS	720	Gas
20	Sapele GT NIPP	Sapele_2	Delta	NIPP	OC	500	Gas
21	Delta Gas	Delta_1	Delta	Privatised	OC	900	Gas
22	Trans Amadi	Trans Amadi_1	Rivers	IPP	OC	100	Gas
23	Rivers IPP	Rivers_1	Rivers	IPP	OC	180	Gas
24	Paras	Ikeja_1	Ogun	IPP	OC	110	Gas
25	Taopex	Igbafo_1	Lagos	IPP	GS	45	Gas
26	Kainji	Kainji_1	Niger	Concession	HT	760	Hydro
27	Jebba	Jebba_1	Niger	Concession	HT	578	Hydro
28	Shiroro	Shiroro_1	Niger	Concession	HT	600	Hydro
29	Dadinkowa	Dadin-Kowa_1	Gombe	Concession	HT	40	Hydro
30	Zungeru	Zungeru_1	Niger	Concession	HT	700	Hydro

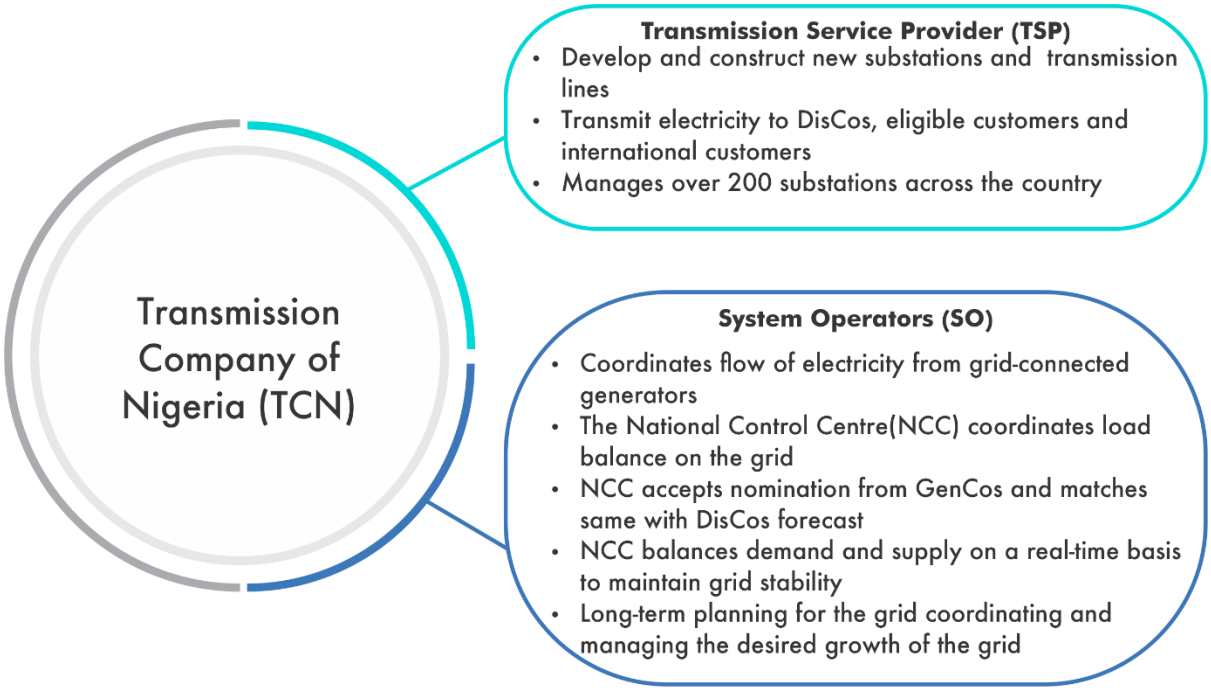
B. Transmission Licence: This licence is granted for the construction, operation and maintenance of transmission systems within Nigeria, or that connects Nigeria with a

[11] NIPP (Nigerian National Integrated Power Project) refers to plants that were built and are operated by the Niger Delta Power Holding Company (NDPHC) on behalf of the Federation. IPP are a combination of projects developed by either private companies or singular government institutions (Federal Ministry of Power or individual state government). All IPPs are currently operated by private companies.

[12] OC is open cycle gas turbine, CC closed cycle gas turbine, GS is gas-fired steam turbine, and HT is hydro turbine.

neighbouring country at a voltage above 33kV. The Transmission Company of Nigeria (TCN) has the responsibility of transporting energy from power plants to DisCos and International customers and currently holds two licences; Transmission Service Provider (TSP) and System Operator (SO). The TSP owns and maintains the transmission infrastructure.

C. System Operator: The SO is responsible for maintaining system stability, load balance, load dispatch and undertaking market operations responsibilities.



Pursuant to Section 15 of the EA 2023, which provides for the incorporation of an entity to be licensed as an ISO to perform the market and system operation functions of the TCN, the Commission through the Order on the Establishment of the Independent System Operator (NERC/2024/45) unbundled the TCN into two entities; the Nigerian Independent System Operator Nigeria Limited (NISO) and the Transmission Service Provider (TSP). This unbundling is intended to enhance efficiency, reliability and transparency in the transmission sub-sector of the NESI.

D. Distribution Licence: A distribution licence holder is permitted to construct, operate and maintain a network operable at 33kV or lower to distribute electricity from grid supply points to the point of delivery to consumers or eligible customers. The licence authorises the holder to carry out installation, maintenance and reading of electricity meters as well as billing and collection of bills. The details of distribution licensees as of December 2024 are given in Table 4.4.

Table 4.4: Electricity Distribution Licensees (DisCos) in the NESI

S/N	DisCo	Franchise area (State/LG[13])
1	Aba Power (APLE)	Abia (Aba ring-fenced area -*Aba North, Aba South, Osisioma Ngwa, Obingwa, Ugwunagbo, Ukwa East, Ukwa West, Isiala Ngwa North, Isiala Ngwa South)*
2	Abuja (AEDC)	FCT, Niger, Kogi, Nasarawa
3	Benin (BEDC)	Edo, Delta, Ondo, Ekiti (*Ado-Ekiti, Ikogosi Ekiti, Ipole-Iloro Ekiti*)
4	Eko (EKEDP)	Lagos (*Apapa, Festac, Ijora, Lekki, Ibeju, Ojo, Orile, Mushin, Victoria Island, Ikoyi*)
5	Enugu (EEDC)	Enugu, Abia, Imo, Anambra, Ebonyi
6	Ibadan (IBEDC)	Oyo, Ogun, Osun, Kwara,
7	Ikeja (IE)	Lagos (*Abule-Egba, Akowonjo, Ikeja, Ikorodu, Oshodi, Amuwo Odofin, Igando, Magodo, Ajao, Ijegun, Oke-afa, Shomolu*)
8	Jos (JED)	Plateau, Bauchi, Benue, Gombe
9	Kaduna (KAEDC)	Kaduna, Sokoto, Kebbi, Zamfara
10	Kano (KEDCO)	Kano, Jigawa, Katsina
11	Port Harcourt (PHED)	Rivers, Cross River, Bayelsa, Akwa Ibom
12	Yola (YEDC)	Yola, Adamawa, Borno, Taraba, Yobe

Pursuant to the provisions of the EA 2023, and detailed above, the Commission has issued orders transferring the regulatory oversight of nine (9) states to the state electricity regulatory commissions/bureaus (SERC/SERB). The list of the SERC/SERBs that had been created as at 31 December 2024 is contained in Table 4.5.

[13] Local governments – LGs are written in italics

Table 4.5: Approved State Electricity Regulatory Bodies in the NESI

SN	State	New Electricity Regulator	DisCo(s) with operations within the State
1	Enugu	Enugu State Electricity Regulatory Commission	Enugu DisCo
2	Ekiti	Ekiti State Electricity Regulatory Bureau	Benin DisCo Ibadan DisCo
3	Ondo	Ondo State Electricity Regulatory Bureau	Benin DisCo
4	Imo	Imo State Electricity Regulatory Commission	Enugu DisCo
5	Oyo	Oyo State Electricity Regulatory Commission	Ibadan DisCo
6	Edo	Edo State Electricity Regulatory Commission	Benin DisCo
7	Kogi	Kogi State Electricity Regulatory Commission	Abuja DisCo
8	Lagos	Lagos State Electricity Regulatory Commission	Eko DisCo Ikeja DisCo
9	Ogun	Ogun State Electricity Regulatory Commission	Eko DisCo Ikeja DisCo Ibadan DisCo

E. Trading Licence: A trading licence grants the holder the authority to purchase, resell and trade electricity and ancillary services from independent power producers and generation companies. All contracts for the purchase of electrical power and ancillary services by the trading licensee must be concluded in an open, transparent and competitive manner and in accordance with the procedure established by the Commission. In 2024, the Commission approved the renewal of a three-year licence for the Nigerian Bulk Electricity Trading Plc and issued new trading licences to nine (9) companies (Table 4.6). All the trading licences were issued pursuant to the Commission's commitment to transition the Nigerian electricity market into bilateral wholesale energy trading in compliance with the provisions of the EA 2023.

Table 4.6: Trading Licences issued in 2024

SN	Trading Licensee	Date of Issuance
1	Watts Exchange Limited	10 January 2024
2	Centum Dopemu Energy Services Limited	10 January 2024
3	DMD Electric Limited	23 February 2024
4	Golden Triangle Electric Power Solutions Company Limited	26 June 2024
5	Damcrest Energy Limited	10 July 2024
6	Zenith Point Limited	07 October 2024
7	Capstone Energies Limited	25 September 2024
8	Ecovolt Trade Limited	23 October 2024
9	Tendon Innovation Limited	23 October 2024

4.6 Permits and Certifications

There are some activities which the EA 2023 does not explicitly grant the Commission licencing powers but which still require regulatory oversight. In line with international best practices, the Commission issues permits or certificates to eligible companies/institutions to participate in those activities. The key activities for which the Commission issues permits or certificates are:

A. Captive Power Generation: The Commission issues captive power generation permits to entities that aim to own and maintain power plants for generating power for their use and not for sale to a third party.
B. Mini-grid: The Commission issues permits to mini-grid developers for the construction, operation, maintenance, and where applicable ownership of mini-grids with distribution capacity above 100kW and generation capacity up to 1MW. For systems with a distribution capacity below 100kW, the Commission issues a registration certificate to the mini-grid developer.
C. Meter Asset Provider (MAP): A 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.

D. Meter Service Provider (MSP): An MSP is an entity certified by the Commission as a manufacturer, supplier, vendor, or installer of electric energy meters and/or metering systems.

The summary of licences, permits and certifications issued by the Commission in 2024 is contained in Table 4.7 and full details of the licensees are contained in Appendix B.1 – B.4.

Table 4.7: Licenses, Permits and Certifications Issued by the Commission in 2024

SN	Licence/Permit	Number
1	On-grid generation	3
2	Off-grid generation	22
3	System Operator	1
4	Trading Licence	9
5	Captive power	24
6	Mini-grid registration certificates	7
7	Mini-grid permits	27
8	Meter service providers	36
9	MAP permit	39
	Total	168

4.7 Compliance Monitoring and Enforcement

Section 34(2)(f) of the EA 2023 specifies the powers of the Commission to "*monitor the operation of the electricity markets and sanction licensees in deserving circumstances in accordance with the provisions of this Act and other subsidiary legislation*". Furthermore, Section 64(1) of the Act states that "*A licensee shall comply with the provisions of its licence, regulations, codes, orders and other requirements issued by the Commission from time to time*".

Pursuant to these provisions, the Commission carried out enforcement actions against licensees during the year for violations of rules and infractions against other instruments in the NESI. The primary enforcement mechanisms used by the Commission include:

A. Notice to Commence Enforcement (NICE): this is a formal communication to a licensee informing them of the Commission's intention to commence enforcement proceedings arising from their non-compliance with instructions issued by the Commission. The issuance of NICE is pursuant to the provisions of section 76(1) of the EA 2023.
B. Rectification Directives: this is an Order or instruction to correct a mistake, submission or omission that ought to be done.
C. Penalties: refers to a sanction or punishment imposed for violating a law, contract, rule, or regulation.
D. Administrative fines: These are financial sanctions imposed by the Commission to deter undesirable behaviour and encourage compliance.

The summary of the various enforcement actions by the Commission in 2024 is contained in Table 4.8. As part of the effort to enforce compliance with all its regulatory instruments, codes and standards in the NESI, the Commission held peer review meetings with the compliance and regulatory officers of licensees during the year 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.

Table 4.8: Summary of enforcement actions carried out by the Commission in 2024

S/N	Rectification Directive/(NICE)/Fines	Licensee	Date Issued	Deadline
	Rectification Directives			
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
6	Failure to submit the Annual Compliance Report on the 2023 Outage Scheduling Programme	TCN	19 April 2024	03 May 2024
7	Failure to replace faulty prepaid meter	Abuja DisCo	28 March 2024	04 April 2024
8	Directive to reconcile the difference in the amount owed by a customer	Abuja DisCo	07 May 2024	21 May 2024
9	Non-metering of Maximum Demand (MD) customers and estimated billing of MD customers	All DisCos except Kaduna and Kano	31 May 2024	14 June 2024
10	Non-compliance with the Commission's directives regarding Angwan Magaji Community	Abuja DisCo	08 May 2024	22 May 2024
11	Failure to meter 15 customers within the prescribed 10-day period after payment	IBEDC	20 August 2024	03 September 2024
12	Failure to file audited financial statements	Various off-grid licensees[14]	30 August 2024	13 September 2024

[14] The licensees include ABV Utility Limited, African Oxygen & Industrial Gases Limited, Aggreko Projects Limited, Ariaria IPP Limited, Babcock consulting Limited, Bayshore Technologies Limited, Central Electricity & Utilities Limited, CET Power Projects Limited, CKS Power Nigeria Limited, Constant Independent Electric Power Distribution Company, Contour Global Solutions (Nig.) Limited, CPGN Limited, Cross-boundary energy Nigeria Limited, Daybreak Power Solutions Limited, Eko utilities limited, Elektron Energy, Energy Company of Nigeria Plc., Gateway Electricity Limited, GEL Utility Limited, Genco Atlantic power Company Limited, Geometric, Power Aba Limited, Green Energy International Limited, Hamakang Global Services Limited, Haske Solar Company Limited, Ibom Utility Company Limited, Income Electrix Limited, Isolo Power Gen Limited, Kano Hydro & Energy, Development Company Limited, Konexa Solar 1 limited, Ladol Integrated logistics, Freezone Enterprise, LBL Power & Gas Company Limited, MBH Power Limited, Notore Power & Infrastructure Limited, Otakikpo Independent electricity, Distribution Company, Pulkit Powers Limited, PZ Power Company Limited, Quest Oil & Engineering Services limited, Shoreline Power Company Limited, Tofu Energy & Power Company Nigeria Limited, Tower Power utility Limited, Unipower Agbara Limited, Uraga Power Distribution Company Limited, Viathan Engineering Limited, Wedotebary Nigeria Limited, Westcom Tech. & Energy Services Limited.

S/N	Rectification Directive/(NICE)/Fines	Licensee	Date Issued	Deadline
13	Failure to adequately show compliance with post-incident remedial actions directed by the Commission	TCN	09 September 2024	23 September 2024
14	Failure to submit 2024/Q2 accident prevention/reduction strategy	EKEDC, Nigerian Agip Oil Company Limited, Shell Petroleum Development Company Limited	18 September 2024	25 September 2024
15	Non-compliance with forum decision	Ikeja DisCo	06 September 2024	13 September 2024
16	Non-compliance with the Commission's decision regarding the complaint by KYC estate	Abuja DisCo	24 September 2024	30 September 2024
17	Non-compliance with Eko forum ruling in complaint No: EFO/5770/2024	Eko DisCo	20 December 2024	27 December 2024
18	Non-compliance with MAP and NMMP Regulations	Eko DisCo	20 December 2024	03 January 2025
19	Non-compliance with capping of estimated bills	Enugu and Port Harcourt DisCos	20 November 2024	30 November 2024
20	Non-compliance with customer complaints resolution procedure	Eko and Ikeja DisCos	26 November 2024	06 December 2024
21	Non-compliance with resolution on appeal	Ibadan DisCo	26 November 2024	10 December 2024
22	Non-compliance with decision in customer complaints	Abuja DisCo	19 November 2024	26 November 2024
23	Non-compliance with forum decision in complaint No: AFO/2019/09/B460	Abuja DisCo	12 November 2024	19 November 2024
24	Non-compliance with forum decision in complaint No: AFO/2024/08/C233	Abuja DisCo	04 November 2024	11 November 2024
25	Non-compliance with forum decision in complaint No: NERC/SFO/01/24/223	Kaduna DisCo	01 November 2024	15 November 2024
26	Non-compliance with forum decision in complaint No: AFO/2024/09/C244	Abuja DisCo	11 October 2024	25 October 2024
27	Non-compliance with forum decision in complaint No: IFO/2024/06/10630	Ikeja DisCo	16 October 2024	30 October 2024
28	Non-compliance with directive on filing audited financial statements	Green Energy International Limited	10 October 2024	23 October 2024
	Notice of Intention to Commence Enforcement Action (NICE)			
29	Failure to file compliance returns	Wapsila Nigeria Limited	15 January 2024	29 January 2024
30	Failure to comply with the HSE Code and NESIS regulations	Abuja, Eko, Jos and Ikeja DisCos	03 April 2024	16 April 2024
31	Breach of Eligible Customer Regulations 2017	TCN	8 April 2024	22 April 2024

S/N	Rectification Directive/(NICE)/Fines	Licensee	Date Issued	Deadline
32	Failure to comply with forum decision in favour of New Haven Community	Abuja DisCo	05 April 2024	19 April 2024
33	Health and safety infractions	TCN	03 April 2024	17 April 2024
34	Non-compliance/ health and safety infractions	TCN	21 June 2024	5 July 2024
35	Non-compliance with the Commission's directives against bulk-billing	Enugu DisCo	13 September 2024	27 September 2024
36	Non-metering of MD customers	Port Harcourt and Enugu DisCos	08 July 2024	15 July 2024
37	Decommissioning of 7,319 meters without the Commission's prior consent	Ibadan DisCo	05 July 2024	19 July 2024
38	Health and safety infractions	Kano DisCo	20 August 2024	03 September 2024
39	Non-compliance with the Commission's post-incident recommendations	Enugu DisCo	09 September 2024	23 September 2024
40	Failure to submit reports on standardisation of network infrastructure for 2024/Q2	Enugu and Eko DisCos	30 August 2024	13 September 2024
41	Health and safety infractions	Ibadan DisCo	05 September 2024	19 September 2024
42	Non-compliance with the Commission's directives on faulty transformer replacement	Abuja DisCo	21 August 2024	05 September 2024
43	Non-compliance with the Commission's directives against bulk-billing	Eko DisCo	13 September 2024	27 September 2024
44	Health and safety infractions	Kano DisCo	11 September 2024	25 September 2024
45	Unauthorised supply of power	Obafemi Awolowo University	10 December 2024	24 December 2024
46	Failure to respond to Commission's request for update on resolution of complaint	Abuja DisCo	26 November 2024	10 December 2024
47	Non-compliance with forum ruling in KNF/NERC/24/04/0048	Kano DisCo	21 November 2024	05 December 2024
48	Non-compliance with the Account Administration Agreement	Kaduna DisCo	08 November 2024	22 December 2024
49	Non-compliance with directive on Principal Collection Accounts	Kaduna, Kano and Port Harcourt DisCos	08 November 2024	22 December 2024
50	Non-compliance with forum decision in AFO/2021/11/B856	Abuja DisCo	01 November 2024	15 December 2024
51	Non-compliance with NESIS regulation	Ibadan DisCo	04 October 2024	28 October 2024
52	Non-compliance with NESIS regulation	Ibadan DisCo	24 October 2024	07 November 2024
53	Non-compliance with the Commission's directive to file audited financial statements.	Green Energy International Limited	28 October 2024	11 November 2024

S/N	Rectification Directive/(NICE)/Fines	Licensee	Date Issued	Deadline
54	Non-compliance with NESIS regulation and HSE code	Yola DisCo	23 October 2024	06 November 2024
55	Non-compliance with Commission's directive in an appeal	Abuja DisCo	22 October 2024	05 November 2024
56	Non-compliance with NESIS regulation	Abuja DisCo	14 October 2024	28 October 2024
57	Non-compliance with the grid code	TCN	14 October 2024	28 October 2024
		Fines		
58	A fine of NGN2,250,000 and USD450,000 (or its naira equivalent) for partaking in the NESI without a licence	CCETC SUK Power Limited	03 April 2024	7 May 2025
59	A fine of NGN1,000,000 and USD200,000 (or its naira equivalent) for partaking in the NESI without a licence	SUK Distribution Company Limited	03 April 2024	7 May 2025
60	A fine of NGN200,000,000 for non-compliance with the supplementary Order to the April 2024 MYTO (NERC/2024/027)	Abuja DisCo	25 April 2024	31 July 2024

4.8 Hearings and Alternative Dispute Resolution among Market Participants

As part of the conditions of their licences, section 72(2)(c) of the EA requires licensees to *"refer disputes to the Commission for arbitration, mediation, or determination by the Commission and file appeal against the decisions of the Commission".* One of the ways by which the Commission performs this quasi-judicial role towards the resolution of disputes between stakeholders is through hearings. During the year, the Commission conducted hearings to consider the petitions filed by different stakeholders on issues pertaining to the provision and utilisation of electricity services. The list of the hearings conducted in 2024 is contained in Table 4.9.

Alternative Dispute Resolution (ADR) refers to the settlement process instituted by the Commission for the resolution of disputes that may arise among market participants. Section 42.3 of the Market Rule empowers the Commission to appoint a Dispute Resolution Counsellor (DRC) and constitute a Dispute Resolution Panel (DRP). Pursuant to the Market Rules, the Commission has constituted a DRP and appointed a DRC responsible for arbitrating or otherwise resolving disputes between

market participants. The DRP did not handle any disputes among industry stakeholders in 2024.

Table 4.9: Hearings conducted by the Commission in 2024

S/N	Parties	Petition	Date of Hearing
1	Enugu Electricity Distribution Company (EEDC), NERC	Petition against the Commission's Order (NERC/2024/006) on Non-compliance with the capping of estimated bills by EEDC	18 March 2024
2	Ikeja Electric (IE), NERC	Petition against the Order on Non-compliance with the capping of estimated bills by IE	19 March 2024
3	Eko Electricity Distribution Company Plc (EKEDP), NERC	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by EKEDP	19 March 2024
4	Benin Electricity Distribution Company (BEDC), NERC	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by BEDC	20 March 2024
5	Port Harcourt Distribution Company (PHED), NERC	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by PHED	20 March 2024
6	BEDC/OOSS/LECAN, Anyigba IEDN	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	11 March 2024
7	Eko Electricity Distribution Company Plc (EKEDP), MILL WATER	Petition by EKEDP against the grant of an Independent Electricity Distribution Network licence to MILLWATER Agbara Power Limited	11 March 2024
8	Ibadan Electricity Distribution Company (IBEDC), NERC	Petition for a Review of the Order on Non-compliance with Capping of estimated bills by IBEDC	30 May 2024
9	CCECC SUK Power Company & SUK Distribution Plc	Petition for a review of fines imposed by the commission for operating undertakings without requisite licensees	08 May 2024
10	Manufacturers Association of Nigeria	Petition for the reversal/indefinite suspension of the implementation of the new electricity tariff rate implemented in the Supplementary Multi-Year Tariff Order of 3rd April 2024 and 6th May 2024	23 May 2024
11	Ibadan DisCo	Petition for a review of April Supplementary Order to MYTO 2024 & non-compliance with the procedure for tariff review	30 May 2024
12	Ikeja Electric Plc, Eko Electricity Distribution Plc, Incorporated Trustees of Hotel Owners and Managers	Petition against the April and May 2024 Supplementary Orders to the Multi-Year Tariff Order	11 July 2024

S/N	Parties	Petition	Date of Hearing
13	Abuja Electricity Distribution Plc, Zeberced Quarry Limited, Mainstream Energy Services Limited, TCN	Petition filed by AEDC against Zeberced Quarry Limited to regularise its contractual relationship and pay for loss of revenue.	23 July 2024
14	Incorporated Trustees of Royal Garden Estate, Eko Electricity Distribution Company, Trojan Estates Limited, Solar Gardens Projects Limited	The Estate Association filed an application against bulk billing	07 August 2024
15	NBET	Hearing on NBET's application for renewal of its license	12 September 2024
16	Ibadan Electricity Distribution Company, Phoenix Steel Mills	Petition against the grant of eligible customer	15 September 2024
17	TCN	Hearing on grid disturbances	24 October 2024
18	Aba Power	Hearing on Rate Review	10 December 2024

Chapter Five:
Consumer Affairs and Stakeholder Engagements

5.1 Consumer Affairs

5.2 Stakeholder Engagements

5.1 Consumer Affairs

The Commission has developed various initiatives to ensure that electricity customers are aware of their rights and obligations and that customer service standards by licensees are consistent with international best practices. The main avenues of interface between the Commission and customers are:

A. Customer Education/Townhall Meetings
B. Customer complaints reporting channels

5.1.1 Consumer Education - Townhall Meetings

The customer education/townhall meetings are used to enlighten customers on the Commission's activities, regulatory instruments, customer rights and obligations, as well as facilitating swift resolution of complaints. These fora also provide avenues for the Commission to obtain feedback from customers which serve as input to the Commission in its decision-making process.

In 2024, nine (9) customer education/townhall meetings were held at different locations across the country (Table 5.1). These meetings were held in collaboration with other government agencies and development partners, including the Federal Competition and Consumer Protection Commission (FCCPC), National Orientation Agency (NOA) and United Kingdom Nigeria Infrastructure Advisory Facility (UKNIAF). During the meetings, discussions centered around several critical issues which include:

- Serviced Based Tariff (SBT) provisions
- Capping of estimated bills for unmetered customers
- Electricity customer rights and obligation
- Electricity customer redress mechanisms
- Unauthorised electricity access

- Metering frameworks and strategies by the Commission to ensure improved overall service delivery to customers.

Table 5.1: Town Hall Meetings held in 2024

S/N	Date	DisCo	Location
1	7 – 9 March 2024	Kano	Kano State
2	21 – 23 March 2024	Eko	Lagos State
3	19 March 2024*	Abuja	FCT
4	18 – 20 April 2024	Enugu	Enugu State
5	18 – 20 July 2024	Jos	Gombe State
6	08 – 10 August 2024	Port Harcourt	Cross River State
7	12 – 14 September 2024	Abuja	Kogi State
8	10 – 12 October 2024	Ibadan	Osun State
9	12 – 14 December 2024	Kaduna	Kaduna State

*The town hall meeting was organised by UKNIAF for customers of Abuja DisCo

A cross-section of participants at the town hall/customer complaints resolution meeting held in Lagos, March 2024

Commissioner of Consumer Affairs (NERC) with representatives from Eko DisCo at the town hall meeting held in Lagos, March 2024

A cross section of participants at the town hall/customer complaints resolution meeting held in Kano, March 2024

A cross-section of participants at the town hall/customer complaints resolution meeting held in Abuja, March 2024

A cross-section of participants at the town hall/customer complaints resolution meeting held in Enugu, April 2024

A cross-section of participants at the town hall/customer complaints resolution meeting held in Lokoja, September 2024.

A cross-section of participants at the town hall/complaints resolution meeting held in Kaduna, December 2024

5.1.2 Customer Complaints

Pursuant to section 34(2)(c) of the Electricity Act 2023 which empowers the Commission to *"establish appropriate consumer rights and obligations regarding the provision and use of electricity services"* in the NESI, the Commission issued the updated Customer Protection Regulation (CPR) in 2023. The updated CPR adequately highlights the standards and procedures for handling customer complaints in the NESI. Furthermore, the Regulation provides a clear process flow for efficient customer complaint resolution in the NESI. The process Error! Reference s ource not found.for customer complaint handling and resolution in the NESI is as follows:

i. Lodging a complaint: Customers must first lodge their complaints in writing or via email to the Customer Complaints Unit (CCU) of their respective Distribution Company (DisCo).
ii. Acknowledgement of Complaints: The CCU of the DisCos acknowledges receipt of the complaint within three (3) working days.
iii. Resolution by DisCos CCU: The DisCo's CCU is responsible for resolving the complaint within 15 working days. If the complaint requires more time, the

customer is notified within the initial 15 working days and every 15 days thereafter until the complaint is resolved.

iv. Escalation to Forum Office: If the customer is dissatisfied with the CCU's resolution, they can escalate the complaint to the nearest NERC Forum office under the DisCo's operational area. The Forum office reviews the complaint with the aim to resolve it within two months.

v. Escalation to NERC Head Office: If the customer is still not satisfied with the Forum office's resolution, they can escalate the complaint to the NERC head office. NERC reviews the complaint and the processes followed by the DisCo and Forum to arrive at a final decision.

This structured approach ensures that customer complaints are handled systematically and transparently, providing multiple levels of review to ensure fair resolution.

5.1.3 Complaints Reporting Channels

Pursuant to the provisions of 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 include:

A. NERC Customer Complaint Unit (NERC-CCU): This is a unit at the Consumer Affairs Division of the Commission dedicated to the management of customer complaints against the DisCos; i.e., the Unit does not directly resolve complaints but rather tracks the resolution of the complaints by the DisCos. Customers can lodge complaints at the NERC CCU for onward passage to the respective DisCos for resolution via emails, letters or phone calls (through the NESI Call Centre).

The NESI call centre which was launched by the Commission in 2023, provides a centralised portal for customers to pass complaints directly to their service providers. Being a centralised portal, it provides the Commission with near real-time visibility into the filing and resolution of customer complaints by the DisCos pursuant to the provisions of the CPR 2023.

B. DisCo Customer Complaint Unit (DisCo-CCU): The CPR 2023 mandates all DisCos to establish customer complaint units (CCU) across their franchise area dedicated to the receipt and resolution of complaints from customers. Complaints can be lodged with the DisCo via electronic means including phone calls, SMS, email, etc. 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 satisfied with the resolution of their complaints at the DisCo-CCU. As of 31 December 2024, the Commission had twenty-seven (27) operational Forum Offices in twenty-six (26) states and the FCT, Abuja. The details, including names, addresses and contacts of the Commission's Forum Offices are contained in Appendix C.4.

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 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 have jurisdiction over the customer complaints from the state.

5.1.4 Customer Complaints Received in 2024

This subsection provides a summary of the types of complaints and resolution rates of complaints across the various channels explained in section 5.1.3 above.

5.1.4.1 NERC CCU

In 2024, 16,882 complaints were received at the Commission's CCU - Ikeja (7,392), Eko (3,664) and Abuja (2,548) DisCos recorded the highest number of complaints by their customers, accounting for 43.79%, 21.70% and 15.09% of the total, respectively. Conversely, Kano DisCo (55) and APLE (42) had the lowest number of complaints, corresponding to 0.33% and 0.25%, respectively. Cumulatively, 4,858 were resolved, corresponding to a 28.78% resolution rate.

The most common issues among the 16,882 complaints received were billing (33.59%), metering (28.62%), service interruption (15.06%) and customer band (12.36%). The four (4) complaint categories cumulatively accounted for 89.62% of the total complaints in the year (Figure 5.1).

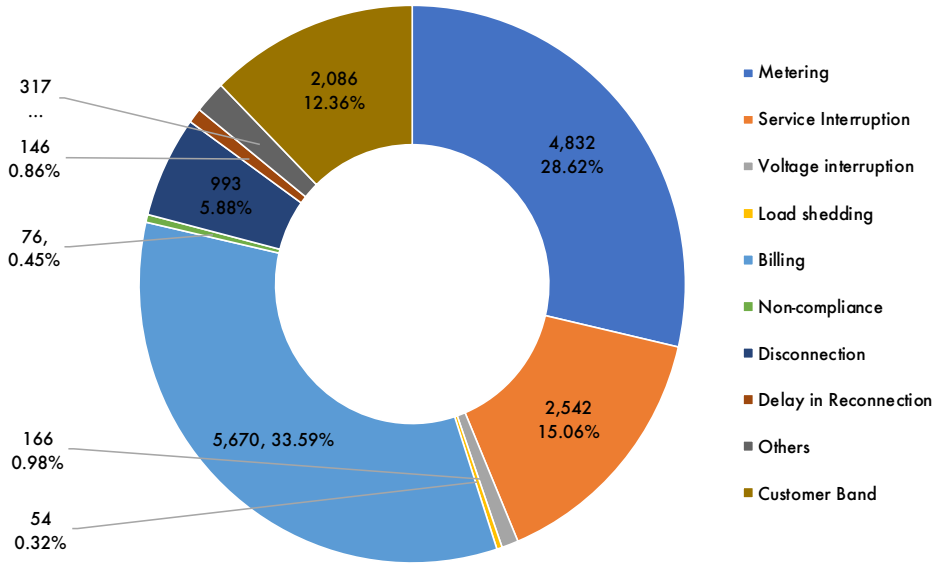


Figure 5.1: Category of Complaints Received at the Commission's CCU in 2024

5.1.4.2 DisCo CCU

The total number of complaints received across all DisCos in 2024 was 1,183,198 – Port Harcourt, Eko and Ibadan DisCos received the highest complaints (222,007, 214,175 and 209,562, representing 18.76%, 18.10% and 17.71% of total complaints, respectively). In comparison, Yola DisCo and APLE had the lowest complaints (9,321 and 18,053 representing 0.79% and 1.53% of the total complaints, respectively).

The most common issues among the complaints received by DisCos during the year were metering (49.62%), billing (14.28%), and service interruption (8.42%). These three (3) complaints categories cumulatively accounted for 72.33% of the total complaints in the year (Figure 5.2).

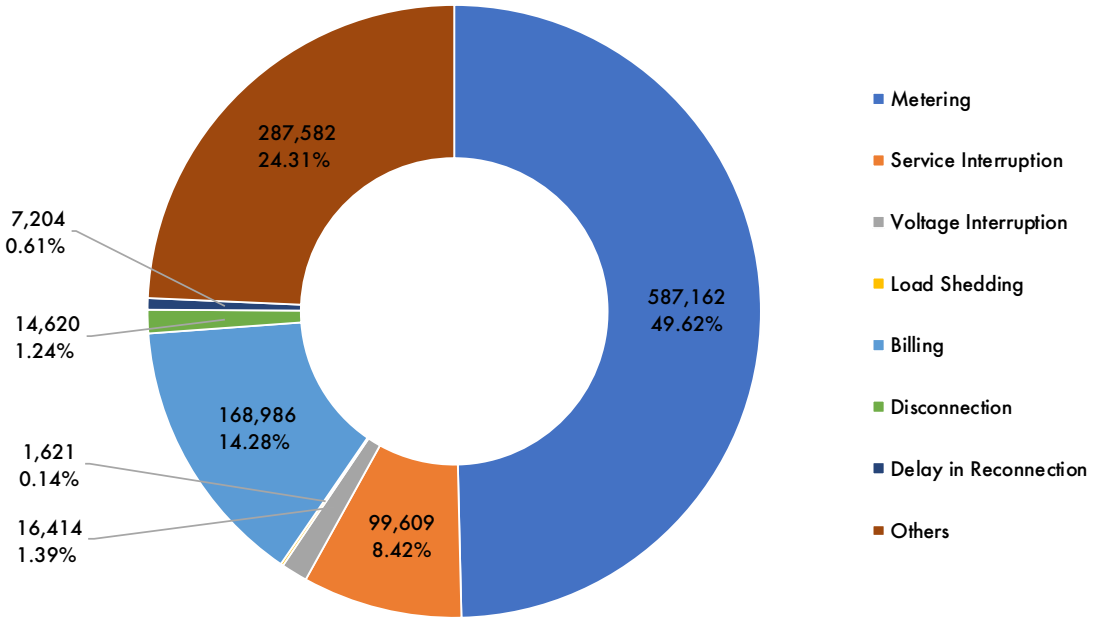


Figure 5.2: Category of Complaints Received by all DisCos in 2024

5.1.4.3 NERC Forum Offices

A summary of the appeals across the Forum Offices in 2024 is contained in Table 5.2. In total, the Forum Offices had 8,351 (7,575 new appeals and 776 pending

appeals) active appeals through 2024. The Forum Office serving Ibadan (2,676) and Ikeja (1,563) DisCos received the highest number of appeals (corresponding to 32.04% and 18.71% of total appeals respectively) while Yola DisCo (76) and APLE (21) received the fewest appeals corresponding to 0.91% and 0.25% of total appeals respectively.

Cumulatively, the Forum Offices had 308 sittings in 2024 and resolved 83.06% (6,936) of the total active appeals. The breakdown of the various categories of appeals received at the Forum Offices is presented in Figure 5.3. Billing and metering were the most prevalent complaints within the year, accounting for 52.81% and 29.77% of the total appeals respectively.

Table 5.2: Appeals Handled by Forum Offices in 2024

Forum Offices	DisCos	Appeals Received[1]	Appeals Resolved	Appeals Pending[2]	Resolution Rate (%)	No of Sittings
Abuja, Lafia & Lokoja	Abuja	232	204	28	*87.93*	24
Ado-Ekiti,Asaba & Benin	Benin	413	356	54	*86.20*	26
Eko	Eko	796	694	98	*87.19*	24
Abakaliki, Akwa, Enugu, Owerri & Umuahia (including APLE cases)	Enugu	1,192	969	106	*81.29*	65
Abeokuta, Ibadan, Ilorin & Osogbo	Ibadan	2,676	1,916	480	*71.60*	76
Ikeja	Ikeja	1,563	1,520	43	*97.25*	28
Bauchi, Gombe, Jos & Makurdi	Jos	170	129	22	*75.88*	6
Gusau, Kaduna, Kebbi & Sokoto	Kaduna	150	107	22	*71.33*	14
Jigawa, Kano & Katsina	Kano	107	82	11	*76.64*	5
Calabar, Port Harcourt & Uyo	P/H	976	894	68	*91.60*	35
Yola	Yola	76	65	8	*85.53*	5
All Forum Offices	All	8,351	6,936	940	*83.06*	308

[1.] Appeals received include outstanding complaints from the preceding year as well as complaints rejected and withdrawn. During the year, 320 appeals were rejected while 155 appeals were withdrawn. [2.] Some of the pending appeals are still within the regulatory timeframe of 2 months to resolve.

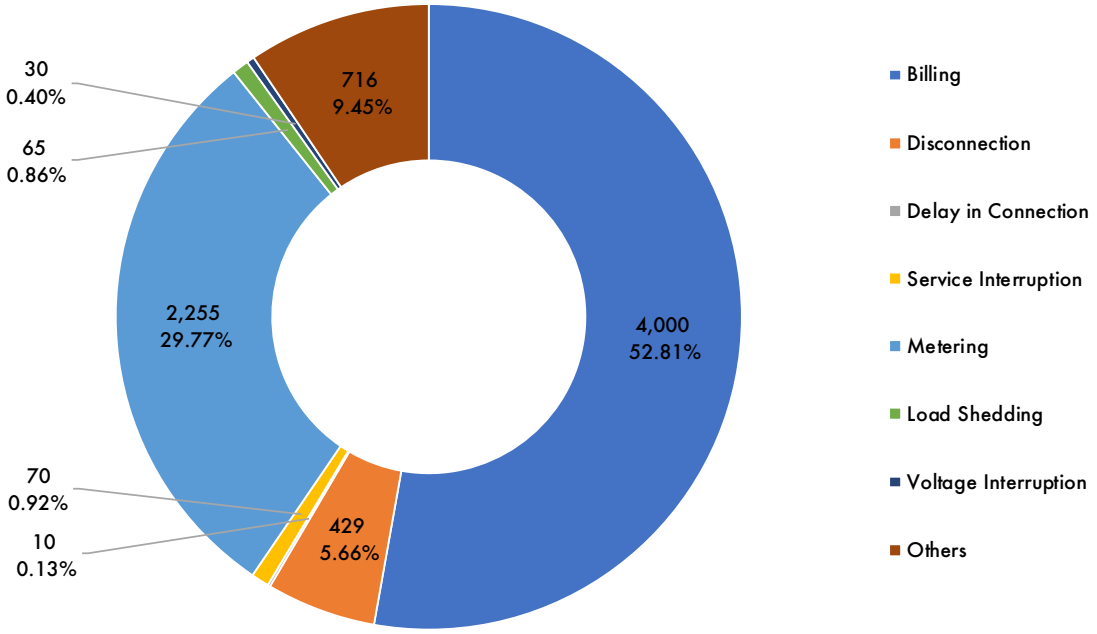


Figure 5.3: Category of Complaints Received by all Forum Offices in 2024

To ensure DisCos comply with the rulings of the Forum Offices, the Commission has included "Compliance with forum rulings" as one of the indices contained in the Order on Performance Monitoring Framework. As contained in the KPI order, a DisCo is fined ₦10,000 per day for non-compliance with the forum ruling. Furthermore, the Commission is exploring strategies to improve the operational efficiency of Forum Offices such as ensuring that the forum panels sit regularly to increase the resolution rate and reduce the number of pending appeals carried over across years. The Commission also undertakes regular training and capacity development for members of the forum panel to equip them to deliver on their mandates.

A cross-section of forum members at the capacity development training held in Abuja, April 2024.

5.2 Stakeholder Engagements

The Commission engages relevant stakeholders as well as the public to apprise them of the Commission's activities. The main avenues for interface between the Commission and stakeholders are:

A. NESI stakeholder meetings
B. Trainings/Workshops
C. Other stakeholder engagement activities

5.2.1 Nigerian Electricity Supply Industry (NESI) Stakeholder Meetings

The NESI meetings are periodic gatherings of all stakeholders in the NESI to deliberate on important industry issues and to review compliance and performances. The meetings usually have in attendance the executives of DisCos, GenCos, Transmission Service Provider (TSP), System Operator (SO), Market Operator (MO), Nigerian Bulk Electricity Trading (NBET) Company, Rural Electrification Agency (REA), other FGN Stakeholders and Development Partners (on an ad-hoc basis). Four (4) NESI meetings were held in 2024 (Table 5.3).

Table 5.3: NESI Meetings held in 2024

S/N	NESI Meeting	Date	Location
1	Q1 NESI meeting	12 February 2024	Lagos, Nigeria
2	Q2 NESI meeting	24 June 2024	Abuja, Nigeria
3	Q3 NESI meeting	02 September 2024	Lagos, Nigeria
4	Q4 NESI meeting	03 December 2024	Lagos, Nigeria

NERC Commissioners and other participants at the second quarter NESI meeting held in Abuja, June 2024


A cross-section of participants at the fourth quarter NESI meeting held in Lagos, December 2024

5.2.2 Summit on Accelerating Scale-up of Renewable and Distributed Energy Resources in Nigeria

The summit on Accelerating Scale-up of Renewable and Distributed Energy Resources in Nigeria was organised by the Commission between July 22-23, 2024, in Abuja. The summit focused on discussing strategies, regulatory frameworks, and financing options to promote the development of grid-scale renewable energy projects in Nigeria. It was a significant event for fostering partnerships and driving the expansion of renewable and distributed energy access in Nigeria. The discussions and commitments made during the summit are expected to drive the adoption and incorporation of renewable and distributed energy access in the country.

The Minister of Power, Chief Adebayo Adelabu declares open the summit on Accelerating Scale Up of Renewables and Distributed Energy Resources in Abuja, July 2024

Participants and other NESI stakeholders at the summit on Accelerating Scale Up of Renewables and Distributed Energy Resources in Abuja, July 2024

5.2.3 Other Stakeholder Engagements

The Commission held a series of other stakeholder engagements and activities during the year, including workshops, training, customer service week celebrations as well as hosting various stakeholders who paid courtesy visits to the Commission. The summary of the Commission's engagements with external stakeholders during the year is contained in Table 5.4.

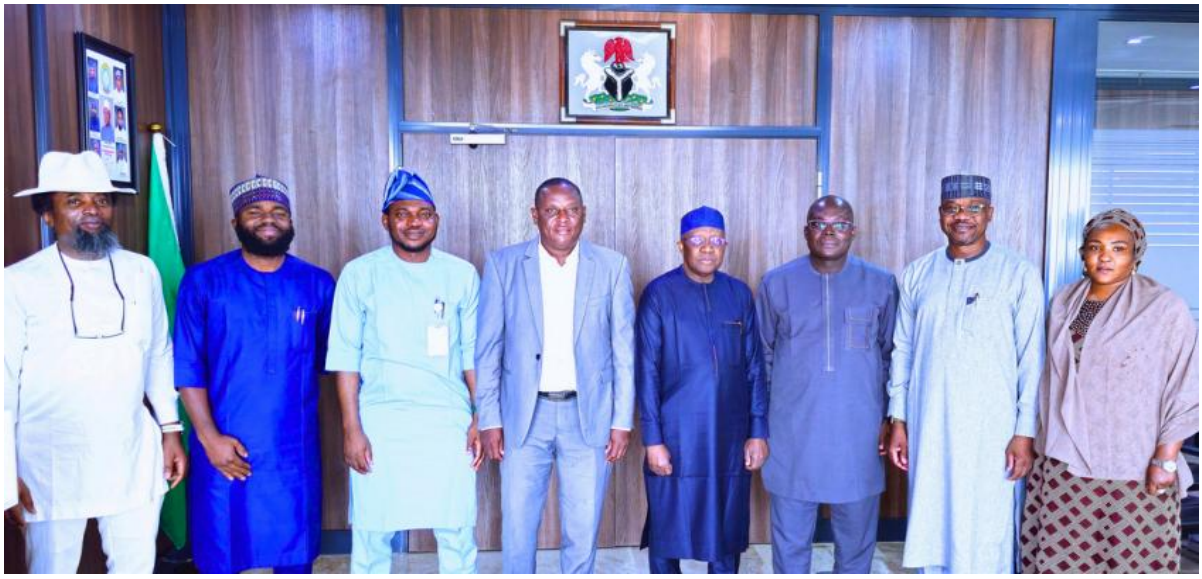
Table 5.4: Stakeholder engagements and other activities of the Commission in 2024

S/N	Event	Date	Location
	Trainings/Workshops		
1	Capacity building workshop for members of the Nigerian Bar Association (NBA)	07 February 2024	NERC HQ, Abuja
2	Seminar for judges from the Federal and State High Courts as well as the National Industrial Court.	19 - 21 February 2024	National Judicial Institute (NJI), Abuja
3	Training for NERC Forum Panel members	25 April 2024	NERC HQ, Abuja
4	Capacity building workshop for representatives of Civil Society Organisations (CSO) and Community Based Organisations (CBO)	29 – 30 April 2024	NERC HQ, Abuja
5	A three-day workshop on Technical Codes for Operators in the NESI	29 – 31 July 2024	NERC HQ, Abuja

S/N	Event	Date	Location
6	Training on Average Participation Method for Regional Electricity Transmission by ECOWAS Regional Electricity Regulatory Authority (ERERA)	16 September 2024	NERC HQ, Abuja
	Courtesy Visits		
7	Courtesy call by a delegation from the Autorité de Régulation du secteur de l'Électricité (ARE)	30 January 2024	NERC HQ, Abuja
8	Courtesy visit to the Nigerian Bar Association (NBA)	01 February 2024	NBA Secretariat, Abuja
9	Courtesy visit by the leadership of the NBA	06 February 2024	NERC HQ, Abuja
10	Courtesy visit to the Federal Competition and Consumer Protection Commission (FCCPC)	30 February 2024	FCCPC HQ, Abuja
11	Familiarisation visit by the House of Representatives Committee on Delegated Regulations	22 March 2024	NERC HQ, Abuja
12	Courtesy visit by the Chartered Institute of Power Engineers of Nigeria (CIPEN)	23 April 2024	NERC HQ, Abuja
13	Oversight visit by the Senate Committee on Power	23 April 2024	NERC HQ, Abuja
14	Courtesy visit by the Ambassador of Spain and a Spanish energy solution firm	25 April 2024	NERC HQ, Abuja
15	Courtesy visit by a delegation from the Norwegian embassy	08 May 2024	NERC HQ, Abuja
16	Courtesy call by a delegation from the Kano State energy committee	09 May 2024	NERC HQ, Abuja
17	Courtesy visit by the management team of the Rural Electrification Agency (REA)	10 May 2024	NERC HQ, Abuja
18	Courtesy call by the leadership of the Institute of Chartered Accountants of Nigeria (ICAN) Abuja district	31 May 2025	NERC HQ, Abuja
19	Courtesy visit by a delegation from the Nigerian Economic Summit Group (NESG)	13 June 2024	NERC HQ, Abuja
20	Oversight visit by the House of Representatives Committee on Power	23 July 2024	NERC HQ, Abuja
21	Working visit to the National Youth Service Corps (NYSC)	21 August 2024	NYSC HQ, Abuja
	Other Activities		
22	Media engagement with NESI stakeholders	17 January 2024	NERC HQ, Abuja
23	Award ceremony for the winners of the annual energy essay competition	15 June 2024	NERC HQ, Abuja
24	NERC and NESI Health and Safety Managers Meeting	26 June 2024	NERC HQ, Abuja
25	Inauguration of members of the Anti-Corruption and Transparency Unit (ACTU) by the Independent	30 July 2024	NERC HQ, Abuja

S/N	Event	Date	Location
	Corrupt Practices and Other Related Offences Commission		
26	Engagement with members of the Civil Society Organisations (CSO) and Community-Based Organisations (CBO)	12 October 2024	NERC HQ, Abuja
27	Peer review meeting with compliance and regulatory officers of licensees	11 November 2024	NERC HQ, Abuja


NERC Chairman and some Commissioners at the press briefing in Abuja, January 2024



NERC Commissioners with a delegation of regulatory officers from the Autorité de Régulation de l'Électricité (ARE) in Abuja, January 2024.

NERC delegation led by the Commissioner for Consumer Affairs during a courtesy visit to the Federal Competition and Consumer Protection Commission (FCCPC) in Abuja, February 2024.

Delegations from NERC and NBA during the courtesy visits to the NBA secretariat and NERC HQ in Abuja, February 2024.

Participants at the three-day seminar for judges at the NJI complex in Abuja, February 2024

NERC Chairman and other Commissioners at the seminar for judges at the NJI, February 2024

Minister of Power, Chief Adebayo Adelabu (left) and NERC Chairman delivering their speech at the seminar for judges, February 2024

NERC Chairman and Commissioner for Engineering and Performance Monitoring with the delegation from the Chartered Institute of Power Engineers of Nigeria (CIPEN) in Abuja, April 2024.

NERC Commissioners with the Chairman and other members of the Senate Committee on Power in Abuja, April 2024.

NERC forum panel members at the capacity-building training in Abuja, April 2024.

NERC Commissioners with a delegation led by the Spanish Ambassador to Nigeria in Abuja, April 2024.

NERC Commissioners with a delegation from the Norwegian embassy in Abuja, May 2024.

Participants at the petition hearing of the Manufacturers Association of Nigeria in Abuja, May 2024

A delegation from the Institute of Chartered Accountants of Nigeria (ICAN) Abuja District, with the GM Finance and Management Services, May 2024.

NERC Staff with a delegation from REA in Abuja, May 2024

Top three winners of the 2024 NERC electricity essay competition, June 2024

Commissioners and staff of NERC at the 2024 NERC Customer Service Week, October 2024

Cross Section of participants at the seminar for Justices of the Supreme Court and Court of Appeal in Ikot Ekpene, October 2024

Participants at the public hearing on the incessant grid disturbances in the NESI, October 2024.

Chapter Six:
Electricity Tariffs

6.1 Introduction

6.2 Components of Electricity Tariff

6.3 Multi-Year Tariff Order (MYTO)

6.4 Customer Tariffs in 2024

6.1 Introduction

Pursuant to section 34(1)(d) of the EA 2023, the Commission is mandated to ensure that prices charged by licensees are fair to customers and sufficient to allow the licensees to fully recover their efficient cost of operation. In compliance with the provisions of Section 116 of the EA 2023, the Commission has since 2007 adopted the Multi-Year Tariff methodology for the determination of electricity tariffs to be charged by distribution companies in the NESI.

6.2 Components of Electricity Tariffs

The components of electricity tariffs include the cost of generation, transmission, distribution, and administrative services (Figure 6.1). Tariffs are structured to ensure fairness and incentivise performance.

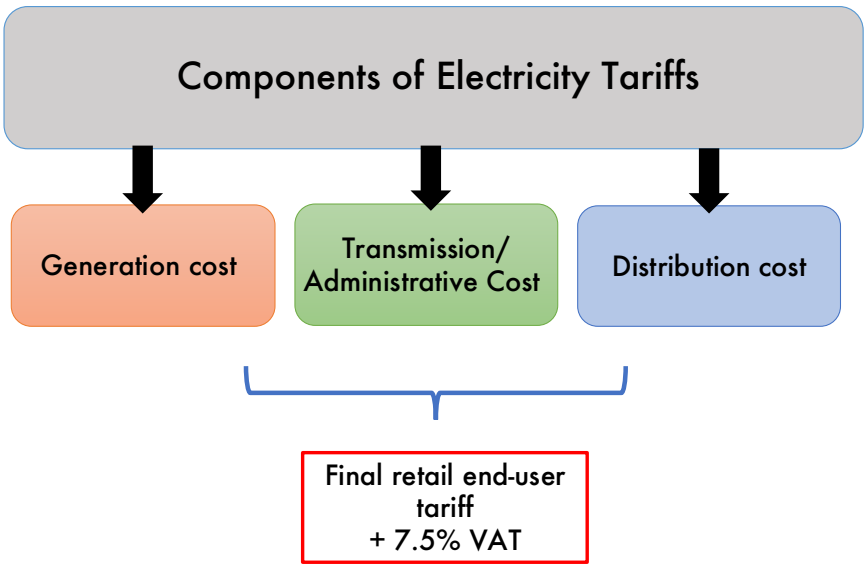


Figure 6.1: Components of Electricity Tariffs

The generation cost/tariff is determined using a benchmark Long Run Marginal Cost (LRMC) of the most economically efficient new entrant. Generation tariffs are usually bilaterally negotiated between the Generation Company and the off-taker; the negotiated rates are subject to the Commission's approval before they become

effective. If components of the tariffs, e.g. gas price, are indexed to the US$, they will be adjusted at the time of invoicing based on the provisions of the contract.

Transmission and distribution costs are computed based on the revenue requirement and the volume of energy to be traded over a specific period. The revenue requirements for the transmission and distribution segments of the value chain are determined using a building blocks approach which provides the joint benefit of price cap and incentive-based regulation. The three building blocks are:

- The allowed return on capital – fair (market-based) rate of return on capital invested
- The allowed return of capital – recoup capital over the useful lives of the assets (depreciation)
- Efficient operating costs and overheads

6.3 Multi-Year Tariff Order (MYTO)

The MYTO is a regulation that is used to set cost-reflective prices for electricity in the industry by employing a unified way to determine total industry revenue requirements tied to measurable performance improvements and standards. It seeks to reward performance above certain benchmarks, reduce technical and non-technical/commercial losses and lead to cost recovery as well as improved performance standards from all industry operators in the NESI. The first MYTO was issued by the Commission in July 2008 and has been reviewed regularly pursuant to the provisions of the extant regulatory instruments.

6.3.1 Objectives of the MYTO

The MYTO methodology offers a transparent framework for determining electricity tariffs that provides for the clear disaggregation and determination of necessary operating costs and overheads, and a reasonable Return on Investment. Specific objectives of the MYTO include:

A. Cost recovery and financial viability - regulated entities should recover their efficient costs of providing electricity services, including a reasonable rate of return on their capital.
B. Certainty and stability of the pricing framework – this assures the recoverability of returns, thereby promoting investments in the sector.
C. Incentives for improving performance – It provides incentives to reduce costs, improve the quality of service and encourage efficient use of the network.
D. Allocation of risk – It promotes the efficient allocation of risks.
E. Simplicity and cost-effectiveness – the MYTO was designed to be easy to understand and implement.

6.3.2 Tariff Reviews

In 2024, the Commission issued the updated Regulations on the Procedure for Electricity Tariff Reviews in the NESI (NERC-R-002-2024). The Regulation provides a detailed procedure for conducting electricity tariff reviews in line with the provisions of the EA 2023. It also provides clarity on the responsibilities of parties regarding the tariff review processes, filing arrangements, timelines, fees and documentation required for the tariff review process in the NESI. The regulation further provides for the following types of reviews:

A. Monthly/Minor review: This is done to consider changes in a limited number of tariff-setting macroeconomic indices such as inflation, interest rates, exchange rates and generation capacity. Pursuant to the provisions of the regulation, the monthly review shall include the review and approval for migration or classification/reclassification of distribution feeders based on the availability of supply on the feeders. The Commission may, at its discretion, conduct minor reviews of tariffs at shorter periods but no longer than six months, depending on the stability of macroeconomic indices.

B. Major review: This is to be conducted once in five (5) years and entails a review of all inputs for tariff setting. It is a comprehensive review of all tariff assumptions to ensure the viability and efficiency of the NESI.

C. Extraordinary review: This type of review is conducted where industry parameters have significantly changed, thus requiring immediate consideration for the sustainability of the licensee and the provision of service. The Regulations allow licensees that encounter significant unforeseen operational, legal or regulatory costs that can be reasonably passed on to customers to file for extraordinary tariff reviews, following which the Commission conducts electricity rate case hearings.

The group of parameters which the Commission considers during tariff reviews are summarised in Table 6.1.

Table 6.1: Parameters considered during Tariff Reviews

Parameters		Generation	Transmission	Distribution	Type of Review
Exogenous *(parameters outside the control of licensees)*	Macroeconomic Indices *(Inflation rate, Interest rate, Foreign exchange)*	✓	✓	✓	Minor Review
Endogenous *(parameters within the control of licensees)*	Efficient Loss Targets *(Transmission loss factor [TLF], Aggregate Technical, Commercial and Collection Loss [ATC&C])*	×	✓	✓	Major/Extraordinary Review
	Capital Expenditure (CapEx)/Regulatory Asset Base (RAB)	×	✓	✓	
	Operational & Maintenance cost (O&M)	×	✓	✓	
	Energy Offtake	×	✓	✓	

6.4 Customer Tariffs in 2024

6.4.1 Service-Based Tariff Regime (SBT)

Pursuant to section 116(2)(c) of the EA 2023 which mandates the Commission to approve rates that incentivise continuous improvement of the quality of service, tariff reviews take into consideration the varying levels of infrastructural development in the utility's network, that is directly attributable to the differential level of supply experienced by customers in the DisCo's network.

In August 2020, the Commission issued the MYTO 2020, marking the beginning of the Service-Based Tariff (SBT) regime in the NESI. The objectives of MYTO 2020 included:

A. Creation of a path towards transitioning to a fully service-based cost-reflective tariff in the NESI.
B. Disaggregation of the pre-existing customers' classes and clusters, reclassifying them based on each DisCo's commitment to service quality to them (which comprises such factors as the quantum of energy delivered, its voltage, and the DisCo's average response time to resolving customer complaints).
C. Ensure that the tariffs are aligned with the quality and availability of electricity committed to customer clusters by the DisCos.

The customer clusters/classes specified in MYTO 2020 and expected service delivery are contained in Table 6.2.

Table 6.2: Customer Cluster and Expected Service Delivery

Service Band	Minimum hours of supply
A	20
B	16
C	12
D	8
E	4

6.4.2 Tariff Reviews in 2024

In July 2023, eleven (11) DisCos[15] filed applications for extraordinary review of their tariffs due to the significant change in the macroeconomic environment highlighted by the liberalisation of the foreign exchange market. Pursuant to section 116 of the EA 2023 and extant regulations, the Commission considered and approved cost-reflective tariffs (CRT) for the DisCos effective 01 January 2024.

Although the Commission undertakes regular reviews of the DisCos' CRT in line with extant regulations, the allowed end-user tariffs are determined by government policy on subsidy (details below). As a result, pursuant to the subsisting government policy as at 01 January 2024, all customer tariffs across the eleven (11) DisCos were frozen at the rates set in December 2022 in spite of the significant increase in the CRT arising from the extraordinary reviews.

Subsequently, the FGN issued a policy directive to implement a review of tariffs charged to Band A customers effective 01 April 2024, while the tariffs for Band B-E customers remained frozen at the rates payable since 2022.

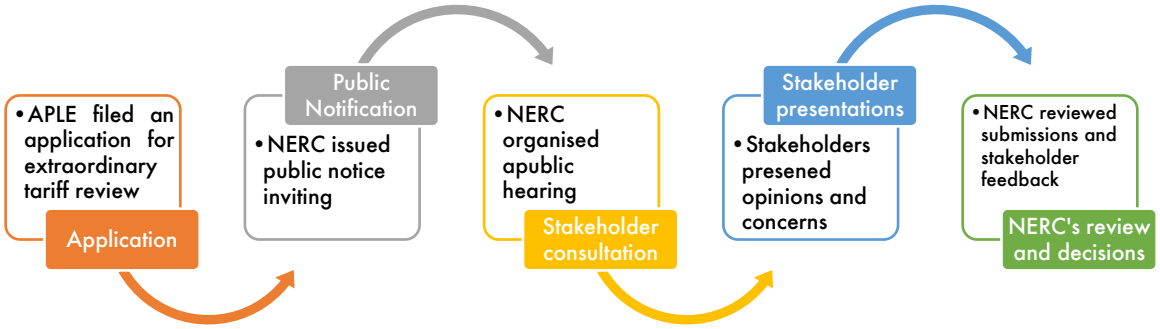
Following the tariff review in April, the Commission carried out monthly tariff reviews pursuant to Section 7 of the April 2024 supplementary MYT Orders which provide for monthly tariff reviews to reflect the changes in the pass-through indices outside

[15] Abuja, Benin, Eko, Enugu, Ikeja, Ibadan, Jos, Kaduna, Kano, Port Harcourt and Yola

the control of licensees. Between April and June 2024, the tariffs charged to band A customers were adjusted in line with the overall changes to the CRT. Effective from July 2024, the FGN issued a policy directive for all customer tariffs to be frozen at the July 2024 rates; these rates remained in effect until December 2024.

In October 2024, the Commission received an application for an extraordinary tariff review from Aba Power Limited Electric (APLE). APLE is the electricity distribution company in the Aba Ring Fenced Area of Abia State. The review was initiated to address significant changes in macroeconomic parameters and operational realities affecting the electricity distribution company.

As was explained in the 2023 annual report, the Commission adopted the rate-case hearing approach for the appraisal of the submission made by APLE. The review followed a structured and transparent process as illustrated below:



The summary of the parameters requested by APLE in its submission and the corresponding approval granted by the Commission is contained in Table 6.3.

Table 6.3: Summary of NERC's Decision on APLE's Filing

Parameter	APLE's Request	NERC Approval
Nigerian Inflation	34.60%	34.60%
United States Inflation	3.20%	3.70%
Foreign Exchange (₦/$)	N1,654.2/$1	N1,572.2/$1
Gas Supply and Transportation Cost ($/MMBTU)	$4.62	$4.62
Available Generation	135MW	135MW

Parameter	APLE's Request	NERC Approval
Generation Cost (₦/kWh)	137.39	135.00
Annual OPEX (₦' billion)	14.23	12.42
Annual Meter CAPEX (₦' billion)	13.58	10.85
Annual Other CAPEX (₦' billion)	10.38	10.77
Annual Revenue Requirement (₦' billion)	244.25	187.27
Cost-reflective tariff (₦/kWh)	240.82	201.11

6.4.3 Tariff Subsidies

When the tariffs allowed for DisCos to charge customers (allowed tariff) is lower than the cost-reflective tariff as computed by the Commission, the Government undertakes to cover the resultant gap (between the cost-reflective and allowed tariff) in the form of tariff shortfall funding.

The gross subsidy obligation of the FGN in 2024 is presented in Figure 6.2. The FGN directive to freeze all customer tariffs at the December 2022 approved rates despite the increase in the cost-reflective tariffs arising from the major increase in FX rates caused the FGN subsidy to reach ₦633.30 billion in 2024/Q1; this represents a 303% and 1,699% increase respectively compared to the average quarterly subsidy liability incurred in 2023 (₦157.15 billion) and 2022 (₦35.21 billion).

As explained earlier, effective 01 April 2024, the tariffs for Band A customers who account for ~40% of total energy consumed across all the DisCos were reviewed to cost-reflective rates (in most DisCos). This adjustment led to a significant decrease (-39.99%) in FGN subsidy obligations between 2024/Q1 (₦633.30 billion) and 2024/Q2 (₦380.06 billion).

However, the FGN directive that froze all customer rates at the July rates for the rest of 2024 led to increases[16] in the quarterly subsidy obligation of the FGN; +₦84.06 billion (+22.12%) in 2024/Q3 and +₦91.63 billion (+24.11%) in 2024/Q4. This

[16] Compared to 2024/Q2 (₦380.06 billion)

is because although allowed tariffs were frozen, the cost-reflective tariffs increased due to macroeconomic factors.

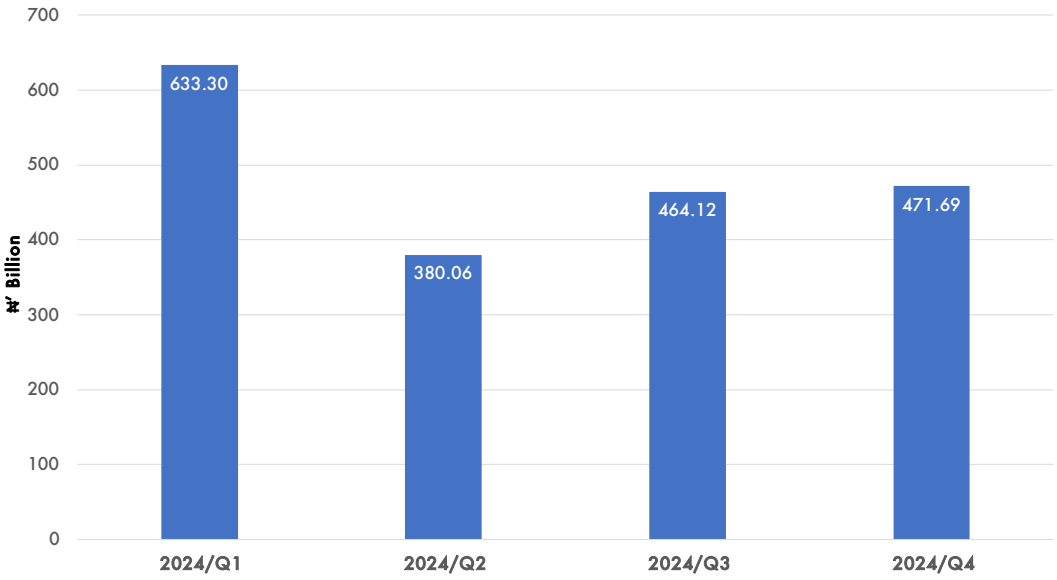


Figure 6.2: FGN subsidy obligation in 2024

For ease of administration, the subsidy is only applied to the generation cost payable by DisCos to NBET at the source in the form of a DisCo's Remittance Obligation (DRO).

The DRO represents the ratio of the total GenCo invoice that is billed to the DisCos by NBET based on what the allowed DisCo tariffs can cover. The DRO regime replaced the Minimum Remittance Obligation[17] (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.

[17] For the MRO framework, DisCos are invoiced 100% of energy cost but only expected to pay MRO share of the invoice. The outstanding balance is only cleared from the DisCo's record when the FGN subsidy is paid to NBET.

The 2024 average DRO of the DisCos, weighted average cost-reflective tariffs, average allowed tariffs, corresponding tariff subsidies and accrued gross subsidy required to bridge the revenue shortfall in the NESI are contained in Table 6.4.

Table 6.4: DRO and Average Tariff for Non-MD Customers Across DisCos in 2024

DisCo	Average DRO	Cost-reflective tariff (₦/kWh)	Allowed Tariff (₦/kWh)	Tariff Subsidy (₦/kWh)	Accrued Subsidy (₦'bn)
Abuja	38%	170.51	101.91	68.60	284.88
Benin	34%	190.92	102.47	88.45	169.20
Eko	41%	163.03	101.43	61.61	230.86
Enugu	32%	196.74	101.02	95.72	161.47
Ibadan	34%	172.18	101.73	70.44	236.06
Ikeja	41%	160.80	98.58	62.22	272.22
Jos	23%	185.74	95.76	89.98	117.89
Kaduna	25%	176.35	96.95	79.40	128.29
Kano	28%	171.17	99.28	71.89	124.19
PH	32%	184.56	100.08	84.48	149.40
Yola	4%	266.64	96.77	169.87	67.32
National	34%	175.31	100.27	75.04	1,941.78

In 2024, Yola DisCo had the highest cost-reflective tariff compared to other DisCos due to higher operational costs and other unique factors (such as vandalism and insecurity in parts of the franchise area) which the Federal Government approved as part of the reprivatisation effort in 2021. As a result of the fact that its allowed tariffs were also identical to the rest of the DisCos, Yola DisCo enjoyed the highest subsidy cost per unit of energy delivered (~2 times the average subsidy per kWh of other DisCos). On the other hand, Ikeja and Eko DisCos had relatively lower cost-reflective tariffs and subsidy allocations per unit of energy delivered.

At the national level, the average CRT was ₦175.31/kWh, while the average allowed tariff was ₦100.27/kWh, resulting in an average subsidy of ₦75.04/kWh.

6.4.4 End-user Tariffs in Nigeria and Other African Countries

A comparison of the average allowed end-use customer electricity tariff in Nigeria in 2024 and the rates charged in selected African countries (predominantly West African countries) is presented in Table 6.5. On average, across 2024, the average allowed customer tariff in Nigeria was US$0.07/kWh (approximately ₦100.27/kWh), which was the lowest tariff charged across the selected countries and represented only 35.71% of the average tariff charged in the other selected countries (US$0.19/kWh)[18].

Table 6.5: Comparison of the Average Electricity Tariff in Nigeria and Selected African Countries

Country	Average Tariff ($/kWh)	Average Cost (₦/kWh)
Nigeria	0.07	100.26
South Africa	0.18	263.70
Burkina Faso	0.20	293.00
Gambia	0.24	351.60
Ghana	0.11	161.15
Guinea Bissau	0.38	556.70
Ivory Coast	0.13	187.52
Liberia	0.35	512.75
Mali	0.21	307.65
Mauritania	0.15	212.29
Mauritius	0.13	190.45
Niger	0.12	174.33
Senegal	0.18	263.70
Sierra Leone	0.25	366.25
Togo	0.18	263.70
Uganda	0.18	263.70

Note: [1] Average rate of tariffs is as of June 2024, at an exchange rate of NGN1,465/$1. (Source: Statista)

While the relatively low tariff in Nigeria is largely due to the tariff subsidy provided by the FGN, the cost-reflective tariff for Nigeria (US$0.12/kWh; ₦175.31) represents only 63% of the average tariff charged in the reference countries (US$0.19/kWh).

[18] The Cost of electricity for Nigeria was excluded in the computation of average cost

Chapter Seven:

State of the Nigerian Electricity Supply Industry (NESI)

7.1 Operational Report

7.2 Indices on the Performance of the National Grid

7.2 Metering

7.3 Commercial Report

7.1 Operational Report

The operational performance of the NESI is a measure of how effectively available resources are utilised to generate electricity. Optimum operational performance is essential to ensure adequate and safe electricity generation, transmission, and distribution. In evaluating the operational performance of the NESI in 2024, the following Key Performance Indicators (KPIs) were considered:

A. Available generation
B. Plant availability factor
C. Total generation
D. Generation load factor
E. Generation mix

7.1.1 Available Generation

In 2024, the average available generation capacity of the grid-connected power plants was 4,853.69MW. A review of monthly data showed that during 2024, the average available generation capacity peaked in the last third of the year (Figure 7.1). The highest monthly average available generation capacity during the year was recorded in September, largely due to the improved mechanical availability of Egbin_1[19], Omotosho_1, Olorunsogo_1, Geregu_2 and Rivers_1. It is noteworthy that, except Zungeru_1, all the other hydropower plants (Shiroro_1, Kainji_1, Jebba_1, and Dadin-Kowa_1) recorded improved availability in the last third of 2024, owing to improved water reserves after the rainy season.

[19] The nomenclature of generating plants in the NESI has been revised pursuant to Order-NERC/2024/002. The old and new names are contained in Appendix D 1.

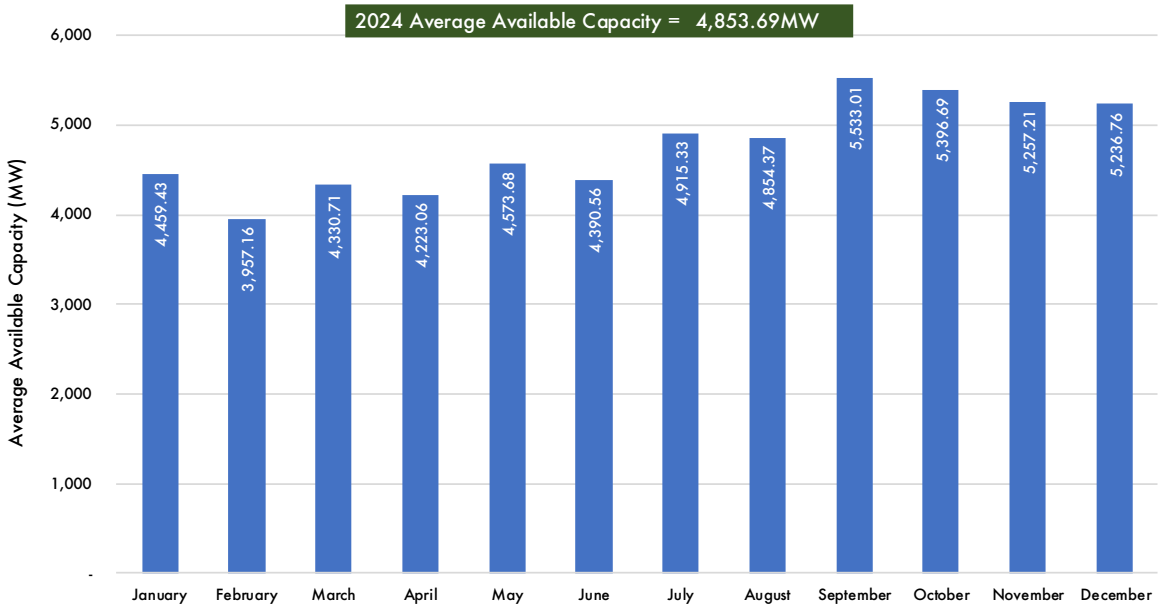


Figure 7.1: Average Available Capacity (MW) in 2024

7.1.2 Plant Availability Factor (PAF)

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 is represented by equation 7.1.

$$\text{Plant Availability Factor} = \frac{\text{Average Available Capacity (MW)}}{\text{Installed Capacity (MW)}} \times 100 \qquad (7.1)$$

The plant availability factor is a critical parameter for evaluating the overall health of the upstream segment of the NESI. In 2024, the overall availability factor for all grid-connected power plants was 37.43%. This indicates that more than 62% of the installed capacity of grid-connected power plants in the NESI was not available

during the year. Overall, only eight (8) power plants had availability factors above 50% with Ihovbor_2 recording the highest availability factor of 93.72% (Table 7.1). Conversely, Alaoji_1 was unavailable throughout the year while Ihovbor_1 and Omotosho_2 recorded PAF of 1.73% and 5.77% respectively.

Table 7.1: Plant Availability Factor (%) in 2024

Plant	Installed Capacity (MW)	Average Available Capacity in 2024	Plant Availability Factor in 2024 (%)
Ihovbor_2	461	432.05	*93.72*
Ikeja_1	110	96.93	*88.12*
Jebba_1	578	378.25	*65.44*
Dadin-Kowa_1	40	25.60	*64.01*
Shiroro_1	600	327.02	*54.50*
Okpai_1	480	258.52	*53.86*
Zungeru_1	700	372.12	*53.16*
Kainji_1	760	399.55	*52.57*
Odukpani_1	625	308.27	*49.32*
Afam_2	650	280.49	*43.15*
Egbin_1	1320	558.35	*42.30*
Geregu_2	435	179.01	*41.15*
Delta_1	900	350.95	*38.99*
Rivers_1	180	69.12	*38.40*
Ibom power_1	190	72.27	*38.04*
Omotosho_1	335	124.20	*37.07*
Geregu_1	435	159.14	*36.58*
Olorunsogo_1	335	121.61	*36.30*
Igbafo_1	45	15.98	*35.51*
Omoku_1	150	49.07	*32.72*
Trans Amadi_1	100	12.91	*12.91*
Sapele Steam_1	720	79.15	*10.99*
Olorunsogo_2	750	70.68	*9.42*
Sapele_2	500	31.06	*6.21*
Afam_1	726	43.85	*6.04*
Ihovbor_1	500	28.83	*5.77*
Omotosho_2	500	8.67	*1.73*
Alaoji_1	500	0.05	*0.01*
Total	13,625	4,853.69	*37.43*

The low overall availability factor of the power plants in the NESI is a major reason why there are limited energy flows on the National grid. The major contributory factors to the low PAF experienced in the NESI include:

- Aged generation units and poor maintenance: As of December 31 2024, the average plant in the NESI is 22 years old. This, combined with the poor maintenance record of the units (caused in part by the liquidity challenges explained below) means that the majority of the grid-connected generating units suffer frequent incidents of unscheduled outages.
- Liquidity challenges at the upstream segment of the NESI *(applicable to all GenCos)*: this is caused by the gross underpayment of GenCo invoices by DisCos (market shortfall) and the Government (unpaid subsidy costs). Without sufficient cash flows, GenCos cannot maintain their generation units, leading to extended outages. The liquidity challenges have also prevented operators of the privatised generation assets from recovering capacity that had been inoperable before privatisation.
- Gas supply challenges *(applicable to thermal GenCos)*: this is caused by the lack of a reliable gas supply to the plants due to gas infrastructure constraints on the national gas network and the absence of fully effective Gas Supply Agreements (GSA). As of the end of December 2024, only five (5) plants[20] out of the total twenty-three (23) thermal plants are operating with fully effective GSAs. This means that the remaining eighteen (18) plants secure gas on a "best endeavour basis[21]" which puts them at great risk of having their supply curtailed by the suppliers when there is a reduction in gas production.

Improving liquidity flows to GenCos through the enforcement of payment discipline on DisCos and the timely payment of subsidies by the Federal Government are essential to allowing GenCos to fund much-needed capital expenditures. This will allow them to reclaim units that have been inoperable for extended periods and

[20] The generation companies include Azura Power West Africa Ltd, Omotosho Power Plc, Olorunsogo Power Plc, Nigerian Agip Oil Company Ltd, and Shell Petroleum Development Company of Nigeria Ltd.
[21] Best endeavour basis refers to a situation where parties (i.e., GenCos and Gas suppliers) transact without a fully effective contract, therefore there are limited service requirements and obligations between parties.

fund the preventive maintenance of operable units to prevent frequent unscheduled mechanical failures/outages.

To manage the overall availability of plants on the grid, the System Operator (SO) must implement the provisions of section 22.3 of the Grid Code on scheduling outages in a way that does not put the grid at risk of low gross availability. Furthermore, GenCos must engage with the gas subsector to ensure that scheduled outages for the generation units are aligned with planned outages on the gas infrastructure (e.g. pipeline maintenance).

7.1.3 Total 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:

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

The average hourly generation on the National Grid in 2024 was 4,222.87MWh/h, which translates to a total generation of 37,093.70GWh (equation 7.2).

$$\text{Total Generation} = \text{Hourly Generation (MWh/h)} \times 24\text{hrs} \times \text{No of days in the year} \quad (7.2)$$

The lowest monthly average hourly generation on the National Grid in 2024 (3,796.11MWh/h) was recorded in February, while the highest monthly average (4,524.21MWh/h) was recorded in December (Figure 7.2).

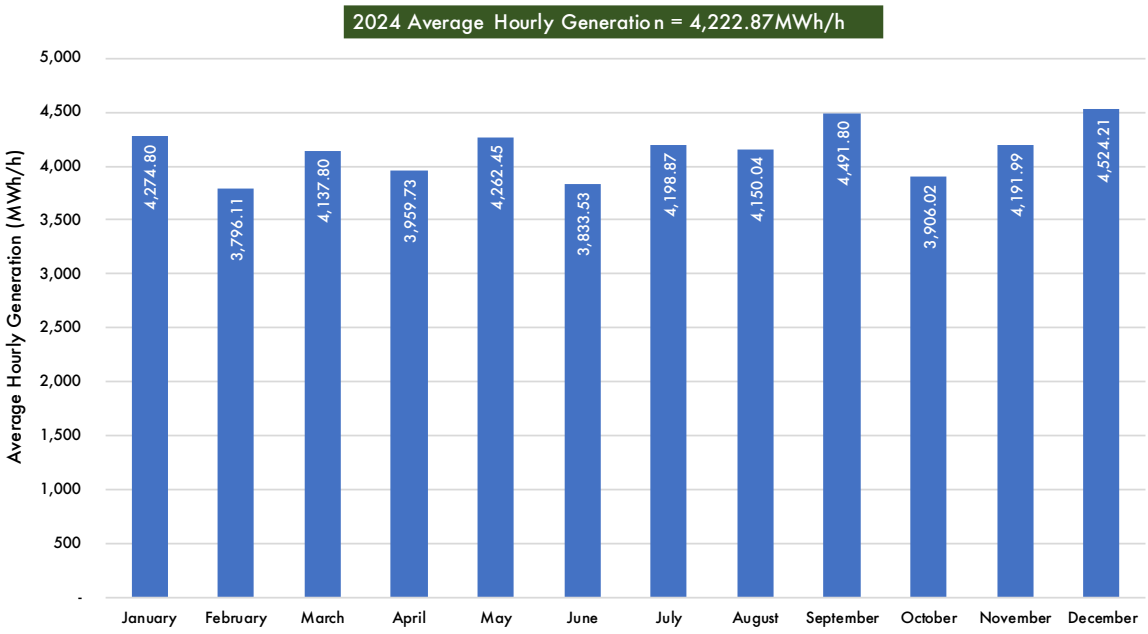


Figure 7.2: Average Hourly Generation (MWh/h) in 2024

7.1.4. Plant Share (%) of Generation Output

The generation share is a percentage of the total energy generated within a specified period. The generation share of a power plant is affected by its size (installed capacity), feedstock availability, and mechanical availability within the year as well as its rank within the merit dispatch order.

The contribution of nineteen (19) power plants out of the twenty-eight (28) grid-connected power plants, which accounted for 95.99% of the total electricity generated in 2024, is presented in Figure 7.3.

Egbin_1 had the highest share of generation output (11.86%) compared to the other power plants. Ihovbor_2 (8.96%) and Kainji_1 (8.80%) had more than 8% share of generation output in 2024. Conversely, Omotosho_2 accounted for the lowest share of output, contributing 0.12% of the total energy generated within the year.

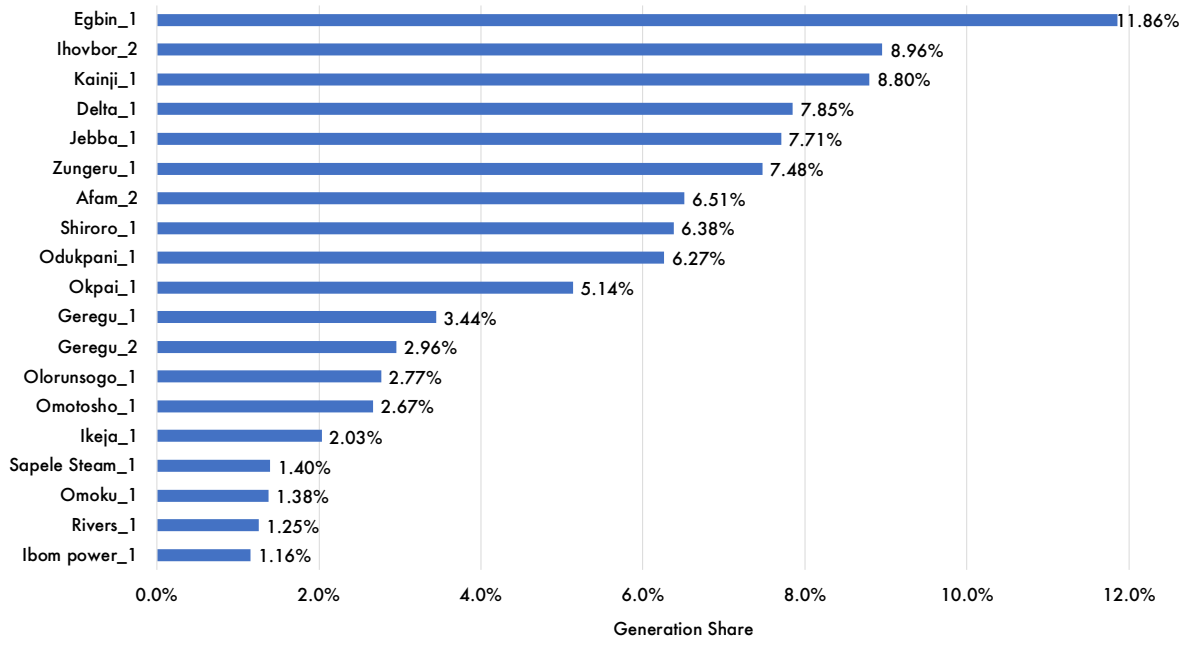


Figure 7.3: Average Share (%) of Generation Output by Power Plants in 2024

7.1.5 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 7.3.

$$\text{Load Factor} = \frac{\text{Total Energy Generated (MWh)}}{\text{Ave. Available Capacity (MW)} \times 24\text{hrs} \times \text{Period (in Days)}} \times 100 \qquad (7.3)$$

The overall load factor for all grid-connected power plants in 2024 was 87.00%; meaning that 13.00% of available energy (MWh) was not dispatched during the year. In the absence of a Supervisory Control and Data Acquisition (SCADA) system, and provisioning for spinning reserve, the SO and DisCos do not operate

the system to its limit to allow for some inherent protection against grid disturbances. Therefore, grid-connected power plants have historically been operated with load factors below 95%.

The load factors of the ten (10) power plants with the highest dispatch rates in 2024 are represented in Figure 7.4. Trans Amadi_1 and Omoku_1 recorded dispatch rates of 100%, while nine (9) other power plants, including Kainji_1 and Dadin Kowa_1 hydropower plants, recorded dispatch rates above 90%. Jebba_1 (86.02%), Zungeru_1 (84.84%) and Shiroro_1 (82.35%) hydropower plants recorded dispatch rates below the 90% minimum threshold contained in the Commission's Order (Order No: NERC/182/2019)[22] on mandatory and priority dispatch of hydropower plants.

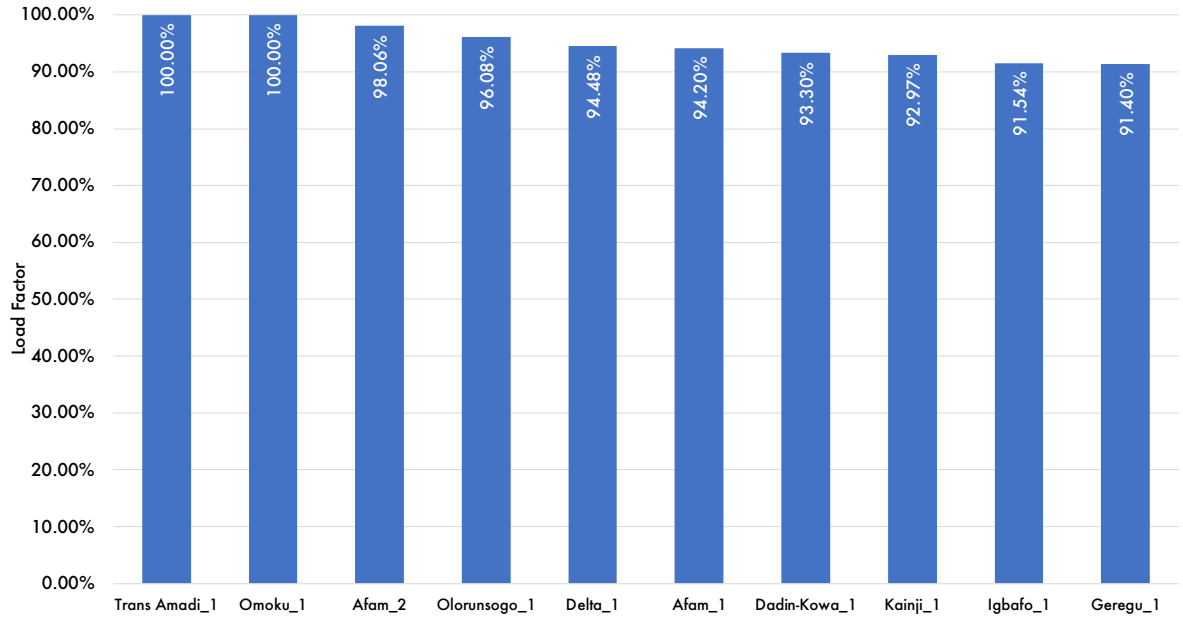


Figure 7.4: Load Factor of Plants with Highest Dispatch Rate (%) in 2024

[22] The order stipulates that hydropower plants which are the cheapest energy generation source, should be dispatched with priority to reduce wholesale energy costs for consumers. Dispatch of hydropower plants also helps to manage the flow of water thereby mitigating the risk of dam overflow and consequentially flooding.

7.1.6 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:

A. Energy Security[23]
B. Energy Sustainability[24]
C. Energy Affordability/Equity[25]

The formula for the share of electricity generated by fuel source is given by equation 7.4.

$$\text{Share of Fuel}_i = \frac{\text{Total Electricty Generated from Fuel i (MWh)}}{\text{Total Electricity Generated from all Fuel Sources (MWh)}} \times 100 \qquad (7.4)$$

The contribution from hydropower plants to total generation in 2024 was 30.92% (11,469.85GWh). The National Control Centre (NCC) tracks the daily water levels at all hydropower plants and manages the dispatch of the plants to ensure that there is sufficient water in the plants' reservoirs to allow them to run during the peak of the dry season albeit with limited output compared to the wet season. This is critical to grid stabilisation as it allows for year-round security of supply from the hydropower plants which are all located in the northern part of the country.

[23] 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.
[24] This represents the transition of a nation's energy system towards mitigating and avoiding potential environmental harm and climate change impacts.
[25] This reflects a nation's ability to provide universal access to affordable, fairly priced and abundant energy for domestic and commercial use.

7.2 Indices on the Performance of the National Grid

The Transmission Company of Nigeria (TCN) which has the responsibility of transporting energy from power plants to distribution substations holds two licences; 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.

Pursuant to Section 15 of the EA 2023, the Commission issued the Order on the Establishment of the Independent System Operator (ISO) in May 2024. Pursuant to the provisions of the Order, the TCN was unbundled into two entities; the TSP and the Nigerian Independent System Operator Nigeria Limited (NISO). The TSP will retain ownership and maintenance of the transmission infrastructure while the NISO will perform market and system operation functions of the TCN.

To assess the performance of the grid, the Commission focuses on the following four (4) Key Performance Indicators (KPIs) that relate to power transmission:

A. Transmission loss factor
B. Stability of grid frequency
C. Voltage fluctuation
D. Incidence of system collapse

7.2.1 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 local and international bilateral customers. There is an inverse relationship between the TLF and the efficiency of the transmission system; i.e. a decline in the TLF indicates an

improvement in transmission efficiency over a given period. The formula for TLF is represented by equation 7.5.

$$TLF = \left(1 - \frac{\text{Energy Delivered to all DisCos + Energy Exported}}{\text{Energy Sent out by all GenCos}}\right) \times 100 \qquad (7.5)$$

The average TLF in 2024 was 8.71%[26], as shown in Figure 7.5. A TLF of 8.71% indicates that for every 100MWh of energy injected into the grid, 8.71MWh of the energy was undelivered to DisCos and international customers due to losses in the transmission network or consumption at the transmission substation.

The average TLF of 8.71% recorded in 2024 represents an under-performance of -1.71pp relative to the MYTO target for 2024 (7.00%). The 7.00% TLF target set by the Commission for 2024 represents the maximum efficient transmission loss, which is to be recovered from tariffs paid by the customers. When the TLF exceeds the set target, the additional cost is borne solely by the TSP because there is no provision to recover revenues needed to cover excess (inefficient) losses from customers.

The Commission has directed TCN to work on a mechanism to identify the drivers of TLF so that they can develop solutions to maintain the TLF on the grid within the limits approved in its tariff.

[26] The TLF for May has been excluded in the computation of the 2024 average TLF because of the extraordinarily low TLF recorded in the month. The low TLF in May is because the energy injected into the grid by Zungeru_1 between 29 April to 15 May 2024 was not apportioned to DisCos and thus was used to net off transmission losses on the grid during the period.

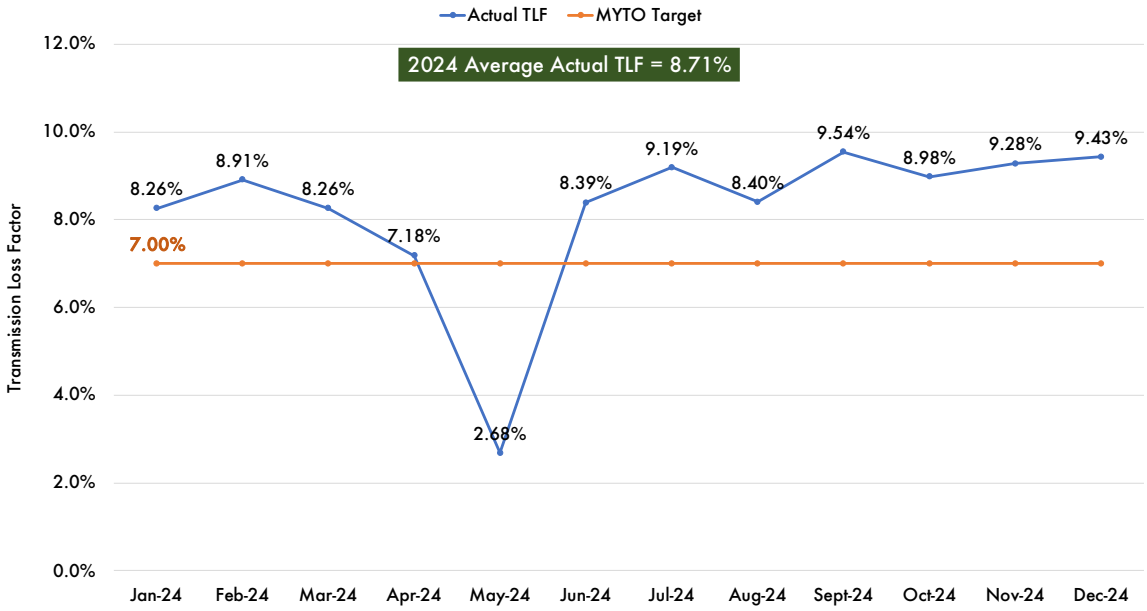


Figure 7.5: Actual TLF (%) vs. MYTO TLF Target (%) in 2024

7.2.2 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 only 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 ±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 ±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. In 2024, the average upper daily system frequency was 50.83Hz, while the average lower daily system frequency was 49.28Hz, which translates to a range of 1.55Hz.

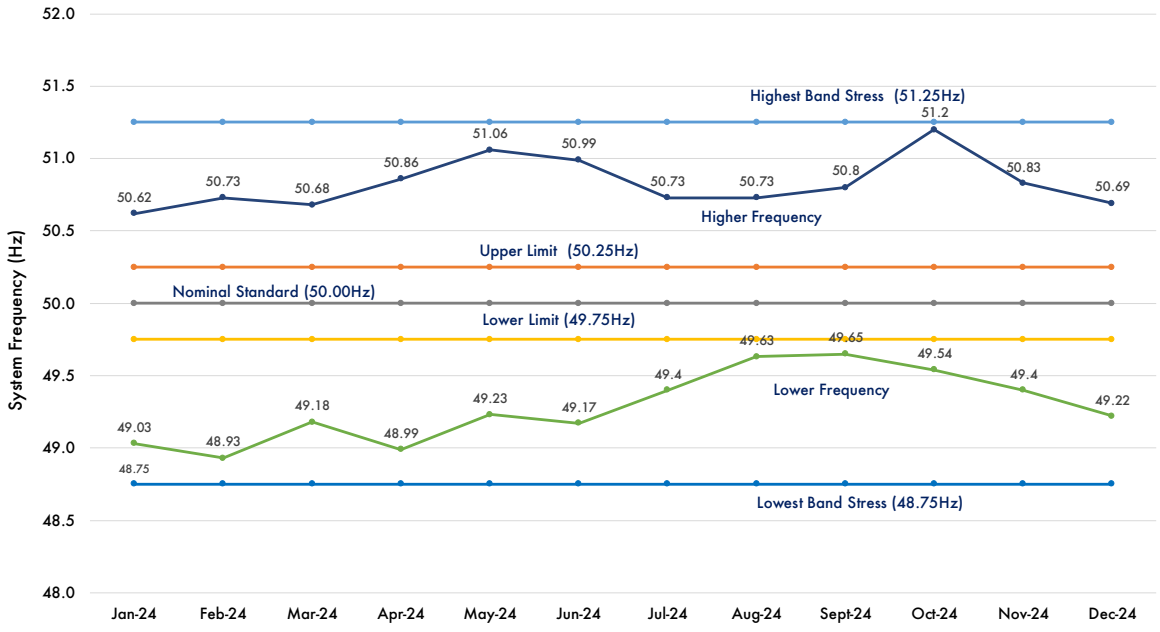


Figure 7.6: Monthly System Frequency (Hz) from Jan – Dec 2024

Figure 7.6 shows that the monthly average upper and lower bounds of the system frequency were both outside the normal operation limits but within the stress limits throughout 2024. The consistent operation of the grid outside the normal frequency limits during the year 2024 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 that provides for real-time grid monitoring and load management.

Since 2022, the SO has introduced 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 operational frequency limits.

7.2.3 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 ±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 cases of voltage fluctuations, particularly at the distribution network level can cause severe damage to industrial machines.

The system voltage pattern for 2024 is illustrated in Figure 7.7. The average upper and lower operating voltage bounds for the transmission network in 2024 were 352.55kV and 299.42kV, respectively (range of 53.13kV); both values are outside their respective allowable limits, which shows that the grid performance did not comply with the standard specified in the Grid Code.

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.

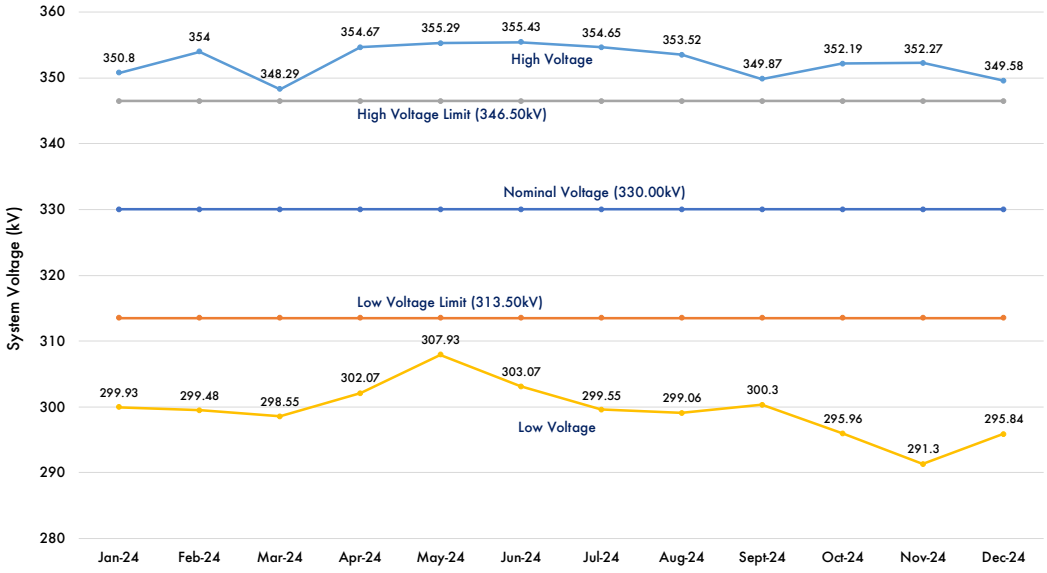


Figure 7.7: Monthly System Voltage (kV) in 2024

7.2.4 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 it is designed to function within specific stability boundaries, including voltage (330kV ± 5.0%) and frequency (50Hz ± 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 collapse.

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 may cause the units to shut down. This often exacerbates the frequency imbalance on the grid, thereby causing more generation units to shut down, resulting in a full or partial system collapse.

There were nine (9) incidents of system collapse in 2024. The summary of grid collapse incidents between 2019 and 2024 is contained in Table 7.2 and the details of the system collapse recorded in 2024 are contained in Table 7.3 respectively.

Table 7.2: System Collapses in 2019 – 2024

	No. of Collapses					
Category of Collapse	2019	2020	2021	2022	2023	2024
Partial Collapse	1	0	2	2	0	5
Total Collapse	10	4	2	4	3	4

Table 7.3: System collapse incidents in 2024

SN	Date and Time of Collapse	Type of Collapse	Data and Time of full system restoration	Remarks
1	04/02/2024 11:21Hrs	Partial	04/02/2024 18:15Hrs	The cascaded tripping of Sapele steam on gas constraints (29.2MW) and Egbin G.S units on units' faulty transmitters (343.8MW) initiated the instability on the grid.
2	28/03/2024 16:28Hrs	Full	28/03/2024 20:27Hrs	The cascaded tripping of Sapele steam (93.95MW) and Egbin G.S units (518.55MW) initiated the instability that caused the collapse.
3	15/04/2024 02:41Hrs	Partial	15/04/2024 10:55Hrs	The cascaded tripping of Afam VI (305MW) and Afam III (25MW) due to the fire incident at Afam T.S initiated the system instability on the grid and islanded Ibom power
4	06/07/2024 15:09Hrs	Partial	06/07/2024 23:56Hrs	The cascaded tripping of Egbin G.S units (347.0MW), Odukpani NIPP units (308.7MW) and Jebba G.S units (260.0MW) initiated the instability on the grid.
5	14/10/2024 18:48Hrs	Partial	15/10/2024 16:14Hrs	The cascading tripping of Jebba-Osogbo 330kV lines 1 & 2 (ccts 2JEB-SGB1 & 2), Jebba-Ganmo 330kV line (cct 2JEB-GAM1), Ikeja West - Osogbo 330kV line (cct 2KJW-SGB1) and Ihovbor-Osogbo 330kV line (cct 2HVR-SGB1) initiated the instability that eventually caused the system disturbance.
6	19/10/2024 08:15Hrs	Full	19/10/2024 17:57Hrs	The explosion of the yellow phase Current Transformer of the Bus-Section at Jebba TS triggered the tripping of all lines connected to Jebba TS, resulting in the loss of Jebba generation and subsequent loss of Shiroro, Zungeru and Kainji generating units. This event initiated the instability that eventually led to the system disturbance.
7	05/11/2024 13:52Hrs	Partial	05/11/2024 23:37Hrs	The cascaded tripping of Osogbo-Ayede 330kV line 1 (circuit 2SGB-YDE1), Osogbo-Ganmo 330kV line 1 (circuit 2SGB-GAM1), and Osogbo-Ikeja West 330kV line 1 (circuit 2SGB-KJW1) initiated the instability on the grid, this was further aggravated by the tripping of Osogbo-Ihovbor 330kV line 1 (circuit 2HVR-SGB1), and Ughelli/Sapele 330kV line 1 (circuit 2UGH-SAP1) which eventually caused the system disturbance.

SN	Date and Time of Collapse	Type of Collapse	Data and Time of full system restoration	Remarks
8	07/11/2024 11:29Hrs	Full	08/11/2024 10:59Hrs	The tripping of the following circuits: 2SHR-KTP1, 2SHR-GWA1, 2JEB-SGB2, 2SGB-KJW1, 2SGB-YDE1 with subsequent tripping of 2HVR-SGB1 and 2SGB-GAM1 initiated the instability that eventually led to the system disturbance.
9	11/12/2024 13:32Hrs	Full	11/12/2024 20:07Hrs	The tripping of the following circuits and generators: Kainji-Jebba 330kV Line 1 (circuit 2KNJ-JEB1), Jebba G.S-Jebba T.S 330kV Line 1 (circuit 1JEG-JEB1), Jebba G.S unit 2G1, 2, 3, 4 & 6 and Kainji G.S unit 1G5, 6,7,11 &12 with a generation loss totalling 731.48MW initiated the instability that eventually led to the system disturbance.

7.3 Metering

The status of the metering of end-use customers is presented in Table 7.4. The total number of registered customers as of December 2024 was 13,503,342, with 6,288,642 (46.57%) of the customers metered.

Table 7.4: Metering Progress as of December 2024

DisCos	Total No. of Registered Customers 2024	No. of Metered Customers 2024	Metering Progress (%) 2024	Metering Gap (%) 2024
Aba	206,540	78,281	*37.90*	*62.10*
Abuja	1,195,429	910,942	*76.20*	*23.80*
Benin	1,435,685	714,242	*49.75*	*50.25*
Eko	729,169	460,187	*63.11*	*36.89*
Enugu	1,396,440	671,760	*48.11*	*51.89*
Ibadan	2,644,124	1,153,025	*43.61*	*56.39*
Ikeja	1,286,026	998,986	*77.68*	*22.32*
Jos	832,053	225,188	*27.06*	*72.94*
Kaduna	884,647	217,033	*24.53*	*75.47*
Kano	891,410	215,834	*24.21*	*75.79*
Port Harcourt	1,179,194	524,256	*44.46*	*55.54*
Yola	822,625	118,908	*14.45*	*85.55*
Total	13,503,342	6,288,642	*46.57*	*53.43*

7.3.1 Metering Frameworks

The five (5) frameworks that are available for DisCos to meter their customers are contained in the Meter Asset Provider and National Mass Metering Regulations (NERC-R-113-2021) which was issued in 2021. Descriptions of the frameworks are contained below -

A. Meter Asset Provider: This framework aims to provide for the provision and maintenance of end-user meters as a service by third-party investors, and customers benefitting from such meters pay a Metering Service Charge (MSC) to cover the cost of metering service.

B. 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.
C. Vendor Financed: 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.
D. DisCo Financed: This involves the 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 approved by the Commission, and the terms of supply should not be in conflict with the terms of existing MAP and NMMP contracts.
E. Other External Efficient Meter Financing: The Commission has also approved other external meter financing that is efficient, cost-effective, and in tune with the terms of existing MAP and NMMP contracts.

In addition to the frameworks, the Commission created the Meter Acquisition Fund (MAF) in February 2024. The fund provides for a metering surcharge in the allowed tariffs for all DisCos. It is geared towards providing regulatory-backed long-tenor financing for the procurement of meters towards closing the metering gap in the NESI. A proportionate amount is deducted from the monthly collections of DisCos towards the MAF; this is then made available for DisCos to purchase meters either through a bulk one-off procurement or repayment of mid/long-term vendor-financed meter deployments.

In April 2024, the Commission, vide the Order: NERC/2024/072 on the Operationalisation of Tranche A of the MAF approved the use of ₦21.00 billion out of the funds that have accrued in the MAF as of the April 2024 settlement cycle, for

DisCos to provide meters for Band A customers in their franchise area at no cost. The approved fund was distributed pro rata among the DisCos based on their contribution to the MAF scheme at the cut-off date.

7.3.2 Customer Metering in 2024

A total of 572,055 meters were installed across all DisCos in 2024 (Table 7.5) utilising all the metering frameworks (Table 7.6). Ikeja (137,261), Ibadan (108,155), and Abuja (80,932) DisCos had the highest number of meter installations, representing 23.99%, 18.91% and 14.15% respectively of the total installations. Conversely, Kano (3,156) and Yola (2,586) DisCos had the lowest number of installations, accounting for 0.55% and 0.45% respectively of the total installations.

Table 7.5: Meter Deployment by DisCos in 2024

DisCo	No. of Metered Customers as of December 2024	No. of Customers Metered in 2024	Percentage of Total Installations
Aba	78,281	23,728	*4.15*
Abuja	910,942	80,932	*14.15*
Benin	714,242	55,105	*9.63*
Eko	460,187	38,117	*6.66*
Enugu	671,760	53,737	*9.39*
Ibadan	1,153,025	108,155	*18.91*
Ikeja	998,986	137,261	*23.99*
Jos	225,188	36,930	*6.46*
Kaduna	217,033	9,761	*1.71*
Kano	215,834	3,156	*0.55*
Port Harcourt	524,256	22,587	*3.95*
Yola	118,908	2,586	*0.45*
Total	6,288,642	572,055	*100.00*

Table 7.6: Meter Installations under the Metering Frameworks

S/N	Framework	Meter Installations in 2024
1	NMMP	289
2	MAF	4,076
3	MAP	508,103
4	Vendor Financed	27,965
5	DisCo Financed	31,622
	Total	*572,055*

NMMP

During the year, there were only 289 meters installed under the NMMP framework due to the winding down of its phase zero. Abuja, Eko, Ibadan, Ikeja, Jos and Port Harcourt DisCos have exhausted their meter allocations under the NMMP phase zero and hence have achieved a 100% utilisation rate. Benin, Kaduna and Yola still have significant allocations under the NMMP which they are yet to utilise (Table 7.7).

Table 7.7: Meter Installations under the NMMP Framework

DisCos	Meters Contracted	Total Installations	Utilisation Rate (%)
Abuja	100,475	100,475	*100.00*
Benin	90,870	80,156	*88.21*
Eko	79,178	79,010	*99.79*
Enugu	92,381	91,512	*99.06*
Ibadan	117,379	117,379	*100.00*
Ikeja	111,703	111,703	*100.00*
Jos	96,096	95,765	*99.66*
Kaduna	69,152	47,908	*69.28*
Kano	87,747	83,480	*95.14*
Port Harcourt	82,720	82,720	*100.00*
Yola	85,376	53,003	*62.08*
Total	1,013,077	943,111	*93.09*

MAP

The MAP framework accounted for a total of 508,103 meter installations in 2024 which corresponds to 88.82% of the total installations during the year. The winding down of the NMMP phase zero has led DisCos to intensify metering through the MAP framework in an attempt to further close the metering gap in the NESI. Ikeja (131,263; 25.83%), Ibadan (108,071; 21.27%) and Abuja (79,069; 15.56%) DisCos recorded the highest number of meters installed under the MAP framework in 2024. Kano (1,846; 0.36%) and Yola (831; 0.16%) recorded the lowest meter installations under the MAP in 2024.

Vendor Financed and DisCo Financed

A total of 27,965 meters were installed under the Vendor Finance metering framework in 2024. Only five (5) DisCos; Aba (18,933), Ikeja (5,998), Abuja (1,863), Kano (1,135) and Benin (36) DisCos installed meters under the vendor-financed metering framework in 2024.

A total of 31,622 customers were metered under the DisCo Financed framework by Jos (31, 442), Kano (96) and Ibadan (84) DisCos in 2024.

MAF

As of 31 December 2024, 4,076 meters have been installed under the MAF framework. Yola (1,755), Jos (1,674), Benin (568) and Kano (79) are the only DisCos that have commenced meter installations under the MAF.

7.4 Commercial Report

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 for all the players along the value chain to sustain their operations. In evaluating the commercial performance of the NESI in 2024, the following parameters have been considered:

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

7.4.1 Energy offtake performance

Effective 01 July 2022, the NESI transitioned into the Partial Activation of Contract (PAC) regime which enabled the DisCos to determine their unconstrained power requirements in absolute Megawatt (MW) known as their Partially Contracted Capacity (PCC). This marked a change from the previous regime under which energy was allocated to DisCo based on the percentages contained in the vesting contracts signed with NBET – "MYTO Load Allocation". When the gross available generation is below the total PCC of the DisCos, the SO shall allocate capacities to the DisCos in line with the guidelines for the implementation of the Economic Merit Order of Dispatch (EMOD) contained in the Tariff Order (NERC/2023/034) issued to the TCN in January 2024.

The PAC regime set out a framework to enable GenCos to earn capacity payments, i.e., payments for making an agreed generation capacity available irrespective of whether it is dispatched by the SO or not. This is in line with international best

practices in power procurement contracting and it increases the predictability of revenue flows for GenCos, thus allowing for critical routine maintenance activities to improve the availability of their plants.

The PAC regime acts as a deterrent against discretionary non-offtake of energy because DisCos have the obligation to make payments for all available capacity (up to the PCC) irrespective of actual energy offtake. To further improve contract discipline along the upstream segment of the NESI, the PAC regime provides for Liquidated Damages (LD) to be paid by GenCos to the DisCos in situations where the DisCo does not receive the contracted capacity due to challenges at the generation and/or transmission sub-segments[27]. In July 2022, updated Service Level Agreements (SLA) were signed between DisCos and TCN to institutionalise the compensation mechanism for DisCos when TCN's limitations constrain the energy delivered to the DisCos (up to the PCC).

The ratio between a DisCo's energy offtake and the available PCC is known as the "energy offtake performance". The formula for determining a DisCo's energy offtake performance is represented by equation 7.6:

$$\text{Energy Offtake performance (\%)} = \left(\frac{\text{Energy Offtake}}{\text{Available PCC}}\right) \times 100 \qquad (7.6)$$

Considering the large disparity between the 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.,

[27] Liquidated Damages (LD) are only due when issues are not Force Majeure i.e. the issues are within the control of the TCN/GenCo.

instances where DisCos deliberately reduced energy supply to areas with high commercial and collection losses.

It is noteworthy that when DisCos have offtake ratios below 100%, they incur increased wholesale energy costs as they still have to pay NBET/GenCos for unutilised capacity. The tariff methodology utilised by the Commission does not allow DisCos to recover the resultant additional wholesale energy costs (relative to the volume of energy off-taken) from customers.

The DisCos' load offtake performance in 2024 is presented in Table 7.8. Cumulatively, the DisCos' offtake performance in 2024 was 94.55%. All DisCos took less energy than their PCC in 2024. Enugu (98.18%) and Benin (98.03%) recorded the highest offtake performances. Yola (85.04%) DisCo, which was the only DisCo with offtake performance below 90%, recorded the lowest offtake performance during the year.

Table 7.8: Energy Offtake Performance in 2024

DisCos	Offtake (MWh/h)	PCC (MWh/h)	Offtake Performance (%)
Abuja	513.54	555.70	*92.41*
Benin	295.87	301.82	*98.03*
Eko	442.47	468.00	*94.54*
Enugu	269.93	274.93	*98.18*
Ibadan	407.94	421.90	*96.69*
Ikeja	520.39	549.04	*94.78*
Jos	167.86	184.58	*90.94*
Kaduna	189.64	208.61	*90.91*
Kano	192.59	207.25	*92.93*
Port Harcourt	251.10	258.21	*97.25*
Yola	73.58	86.52	*85.04*
All DisCos	3,324.92	3,516.57	*94.55*

7.4.2 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 formula for billing efficiency is represented by equation 7.7.

$$\text{Billing Efficiency (\%)} = \frac{\text{Total Units Billed (kWh)}}{\text{Total Energy Received by the Network (kWh)}} \times 100 \quad (7.7)$$

The amount of energy received by DisCos at their trading points in 2024 was 29,126.27GWh, out of which 23,919.68GWh was billed to the end-users, resulting in a billing efficiency of 82.12%. Billing Efficiency covers the technical and commercial loss components in the Aggregate, Technical, Commercial and Collection (ATC&C) loss. Some of the major factors that contribute to billing losses include;

A. Poor Customer Enumeration: this is the inability of DisCos to identify all electricity consumers.
B. Inaccurate Meters/Outdated Meters: this is the inability of DisCos to accurately measure the electricity consumed by end users due to the unavailability of meters or the use of obsolete meters at user sites.
C. Energy Theft: this is the deliberate action by some electricity consumers to consume electricity without making payments.
D. Technical Loss: this is the energy loss to wires and transformers (technical losses) which also contributes to DisCos' billing inefficiency, and this is particularly relevant for areas of the network with substandard or aged infrastructure.

The billing efficiency of all DisCos contained in Table 7.9 shows that Eko, Ibadan and Yola DisCos had the highest billing efficiencies of 89.46%, 88.78% and 88.04% respectively. Conversely, Kaduna recorded the lowest billing efficiency of

63.24%, indicating that Kaduna DisCo lost 36.76% of the energy received in 2024 to technical and commercial inefficiencies.

Table 7.9: Energy Received and Billed by DisCos in 2024

DisCos	Total Energy Received (GWh)	Total Energy Billed (GWh)	Billing Efficiency (%)
Abuja	4,498.57	3,510.00	*78.02*
Benin	2,591.83	2,207.87	*85.19*
Eko	3,876.01	3,467.65	*89.46*
Enugu	2,364.63	1,864.77	*78.86*
Ibadan	3,573.60	3,172.56	*88.78*
Ikeja	4,558.58	3,803.34	*83.43*
Jos	1,470.44	1,055.77	*71.80*
Kaduna	1,661.27	1,050.62	*63.24*
Kano	1,687.08	1,351.88	*80.13*
Port Harcourt	2,199.67	1,867.71	*84.91*
Yola	644.59	567.52	*88.04*
All DisCos	29,126.27	23,919.68	*82.12*

7.4.3 Revenue and Collection Efficiency

Collection efficiency is the ratio of the amount that is collected from customers compared to the amount billed to them by the DisCos. The significant under-recovery of the bills 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. The formula for collection efficiency is represented by equation 7.8.

$$\text{Collection Efficiency (\%)} = \frac{\text{Revenue Collected}}{\text{Billed Amount}} \times 100 \qquad (7.8)$$

The total revenue collected by the DisCos from customers in 2024 was ₦1,659.76 billion out of the total bill of ₦2,196.71 billion to customers, leaving an outstanding balance of ₦536.95 billion. This translates to a collection efficiency of 75.56% and implies that for every ₦100.00 worth of energy billed to customers by DisCos in

2024, approximately ₦24.44 was not recovered from customers. The significant collection inefficiency, combined with billing inefficiency, has continued to adversely impact the financial liquidity of the industry, ultimately limiting the NESI's ability to grow and attract new investments.

In 2024, Eko (86.85%) and Ikeja (83.37%) DisCos recorded the highest collection efficiencies among the DisCos, while Yola DisCo (51.53%) had the lowest collection efficiency (Table 7.10).

Table 7.10: Revenue Performance of DisCos in 2024

DisCos	Total Billings (₦'Billion)	Revenue Collected (₦'Billion)	Collection Efficiency (%)
Abuja	349.97	275.81	*78.81*
Benin	177.69	141.88	*79.85*
Eko	352.40	306.05	*86.85*
Enugu	163.23	126.05	*77.22*
Ibadan	261.40	192.50	*73.64*
Ikeja	371.22	309.48	*83.37*
Jos	105.32	57.59	*54.68*
Kaduna	81.87	43.34	*52.94*
Kano	136.52	75.01	*54.95*
Port Harcourt	155.03	110.35	*71.18*
Yola	42.08	21.68	*51.53*
All DisCos	2,196.71	1,659.76	*75.56*

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

The Aggregate Technical, Commercial and Collection (ATC&C) loss is the measure of the gross losses incurred by a DisCo in supplying electricity to end-use customers; it measures the revenue shortfall a DisCo suffers arising from a combination of billing (technical and commercial) as well as collection losses. The ATC&C loss comprises 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 7.9.

$$\text{ATC\&C Loss} = [1 - (\text{Billing Efficiency} \times \text{Collection Efficiency})] \times 100 \quad (7.9)$$

The ATC&C loss is a critical performance parameter for tariff determination because it is used to set efficiency targets for the DisCos. The Tariff Orders issued to DisCos make allowance for specific ATC&C loss level targets for each DisCo. Just as the case of TLF explained in section 7.2.1, the Commission has the responsibility of constantly reviewing the allowed ATC&C for each DisCo to reflect the maturity of the market and investments being made by the DisCo.

The average ATC&C loss for all the DisCos in 2024 was 37.95%, comprising 17.88% technical and commercial losses, and 24.44% collection loss. Collection losses (including unpaid bills from sensitive customers, disputed bills, etc.) continue to form a substantial part of the ATC&C loss. This reinforces the need for DisCos to intensify efforts in revenue collection to improve their cash flow and meet market obligations.

The overall ATC&C loss of 37.95% in 2024 was substantially higher than the efficient ATC&C loss provided in the MYTO for 2024 (24.73%). The inability of the DisCos to meet their allowed loss targets and the consequential inability to meet revenue requirements compromises their long-term financial position.

Table 7.11: ATC&C Loss of DisCos in 2024

DisCos	MYTO Target ATC&C (%)	Actual ATC&C Loss (%)	Variance: target-actual (pp)
Abuja	25.00	38.51	-13.51
Benin	25.00	31.98	-6.98
Eko	20.07	22.30	-2.23
Enugu	25.00	39.10	-14.10
Ibadan	25.00	34.62	-9.62
Ikeja	18.73	30.44	-11.71
Jos	32.72	60.74	-28.02
Kaduna	25.00	66.52	-41.52
Kano	25.00	55.97	-30.97
Port Harcourt	25.00	39.56	-14.56
Yola	56.00	54.63	1.37
Overall MYTO Level	24.73		
Aggregate technical, commercial & collection Loss	-	37.95	
Technical & Commercial Losses	-	17.88	
Collection Losses	-	24.44	

Eko DisCo (22.30%) recorded the lowest ATC&C, while Kaduna DisCo was the worst-performing DisCo with an ATC&C of 66.52% in 2024 (Table 7.11). This means that for every ₦100.00 worth of energy delivered by Eko and Kaduna, Eko recovered ₦77.70 in revenue while Kaduna recovered only ₦33.48 in revenue from customers.

Kaduna, Kano, and Jos DisCos had the widest variances relative to their allowed MYTO targets for the year with -41.52pp (target of 25.00% vs 66.52%), -30.97pp (target of 25.00% vs 55.97%), and -28.02pp (target of 32.72% vs 60.74%), respectively.

7.4.5 Market Remittance

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 share of the total GenCo invoice that is billed to the DisCos by NBET based on what the allowed DisCo tariffs can cover[28].

The DRO regime replaced the Minimum Remittance Obligation[29] (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 in their distribution networks.

Thus, the portion of GenCo invoices not covered by DRO is the tariff subsidy which is invoiced directly to the Federal Ministry of Finance by NBET. In addition, DisCos are also expected to remit 100% of the invoices received from the MO for transmission and administrative service costs.

It is important to note that due to the absence of cost-reflective tariffs across all DisCos in 2024, the Government incurred a subsidy obligation of ₦1,941.78 billion (62.59% of total NBET invoice) during the year (Table 7.12), which translates to an average of ₦161.85 billion per month. This subsidy obligation of the FGN is largely attributable to the FGN's policy to freeze allowed tariffs paid by customers despite the increase in cost-reflective tariffs.

The gross invoice issued by NBET (DRO-adjusted) and MO for energy costs and administrative services to DisCos in 2024 was ₦1,370.35 billion. Out of this amount, the DisCos remitted a total of ₦1,184.88 billion, translating to a gross remittance

[28] 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.
[29] For the MRO framework, DisCos are invoiced 100% of energy cost but only expected to pay MRO share of the invoice.

rate of 86.47%. The resultant deficit/underpayment of ₦185.47 billion is known as "market shortfall" i.e. shortfall that is attributable to market participants[30].

Table 7.12: Total NBET Invoice and Final Obligation (DRO) of DisCos for 2024

DisCos	Total NBET Invoice (₦' billion)	Final Obligation (₦' billion)	FGN Subsidy (₦' billion)
Abuja	483.53	198.64	284.88
Benin	272.41	103.21	169.20
Eko	415.06	184.19	230.86
Enugu	249.53	88.06	161.47
Ibadan	375.69	139.63	236.06
Ikeja	484.96	212.75	272.22
Jos	158.38	40.49	117.89
Kaduna	179.31	51.02	128.29
Kano	180.20	56.01	124.19
Port Harcourt	230.45	81.05	149.40
Yola	72.66	5.34	67.32
All DisCos	3,102.17	1,160.39	1,941.78

A comparative analysis of DisCos' market invoice (NBET + MO) and remittance in 2024 is presented in Figure 7.8. Eko, Ikeja, Yola and Abuja DisCos recorded remittance performances above 90% (98.56%, 94.61%, 92.10% and 90.80% respectively). Kaduna DisCo recorded the lowest remittance performance of 31.55% in 2024 due to its significant ATC&C loss underperformance, as reported in section 7.4.4.

The DisCos' disaggregated remittances to NBET and MO are summarised in Table 7.13. Out of the ₦1,160.39 billion invoice issued by NBET in 2024, DisCos remitted ₦1,005.51 billion, translating to a remittance performance of 86.65%. The top-performing DisCos were Eko (99.33%), Ikeja (94.43%) and Abuja (90.42%). Conversely, Kaduna DisCo (32.77%) recorded the lowest remittance performance to NBET in 2024.

[30] Government subsidy can also be referred to as "Tariff Shortfall" i.e., shortfall which is attributable to the government's policy that the CRT should not be passed onto customers in its entirety.

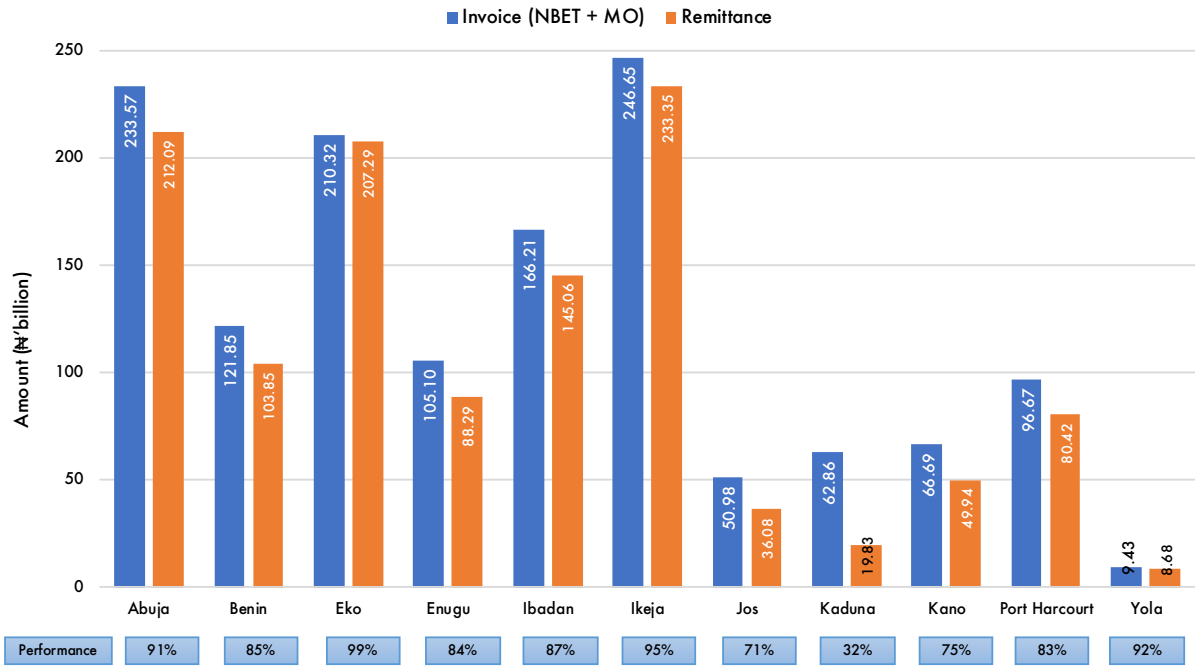


Figure 7.8: DisCos' Remittance Performance to NBET and MO in 2024

The MO invoice issued to the DisCos in 2024 was ₦209.95 billion, and the DisCos collectively remitted ₦179.36 billion, translating to an 85.43% remittance rate. The top-performing DisCos were Yola (96.73%), Ikeja (95.71%), Eko (93.12%) and Abuja (92.97%) with remittance rates above 90% to the MO in 2024. Conversely, Kaduna DisCo recorded the lowest remittance rate (26.29%) to MO in 2024.

Based on the remittance numbers contained above and non-funding of subsidies incurred in 2024 by the Federal government[31], it is clear that the upstream segment of the market continues to be plagued by liquidity challenges. Under the payment assurance waterfall[32] regime, DisCos' inability to achieve 100% remittance to the upstream segment indicates that they were unable to earn significant portions of

[31] NBET reported that the FGN paid only ₦371.34 million out of the ₦1,941.78 billion subsidy obligation for 2024; this translates to 0.019% settlement.
[32] 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.

their allowed revenues. Without this, they would also be unable to undertake necessary operational/capital investments.

Table 7.13: DisCos Remittance Performance to NBET and MO in 2024

DisCos	NBET (₦' Billion)			MO (₦' Billion)[33]		
	Invoice 2024	Remit. 2024	Performance 2024 (%)	Invoice 2024	Remit. 2024	Performance 2024 (%)
Abuja	198.64	179.62	*90.42*	34.93	32.47	*92.97*
Benin	103.21	87.96	*85.22*	18.64	15.89	*85.24*
Eko	184.19	182.96	*99.33*	26.13	24.33	*93.12*
Enugu	88.06	73.50	*83.47*	17.04	14.79	*86.79*
Ibadan	139.63	121.21	*86.81*	26.59	23.85	*89.70*
Ikeja	212.75	200.90	*94.43*	33.90	32.45	*95.71*
Jos	40.49	28.71	*70.90*	10.49	7.37	*70.26*
Kaduna	51.02	16.72	*32.77*	11.84	3.11	*26.29*
Kano	56.01	42.20	*75.35*	10.68	7.74	*72.44*
Port Harcourt	81.05	67.01	*82.67*	15.63	13.41	*85.83*
Yola	5.34	4.73	*88.56*	4.09	3.95	*96.73*
All DisCos	1,160.39	1,005.51	*86.65*	209.95	179.36	*85.43*
Special Customer: (₦ 'Million)						
Ajaokuta Steel	5,198.47	0.00	*0.00*	441.46	0.00	*0.00*

1. NBET and MO are the Nigerian Bulk Electricity Trader and Market Operator, respectively.

Ajaokuta Steel Co. Ltd and the host community did not make any payment for the ₦5.19 billion and ₦0.44 billion energy invoices and service charges received from NBET and MO, respectively, in 2024. The Commission has escalated the issue of continual non-payment of electricity bills by Ajaokuta to the relevant federal ministries to find a lasting solution. Failure to settle the obligations may put the Ajaokuta complex at risk of being disconnected from its service providers (NBET and MO) on the grounds of gross indebtedness.

The remittance performance of local and international bilateral customers to MO in 2024 is contained in Table 7.14. The international bilateral customers (i.e., Societe

[33] Based on the provisions of the SLA between the TCN and DisCos, the TSP has to pay a total of ₦2.41 billion to Jos, Kaduna, Kano and Yola DisCos due to service shortfalls in October and November 2024. The breakdown of the payments are as follows: Jos - Oct; ₦0.27 billion, Nov; ₦0.37 billion, Kaduna - Oct; ₦0.37 billion, Kano - Oct; ₦0.60 billion, Nov: ₦0.51 billion and Yola - Oct; ₦0.26 billion, Nov; ₦0.01 billion.

Nigerienne d'electricite – NIGELEC, Societe Beninoise d'Energie Electrique – SBEE and Compagnie Energie Electrique du Togo – CEET) received a total invoice of $56.07 million for ancillary services provided by the MO and made a total payment of $42.06 million, corresponding to a remittance performance of 75.01%. The local bilateral customers received a total invoice of ₦7,929.25 million for ancillary services provided by the MO and made a payment of ₦5,970.85 million, corresponding to a remittance performance of 75.30%.

Table 7.14: International & Bilateral Customers Invoices & Remittances in 2024

International Customers	Invoice (Million)	Remittance (Million)	Performance (%)
PARAS - SBEE ($)	12.89	12.89	*100.00*
PARAS - CEET ($)	2.62	2.62	*100.00*
TRANSCORP/SBEE - UGHELLI ($)	13.13	13.13	*100.00*
TRANSCORP/SBEE – AFAM 3 ($)	2.59	2.58	*99.61*
MAINSTREAM/NIGELEC ($)	10.84	10.84	*100.00*
ODUKPANI/CEET ($)	13.98	0.00	*0.00*
Total	*56.07*	*42.06*	*75.01*
Bilateral Customers	**Invoice (Million)**	**Remittance (Million)**	**Performance**
MAINSTREAM/INNER GALAXY (₦) MAINSTREAM/KAM INDUSTRIES (₦) MAINSTREAM/KAM INTEGRATED (₦) MAINSTREM/PRISM (₦) MAINSTREAM/ZERBERCED MAINSTREAM/KAM STEEL SHAGAMU (₦) MAINSTREAM/ADEFOLORUNSHO VENTURE (₦)	4,815.39	4,814.78	*99.99*
NDPHC /WEEWOOD (₦)	351.50	133.68	*38.03*
NORTH SOUTH/ STAR PIPE (₦)	131.49	110.39	*83.95*
TRANS-AMADI/FMPI TRANS-AMADI/ OAU (₦)	130.09	120.48	*92.61*
NDPHC/SUNFLAG (₦) OMOTOSHO 11/PULKIT (₦)	159.53	0.00	*0.00*
ALAOJI GENCO/APLE (₦)	1,646.18	350.00	*21.26*
TAOPEX/KAM STEEL SHAGAMU (₦) TAOPEX/KAM INTEGRATED	580.10	441.52	*76.11*
SAPELE/PHOENIX	114.94	0.00	*0.00*
Total	*7,929.25*	*5,970.85*	*75.30*

Appendices

APPENDICES

A. Human Resource Management

Table A.1: Forum Secretaries of the Commission as of 31st December 2024

S/N	Name	Forum Office
1	Emeka Stanley Anako	Abakaliki Forum Office, Ebonyi State
2	Adesoji Oluwo	Abeokuta Forum Office, Ogun State
3	Grace Ekpenyong	Abuja Forum Office, FCT
4	Nnabuife J. Ogana	Asaba Forum Office, Delta State
5	Princess Agwu	Awka Forum Office, Anambra State
6	Akiti Wilson Barguma	Bauchi Forum Office, Bauchi State
7	Blessing Ikharo Abua	Calabar Forum Office, Cross River State
8	Ado Jamilu	Dutse Forum Office, Jigawa State
9	Chikaeze Osakumi	Eko Forum Office, Lagos State
10	Abubakar Yuguda	Gombe Forum Office
11	Bashir Adam	Damaturu Forum Office, Yobe State
12	Aminu Dauda	Gusau Forum Office, Zamfara State
13	Damilola Akintokunbo	Ikeja Forum Office, Lagos State
14	Chukwunonso Joachim	Ikeja Forum Office, Lagos State
15	Oluwakemi Mary Iyanda	Ilorin Forum Office, Kwara State
16	Samuel Andzenge	Jos Forum Office, Plateau State
17	Mansur Abdullahi	Kaduna Forum Office, Kaduna State
18	Ja'afar Ibrahim	Kano Forum Office, Kano State
19	Abubakar Kurna	Katsina Forum Office, Katsina State
20	Jonathan Alanji	Lafia Forum Office, Nasarawa State
21	Pamela Ishaya Zakari	Makurdi Forum Office, Benue State
22	Afaoma Ubani	Owerri Forum Office, Imo State
23	Azeez Mutiu Akofe	Osogbo Forum Office, Osun State
24	Daniel Osumawei	Port-Harcourt Forum Office, River State
25	Kabiru. U. Musa	Sokoto Forum Office, Sokoto State
26	Chioma Okechukwu	Umuahia Forum Office, Abia State
27	Peter A. Dickson	Uyo Forum Office, Akwa Ibom State
28	Sydney W. Maksha	Yola Forum Office, Adamawa State

B. Licence, Permit and Certification

Table B.1: Licences issued and renewed by the Commission in 2024

S/N	Applicants	Capacity (MW)	Licence Type	Location	Fuel Type
A.	New Issue				
1	Golden Penny Power Limited	26.40	Off-grid Generation	Lagos State	Gas
2	Golden Penny Power Limited	11.80	Off-grid Generation	Oyo State	Gas
3	Golden Penny Power Limited	10.90	Off-grid Generation	Oyo State	Gas
4	Golden Penny Power Limited	4.50	Off-grid Generation	Cross River State	Gas
5	Golden Penny Power Limited	14.00	Off-grid Generation	Ogun State	Gas
6	Golden Penny Power Limited	32.40	Off-grid Generation	Lagos State	Gas
7	Daybreak Power Solutions	2.19	Off-grid Generation	Niger State	Solar
8	TIS Renewable Energy Limited	6.00	Off-grid Generation	Lagos State	Gas
9	Auro Nigeria Private Limited	1.50	Off-grid Generation	Kaduna State	Gas
10	Daybreak Power Solutions Limited	2.00	Off-grid Generation	Ogun State	Solar
11	Daybreak Power Solutions Limited	2.25	Off-grid Generation	Ogun State	Solar
12	Daybreak Power Solutions Limited	2.41	Off-grid Generation	Ogun State	Solar
13	Daybreak Power Solutions Limited	4.20	Off-grid Generation	Lagos State	Solar
17	Daybreak power Solutions	2.41	Off-grid Generation	Ogun State	Solar
18	Daybreak power Solutions	4.20	Off-grid Generation	Lagos State	Solar
19	TIS Renewable Energy Limited	6.00	Off-grid Generation	Lagos State	Gas
20	Golden penny Power Ltd	13.20	Off-grid Generation	Ogun State	Gas
21	Daybreak Power Solutions Limited	2.41	Off-grid Generation	Ogun State	Solar
22	Daybreak power Solutions Limited	2.634	Off-grid Generation	Abia State	Solar
23	Water Resources Asset Holding Co. Ltd	40.00	On-grid Generation	Taraba State	Hydro
24	Bogi Power Generation Co. Limited	26.00	On-grid Generation	Cross River State	Gas
25	Nigeria Independent System Operator Limited	NA	System Operator	FCT, Abuja	NA
26	Golden Triangle Electric Power Solutions Co. Ltd	NA	Trading Licence	Lagos State	NA
27	Watts Exchange Limited	NA	Trading Licence	Abuja	NA
28	Centum Dopemu Energy Services Ltd	NA	Trading Licence	Ogun State	NA
29	DMD Electric Limited	NA	Trading Licence	Lagos State	NA
30	Damcrest Energy Limited	NA	Trading Licence	FCT, Abuja	NA
31	Zenith point limited	NA	Trading Licence	Lagos State	NA
32	Capstone Energies Limited	NA	Trading Licence	FCT, Abuja	NA
33	Ecovolt Trade Limited	NA	Trading Licence	Lagos State	NA
34	Tendon Innovation Limited	NA	Trading Licence	Lagos State	NA
B.	Renewal				
35	Mabon Limited	39.00	On-grid Generation	Gombe State	Hydro

*IEDN is an acronym for an Independent Electricity Distribution Network

Table B.2: Captive power generation Permits granted by the Commission in 2024

S/N	Applicants	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
10	University of Abuja	Gwagwalada, Abuja	3.00
11	University of Calabar & Teaching Hospital	Cross River State	7.00
12	University of Agriculture Micheal Okpara	Umetuke, Abia State	3.00
13	University of Maiduguri & Teaching Hospital	Main Campus, Borno State	12.00
14	Federal University of Agriculture, Abeokuta	Main Campus, Ogun State	3.00
15	Federal University Gashuwa	Sabon Gari, Yobe State	1.50
16	Nigerian Defence Academy	Kaduna State	2.50
17	Nigeria Breweries Plc (Aba Breweries)	Aba, Abia State	5.60
18	Nigeria Breweries Plc (Ibadan Breweries)	Ibadan, Oyo State	7.20
19	Nigeria Breweries Plc (Ama Breweries)	Ama-Eke Ngwo, Enugu State	10.59
20	Nigeria Breweries Plc (Aba Malting Plant)	Obingwa, Abia State	7.97
21	Ro-Marong Nigeria Ltd	Amuwo Odofin, Lagos	4.40
22	Quantum Paper Limited	Lekki, Ogun State	7.00
23	Psaltry International Company Limited	Alayide Village, Oyo State	1.10
24	Nile University of Nigeria	Jabi, Abuja	10.00

Table B.3: Mini-grid registrations and Permits approved by the Commission in 2024

S/N	Name	Location	Capacity (kW)
	A. Registrations		
1	NXT Grid Nigeria Limited	Kaduna State	91.00
2	Prince Albert Company Limited	Cross River State	100.00
3	Crossboundary Energy Access Nigeria Assets Limited	Kogi State	100.00
4	Crossboundary Energy Access Nigeria Assets Limited	Kogi State	100.00
5	Crossboundary Energy Access Nigeria Assets Limited	Kogi State	100.00
6	Crossboundary Energy Access Nigeria Assets Limited	Kogi State	100.00
7	Crossboundary Energy Access Nigeria Assets Limited	Kogi State	50.00
	B. Permits		
8	Havenhill Synergy Limited	Osun State	100.00
9	Havenhill Synergy Limited	Osun State	50.00
10	Havenhill Synergy Limited	Osun State	132.00
11	Prado Limited	Benue State	150.00
12	Prado Limited	Nasarawa State	150.00
13	Prado Limited	Benue State	100.00
14	Prado Limited	Niger State	100.00
15	Prado Limited	Benue State	100.00
16	Prado Limited	Niger State	150.00
17	Prado Limited	Benue State	600.00
18	Prado Limited	Niger State	100.00
19	Prado Limited	Benue State	100.00
20	Prado Limited	Benue State	550.00
21	Prado Limited	Benue State	250.00
22	Prado Limited	Benue State	150.00
23	Prado Limited	Benue State	150.00
24	Prado Limited	Benue State	300.00
25	Prado Limited	Nasarawa State	300.00
26	Prado Limited	Benue State	100.00
27	Prado Limited	Nasarawa State	400.00
28	Prado Limited	Benue State	250.00
29	Prado Limited	Benue State	100.00
30	Prado Limited	Benue State	200.00
31	Prado Limited	Benue State	300.00
32	Prado Limited	Ondo State	200.00
33	Prado Limited	Kano State	400.00
34	Prado Limited	Kano State	300.00

Table B.4: Meter Service Providers and Meter Asset Providers certified by the Commission in 2024

S/N	Applicant	Application Type
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	Bee-Spring Services Ltd	Installer A1
6	Armese Consulting Ltd	Installer A1
7	Shimi H & F Ltd	Installer A1
8	Integrated Power Nigeria Limited	Installer A1
9	Meter Service Hub	Installer A1
10	Caplan Integrated Services Limited	Installer A1
11	Cartlark international Limited	Installer A1
12	Gosslink Engineering Limited	Installer A1
13	MBH Power Limited	Installer A1
14	Arrowhead Electric solutions Ltd	Installer A1
15	Chapet Energy Ltd	Installer C1
16	Mojec Meter Asset Management	Installer A1
17	Omelus Integrated Solutions Limited	Installer A1
18	Unistar Hi-Tech Systems Limited	Installer A1
19	Smart Meters Company Limited	Manufacturer
20	Crestflow Energy Limited	Manufacturer
21	Mojec Meter Asset Management Co Limited	Manufacturer
22	MBH Power Limited	Manufacturer
23	Amal Technologies Limited	Manufacturer
24	Sabrud Consortium Nigeria Ltd	Manufacturer
25	Unistar H-Tech system Ltd	Manufacturer
26	CWG Plc	Manufacturer
27	Skyrun Electric Power Tech	Manufacturer
28	Holley Metering Limited	Manufacturer
29	Smart Meters Co Ltd	Manufacturer
30	Mojec International ltd	Manufacturer
31	Integrated Power Nig Ltd	Vendor
32	Utility Performance Ltd	Vendor
33	Gosslink Engineering Ltd	Vendor
34	Gosslink Engineering Lttd	Importer
35	Phoenix Renewable Limited	Importer
36	Kenpetrus Energy Resources Limited	Importer
37	Smart Meters Asset Provider Limited	MAP
38	Deep Vision Business Venturers Limited MAP	MAP
39	Wellsun Intelligent Technology Ltd	MAP
40	Kiggs Meters and Systems Ltd	MAP
41	Skyrun Elec. Smart Metering System	MAP
42	Paktim Engineering Consultants MGT	MAP
43	Skipper Nigeria Limited	MAP
44	Amal Tech Ltd	MAP

S/N	Applicant	Application Type
45	Morgan Energy Limited	MAP
46	Beacon Energy Development Services Ltd	MAP
47	Anietronic Limited	MAP
48	Utility Performance Limited	MAP
49	Ams Smart Tech Solutions Nig. Ltd	MAP
50	Susej Nigeria Limited	MAP
51	Phisbond Nigeria Limited	MAP
52	Marks & Adams Investment Ltd	MAP
53	Chris Omonri Nigeria Enterprises ltd	MAP
54	TSL Engineering Limited	MAP
55	BTS Power Limited	MAP
56	Chintech Electro Nigeria Limited	MAP
57	Domtech Consult Limited	MAP
58	Dari Investment Limited	MAP
59	Mahashakti Nigeria Limited	MAP
60	Metub Services Limited	MAP
61	Eve Electric Technology Co.Ltd	MAP
62	Zenithpoint Limited	MAP
63	Tesla Automation Limited	MAP
64	Tetra-electric solutions Limited	MAP
65	Bee-springs Services Limited	MAP
66	Brooksfield Technologies Limited	MAP
67	RLG-Adulawo Limited	MAP
68	Incomtel Engieering Limited	MAP
69	Lowpai Energy & Marine Limited	MAP
70	Power Cap limited	MAP
71	Regno Development Limited	MAP
72	Hampcc Uti Limited	MAP
73	Nicholas Ojo Alokomaro and Sons Limited	MAP
74	M E Metering Company Limited	MAP
75	Direct Credit E-Solutions Nigeria Limited	MAP

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.[1] 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.

C. Customer Complaints

Table C.1: Customer complaints received by DisCos in 2024

DisCo	Customers' Complaints ('000)				
	2024/Q1	2024/Q2	2024/Q3	2024/Q4	Y2024
Abuja	27.48	25.89	31.41	23.96	108.74
Aba	3.33	4.28	4.93	5.51	18.05
Benin	6.88	6.02	11.81	13.95	38.66
Eko	47.90	53.38	64.99	48.96	214.16
Enugu	35.58	22.02	20.77	15.81	93.99
Ibadan	53.74	51.72	56.60	46.46	209.56
Ikeja	23.00	20.54	22.97	24.09	89.74
Jos	18.93	20.01	20.50	19.88	79.61
Kaduna	6.90	6.55	7.41	5.90	25.02
Kano	11.41	18.07	27.51	17.28	74.33
P/H	53.45	56.93	56.94	54.28	222.00
Yola	2.79	2.04	2.58	2.05	9.32
Total	291.38	287.44	328.41	278.13	1,183.18

Table C.2: Category of customer complaints received by DisCos (2019-2024)

Complaint	2024 ('000)					2023 ('000)					2022 ('000)				
Categories	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual
Metering	167.46	140.42	137.88	141.40	587.16	118.99	149.71	191.36	177.52	638.32	79.63	111.95	117.26	122.80	431.66
Interruption	24.85	28.18	23.18	23.40	99.61	23.01	23.61	26.94	24.55	98.13	37.18	23.43	21.75	24.23	106.60
Voltage	4.87	4.80	4.05	2.70	16.41	4.27	4.33	4.49	4.80	17.80	16.27	9.98	4.13	4.34	34.74
Load Shedding	0.64	0.47	0.28	0.23	1.62	1.51	2.43	1.66	0.86	6.48	14.71	5.33	1.30	1.46	22.82
Billing	28.45	41.08	69.96	29.51	168.99	56.72	53.36	43.02	42.86	195.97	41.64	32.93	49.92	61.02	185.52
Disconnection	2.60	2.79	4.18	5.05	14.62	4.11	4.69	4.91	4.26	17.98	26.99	7.25	7.34	4.84	46.43
Connection Delay	2.44	3.36	0.84	0.56	7.20	3.69	3.06	2.07	0.52	9.35	12.79	2.99	1.28	2.95	20.02
Others	60.08	66.34	88.33	72.83	287.58	37.17	65.80	59.45	55.30	218.24	14.14	38.01	38.22	39.43	129.81
Total	291.38	287.44	328.70	275.68	1,183.20	249.68	325.89	333.94	310.71	1,220.24	243.38	231.90	241.24	261.10	977.64
Complaint	2021 ('000)					2020 ('000)					2019('000)				
Categories	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual
Metering	50.32	50.65	55.28	53.30	209.58	44.66	48.01	71.89	41.45	206.03	37.12	46.43	38.83	41.54	163.94
Interruption	43.61	48.21	45.06	38.45	175.34	41.38	39.86	34.19	37.63	153.08	14.39	12.92	22.09	24.92	74.33
Voltage	22.89	29.32	30.23	26.07	108.53	15.21	17.58	17.62	14.89	65.32	7.11	6.48	7.83	10.09	31.52
Load Shedding	17.79	18.22	14.36	14.14	64.52	16.05	20.34	16.49	16.68	69.57	1.37	8.33	21.62	7.74	39.08
Billing	38.92	42.76	48.54	39.39	169.62	45.74	45.89	40.48	46.39	178.52	39.94	46.19	47.05	48.23	181.41
Disconnection	34.36	31.31	31.01	28.12	124.82	21.42	22.85	20.41	24.66	89.36	7.79	9.32	18.06	17.69	52.87
Connection Delay	19.22	15.98	14.82	14.76	64.79	10.30	14.49	12.40	13.38	50.59	0.51	5.87	7.23	9.15	22.77
Others	9.80	4.97	7.78	8.37	30.92	8.31	9.93	16.97	9.39	44.61	37.70	16.36	10.09	18.42	82.58
Total	236.93	241.47	247.11	222.63	948.17	203.11	218.98	230.49	204.50	857.10	145.95	151.93	172.83	177.80	648.53

Table C.3: Appeals received and resolved by Forum Offices in 2024

S/N	Forum Offices	2024/Q1				2024/Q2				2024/Q3				2024/Q4				2024			
		Customers' Complaints				Customers' Complaints				Customers' Complaints				Customers' Complaints				Customers' Complaints			
		Received	Resolved	Pending	Resolution Rate (%)	Received	Resolved	Pending	Resolution Rate (%)	Received	Resolved	Pending	Resolution Rate (5)	Received	Resolved	Pending	Resolution Rate (%)	Received	Resolved	Pending	Resolution Rate (%)
1	Abakaliki	41	17	21	41	66	42	18	64	64	57	6	89	49	34	15	69	175	150	15	86
2	Abeokuta	122	42	33	34	152	14	63	9	180	90	30	50	228	82	48	36	556	228	48	41
3	Abuja	35	27	8	77	45	30	15	67	65	48	17	74	77	61	16	79	182	166	16	91
4	Ado-Ekiti	16	10	6	63	19	11	8	58	24	17	7	71	10	7	3	70	48	45	3	94
5	Asaba	72	50	21	69	51	34	15	67	55	38	17	69	74	48	26	65	199	170	26	85
6	Awka	101	56	45	55	149	103	46	69	168	94	74	56	172	150	22	87	425	403	22	95
7	Bauchi	6	6	0	100	3	3	0	100	6	6	0	100	10	2	8	20	25	17	8	68
8	Benin	55	39	16	0	60	53	7	0	49	19	30	0	55	30	25	0	166	141	25	0
9	Damaturu	3	3	0	0	3	2	1	0	5	3	2	0	4	4	0	0	12	12	0	0
10	Calabar	27	17	10	63	26	19	7	73	31	20	11	65	35	28	7	80	91	84	7	92
11	Dutse	7	5	2	71	4	2	2	50	3	2	1	67	3	0	3	0	12	9	3	75
12	Eko	207	159	45	77	218	155	63	71	270	175	94	65	303	205	98	68	796	694	98	87
13	Enugu	201	82	68	41	204	83	76	41	186	151	26	81	26	0	26	0	447	316	26	71
14	Gombe	12	0	11	0	13	1	12	8	20	1	18	5	27	14	12	52	31	16	12	52
15	Gusau	8	2	6	25	10	10	0	100	7	1	6	14	14	6	8	43	27	19	8	70
16	Ibadan	142	114	28	80	104	65	39	63	220	59	161	27	311	113	198	36	549	351	198	64
17	Ikeja	537	240	297	45	642	320	322	50	719	416	303	58	587	544	43	93	1563	1520	43	97
18	Ilorin	60	26	34	43	96	62	34	65	159	129	30	81	201	179	22	89	418	396	22	95
19	Jos	17	12	5	71	17	13	4	76	38	23	15	61	30	30	0	100	78	78	0	100
20	Kaduna	22	12	8	55	29	18	2	62	29	23	5	79	26	14	6	54	91	67	6	74
21	Kano	26	15	7	58	23	17	0	74	21	10	7	48	30	22	8	73	86	64	8	74
22	Katsina	3	1	2	33	4	3	1	75	5	4	1	80	1	1	0	100	9	9	0	100
23	Kebbi	8	3	3	38	4	2	2	50	3	1	2	33	2	0	2	0	10	6	2	60
24	Lafia	10	10	0	100	10	4	6	40	11	7	4	64	4	0	4	0	25	21	4	84
25	Lokoja	6	3	3	0	5	3	2	0	17	4	13	0	15	7	8	0	25	17	8	0
26	Makurdi	13	5	1	38	11	7	1	64	6	0	5	0	13	6	2	46	36	18	2	50
27	Osogbo	371	194	177	52	365	173	192	47	473	213	260	45	573	361	212	63	1153	941	212	82
28	Owerri	15	9	6	60	26	18	8	69	45	30	15	67	43	15	28	35	100	72	28	72
29	P/Harcourt	69	57	8	83	83	57	24	69	112	102	8	91	86	63	19	73	310	279	19	90
30	Sokoto	5	2	3	40	10	7	3	70	8	0	7	0	12	6	6	50	22	15	6	68
31	Umuahia	9	5	4	56	12	6	6	50	8	0	8	0	13	4	7	31	24	15	7	63
	Umuahia 2	5	4	1	80	5	2	3	40	6	0	6	0	15	7	8	47	21	13	8	62
32	Uyo	176	148	27	84	152	104	48	68	165	134	30	81	187	145	42	78	575	531	42	92
33	Yola	23	22	0	96	5	0	5	0	24	10	14	42	31	21	8	68	64	53	8	83
All Forum Offices		2,430	1,397	906	57	2,626	1,443	1,035	55	3,202	1,887	1,233	59	3,267	2,209	940	68	8,351	6,936	940	83

Table C.4: List and addresses of NERC Forum Offices as of December 2024

S/N	Forum Office	Location	Telephone	Email
1	Abakaliki, Ebonyi State	3, Ezekuna Crescent, Off Nsugbe Street, Abakaliki Ebonyi State	9037808590	abakalikiforum@nerc.gov.ng
2	Abeokuta, Ogun State	33, First Avenue, Ibara Housing Estate, Ibrar GRA, Abeokuta	9139381008	abeokutaforum@nerc.gov.ng
3	Abuja, FCT	14, Road 131, Gwarinpa, Federal Capital Territory, Abuja	8146862225	abujaforum@nerc.gov.ng
4	Asaba, Delta State	Denis Osadebe Way, Beside Mobil Filling Station, Asaba, Delta State	9062277247	asabaforum@nerc.gov.ng
5	Awka, Anambra State	Plot 80, Aroma Junction Layout, Opp. CBN, Awka, Anambra State	9037808594	awkaforum@nerc.gov.ng
6	Bauchi, Bauchi State	37, Old Jos Road, GRA, Bauchi, Bauchi State	9062924607	bauchiforum@nerc.gov.ng
7	B/Kebbi, Kebbi State	8, Ahmadu Bello Way, Opp. Kebbi State Govt House, Kebbi State	9062863161	birninkebbiforum@nerc.gov.ng
8	Calabar, C/Rivers State	Plot 109, MCC Road by Ibok Street, Calabar, Cross River State	9062863159	calabarforum@nerc.gov.ng
9	Damaturu, Yobe State	No. 5, AD Road, Abba Ibrahim Extension, Off Potiskum Road, Damaturu, Yobe State	9169978243	damaturuforum@nerc.gov.ng
10	Dutse, Jigawa State	Dutse G.R.A, Dutse, Jigawa State	7031704827	jigawaforum@nerc.gov.ng
11	Eko, Lagos State	61, Odunlami Street, Off Marina, Lagos Island, Lagos State	8106807261	ekoforum@nerc.gov.ng
12	Gombe, Gombe State	Government Layout GDP/2, Along Ministry of Education Road, Gombe State	8140440079	gombeforum@nerc.gov.ng
13	Gusau, Zamfara State	2 Canteen Daji, J. B. Yakubu Road, Gusau, Zamfara State	9062863163	gusauforum@nerc.gov.ng
14	Ikeja, Lagos State	199, Obafemi Awolowo Way, Alausa, Ikeja, Lagos State	8106807298	ikejaforum@nerc.gov.ng
15	Ilorin, Kwara State	30, Stadium Road, Off Taiwo Road, Ilorin, Kwara State	9062924603	ilorinforum@nerc.gov.ng
16	Jos, Plateau State	5a, Ray-field Road, Jos, Plateau State	9037808597	josforum@nerc.gov.ng
17	Kaduna, Kaduna State	22, Ahmadu Bello Way, Opposite NNDC Building, Kaduna, Kaduna State	8106807299	kadunaforum@nerc.gov.ng
18	Kano, Kano State	2, Miller Road, Bompai, Nasarawa G.R.A, Kano, Kano State	8146862222	kanoforum@nerc.gov.ng
19	Katsina, Katsina State	7, Abuja Crescent, Off Hassan Usman Katsina Road, Katsina, Katsina State	7031704821	katsinaforum@nerc.gov.ng
20	Lafia, Nasarawa State	Manyi Street, Off Jos Road, Bukan Sidi, Lafia, Nasarawa State	9062924599	lafiaforum@nerc.gov.ng
21	Makurdi, Benue State	Hephzibah Plaza, Atom Kpera Road, Opp. Makurdi Int'l School, Benue State	9062277249	makurdiforum@nerc.gov.ng
22	Osogbo, Osun State	51, Isiaka Adeleke Way, Along Okefia-Alekuwodo Rd, Osogbo, Osun State	9062924604	osogboforum@nerc.gov.ng
23	P/Harcourt, Rivers State	The Vhelberg Imperial Hotel, Plot 122 & 122a, Bank Anthony Avenue, Off Ordinance Rd, P/Harcourt	8146862223	phforum@nerc.gov.ng
24	Sokoto, Sokoto State	1, Garba Duba Road, Sokoto, Sokoto State	9062863157	sokotoforum@nerc.gov.ng
25	Umuahia, Abia State	House 2, Adelabu Str., Amaokwe Housing Estate, Umuahia Ibeku, Abia State	9062277251	umuahiaforum@nerc.gov.ng
26	Uyo, Akwa Ibom State	63, Osongama Road, Off Oron/Uyo Airport Road, Uyo, Akwa Ibom State	9062863165	uyoforum@nerc.gov.ng
27	Yola, Adamawa State	5, Nguroje Str., Karewa Extension, Jimeta, Yola, Adamawa State	9037808535	yolaforum@nerc.gov.ng

D. Electricity Generation

Table D.1: Updated nomenclature of Power Plants

S/N	Old Name	New Name
1	Shiroro	Shiroro_1
2	Kainji	Kainji_1
3	Jebba	Jebba_1
4	Dadin-Kowa	Dadin-Kowa_1
5	Zungeru	Zungeru_1
6	Egbin ST (1-6)	Egbin_1
7	Sapele Steam	Sapele Steam_1
8	Delta	Delta_1
9	Geregu	Geregu_1
10	Omotosho	Omotosho_1
11	Olorunsogo	Olorunsogo_1
12	Afam IV-V	Afam_1
13	Sapele NIPP	Sapele_2
14	Alaoji NIPP	Alaoji_1
15	Geregu NIPP	Geregu_2
16	Olorunsogo NIPP	Olorunsogo_2
17	Omotosho NIPP	Omotosho_2
18	Ihovbor NIPP	Ihovbor_1
19	Gbarain NIPP	Gbarain_1
20	Okpai	Okpai_1
21	Afam VI	Afam_2
22	AES	AES_1
23	Omoku	Omoku_1
24	Azura IPP	Ihovbor_2
25	Ibom Power	Ibom Power_1
26	Trans Amadi	Trans Amadi_1
27	Rivers IPP	Rivers_1
28	Odukpani	Odukpani_1
29	Paras Energy	Ikeja_1
30	Taopex Energy	Igbafo_1

Table D.2: Available Capacity, Energy Generated and Energy Delivered (2021-2024)

	Installed Available Capacity (MW)				Energy Generated (MWh/h)				Energy Delivered to the Grid (MWh/h)			
Period	2024	2023	2022	2021	2024	2023	2022	2021	2024	2023	2022	2021
January	4,459	4,394	4,783	5,103	4,275	4,083	4,265	4,495	4,230	4,021	4,187	4,424
February	3,957	4,726	4,863	5,513	3,796	4,502	4,317	4,561	3,763	4,441	4,255	4,482
March	4,331	4,828	4,491	5,601	4,138	4,432	3,728	4,410	4,887	4,346	3,679	4,328
April	4,223	4,334	5,099	5,023	3,960	4,177	3,813	4,308	3,921	4,095	3,764	4,229
May	4,574	4,421	4,608	5,002	4,262	4,071	3,630	4,149	4,217	4,029	3,583	4,075
June	4,391	4,426	3,845	4,505	3,834	3,949	3,224	3,774	3,793	3,863	3,178	3,705
July	4,915	4,139	4,092	4,858	4,199	3,968	3,634	3,940	4,151	3,911	3,592	3,866
August	4,854	4,060	4,575	5,593	4,150	3,946	3,939	4,003	4,125	3,891	3,882	3,934
September	5,533	4,435	4,456	5,453	4,492	3,858	4,047	3,867	4,462	3,808	3,939	3,801
October	5,397	4,964	4,233	5,764	3,906	4,452	3,976	4,138	3,904	4,399	3,936	4,078
November	5,257	5,076	4,537	5,432	4,192	4,399	4,304	4,336	4,189	4,338	4,264	4,275
December	5,237	4,450	4,740	5,200	4,524	4,450	4,265	4,495	4,503	4,021	4,394	4,424
Average	4,761	4,521	4,527	5,254	4,144	4,191	3,929	4,206	4,179	4,096	3,888	4,159

Table D.3: Plants' Average Load Factor (2021-2024)

	Load Factor (%)			
GenCos	2024	2023	2022	2021
Afam_1	94.20	93.69	78.90	75.69
Afam_2	98.06	100.00	97.72	92.91
Alaoji_1	0.00	88.35	80.10	51.29
Ihovbor_2	87.55	90.31	93.23	88.90
Dadin-Kowa_1	93.30	95.93	97.93	-
Delta_1	94.48	96.39	87.69	82.27
Egbin_1	89.67	93.28	91.48	81.59
Geregu_1	91.40	94.17	83.57	76.14
Geregu_2	69.75	91.88	88.03	64.91
Ibom power_1	67.49	54.57	52.37	80.69
Ihovbor_1	43.24	81.16	84.02	50.60
Jebba_1	86.02	93.18	98.44	85.08
Kainji_1	92.97	95.52	98.09	95.05
Odukpani_1	85.83	92.63	72.70	72.88
Okpai_1	83.91	84.72	81.37	78.52
Olorunsogo_1	96.08	99.83	84.90	75.45
Olorunsogo_2	54.89	98.26	82.60	65.11
Omoku_1	100.00	100.00	100.00	87.26
Omotosho_1	90.79	97.40	89.66	84.07
Omotosho_2	60.57	85.51	87.19	52.76
Ikeja_1	88.58	87.39	82.84	79.20
Rivers_1	76.56	89.23	92.03	71.72
Sapele Steam_1	74.59	90.29	68.67	51.87
Sapele_2	54.94	79.90	66.91	77.37
Shiroro_1	82.35	85.53	89.63	74.54
Afam_1	100.00	100.00	99.05	79.12
Total	87.00	92.22	85.94	79.92

Table D.4: Annual Electricity Output and Share by Fuel Type (2021-2024)

		Total Electricity Output (GWh)				Fuel Share of Electricity Output (%)			
Period	Fuel Type	2024	2023	2022	2021	2024	2023	2022	2021
Q1	Thermal	6,582	6,979	6,497	7,683	74	75	73	78
	Hydro	2,306	2,370	2,350	2,227	26	25	27	22
	Aggregate	8,888	9,350	8,848	9,910	100	100	100	100
Q2	Thermal	6,409	7,068	6,324	7,373	73	80	81	82
	Hydro	2,368	1,798	1,442	1,628	27	20	19	18
	Aggregate	8,777	8,867	7,766	9,001	100	100	100	100
Q3	Thermal	6,370	6,456	6,027	6,729	67	74	72	77
	Hydro	3,081	2,208	2,512	1,962	33	26	28	23
	Aggregate	9,451	8,664	8,850	8,692	100	100	100	100
Q4	Thermal	6,261	7,087	6,438	6,832	67	72	70	72
	Hydro	3,029	2,702	2,926	2,648	33	28	30	28
	Aggregate	9,290	9,789	9,365	9,481	100	100	100	100
Annual	Thermal	25,621	27,623	25,613	28,619	70	75	73	77
	Hydro	10,782	9,086	9,328	8,466	30	25	27	23
	Aggregate	37,093	36,710	34,942	37,086	100	100	100	100

Table D.5: Plant Share of Total Electricity Output (2021-2024)

	Electricity Output by Plant (GWh)				Electricity Output by Plant (%)			
GenCos	2024	2023	2022	2021	2024	2023	2022	2021
Afam_1	363	344	432	585	0.98	0.94	1.24	1.59
Afam_2	2,416	2,737	853	2,404	6.51	7.46	2.44	6.53
Alaoji_1	0	58	579	505	0.00	0.16	1.66	1.37
Ihovbor_2	3,323	3,244	3,454	3,252	8.96	8.84	9.89	8.84
Dadin-Kowa_1	210	205	234	0	0.57	0.56	0.67	-
Delta_1	2,913	3,130	3,341	112	7.85	8.53	9.56	7.53
Egbin_1	4,398	5,173	3,800	2,769	11.86	14.09	10.87	15.29
Geregu_1	1,278	1,741	1,619	5,626	3.44	4.74	4.63	6.70
Geregu_2	1,097	315	734	2,463	2.96	0.86	2.1	1.85
Ibom power_1	428	349	309	681	1.16	0.95	0.88	0.30
Ihovbor_1	110	217	529	111	0.30	0.59	1.51	0.40
Jebba_1	2,858	2,961	2,859	149	7.71	8.07	8.18	8.37
Kainji_1	3,263	3,410	3,202	3,078	8.80	9.29	9.16	7.70
Odukpani_1	2,324	2,117	1,925	2,834	6.27	5.77	5.51	6.90
Okpai_1	1,905	2,331	2,066	2,537	5.14	6.35	5.91	6.40
Olorunsogo_1	1,026	832	953	2,356	2.77	2.27	2.73	2.94
Olorunsogo_2	341	253	349	1,080	0.92	0.69	1	0.17
Omoku_1	510	487	424	64	1.38	1.33	1.21	1.03
Omotosho_1	990	1,006	918	377	2.67	2.74	2.63	2.77
Omotosho_2	46	751	722	1,018	0.12	2.05	2.07	0.76
Ikeja_1	754	513	420	281	2.03	1.40	1.2	1.09
Rivers_1	465	548	993	400	1.25	1.49	2.84	1.74
Sapele Steam_1	519	478	433	640	1.40	1.30	1.24	0.72
Sapele_2	150	711	290	266	0.40	1.94	0.83	0.92
Shiroro_1	2,366	2,510	3,035	340	6.38	6.84	8.69	6.45
Igbafo_1	128	79	NA	NA	0.35	0.21	NA	NA
Trans Amadi_1	140	203	472	2,374	0.38	0.55	1.35	1.31
Total	37,093	36,710	34,942	36,784	100	100	100	100

Table D.6: Average Monthly Transmission Loss Factor (2021-2024)

	Energy Injected into Grid (GWh)				Energy Delivered to DisCos & Exported (GWh)				Transmission Losses Factor (%)			
Month	2024	2023	2022	2021	2024	2023	2022	2021	*2024	2023	2022	2021
January	3,128	3,263	3,136	3,295	2,870	2,755	2,812	3,043	8.26	7.32	8.15	7.64
February	2,602	2,974	2,860	3,007	2,387	2,744	2,554	2,781	8.91	8.19	8.54	7.51
March	3,028	2,983	2,754	3,220	2,778	2,982	2,487	2,982	8.26	8.19	7.38	7.37
April	2,772	3,247	2,717	3,004	2,563	2,720	2,446	2,816	7.18	7.73	8.44	7.49
May	2,925	2,948	2,662	3,033	2,846	2,715	2,081	2,809	2.68	9.56	8.43	7.41
June	2,732	3,002	2,291	2,664	2,489	2,562	2,465	2,464	8.39	7.72	8.20	7.49
July	3,075	2,776	2,677	2,834	2,792	2,664	2,593	2,654	9.19	8.17	8.08	6.34
August	3,066	2,897	2,870	2,890	2,809	2,670	2,637	2,705	8.40	8.39	7.78	6.43
September	3,201	2,912	2,847	2,714	2,901	2,544	2,701	2,522	9.54	7.26	7.50	7.07
October	2,878	2,742	2,917	3,030	2,627	2,977	2,851	2,785	8.98	8.89	7.42	8.07
November	2,982	3,266	3,059	3,091	2,711	2,944	3,012	2,828	9.28	8.83	6.81	8.50
December	3,321	3,229	3,263	3,243	3,010	2,998	2,755	2,983	9.43	7.74	7.71	8.03
Average	2,976	3,020	2,838	3,005	2,732	2,773	2,616	2,781	8.21	8.17	7.87	7.45
Total	35,711	36,240	34,054	36,065	32,784	33,273	31,393	33,373	8.21	8.17	7.87	7.45%

*MYTO TLF Assumption for 2024: 7%

Table D.7: Number of System Collapses (2011-2024)

Year	Type	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total
2011	Total Collapse	0	0	0	0	4	3	1	1	1	2	1	0	13
	Partial Collapse	0	1	1	0	0	0	0	1	0	1	2	0	6
2012	Total Collapse	0	0	2	1	5	2	1	0	0	2	2	1	16
	Partial Collapse	0	0	2	3	0	0	0	0	1	0	1	1	8
2013	Total Collapse	0	1	2	2	3	4	1	1	1	1	4	2	22
	Partial Collapse	0	0	0	0	0	0	0	0	2	0	0	0	2
2014	Total Collapse	2	0	0	2	0	3	1	0	0	1	0	0	9
	Partial Collapse	0	0	0	0	1	0	0	0	0	0	2	1	4
2015	Total Collapse	1	0	1	0	2	0	1	0	0	0	1	0	6
	Partial Collapse	0	0	1	0	2	0	0	0	0	1	0	0	4
2016	Total Collapse	0	0	2	3	6	5	0	0	1	1	2	2	22
	Partial Collapse	0	0	1	0	1	3	1	0	0	0	0	0	6
2017	Total Collapse	5	3	0	3	1	1	0	0	1	1	0	0	15
	Partial Collapse	1	0	1	0	0	0	1	0	3	3	0	0	9
2018	Total Collapse	5	1	0	0	0	1	1	0	2	0	0	2	12
	Partial Collapse	0	0	0	1	0	0	0	0	0	0	0	0	1
2019	Total Collapse	4	1	0	1	1	1	0	1	0	0	0	1	10
	Partial Collapse	0	0	0	0	0	0	0	0	0	0	1	0	1
2020	Total Collapse	1	0	0	1	0	1	0	0	0	0	1	0	4
	Partial Collapse	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	Total Collapse	0	0	0	0	1	0	1	0	0	0	0	0	2
	Partial Collapse	0	1	0	0	0	0	0	1	0	0	0	0	2
2022	Total Collapse	0	0	1	1	0	1	1	0	0	0	0	0	4
	Partial Collapse	0	0	1	0	0	0	0	0	1	0	0	0	2
2023	Total Collapse	0	0	0	0	0	0	0	0	2	0	0	1	3
	Partial Collapse	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	Total Collapse	0	0	1	0	0	0	0	0	0	1	1	0	4
	Partial Collapse	0	1	0	1	0	0	1	0	0	1	1	1	5

Table D.8: Average Daily System Frequency [Hz] (2021-2024)

	Average system frequency (upper bound)				Average system frequency (lower bound)			
Period	2024	2023	2022	2021	2024	2023	2022	2021
January	50.62	50.60	50.68	50.49	49.03	49.10	49.13	49.17
February	50.73	50.96	50.60	50.59	48.93	49.11	49.05	49.38
March	50.68	51.01	50.78	50.62	49.18	49.02	49.07	49.29
April	50.86	50.93	51.12	50.72	48.99	48.98	49.08	49.12
May	51.06	51.10	50.47	50.64	49.23	49.08	49.13	49.13
June	50.99	51.06	50.73	50.70	49.17	49.06	49.09	49.07
July	50.73	50.73	50.63	50.69	49.40	48.96	48.71	49.95
August	50.73	50.56	51.14	50.81	49.63	48.98	48.65	49.35
September	50.80	50.83	50.81	51.00	49.65	49.08	48.76	49.24
October	51.20	50.69	50.66	50.96	49.54	48.88	49.08	49.43
November	50.83	50.67	50.44	50.72	49.40	49.19	49.07	49.32
December	50.69	50.62	50.56	50.59	49.22	49.05	49.09	49.20
Average	50.83	50.81	50.72	50.71	49.28	49.04	48.99	49.30

Higher stress limit - 51.25
Upper limit - 50.25
Nominal standard – 50
Lower limit - 49.75
Lower stress limit – 48.75

Table D.9: Average Daily System Voltage (2021-2024)

	Average system voltage (upper bound) (kV)				Average system voltage (lower bound) (kV)			
Period	2024	2023	2022	2021	2024	2023	2022	2021
January	350.80	357.50	352.90	349.81	299.93	300.50	297.74	298.48
February	354.00	354.28	352.76	348.96	299.48	299.17	297.36	299.21
March	348.29	349.55	351.18	350.87	298.55	292.75	297.00	296.07
April	354.67	351.97	358.00	349.13	302.07	299.34	299.00	297.17
May	355.29	354.30	357.00	351.75	307.93	296.33	300.00	294.78
June	355.43	356.27	358.00	353.47	303.07	297.03	300.00	299.97
July	354.65	350.77	335.42	353.35	299.55	300.00	299.53	300.16
August	353.52	353.32	358.24	352.23	299.06	299.39	299.10	298.74
September	349.87	355.73	353.21	352.90	300.30	299.20	299.83	297.74
October	352.19	348.00	351.03	352.90	295.96	297.00	299.45	297.74
November	352.27	348.00	352.96	352.76	291.30	299.00	299.93	397.36
December	349.58	347.00	352.21	351.18	295.84	299.00	298.73	297.00
Average	352.55	352.22	352.74	351.61	299.42	298.23	298.97	297.87

Upper limit – 346.50
Nominal standard – 330.00
Lower limit – 313.50

E. Metering

Table E.1: Number of registered, metered, and unmetered customers in 2024

Registered Customers (RC) by DisCos								
Distribution Company	2024/Q1		2024/Q2		2024/Q3		2024/Q4	
	Registered Customers	%	Registered Customers	%	Registered Customers	%	Registered Customers	%
Aba	194,354	1.45	198,531	1.50	202,523	1.52	206,540	1.53
Abuja	1,446,609	10.82	1,244,245	9.43	1,263,483	9.47	1,195,429	8.85
Benin	1,351,811	10.11	1,369,840	10.38	1,402,484	10.51	1,435,685	10.63
Eko	766,329	5.73	773,171	5.86	724,213	5.43	729,169	5.40
Enugu	1,396,440	10.44	1,396,440	10.59	1,396,440	10.47	1,396,440	10.34
Ibadan	2,471,429	18.48	2,498,224	18.94	2,582,740	19.36	2,644,124	19.58
Ikeja	1,257,046	9.40	1,208,581	9.16	1,249,385	9.37	1,286,026	9.52
Jos	741,266	5.54	747,162	5.66	752,943	5.64	832,053	6.16
Kaduna	870,449	6.51	877,528	6.65	881,749	6.61	884,647	6.55
Kano	880,603	6.59	881,922	6.68	883,742	6.62	891,410	6.60
P/H	1,179,194	8.82	1,179,194	8.94	1,179,194	8.84	1,179,194	8.73
Yola	816,994	6.11	817,735	6.20	820,739	6.15	822,625	6.09
Total	13,372,524	100.00	13,192,573	100.00	13,339,635	100.00	13,503,342	100.00
	Metered Customers by DisCos							
Distribution Company	2024/Q1		2024/Q2		2024/Q3		2024/Q4	
	Metered Customers	%	Metered Customers	%	Metered Customers	%	Metered Customers	%
Aba	62,321	1.04	71,135	1.19	76,052	1.24	78,281	1.24
Abuja	883,443	14.75	873,083	14.57	896,753	14.57	910,942	14.49
Benin	669,362	11.18	675,092	11.26	689,122	11.19	714,242	11.36
Eko	452,875	7.56	438,462	7.32	455,496	7.40	460,187	7.32
Enugu	630,606	10.53	635,042	10.60	654,770	10.64	671,760	10.68
Ibadan	1,074,187	17.93	1,069,201	17.84	1,114,609	18.10	1,153,025	18.34
Ikeja	920,448	15.37	926,272	15.46	956,469	15.54	998,986	15.89
Jos	248,110	4.14	251,689	4.20	253,792	4.12	225,188	3.58
Kaduna	209,090	3.49	210,229	3.51	214,113	3.48	217,033	3.45
Kano	211,537	3.53	212,016	3.54	214,650	3.49	215,834	3.43
P/H	500,821	8.36	502,409	8.38	512,429	8.32	524,256	8.34
Yola	126,927	2.12	128,710	2.15	118,471	1.92	118,908	1.89
Total	5,989,727	100.00	5,993,340	100.00	6,156,726	100.00	6,288,642	100.00
	Metering Rate by DisCos							
Distribution Company	2024/Q1		2024/Q2		2024/Q3		2024/Q4	
	Metering rate (%)		Metering rate (%)		Metering rate (%)		Metering rate (%)	
Aba	32.07		35.83		37.55		37.90	
Abuja	61.07		70.17		70.97		76.20	
Benin	49.52		49.28		49.14		49.75	
Eko	59.10		56.71		62.90		63.11	
Enugu	45.16		45.48		46.89		48.11	
Ibadan	43.46		42.80		43.16		43.61	
Ikeja	73.22		76.64		76.56		77.68	
Jos	33.47		33.69		33.71		27.06	
Kaduna	24.02		23.96		24.28		24.53	
Kano	24.02		24.04		24.29		24.21	
P/H	42.47		42.61		43.46		44.46	
Yola	15.54		15.74		14.43		14.45	
Total	44.79		45.43		46.15		46.57	

F. Commercial Performance

Table F.1: DisCos' energy received, energy billed and billing efficiency (2021-2024)

DisCos	Total Energy Received (GWh)							
	2024 Quarters					Annual		
	/Q1	/Q2	/Q3	/Q4	2024	2023	2022	2021
Abuja	1,120	1,091	1,125	1,163	4,499	4,483	3,906	4,050
Benin	569	563	694	765	2,592	2,552	2,698	2,683
Eko	947	942	983	1,004	3,876	3,801	3,125	3,591
Enugu	544	535	636	650	2,365	2,520	2,612	2,841
Ibadan	834	815	958	966	3,574	3,556	3,450	4,092
Ikeja	1,100	1,137	1,131	1,191	4,559	4,673	4,082	4,548
Jos	407	334	429	301	1,470	1,559	1,566	1,403
Kaduna	437	447	446	330	1,661	1,843	2,110	2,324
Kano	433	449	476	329	1,687	1,871	1,923	1,951
Port Harcourt	532	524	560	583	2,200	2,187	2,024	2,109
Yola	210	129	168	138	645	935	856	902
Total	7,133	6,965	7,607	7,421	29,126	29,980	28,352	30,494
	Total Energy Billed (GWh)							
	/Q1	/Q2	/Q3	/Q4	2024	2023	2022	2021
Abuja	846	835	911	918	3,510	3,239	2,677	2,682
Benin	489	469	585	665	2,208	2,179	2,274	2,246
Eko	849	845	878	896	3,468	3,402	2,786	3,141
Enugu	444	469	477	475	1,865	1,868	1,852	2,035
Ibadan	717	724	862	869	3,173	2,824	2,567	2,920
Ikeja	908	937	953	1,005	3,803	4,104	3,613	4,081
Jos	301	242	269	244	1,056	1,266	1,181	976
Kaduna	252	279	286	234	1,051	980	1,349	1,767
Kano	330	332	416	274	1,352	1,326	1,346	1,454
Port Harcourt	451	444	469	503	1,868	1,809	1,639	1,625
Yola	183	116	144	124	568	750	486	420
Total	5,770	5,693	6,249	6,208	23,920	23,748	21,771	23,348
	Billing Efficiency (%)							
	/Q1	/Q2	/Q3	/Q4	2024	2023	2022	2021
Abuja	75.60	76.68	81.00	78.92	78.02	72.25	68.54	66.22
Benin	84.87	83.35	84.27	86.89	85.19	85.40	84.29	83.73
Eko	89.75	89.70	89.30	89.20	89.46	89.50	89.15	87.47
Enugu	80.46	95.33	74.98	73.13	78.86	74.13	70.90	71.62
Ibadan	85.54	88.75	89.98	89.99	88.78	79.41	74.41	71.37
Ikeja	81.26	82.47	84.24	84.41	83.43	87.82	88.51	89.73
Jos	76.04	72.76	62.66	81.04	71.80	81.19	75.40	69.57
Kaduna	56.66	63.07	64.01	70.87	63.24	53.18	63.95	76.03
Kano	74.93	74.63	87.38	83.39	80.13	70.89	69.99	74.52
Port Harcourt	85.01	83.58	83.74	86.31	84.91	82.73	81.00	77.06
Yola	86.03	93.34	85.73	89.83	88.04	80.25	56.79	46.56
Aggregate	80.45	82.34	82.15	83.66	82.12	79.21	76.79	76.57

Table F.2: Revenue performance by DisCos (2021-2024)

DisCos	Total Billing (₦' Billion)							
	2024 Quarters				Annual			
	/Q1	/Q2	/Q3	/Q4	2024	2023	2022	2021
Abuja	58.30	84.49	99.26	107.91	349.97	212.25	154.22	140.63
Benin	29.40	41.24	50.77	56.28	177.69	132.12	122.07	105.77
Eko	56.52	85.46	103.11	107.31	352.40	211.24	151.31	145.61
Enugu	26.40	40.88	46.71	49.24	163.23	111.67	101.34	98.00
Ibadan	44.79	63.01	74.96	78.64	261.40	164.92	137.33	139.71
Ikeja	55.86	92.28	99.73	123.35	371.22	236.90	182.42	184.22
Jos	21.85	24.07	30.73	28.67	105.32	89.31	73.57	49.32
Kaduna	13.59	24.25	24.57	19.45	81.87	58.16	71.98	89.77
Kano	21.58	37.33	43.89	33.72	136.52	83.85	73.79	69.17
Port Harcourt	27.69	42.02	41.31	44.01	155.03	110.08	90.34	76.23
Yola	12.68	8.63	10.98	9.82	42.08	52.75	26.93	18.47
Total	368.65	543.64	626.02	658.40	2,196.71	1,463.24	1,185.31	1,116.92
	Total Revenue Collected (₦' Billion)							
	/Q1	/Q2	/Q3	/Q4	2024	2023	2022	2021
Abuja	48.60	70.19	78.28	81.45	275.81	170.20	127.80	117.61
Benin	22.46	33.96	41.09	45.69	141.88	84.93	69.90	58.16
Eko	48.74	75.23	87.02	96.58	306.05	178.09	127.79	120.89
Enugu	21.24	30.39	36.07	39.49	126.05	83.28	70.93	69.83
Ibadan	30.35	44.27	57.60	60.91	192.50	113.47	95.67	91.37
Ikeja	57.88	87.36	83.55	101.92	309.48	222.43	168.31	157.40
Jos	13.29	15.74	16.37	14.25	57.59	40.35	31.01	24.80
Kaduna	9.60	14.71	11.40	10.80	43.34	32.73	28.25	30.64
Kano	13.62	21.92	20.64	19.19	75.01	54.09	48.91	47.39
Port Harcourt	20.39	32.61	29.22	33.36	110.35	74.96	58.77	47.72
Yola	5.46	4.78	5.41	6.21	21.68	22.98	14.46	9.54
Total	291.62	431.16	466.69	509.84	1,659.76	1,077.51	841.81	775.34
	Collection Efficiency (%)							
	/Q1	/Q2	/Q3	/Q4	2024	2023	2022	2021
Abuja	83.36	83.07	78.87	75.48	78.81	80.19	82.87	83.63
Benin	76.39	82.35	80.94	81.17	79.85	64.28	57.26	54.98
Eko	86.24	88.03	84.40	90.00	86.85	84.31	84.45	83.02
Enugu	80.45	74.35	77.23	80.20	77.22	74.58	69.99	71.25
Ibadan	67.78	70.25	76.84	77.46	73.64	68.81	69.67	65.39
Ikeja	103.61	94.67	83.78	82.63	83.37	93.89	92.27	85.44
Jos	60.81	65.37	53.29	49.68	54.68	45.18	42.15	50.29
Kaduna	70.66	60.62	46.42	55.52	52.94	56.28	39.25	34.14
Kano	63.09	58.71	47.03	56.91	54.95	64.50	66.28	68.51
Port Harcourt	73.66	77.59	70.76	75.79	71.18	68.10	65.06	62.59
Yola	43.03	55.67	49.31	63.24	51.53	43.56	53.71	51.63
Aggregate	79.11	79.31	74.55	77.44	75.56	73.64	71.02	69.42

Table F.3: ATC&C losses performance (2020-2024)

	2024		2023		2022		2021		2020	
DisCos	MYTO Target (%)	ATC&C Losses (%)	MYTO Target (%)	ATC&C Losses (%)	MYTO Target (%)	ATC&C Losses (%)	MYTO Target (%)	ATC&C Losses (%)	MYTO Target (%)	ATC&C Losses (%)
Abuja	25.00	38.51	19.27	42.06	19.27	43.20	22.80	44.62	22.33	45.8
Benin	25.00	31.98	17.37	45.11	17.37	51.73	21.71	53.96	23.91	55.41
Eko	20.07	22.30	14.18	24.54	14.18	24.71	14.70	27.38	11.23	30.85
Enugu	25.00	39.10	11.31	44.72	11.31	50.38	19.96	48.97	20.56	53.83
Ibadan	25.00	34.62	15.47	45.36	15.47	48.16	18.55	53.33	19.67	56.74
Ikeja	18.73	30.44	11.37	17.54	11.37	18.33	12.52	23.34	10.81	28.21
Jos	32.72	60.74	27.27	63.32	27.27	68.22	35.98	65.02	39.12	67.79
Kaduna	25.00	66.52	10.65	70.07	10.65	74.90	17.18	74.05	20.12	76.80
Kano	25.00	55.97	15.85	54.27	15.85	53.61	18.65	48.94	22.06	50.78
PH	25.00	39.56	21.45	43.66	21.45	47.30	25.85	51.76	29.70	60.80
Yola	56.00	54.63	64.12	65.04	64.12	69.50	29.44	75.96	23.71	73.24
All DisCos:										
MYTO Level	24.73		20.75		20.75		21.58		22.11	
ATC&C Losses		37.95		41.67		45.46		46.85		50.57
ATC Losses		17.88		20.79		23.21		23.43		25.67
C Losses		24.44		26.36		28.98		30.58		33.50

MYTO is Multi-Year Tariff Order; ATC&C is Aggregate Technical, Commercial and Collection; ATC is aggregate Technical & Commercial losses; and C is Collection loss

Table F.4: NBET and MO invoice to DisCos (2019-2024)

	Jan24	Feb24	Mar24	Apr24	May24	Jun24	Jul24	Aug24	Sep24	Oct24	Nov24	Dec24	2024	2023	2022	2021	2020	2019
NBET Invoice	Amount in (₦'Billion)																	
Abuja	5.67	4.62	5.31	18.14	19.76	19.81	21.98	20.68	20.41	20.83	20.79	19.85	198.64	202.41	109.61	101.33	89.91	87.88
Benin	1.73	1.44	1.56	7.93	9.32	10.23	11.57	10.99	11.62	11.81	12.24	12.12	103.21	110.25	74.89	72.87	64.93	54.28
Eko	4.63	3.46	4.19	16.59	19.13	18.82	19.99	18.67	20.58	18.87	18.74	19.77	184.19	147.71	84.43	93.01	84.12	77.99
Enugu	1.02	0.69	0.76	6.77	8.23	9.17	10.17	10.39	10.04	9.71	10.12	10.08	88.06	112.91	75.01	75.05	62.88	52.94
Ibadan	2.82	2.42	2.60	11.07	13.74	13.95	15.95	15.53	15.63	14.86	15.24	15.08	139.63	150.49	100.45	108.07	97.72	83.21
Ikeja	4.75	3.66	4.38	20.29	22.38	22.39	22.46	21.94	23.04	22.35	21.72	22.61	212.75	206.65	117.90	122.51	107.19	89.52
Jos	0.81	0.73	0.81	4.48	3.40	4.00	4.77	6.08	4.07	2.99	3.61	4.41	40.49	69.73	45.56	41.33	37.44	29.46
Kaduna	0.43	0.40	0.44	5.69	6.63	6.92	7.56	6.72	3.62	2.46	4.56	5.19	51.02	79.34	60.44	63.97	58.34	45.69
Kano	0.79	0.69	0.76	6.11	7.37	6.82	8.33	7.62	4.12	2.33	4.74	5.91	56.01	81.60	57.59	58.66	52.43	41.27
Port Harcourt	1.51	1.30	1.39	7.34	7.88	8.50	9.26	8.60	8.72	8.40	8.17	9.57	81.05	95.59	57.28	54.28	48.39	45.77
Yola	0.06	0.05	0.06	0.80	0.02	0.05	0.60	0.90	0.31	0.23	0.72	0.89	5.34	39.06	25.48	26.38	27.37	26.49
Total	24.23	19.46	22.26	105.21	117.88	120.67	132.63	128.11	122.16	114.83	120.65	125.48	1,160.39	1,295.76	808.65	817.46	730.71	634.47
MO Invoice	Amount in (₦'Billion)																	
Abuja	2.33	2.29	2.86	3.07	3.54	2.53	2.97	3.36	3.09	3.15	2.87	2.86	34.93	26.20	20.26	25.60	19.66	15.11
Benin	1.26	1.18	1.48	1.44	1.77	1.31	1.57	1.80	1.63	1.86	1.66	1.68	18.64	15.03	15.44	20.21	13.51	9.33
Eko	2.10	1.81	2.45	2.64	2.14	2.14	2.40	2.66	2.12	1.88	1.81	2.59	26.13	19.99	17.15	23.43	18.02	13.38
Enugu	1.23	1.11	1.38	1.38	1.61	1.20	1.02	1.67	1.60	1.57	1.59	1.69	17.04	15.08	15.58	20.42	13.08	9.09
Ibadan	1.83	1.79	2.15	2.02	2.64	1.83	2.19	2.56	2.48	2.55	2.21	2.33	26.59	20.56	20.87	29.03	20.81	14.29
Ikeja	2.42	2.15	2.85	3.15	3.53	2.45	2.84	3.10	2.89	2.99	2.62	2.91	33.90	27.04	22.28	32.16	21.61	15.3
Jos	0.83	0.91	1.09	1.00	1.24	0.94	1.14	1.30	1.19	-	-	0.85	10.49	9.94	9.97	12.32	7.4	5.07
Kaduna	0.92	0.93	1.19	1.18	1.40	1.03	1.31	1.41	1.27	-	0.26	0.94	11.84	10.79	10.63	15.85	11.86	7.9
Kano	0.90	0.87	1.16	1.19	1.44	0.87	1.26	1.39	1.03	-	-	0.58	10.68	10.95	11.10	12.84	10.1	7.11
Port Harcourt	1.17	1.14	1.37	1.44	1.49	1.13	1.36	1.34	1.31	1.40	0.98	1.51	15.63	12.68	11.38	13.29	10.14	7.86
Yola	0.88	0.36	0.52	0.40	0.20	0.43	0.50	0.55	0.45	-	-	0.57	4.09	4.07	4.11	5.21	5.84	4.58
Total	15.10	14.71	18.50	18.90	21.01	15.86	18.57	21.13	19.06	15.40	14.00	18.51	209.96	172.34	158.65	210.37	152.03	109.03

NBET and MO are Nigeria Bulk Electricity Trader and Market Operator, respectively.
2024 NBET invoices are DRO-adjusted in the invoices

Table F.5: Remittances to NBET and MO by DisCos (2019-2024)

	Jan24	Feb24	Mar24	Apr24	May24	Jun24	Jul24	Aug24	Sep24	Oct24	Nov24	Dec24	2024	2023	2022	2021	2020	2019
Remittances to NBET	Amount in (₦'Billion)																	
Abuja	5.69	4.62	5.31	15.59	16.20	16.18	17.42	18.84	20.43	19.75	20.79	18.80	179.62	98.96	83.07	64.90	34.23	34.98
Benin	1.75	1.44	1.56	7.21	6.38	8.32	8.96	9.23	10.53	10.27	11.12	11.18	87.96	50.64	46.64	33.09	19.70	14.10
Eko	4.64	3.46	4.19	16.59	18.09	19.17	20.04	18.76	20.62	18.87	18.74	19.77	182.96	89.75	72.37	64.12	35.60	31.92
Enugu	1.04	0.69	0.76	5.21	6.31	7.51	7.88	8.67	8.38	8.48	9.49	9.06	73.50	52.80	51.08	42.26	19.74	12.45
Ibadan	2.86	2.42	2.60	9.87	9.44	10.18	12.96	13.04	15.42	11.80	15.24	15.08	121.21	65.75	64.18	53.36	30.31	22.74
Ikeja	4.79	3.66	4.38	16.57	17.04	18.08	18.35	21.77	23.20	22.35	21.72	22.61	200.90	120.03	102.95	93.37	47.99	34.37
Jos	0.81	0.73	0.81	3.59	2.17	2.08	3.67	3.44	2.57	2.99	2.43	3.42	28.71	21.82	21.05	13.13	4.66	2.12
Kaduna	0.26	0.27	0.15	1.81	1.81	1.99	2.05	1.74	1.62	1.18	2.29	1.53	16.72	6.14	10.11	14.28	12.42	6.92
Kano	0.80	0.69	0.74	4.17	4.11	5.92	6.47	5.33	1.59	2.33	4.74	5.31	42.20	25.20	27.72	31.72	13.02	10.20
Port Harcourt	1.52	1.30	1.39	6.15	6.76	6.32	7.96	6.58	5.56	8.40	7.12	7.94	67.01	41.74	31.96	24.62	8.93	8.55
Yola	0.66	0.55	0.58	0.27	0.14	0.55	0.60	0.82	0.31	0.23	0.72	0.89	4.73	5.42	2.31	2.96	2.76	2.99
Total	24.24	19.33	21.95	87.02	88.50	96.34	106.36	108.21	110.24	106.65	114.40	115.58	1,005.51	578.34	513.43	437.81	229.36	181.34
Remittances to MO	Amount in (₦'Billion)																	
Abuja	2.28	1.77	3.27	2.64	3.95	1.93	2.26	3.00	2.98	2.96	2.75	2.69	32.47	20.79	17.46	27.78	16.68	11.08
Benin	1.16	0.84	1.62	1.31	1.59	0.97	1.14	1.45	1.44	1.58	1.40	1.38	15.89	12.23	10.36	15.23	13.64	7.09
Eko	2.01	1.34	2.73	2.55	3.21	0.87	1.60	2.48	1.94	1.70	1.58	2.32	24.33	18.16	15.20	22.93	17.99	12.02
Enugu	1.18	0.84	1.56	1.06	1.56	0.89	0.75	1.35	1.29	1.34	1.47	1.50	14.79	9.86	10.01	16.06	13.07	6.76
Ibadan	1.83	1.42	2.52	1.81	2.60	1.18	1.69	2.08	2.43	1.96	2.21	2.33	23.85	16.49	18.55	21.25	20.27	11.24
Ikeja	2.35	1.64	3.88	2.58	3.67	1.85	2.68	2.94	2.74	2.84	2.44	2.71	32.45	24.44	19.97	23.51	21.61	13.35
Jos	0.79	0.61	1.23	0.80	0.90	0.21	0.79	0.60	0.65	-	-	0.63	7.37	6.47	6.28	9.21	7.04	3.58
Kaduna	0.53	0.49	0.42	0.38	0.31	0.10	0.16	0.11	0.40	-	0.01	0.19	3.11	1.16	3.27	5.02	9.21	5.70
Kano	0.84	0.63	1.28	0.81	1.00	0.70	0.92	0.89	0.24	-	-	0.42	7.74	5.59	6.46	8.50	9.19	4.92
Port Harcourt	1.10	0.85	1.54	1.20	1.78	0.74	1.12	0.96	0.78	1.27	0.84	1.22	13.41	9.50	7.23	10.30	9.46	5.74
Yola	0.89	0.27	0.93	0.13	1.10	0.33	0.46	0.38	0.45	-	-	0.57	3.95	3.69	4.06	1.44	2.82	3.89
Total	14.16	10.78	20.16	15.26	21.66	9.86	13.59	16.23	15.35	13.66	12.70	15.95	179.36	128.38	118.82	161.23	140.98	85.36

NBET and MO are Nigeria Bulk Electricity Trader and Market Operator respectively.

Table F.6: Annual Market shortfalls to NBET and MO by DisCos (2019-2024)

	Jan24	Feb24	Mar24	Apr24	May24	Jun24	Jul24	Aug24	Sep24	Oct24	Nov24	Dec24	2024	2023	2022	2021	2020	2019
Shortfalls to NBET	Amount in (₦'Billion)																	
Abuja	(0.02)	0	0	2.55	3.56	3.63	4.56	1.84	(0.02)	1.08	0	1.05	19.02	103.45	26.54	36.43	55.68	52.89
Benin	(0.02)	0	0	0.72	2.94	1.91	2.61	1.76	1.09	1.54	1.12	0.94	15.25	59.61	28.26	39.77	45.22	40.18
Eko	(0.01)	0	0	0	1.04	(0.35)	(0.05)	(0.09)	(0.04)	0	0	0	1.23	57.96	12.06	28.89	48.52	46.07
Enugu	(0.02)	0	0	1.56	1.92	1.66	2.29	1.72	1.66	1.23	0.63	1.02	14.56	60.11	23.93	32.79	43.14	40.49
Ibadan	(0.04)	0	0	1.20	4.30	3.77	2.99	2.49	0.21	3.06	0	0	18.42	84.74	36.27	54.72	67.41	60.47
Ikeja	(0.04)	0	0	3.72	5.34	4.31	4.11	0.17	(0.16)	0	0	0	11.85	86.62	14.95	29.13	59.20	55.14
Jos	0	0	0	0.89	1.23	1.92	1.10	2.64	1.50	0	1.18	0.99	11.78	47.91	24.51	28.20	32.78	27.34
Kaduna	(0.17)	0.13	0.29	3.88	4.82	4.93	5.51	4.98	2.00	1.28	2.27	3.66	34.30	73.20	50.33	49.69	45.92	38.77
Kano	(0.01)	0	0.02	1.94	3.26	0.90	1.86	2.29	2.53	0	0	0.60	13.81	56.39	29.87	26.94	39.41	31.07
Port Harcourt	(0.01)	0	0	1.19	1.12	2.18	1.30	2.02	3.16	0	1.05	1.63	14.04	53.86	25.32	29.66	39.46	37.22
Yola	(0.60)	(0.5)	(0.52)	0.53	(0.12)	(0.50)	0	0.08	0	0	0	0	0.61	33.63	23.17	23.42	24.60	23.50
Total	-	0.13	0.31	18.19	29.38	24.33	26.27	19.9	11.92	8.18	6.25	9.90	154.88	717.42	295.21	379.65	501.35	453.13
Shortfalls to MO	Amount in (₦'Billion)																	
Abuja	0.05	0.52	(0.41)	0.43	(0.41)	0.60	0.71	0.36	0.11	0.19	0.12	0.17	2.46	5.41	2.81	(2.18)	2.97	4.03
Benin	0.10	0.34	(0.14)	0.13	0.18	0.34	0.43	0.35	0.19	0.28	0.26	0.30	2.75	2.79	5.08	4.98	(0.13)	2.24
Eko	0.09	0.47	(0.28)	0.09	(1.07)	1.27	0.80	0.18	0.18	0.18	0.23	0.27	1.80	1.83	1.95	0.50	0.04	1.36
Enugu	0.05	0.27	(0.18)	0.32	0.05	0.31	0.27	0.32	0.31	0.23	0.12	0.19	2.25	5.22	5.57	4.36	0.01	2.34
Ibadan	0	0.37	(0.37)	0.21	0.04	0.65	0.50	0.48	0.05	0.59	0	0	2.74	4.08	2.33	7.79	0.55	3.05
Ikeja	0.07	0.51	(1.03)	0.57	(0.14)	0.60	0.16	0.16	0.15	0.15	0.18	0.20	1.45	2.60	2.35	8.65	0.01	1.95
Jos	0.04	0.30	(0.14)	0.20	0.34	0.73	0.35	0.70	0.54	0	0	0.22	3.12	3.47	3.51	3.11	0.36	1.49
Kaduna	0.39	0.44	0.77	0.80	1.09	0.93	1.15	1.30	0.87	0	0.25	0.75	8.73	9.63	7.36	10.84	2.64	2.19
Kano	0.06	0.24	(0.12)	0.38	0.44	0.17	0.34	0.50	0.79	0	0	0.16	2.94	5.36	4.66	4.35	0.90	2.18
Port Harcourt	0.07	0.29	(0.17)	0.24	(0.29)	0.39	0.24	0.38	0.53	0.13	0.14	0.29	2.22	3.17	4.14	3.00	0.68	2.13
Yola	0.01	0.09	(0.41)	0.27	(0.90)	0.10	0.04	0.17	0	0	0	0	0.14	0.38	0.08	3.76	3.01	0.69
Total	0.94	3.93	-	3.64	0.65	6.00	4.98	4.90	3.71	1.74	1.30	2.56	30.6	43.96	39.84	49.14	11.05	23.66

NBET and MO are Nigeria Bulk Electricity Trader and Market Operators, respectively.

Table F.7: Market invoice, remittance and shortfall by DisCos (2019-2024)

	Invoice (₦' Billion)						Remittances (₦' Billion)					
DisCos	2024	2023	2022	2021	2020	2019	2024	2023	2022	2021	2020	2019
Abuja	233.57	158.12	118.96	126.93	109.57	102.99	212.09	119.76	100.53	92.68	50.91	46.07
Benin	121.85	68.25	78.00	93.08	78.44	63.61	103.85	62.87	57.01	48.32	33.34	21.19
Eko	210.32	104.85	89.64	116.44	102.14	91.37	207.29	107.90	87.55	87.05	53.58	43.94
Enugu	105.10	79.78	82.33	95.47	75.96	62.03	88.29	62.66	61.10	58.32	32.81	19.21
Ibadan	166.21	91.29	101.76	137.1	118.53	97.50	145.06	82.33	82.72	74.61	50.58	33.98
Ikeja	246.65	151.81	123.19	154.67	128.80	104.82	233.35	144.47	122.90	116.88	69.60	47.72
Jos	50.98	35.03	38.53	53.65	44.84	34.52	36.08	28.29	27.33	22.34	11.70	5.70
Kaduna	62.86	45.70	60.65	79.82	70.20	53.58	19.83	7.30	13.39	19.3	21.64	12.62
Kano	66.69	50.70	58.61	71.5	62.52	48.38	49.94	30.79	34.18	40.22	22.21	15.12
Port Harcourt	96.67	63.29	57.76	67.57	58.53	53.63	80.42	51.25	39.18	34.92	18.39	14.28
Yola	9.43	9.23	6.81	31.59	33.20	31.07	8.68	9.11	6.37	4.4	5.59	6.88
Total	1,370.35	858.03	816.25	1,027.83	882.73	743.50	1,184.88	706.73	632.25	599.04	370.34	266.71
	Shortfalls (₦' Billion)						Remittance Performance (%)					
DisCos	2024	2023	2022	2021	2020	2019	2024	2023	2022	2021	2020	2019
Abuja	21.48	38.36	18.43	34.25	58.66	56.93	90.80	75.74	84.51	73.02	46.46	44.73
Benin	18.00	5.38	20.99	44.76	45.1	42.42	85.22	92.12	73.08	51.91	42.51	33.31
Eko	3.03	(3.05)	2.09	29.39	48.55	47.43	98.56	102.91	97.67	74.76	52.46	48.09
Enugu	16.81	17.12	21.23	37.15	43.15	42.82	84.01	78.54	74.21	61.09	43.20	30.96
Ibadan	21.16	8.96	19.04	62.49	67.95	63.52	87.27	90.19	81.29	54.42	42.67	34.85
Ikeja	13.30	7.34	0.29	37.79	59.20	57.10	94.61	95.17	99.76	75.57	54.03	45.52
Jos	14.90	6.74	11.20	31.31	33.14	28.83	70.77	80.76	70.93	41.64	26.09	16.50
Kaduna	43.03	38.40	47.26	60.52	48.57	40.97	31.55	15.97	22.07	24.18	30.82	23.56
Kano	16.75	19.91	24.43	31.28	40.32	33.26	74.89	60.73	58.32	56.25	35.52	31.26
Port Harcourt	16.26	12.04	18.58	32.65	40.14	39.34	83.18	80.98	67.84	51.68	31.42	26.63
Yola	0.75	0.12	0.44	27.19	27.63	24.19	92.10	98.70	93.51	13.93	16.83	22.14
Total	185.48	151.30	184.00	428.79	512.40	476.8	86.47	82.37	77.46	58.28	41.95	35.87

NBET and MO are Nigeria Bulk Electricity Trader and Market Operator, respectively.
2024 market data is based on DRO, while 2023 and 2022 market data are based on MRO

NIGERIAN ELECTRICITY REGULATORY COMMISSION

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