NIGERIAN
ELECTRICITY
REGULATORY
COMMISSION

2022
Annual Report & Accounts

Electricity on Demand

2022
Annual Report & Accounts

Nigerian Electricity Regulatory Commission
Plot 1387 Cadastral Zone A00
Central Business District
PMB 136, Garki Abuja
www.nerc.gov.ng

NERC Annual Report & Accounts is prepared in compliance with section 55 (1) of the Electric Power Sector Reform (EPSR) Act 2004, 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:

The Commissioner
Planning, Research and Strategy
Nigerian Electricity Regulatory Commission
Corporate Head Office
Plot 1387 Cadastral Zone A00
Central Business District
P.M.B 136, Garki Abuja
Nigeria
NERC Website: www.nerc.gov.ng

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

The Nigerian Electricity Regulatory Commission was established by the Electric Power Sector Reform (EPSR) Act 2004, with the principal objects outlined under section 32 to:

1. Create, promote, and preserve efficient industry and market structures, and ensure the optimal utilisation of resources for the provision of electricity services;
2. Maximise access to electricity services, by promoting and facilitating consumer connections to distribution systems in both rural and urban areas;
3. Ensure that an adequate supply of electricity is available to consumers;
4. 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;
5. Ensure the safety, security, reliability, and quality of service in the production and delivery of electricity to consumers;
6. Ensure that regulation is fair and balanced for licensees, consumers, investors, and other stakeholders and;
7. Present quarterly reports to the President and National Assembly on its activities.

Mission

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

Vision

"Electricity on demand"

Motto:

"Keeping the lights on"

Values

NERC has four (4) guiding values:

1. Leadership: excellence, transparency, courage and discipline;
2. Professionalism: proficiency, diligence, respect, fairness and accountability;
3. Teamwork: creating an environment of loyalty, trust, collaboration, and stakeholder engagement;
4. Good Governance: making decisions in a fair, transparent and consistent manner, in compliance with the laws of Nigeria and our regulations.

TABLE OF CONTENTS

LIST OF TABLES

Table 6.1: Customers Metering Status by DisCos..... 100
Table 6.2: Complaints Received and Resolved by DisCos in 2021 and 2022..... 104
Table 6.3: Appeals Handled by Forum Offices in 2022 107
Table 6.4: NESI Licensee Health and Safety Reports of 2021 and 2022 109

LIST OF FIGURES

LIST OF ABBREVIATIONS

ADR	Alternative Dispute Resolution
AEDC	Abuja Electricity Distribution Company Plc
ANAN	Association of National Accountants of Nigeria
ATC&C	Aggregate Technical, Commercial & Collection Losses
BCR	Business Continuity Regulations
BEDC	Benin Electricity Distribution Company 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
ECN	Electricity Corporation of Nigeria
EEDC	Enugu Electricity Distribution Company Plc
EKEDC	Eko Electricity Distribution Company 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 Company Plc
ICAN	Institute of Chartered Accountants of Nigeria
IEDN	Independent Electricity Distribution Network
IKEDC	Ikeja Electricity Distribution Company Plc
IPP	Independent Power Plant
JEDC	Jos Electricity Distribution Company Plc
KDEDC	Kaduna Electricity Distribution Company Plc
KNEDC	Kano Electricity Distribution Company 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	Nigerian Electric Power Policy
NERC	Nigerian Electricity Regulatory Commission
NESCO	Nigerian Electricity Supply Company Limited
NESI	Nigerian Electricity Supply Industry
NICE	Notices 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
PHEDC	Port Harcourt Electricity Distribution Company 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 Company Plc

PART 1: LEADERSHIP OF THE COMMISSION

1.1 Board of Commissioners

Engr. Sanusi Garba
Chairman/CEO

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

Chidi Ike
Commissioner, Engineering Performance & Monitoring

Aisha Mahmud Mrs.
Commissioner, Consumer Affairs

Dafe C. Akpeneye
Commissioner, Legal, Licensing & Compliance

Nathan R. Shatti
Commissioner, Finance & Management Services

Yusuf Ali, PhD
Commissioner, Planning Research & Strategy

1.2. General Managers of the Divisions

While the overall effective performance and management of the Divisions rest with the Commissioners, each Division has a General (or Deputy General) Manager who coordinates the day-to-day activities of the Division and also cover some functions of the Commissioner in his/her absence. The under-listed staff are the General Managers of the Divisions as at 31st December 2022.

1. Bassey N. Ayambem GM, *Planning, Research & Strategy* (PRS)
2. Dr Usman Abba-Arabi GM, *Public Affairs,* Chairman's Office (CO)
3. Sharfuddeen Mahmud GM, *Market Competition and Rate* (MCR)
4. Abdulkadir Shettima GM, *Finance & Management Services* (FMS)
5. Abdul B. Mohammed* GM, *Engineering Performance & Monitoring* (EPM)
6. Zubairu T. Ahmadu GM, *Legal Licencing & Compliance* (LLC)
7. Maryam Y. Abubakar GM, *Procurement* (CO)

1.3. Secretary of the Commission

The Secretary of the Commission provides administrative support, coordinates, and records minutes of the meeting of the Board of Commissioners. The Secretary of the Commission as at 31st December 2022 is:

8. Ada Ozoemena DGM, *Secretariat, CO*

1.4. Members of the Management Staff

The General Managers of the Divisions, the Secretary of the Commission and the under-listed members of staff made up the Management Staff of the Commission as at 31st December 2022.

9. Chinedu Ukabiala† DGM, Generation, EPM
10. James O. Ewah‡ DGM, Inspectorate, LLC
11. Shittu Shaibu DGM, Customer Service Standards, CA
12. Abba I. Terab DGM, Tariff & Rates, MCR
13. Abdussalam Yusuf DGM, Research, PRS

* Retired voluntarily on September 30, 2022
† Retired voluntarily on October 10, 2022
‡ Mr James Ewah unfortunately passed away on August 29, 2022

14. Abdullah Adamu	DGM, ICT, FMS
15. Razak Y. Afolayan	AGM, Generation, EPM
16. Arit Uya	AGM, Consumer Complaints, CA
17. Michael Faloseyi	AGM, Public Affairs, CO
18. Kanneng Gwon	AGM, Customer Service Standards, CA
19. Zubair B. Zubair	AGM, Consumer Enlightenment & Education, CA
20. Iko Bolus	AGM, Internal Audit, CO
21. Ene Effiom	AGM, Compliance & Enforcement, LLC
22. John D. Joseph	AGM, Engineering & Standards, EPM
23. Jonathan Okoronkwo	AGM, Corporate Planning & Strategy, PRS
24. Friday E. Sule	AGM, Market Analysis, MCR
25. Abu Kadiri	AGM, Health Safety & Standards, EPM
26. Chuka Akunne	AGM, Human Resources Development, FMS
27. Mary Anahve	AGM, Public Affairs, CO
28. Rasheed Busari	AGM, General Administration, FMS
29. Habib Kidaji	AGM, Human Resources Development, FMS
30. Saidu Lawal	AGM, ICT, FMS
31. Regina Osuagwu	AGM, Consumer Affairs, CA
32. Umar Mohammed	AGM, Research, PRS
33. Emeka Onyegbule	AGM, Market Competition and Rates, MCR
34. Ahmed Ndanusa	AGM, Chairman's Office, CO
35. Anthony Essien	AGM, Consumer Affairs, CA
36. Okpale Daisy	AGM, Licensing, LLC
37. Imam Mohammed	AGM, Health Safety and Environment, EPM
38. Bala Ado Shehu	AGM, Finance and Accounts, FMS

1.5. Forum Office Secretaries

In line with the Commission's mandate on customer protection, forum offices were set up pursuant to section 80(1)(b) of the EPSRA to hear and resolve customer complaints not satisfactorily resolved at the DisCos' Customer Complaints Units (DisCos-CCU). The forum office is managed by the forum secretariat while the hearings are conducted by five forum panel members who are not Commission staff. The daily activities of the Commission's Forum Offices

across Nigeria are coordinated by the under-listed staff members as Forum Secretaries as at 31st December 2022.

1. Henritta Ene	Abakaliki Forum Office, Ebonyi State
2. Abubakar Kurna	Abeokuta Forum Office, Ogun State
3. Grace Ekpenyong	Abuja Forum Office, Federal Capital Territory
4. Samson Osi Onu	Asaba Forum Office, Delta State
5. Princess Agwu	Awka Forum Office, Anambra State
6. Samuel Andzenge*	Bauchi Forum Office, Bauchi State
7. Benjamin A. Eboehi	Benin Forum Office, Edo State
8. Blessing Ikharo	Calabar Forum Office, Cross River State
9. Kabiru Musa	Dutse Forum Office, Jigawa State
10. Ado Jamilu	Eko Forum Office, Lagos State
11. Henrietta Ene*	Enugu Forum Office, Enugu State
12. Bashir Adam	Gombe Forum Office, Gombe State
13. Ashiru Abdu Na Abdu	Gusau Forum Office, Zamfara State
14. Olaiya O. Abe	Ibadan Forum Office, Oyo State
15. Patrick Ezeocha	Ikeja Forum Office, Lagos State
16. Kabiru Musa	Ilorin Forum Office, Kwara State
17. Ja'afar Ibrahim*	Jigawa Forum Office, Jigawa State
18. Samuel Andzenge	Jos Forum Office, Plateau State
19. Mansur Abdullahi	Kaduna Forum Office, Kaduna State
20. Ja'afar Ibrahim	Kano Forum Office, Kano State
21. Abubakar Kurna	Katsina Forum Office, Katsina State
22. Samuel Negedu	Lafia Forum Office, Nasarawa State
23. Nebo Joseph	Lokoja Forum Office, Kogi State
24. Pamela Ishaya	Makurdi Forum Office, Benue State
25. Afaoma Ubani	Owerri Forum Office, Imo State
26. Aminu Oguta	Osogbo Forum Office, Osun State
27. Ukongim P. Akubue	Port-Harcourt Forum Office, River State
28. Ashiru Abdu Na Abdu*	Sokoto Forum Office, Sokoto State
29. Chioma Okechukwu	Umuahia Forum Office, Abia State
30. Peter A. Dickson	Uyo Forum Office, Akwa Ibom State
31. Mutari Aliyu	Yola Forum Office, Adamawa State

*Staff were deployed to temporarily oversee additional Forum Offices.

PART 2: EXECUTIVE SUMMARY

A. Corporate Strategy and Structure
B. State of the Industry
C. Regulatory Functions
D. Consumer Affairs
E. Financial Reporting

CORPORATE STRATEGY AND STRUCTURE

The Nigerian Electricity Regulatory Commission (NERC): In 2022, the Commission continued the implementation of its 2021- 2023 Strategic Plan focusing on its ten (10) critical goals targeted at addressing the challenges in the Nigerian Electricity Supply Industry (NESI). The overarching objectives of the plan include:

i) Making the sector financially sustainable.
ii) Providing adequate and reliable power supply to Nigerians.
iii) Improving customer care.
iv) Consolidating the achievements within the Commission.

The Commission continues to reposition itself to provide robust regulatory interventions as the sector continues its transition from a state-owned monopoly to an unbundled competitive electricity market structure as enshrined in the Electric Power Sector Reform Act (EPSRA) 2004.

The Commission has 7 Divisions sub-divided into 25 units.

Corporate Structure: In 2022, the Commission maintained the same structure it operated in 2021 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-five (25) Units. Each division is headed by a Commissioner who is charged with the responsibility of overseeing the affairs of the Division. In addition, a management staff not lower than the rank of Deputy General Manager (DGM) coordinates the day-to-day activities of each Division and reports to the Commissioner.

Staff Composition: In 2022, the count of the Commission's total manpower was one hundred and forty-three (143) broken down as follows –

- Seven (7) Commissioners
- Thirty-five (35) Management staff
- Eighty (80) Mid-management staff, and
- Twenty-one (21) 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.

In 2022, the Commission's members of staff consisted of 7 Commissioners, 35 Management, 80 Mid-Management, & 21 junior staff.

The Commission's workforce cadre in 2022 was split as follows:

- *Management staff cadre* (General Manager, Deputy General Manager and Assistant General Manager) account for 25.74% of the workforce.
- *Senior Staff cadre* (Principal Manager, Senior Manager, and Manager) account for 52.21% of the workforce.
- *Middle-level* staff *cadre* (Assistant Manager and Analysts I–III) account for 6.62% of the workforce, and
- *Junior cadre* (Drivers, Office Assistants) account for 15.44% of the Commission's workforce in 2022.

From a gender representation standpoint, the Commission strives to promote fair representation across all cadres. Table 2.1 shows that as at the end of December 2022, 26.47% of the professional staff of the Commission are female. The Commission is committed to promoting equitable female representation within the Commission and the wider NESI.

Table 2.1: Cadre and Gender Distribution of the Commission's Staff in 2022

No	Position	Cadre	Male	Female	Total
1	General Manager	Mgt. Cadre	5	1	7
2	Deputy General Manager		4	1	7
3	Assistant General Manager		20	4	25
4	Principal Manager	Senior Cadre	11	12	26
5	Senior Manager		14	8	23
6	Manager		22	4	26
7	Assistant Manager	Middle Cadre	3	3	7
8	Analyst I		0	3	3
9	Analyst II		0	0	0
10	Analyst III		0	0	0
11	Junior Staff	Junior Cadre	21	0	21
	Total		105	40	145

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

Capacity Development, Promotion and Exit: The Commission places a premium on staff capacity development, and on account of this, members of staff attended the required in-person and remote regulatory, management and leadership courses in 2022.

In line with its condition of service, the Commission conducted the promotion exercise for eligible staff in 2022. Participants who were adjudged to have satisfied the stipulated requirements were duly promoted.

In 2022, the Commission sponsored staff to attend trainings, workshops and Seminars on subjects/areas that are beneficial to its statutory responsibilities.

Reporting Obligation of the Commission: Pursuant to section 55(3) of the EPSRA 2004, the Commission has published the Q1-Q4 2022 reports of its activities and is currently in the process of making copies available to Mr President and the National Assembly. The reports analyse the state of the industry (covering the technical, operational and commercial performances), regulatory functions, consumer affairs and the Commission's finances.

Also, in compliance with sections (55) & (56) of the EPSRA, mandating the Commission to keep proper accounts and other records relating to its activities, funds & property, the Commission has prepared its audited financial reports for the year ended 31st December 2022.

STATE OF THE INDUSTRY

Operational Performance: Pursuant to the regulatory authority vested on the Commission in the EPSRA 2004, the Commission continued overseeing the operational performance of the NESI. The summary of the NESI's operational performance for 2022 is provided below.

Available Capacity and Generation: In 2022, the average daily available capacity of the twenty-seven (27) active power plants was 4,526.83MW while the average daily generation was 3,988MWh/h. Compared to 2021, the available capacity decreased by 727.20MW (-13.84%) and the average daily generation also decreased by 209MWh/h (-4.98%). The industry recorded its highest daily generation of 4,598.05MWh/h on 12th February 2022.

The Partial Activation of Contract regime took effect in July 2022.

The average utilisation of available generation capacity across all power plants increased from 79.92% in 2021 to 86.05% in 2022 (+6.13pp). The improved utilisation was due to the effect of the Partial Activation of Contract (PAC) regime which began in July 2022 and has improved licensees' commitment to energy delivery and offtake within respective Partially Contracted Capacity (PCC). The PAC regime activation is one of the Commisison's initiatives to fast track NESI maturity, improve market discipline, encourage investment for improvement, and achieve adequate electricity supply.

Building on the escrow arrangement put in place by the Commission in collaboration with the Central Bank of Nigeria (CBN) for improvement in payment assurance to upstream players on behalf of the DisCos in the sector, the Commission activated the Gas Supply Stabilisation Fund (GSSF) initiative in July 2022. The Commission continues its surveillance on the challenges in NESI with respect to gas supply and is committed to engaging relevant stakeholders to develop lasting solutions to this problem.

In 2022, the average capacity utilisation rate was 86.05%.

Furthermore, the Commission continued to execute a number of actionable items identified in its 2021-2023 strategic plan

to completely resolve the technical, operational and commercial challenges in the NESI. Pursuant to this effort, the Commission has finalised the review the Performance Improvement Plans (PIP) filed by the DisCos for relevant and qualified projects. The PIPs were prepared in line with the guidelines provided by the Commission, to cover the period 2021–2025 and have an overall objective of ensuring that utilities invest in projects critical to addressing their technical, operational and commercial constraints.

National Grid Stability: A summary of the system stability performance of the national grid between 2018 and 2022 is contained in Table 2.2. The table shows that there was a decline in the stability of the grid network in 2022 as the number of total system collapses (i.e., *total blackouts nationwide*) increased relative to the preceding year.

This decline in grid reliability in 2022 is further proven by the fact that the range of 1.73Hz between the average maximum and average minimum grid frequency in 2022 is higher than 1.41Hz which was recorded in 2021.

Table 2.2: System Collapse (2018 – 2022)

	2018	2019	2020	2021	2022
No. of Partial Collapse	1	1	0	2	2
No. of Total Collapse	12	10	4	2	4

While the grid reliability performance declined in 2022, overall, the network has recorded a downward trajectory in terms of number of grid incidents since 2018. To maintain this trajectory of improvements in network stability, the Commission continues to monitor the implementation of its directive to DisCos and the Transmission Company of Nigeria (TCN) to execute Service Level Agreements (SLAs) that will ensure grid discipline. The Commission is also exploring options for the enforcement of under frequency load-shedding scheme which has been put in place to provide an added layer

of security for the grid in the case of a sudden loss of generation.

Commercial Performance: As indicated earlier, the financial viability of the NESI remains a major priority of the Commission. The summary of the commercial performance of the NESI focused on the underlisted parameters is provided below:

- 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)

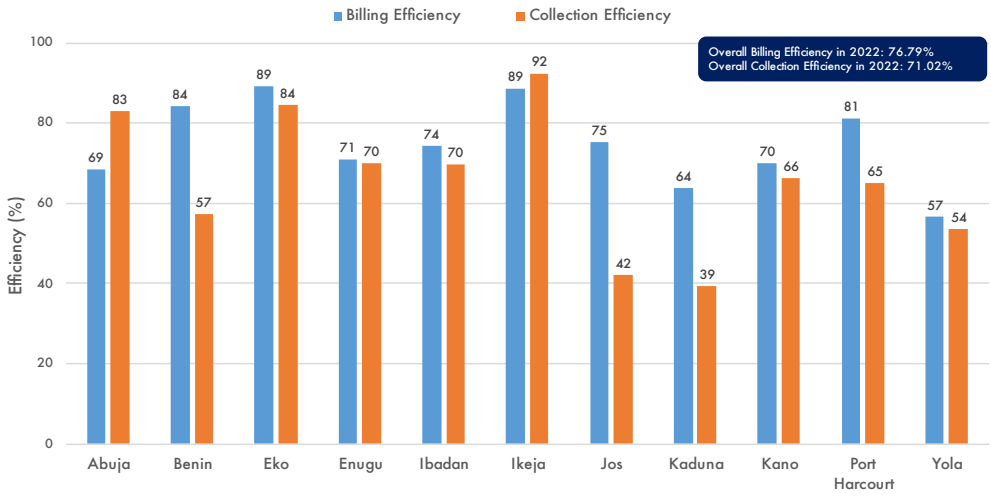
In 2022, the overall DisCos' billing and collection efficiencies were 76.79% and 71.02% respectively.

Energy offtake performance: In 2022, the total energy received by DisCos at their trading points was 28,351.62GWh. This is a decrease of 2,142.48GWh (-7.03%) from the 30,494.10GWh which was recorded in 2021 and is partly attributable to the 4.98% decrease in the total energy generated in 2022 relative to 2021. With the Commission's effort to achieve market maturity and improved upstream payments, energy offtake by DisCos transited from MYTO allocation[1] to Partially Contracted Capacity (PCC) in July 2022. In the first half of 2022, only one (1) DisCo recorded positive variance on its load offtake compared to its MYTO allocations while five (5) DisCos recorded positive variances in their energy offtakes compared to their PCC in the second half of the year. Cumulatively, the energy offtake performance of the DisCos improved in 2022/H2 (3,330.33MWh/h) by 6.02% compared to 2022/H1 (3,141.09MWh/h) partly attributable to the transition to the PAC regime.

[1] 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 it associated payments) for most of the grid-connected power plants.

Billing and Collection efficiencies: Figure 2.1 shows the billing and collection efficiencies by all DisCos in 2022. Out of the 28,351.62GWh total energy received by all DisCos, 21,770.79GWh was billed to the end-users, resulting in a billing efficiency of 76.79% which represents a 0.22pp increase from the billing efficiency recorded in 2021 (76.57%).

Figure 2.1: DisCos Billing and Collection Efficiencies in 2022



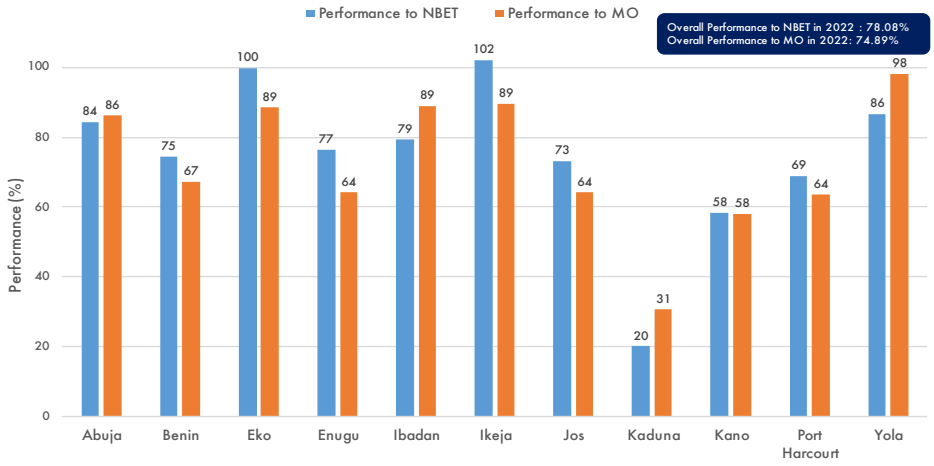
The total billings to electricity consumers by the DisCos was ₦1,185.31 billion of which only ₦841.81 billion was collected, leaving a total outstanding balance of ₦343.50 billion and corresponding to a collection efficiency of 71.02%. This collection efficiency represents 1.60pp increase compared to 69.42% (₦775.33 billion collected out of a total bill of ₦1,116.93 billion) recorded in 2021.

Market Remittance: The financial viability of the industry is further assessed with the market settlement rate by DisCos and special customers to NBET and MO.

The overall remittance was 6.11 percentage points higher than the overall remittance of 71.35% in 2021.

Remittance by DisCos: In 2022, a total invoice of ₦816.25[2] billion was issued to all the DisCos for energy received from NBET and for service charges by the MO, out of which a sum of ₦632.25 billion was settled by DisCos, leaving a total deficit of ₦184.00 billion in the market. This payment translates to an overall remittance performance of 77.46% which is a 6.11pp increase compared to the overall remittance in 2021 (71.35%). The individual DisCo's remittance performances to NBET and MO in 2022 are represented in Figure 2.2.

Figure 2.2: DisCos' Remittance Performance in 2022



The International Customers made a total payment of $50.68 million out of a total invoice of $52.72 million issued to them by the MO.

Ikeja and Eko DisCos had high remittance performances of 102.04%[3] and 99.81% respectively to NBET in 2022 while Kano and Kaduna achieved the lowest NBET remittance performances of 58.37% and 20.21% respectively. The highest remittance performances to the MO were recorded by Yola and Ikeja at 98.08% and 89.45% respectively while Kaduna recorded the lowest MO remittance performance of 30.81% in 2022.

[2] The NBET portion of the total invoice issued to DisCos has been adjusted for the Minimum Remittance Obligation (MRO) of the DisCos.

[3] Remittance performance above the MRT could be due to retroactive review of the minimum remittance threshold or payment of arrears. Ikeja DisCos's performance above MRT is due to payment of arrears/outstanding.

Remittances by Special and International Customers: In 2022, the NESI continued to provide electricity to 3 international customers. Cumulatively, the 3 international customers, i) Societe Beninoise d'Energie Electrique; ii) Compagnie Energie Electrique du Togo; iii) Societe Nigeri*enne d'electricite,* received an invoice of $52.72 million from MO and made a payment of $50.68 million. This corresponds to a remittance performance of 96.13% and a 61.41pp increase compared to 34.72% remittance performance in 2021 ($14.96 million paid against a total invoice of $43.09 million). The domestic bilateral customers operating in the NESI received a total invoice of ₦5,791.85 million from MO and made a payment of ₦5,516.76 million corresponding to a remittance performance of 95.25%.

In 2022, the NESI also supplied electricity to one special customer - Ajaokuta Steel Co. Ltd and the host community. Unfortunately, the customer continued the same pattern of non-payment as it exhibited in 2021 with ₦0 paid against the ₦1.39 billion and ₦0.27 billion invoices received from NBET and MO respectively in 2022. The MO and NBET must activate the relevant safeguards against continued non-settlement of market obligations by these market participants.

The financial viability of the NESI remained a major challenge in 2022. The liquidity challenge was largely driven by market shortfalls by DisCos i.e., non-payment of 100% of their market obligations. The DisCos were unable to pay their bills because of high ATC&C losses exacerbated by energy theft and consumers' apathy to payments under the prevailing practice of estimated billing. Another major contributory factor to high ATC&C losses was the non-settlement of energy bills by MDAs across the three tiers of government (i.e., Federal, State and Local government).

To address this existential liquidity challenges, DisCos must continue to improve on efforts toward reducing ATC&C losses by making necessary infrastructure investments, undertaking

customer enumeration and mass metering. Governments across all tiers also need to take more responsibility for the timely settlement of their electricity bills.

Regulations: Although no new regulation was issued in 2022, the Commission initiated the review of Mini-grid Regulation 2016 through consultations and stakeholders' engagements. The Commission also continued with monitoring compliance to the provisions of existing Regulations, Standards and other industry rules governing the NESI.

Orders: The Commission issued thirty-nine (39) new orders in 2022; these are listed in Table 2.3 below:

Table 2.3: Orders issued by the Commission in 2022

S/N	*Order No*	*Title of Order*	*Effective Date*
1	NERC/307/2022	Methodology for the determination of monthly energy caps for unmetered customers of successor distribution Licensees in the NESI	1st July 2022
2	NERC/319/2022	Securitisation of contracts and payment waterfall in the NESI	1st July 2022
3-15	NERC/320–330, 332/2022	July 2022 Minor Review of the MYTO	1st July 2022
16-26	NERC/316–318, 319A–326A/2022	Order on Performance Monitoring Framework	1st October 2022
27	NERC/333/2022	Securitisation of Gas Payments in the NESI	1st July 2022
28-38	NERC/334 - 344/2022	December 2022 Minor Review of MYTO for the DisCos	1st December 2022

Licensing and Permits: Following the satisfactory evaluation of applications, the Commission issued/granted the following licenses, permits, approvals and certifications in 2022:

- Twenty (20) new generation licenses with a cumulative capacity of 141.79MW. The new licences include those of on-grid, off-grid, and embedded generation plants.
- Renewal of four (4) generation licences with a total nameplate capacity of 2,290.00MW.
- Two (2) new Independent Electricity Distribution Network (IEDN) Licence

- Two (2) new Bulk Electricity Trading Licences.
- Twenty-three (23) permits for Captive Power Generation with a total capacity of 678.90MW.
- Thirty-six (36) Meter Service Providers comprising nine (9) meter manufacturers, four (4) meter importers, twenty-two (22) meter installers and one (1) meter vendor.
- Four (4) Meter Service Provider applications.
- Five (5) Eligible customer applications.
- Forty-eight (48) Mini-grid permits and
- Seventy (70) registration certificates[4].

In 2022, the Commission issued more than 140 licenses and permits.

Compliance and Enforcement: Enforcement actions against violations, breaches and infractions of regulations, orders and technical codes of the NESI are key mandates of the Commission. In 2022, the Commission continued with enforcement actions against some licensees for violations of rules and infractions. These include electric accidents and electrocution cases, and failure to comply with forum panel decisions without filing appeals within the stipulated timeframe.

Litigation and Alternative Dispute Resolution: The Commission was involved in five (5) new litigations instituted either directly against the Commission or where the Commission was joined as an interested party.

Pursuant to Section 42.3 of the market rules, the Commission has maintained a Dispute Resolution Panel (DRP) which is an Alternative Dispute Resolution (ADR) system of resolving disputes between market participants. In 2022, the DRP did not handle any case which continues a trend of limited utilisation of the DRP by market participants. In an attempt to correct this and in compliance with the Market Rules, the Commission appointed a new Dispute Resolution Councillor

[4] Mini-Grid Permit means a permit granted by the Commission to an Isolated or Interconnected Mini-Grid developer, who applied, for the construction, operation and/or maintenance and where applicable ownership of a Mini-Grid. Registration means the submission to the Commission of a registration form as shown in Schedule 2 by a Mini-Grid developer for one or more system(s) of up to 100 kW of Distributed Power per site.

(DRC) who has been tasked with developing a strategy to drive the uptake of the DRP by market participants.

CONSUMER AFFAIRS

The Commission conducted town hall meetings with electricity consumers in Abuja, Benin, Eko, Ibadan, Kano, Katsina, Owerri, and Sokoto in 2022.

Consumer Education and Enlightenment: To ensure continuous education of customers on their rights and obligations, as well as on other general service delivery matters in the industry, the Commission monitored all the customer enlightenment programs and activities of the DisCos in 2022 relative to their proposed plans for the year. On its part, the Commission conducted eight (8) town hall meetings with electricity consumers in Abuja, Benin, Eko, Ibadan, Kano, Katsina, Owerri, and Sokoto during the year. This is in addition to radio programs aired across twelve (12) states and the FCT to address key issues in the NESI through live discussions and pre-recordings. In the effort to educate the younger generation on the activities of the NESI, the Commission held the 2022 edition of the Annual Electricity Essay Competition for secondary school students across the country and winners were awarded prizes.

Metering: In 2022, additional 589,997 end-use customer meters were installed. This is significantly lower than the 836,702 meters installed in 2021 (-29.49%). The recorded decline in metering in 2022 was because of the winding down of the NMMP phase 0. As at 31 December 2022, only 5,134,871 out of the 12,152,106 registered end-use customers in the NESI (42.45%) were metered; as explained above, the resultant huge metering gap remains a key challenge for the financial sustainability of the NESI.

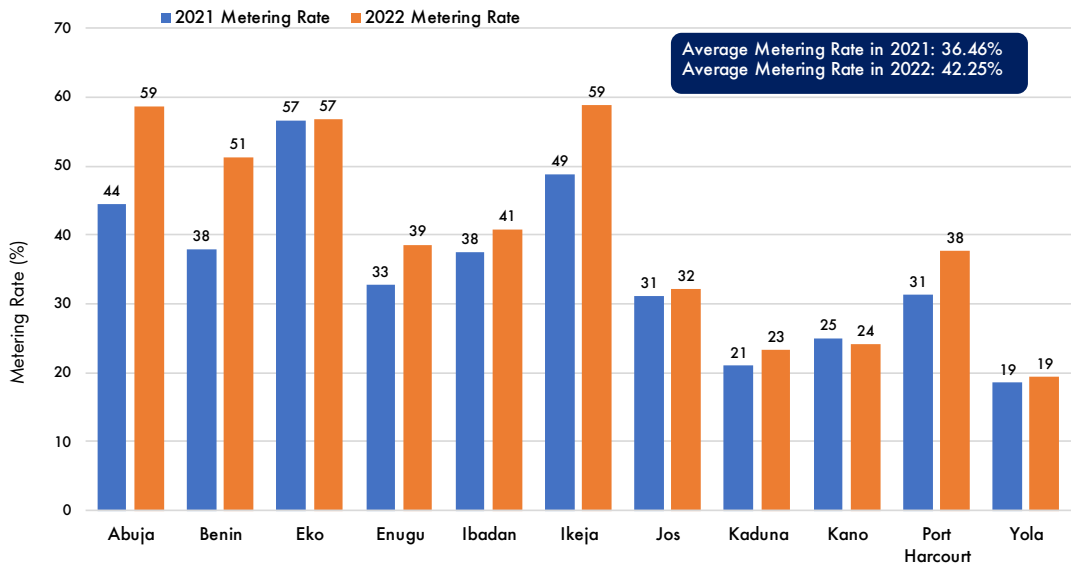
In 2022, additional 589,997 end-use customer meters were installed.

The metering rate (percentage of metered customers) of the 11 DisCos is contained in Figure 2.3. The data indicates that between 2021 and 2022, eight (8) DisCos recorded increases in their metering rate with Abuja (15pp), Benin (13pp), and Ikeja (10pp) recording the most significant increases. Conversely, Kano DisCo recorded a decrease of -1pp in its metering rate.

As a safeguard against overbilling of unmetered customers, the Commission has set maximum limits to the amount of energy (in kWh) that may be estimated for an unmetered customer on a particular feeder, depending on the customer category and tariff band. The maximum limits are computed each month based on three-month data of actual consumption records of metered customers according to customer class and tariff band.

The Commission continues to monitor the deployment of end-use energy meters for customers. It is also working with the CBN, World Bank and other relevant stakeholders on NMMP to accelerate the financial close and funds disbursement for the next round (Phase 1).

Figure 2.3: Metering Status in NESI 2021 vs 2022

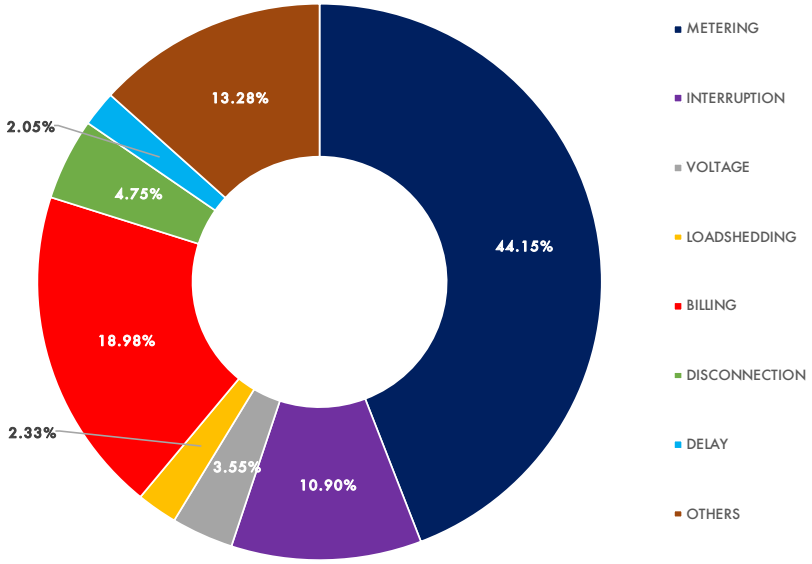


Metering, billing, and interruptions accounted for 74.03% of the total complaints received in 2022.

Customer Complaints: In 2022, all the DisCos received 1,002,998 complaints from consumers, this is +5.78% more complaints than those received in 2021 (948,172). A review of the customer complaints data represented in Figure 2.4 indicates that metering, billing, and service interruption issues were the top categories of customer complaints, accounting for 74.03% (742,519) of the total complaints in 2022.

The DisCos collectively resolved 927,722 complaints representing 92.49% average resolution rate. With the exception of Enugu (89.05%), Ibadan, (83.53%), and Ikeja (86.04%), all other DisCos reported above 90% complaint resolution rate in 2022.

Figure 2.4: Category of Complaints received by DisCos in 2022



Like complaints categories of DisCos CCUs, metering and billing dominated customers' complaints at Forum Offices.

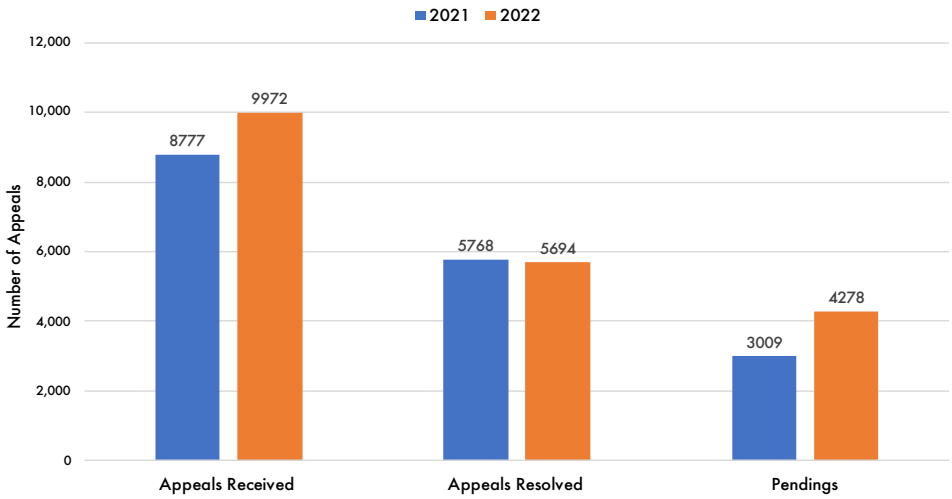
Forum Offices: Forum panels review unresolved disputes at DisCos' Complaint Handling Units (DisCos-CCU) as enshrined in the Commission's Customer Complaints Handling Standards and Procedure Regulations. Figure 2.5 shows that in 2022, the Forum Offices had a total of 9,972 appeals (inclusive of the 3,009 pending appeals carried over from 2021) from customers who were dissatisfied with DisCos' decision on their complaints. Like the complaints received by the DisCos, billing (66.70%), metering (20.70%), and disconnection (5.51%) were the dominant issues in the categories of appeals at the Forum Offices.

With concerted efforts on accelerating resolutions of increased complaints in 2022, the Forum panels held 274 sittings and 5,694 (57.10%) of the appeals were resolved either through hearings or preliminary engagements between

57.10% of the appeals that got to the Forum Offices in 2022 were resolved.

the Forum Secretaries and the concerned DisCos. This represents a -8.62pp decrease in the resolution rate of 65.72% achieved in 2021. The Commission continues to monitor the operation and efficacy of its Forum Offices to ensure quick resolution of all outstanding and new appeals in line with the Forum Offices operating manual.

Figure 2.5: Appeals received at the Forum Offices in 2021 and 2022



Health and Safety: Compared to 2021, the number of safety accidents recorded in the NESI decreased from 176 to 173. The number of injuries increased from 61 to 93, however fatalities recorded decreased from 115 to 108.

On account of the Commission's zero-tolerance on safety breaches in the NESI, the Commission continues to intensify monitoring and implementation of various safety programmes aimed at reducing safety incidents. The programs being implemented include public enlightenment on the safe use of electricity, the standardisation of system protection schemes, review of operational procedures for Distribution System Operators (DSO) on fault clearing, and engagement of stakeholders on Right of Way (ROW) violations.

PART 3: CORPORATE ACTIVITIES OF THE COMMISSION

3.1. The Commission

3.1.1. Background to the Creation of the Commission

Prior to the year 2000, the Nigerian Electricity Supply Industry (NESI) faced several challenges inhibiting the efficient delivery of electricity to Nigerians. These included poor infrastructure, high technical and commercial losses, low power generation capacity, inadequate transmission and distribution facilities, non-cost reflective tariffs etc.

This state of the industry led to the decision by the Federal Government to embark on power sector reforms in the NESI. The reforms aimed to liberate the power sector from the lingering problems and to attract private-sector investments. The Federal Government in March 2001 released the Nigerian Electric Power Policy (NEPP) which was subsequently adopted in 2002 and marked the beginning of the power sector reforms in Nigeria.

A critical milestone in the transformation of the power sector reform 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 previous legislation on the power sector. The National Electric Power Authority (NEPA) 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.

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

Since its inception, the Commission has continued to position itself to give robust regulatory interventions as the power sector transits from a state-owned monopoly to a more competitive market structure.

3.1.2. Objects and Functions of the Commission

The objects of the Commission as outlined under section 32 (1) of the EPSRA are the following;

a) To create, promote, and preserve efficient 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 and;
g) To present quarterly reports to the President and National Assembly on its activities.

In furtherance to the objects highlighted above, the Commission performs the following functions outlined in Section 32 (2) of the EPSRA as follows:

a) Promote competition and private sector participation, when and where feasible;

b) Establish or, as the case may be, approve appropriate operating codes and safety, security, reliability, and quality standards;

c) Establish appropriate consumer rights and obligations regarding the provision and use of electricity services;

d) License and regulate persons engaged in the generation, transmission, system operation, distribution, and trading of electricity;

e) Approve amendments to the market rules;

f) Monitor the operation of the electricity market; and

g) Undertake such other activities, which are necessary or convenient for the better carrying out of or giving effect to the objects of the Commission.

In the discharge of its functions, the Commission, in compliance with Section 32 (3), consults from time to time, and to the extent that it considers appropriate, such persons or groups of persons who may or are likely to be affected by its decision or orders including but not limited to its licensees, consumers, potential investors, and other interested parties.

3.1.3. Mission, Vision and Motto of the Commission

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

Vision: Electricity on Demand

Motto: Keeping the Lights on

3.1.4. Values of the Commission

The Commission has four (4) guiding 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; and

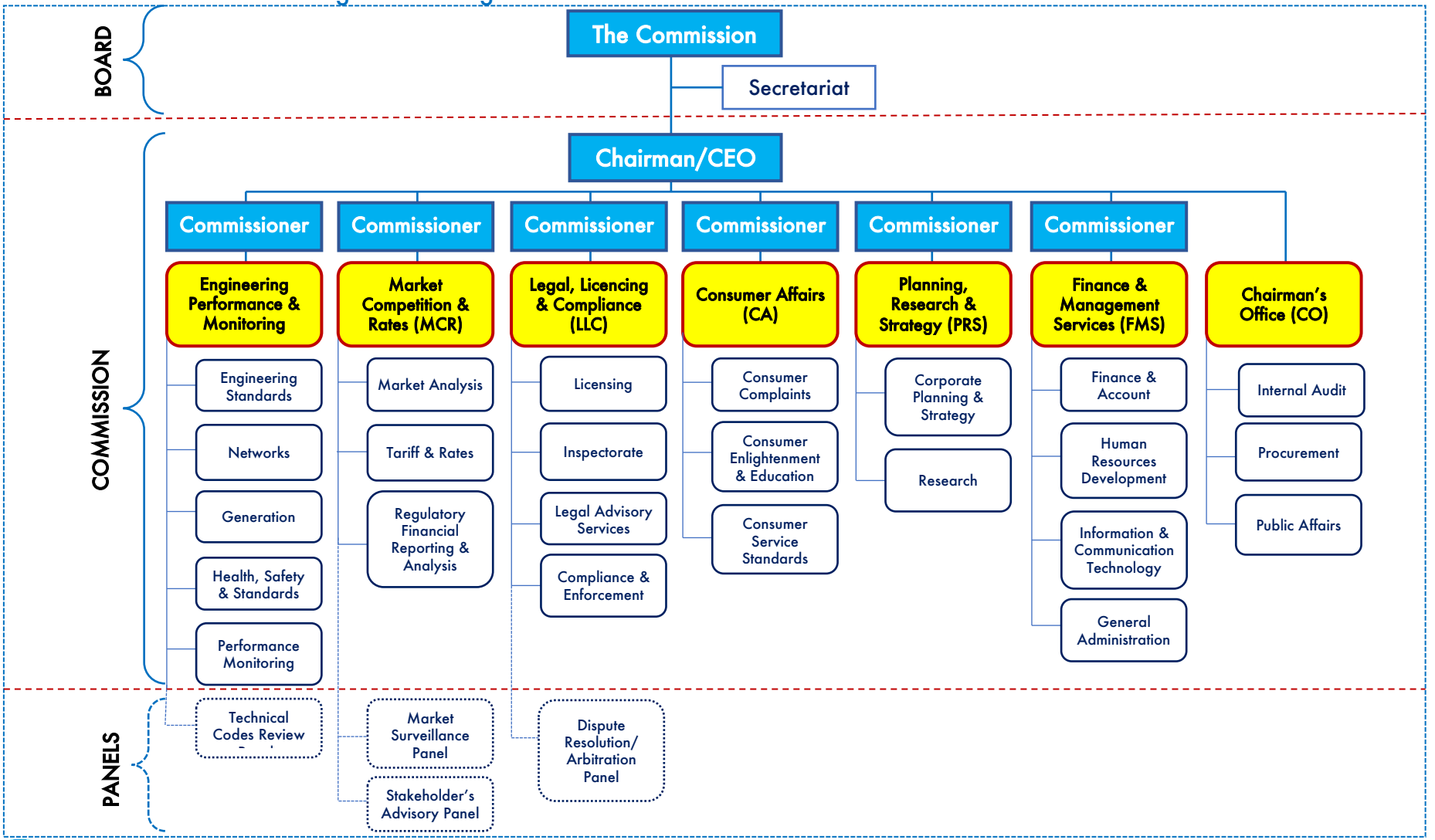
Good Governance: Making decisions in a Fair, Transparent and Consistent manner, in compliance with the laws of Nigeria and our Regulations.

3.1.5. Structure of the Commission

The Commission maintained the same organisational structure as in 2021. The structure seeks to allow an adequate flow of responsibility and authority along functional lines and staffing with professionally qualified personnel that have the requisite skills and experiences to carry out their functions appropriately.

The current organisational structure of the Commission presented in Figure 3.1 consists of seven (7) Divisions. These are subdivided into twenty-five (25) Units, each tasked with unique roles and responsibilities that culminate into Divisional functions to drive the actualisation of the Commission's goals.

Figure 3.1: Organisational structure of NERC as at December 2022



i. Board of Commissioners: The Board has the overall responsibility for leadership. It directs the activities of the Commission in line with the provisions of the EPSRA. The Board performs quasi-judicial roles and conducts public hearings on matters of public interest in line with the EPSRA.

ii. Chairman's Office (CO): This Division is made up of four (4) units that provide overall governance and coordination of the activities of the Commission. The Units are the Secretariat, Public Affairs, Internal Audit, and Procurement.

iii. Consumer Affairs (CA): This Division has the responsibility of leading the development of consumer regulations and ensuring that operators meet the minimum service standards provided in the regulations. It is also responsible for consumer enlightenment programmes and ensuring the speedy resolution of customer complaints by DisCos. In addition, it is responsible for the effective management of the Commission's Forum Offices across the Country.

iv. Engineering and Performance Monitoring (EPM): This Division is responsible for developing technical standards and monitoring compliance with technical codes & standards by industry operators. In addition, it is responsible for the technical evaluation of all license applications submitted to the Commission.

v. Finance and Management Services (FMS): This Division provides support services to the Commission in critical areas that include finance and accounts, asset administration, human capital development, and information technology.

vi. Legal, Licensing and Compliance (LLC): This Division is responsible for coordinating and evaluating license applications before the Commission. It provides legal support and advisory services to the Commission, oversees the quasi-judicial functions of the Commission (hearings and dispute resolutions in the NESI), and the enforcement of Commission's Orders and decisions.

vii. Market Competition and Rates (MCR): This Division is responsible for reviewing tariff applications from licensees and conducting analyses of market performance. It monitors the electricity market to prevent abuse of market power and conducts commercial evaluations of licence applications. It is also responsible for the analyses and review of the financial reporting of all licensees in the NESI.

viii. Planning, Research and Strategy (PRS): This Division is responsible for collating and analysing industry data to help the Commission make informed decisions. It is also responsible for the overall strategy development of the Commission and monitors the emerging trends in the electricity industry – this is with a view to advising the Commission on updates that may be required to the regulatory regime to help deliver on its objects as contained in the EPSRA. Furthermore, the Division coordinates the renewable energy activities of the Commission and is responsible for the preparation of the periodic NESI operational performance reports issued by the Commission.

3.2. Strategic Plan and Performance Monitoring System

The Commission utilises strategic plans to convert its high-level objectives into specific tasks and deliverables which are geared towards the creation of the regulatory environment required to actualise the reforms needed at various

stages of the evolution of the NESI as provided in the EPSRA 2004. The Performance monitoring system of the Commission gives vital information about current processes, how these processes are helping to achieve the strategic goals and suggests ways to achieve the goals more effectively.

The 2021–2023 strategic plan is intended to drive continued growth and consolidate the Commission's oversight functions in the NESI. Specifically, the plan provides for the realisation of the under-listed ten (10) critical goals:

I. Creation of a financially viable electricity market;
II. Metering for all customers;
III. Effective compliance monitoring & enforcement;
IV. Institutionalise code of corporate governance;
V. Recapitalisation of licensees in the sector;
VI. Sustained growth in availability & quality of supply;
VII. Enhancement of the nation's security of supply for electricity;
VIII. Promotion of local content and manpower development in NESI;
IX. Enforcement of safety standards;
X. Review and enforcement of standards for customer care.

These goals have been crafted to align with the overall objects of the Commission as outlined in Section (32) of the EPSRA, while also being consistent with the overarching policy directives issued by the Federal Government of Nigeria in line with Section (33) of the EPSRA.

Progress made in the implementation of the ten (10) strategic goals for 2022 are contained in Table 3.1.

Table 3.1: Summary of Progress on the Commission's Strategic Plan in 2022

S/N	*Goal*	*Action Item*	*Status*
1.	Creation of a financially viable electricity market	Review of TCN Performance Improvement Plan (PIP)	Ongoing
		Regulatory Open Book Review (Regulatory Audit of Procurement Practices, Collection, Disbursement & Utilisation of Market funds by Licensees)	Completed
		Implementation of MYTO - 2022 and Periodic Minor Review of MYTO	Completed
		Valuation of TCN, NDPHC and State Government Assets	Ongoing
		Review of USoA Framework	Ongoing
		Validation of customer enumeration exercise (geotagging to distribution assets, load profile, etc)	Ongoing
		Monitoring of the disbursement and utilisation of funding for Discos and TCN PIP	Completed
		Technical and Operational Audit of Market Operation and System Operations	Ongoing
		The establishment of Power Consumer Assistance Fund (PCAF)	Ongoing
		Review of Security Challenges and the resultant Revenue losses in the NESI	Ongoing
		Monitoring of World Bank/PSRO performance indicator for compliance with Disbursement Linked Indicator (DLI)	Completed
		Implementation of Regulatory net offs and monitoring of credit notes	Completed
2.	Metering of all customers within three years	Review of the guidelines for meter decommissioning procedures	Completed
		Partnership with NAPTIN for training and certification of meter installers	Ongoing
		Accreditation of test laboratories to carry out certification of meters to speed up meter deployment	Ongoing
		Monitoring and evaluation of meter deployment by DisCos	Completed

S/N	Goal	Action Item	Status
		Review of order on Prohibition of Bulk Metering & Introduction of CCA vis-à-vis Franchising guidelines	Ongoing
3.	Effective Performance Monitoring, Compliance and Enforcement	Development of a detailed compliance and enforcement strategy	Completed
4.	Institutionalise Corporate Governance	Issuance of Code of Corporate Governance for the NESI	Ongoing
		Issuance of order on Procurement in the NESI	Ongoing
		Facilitation of the Separation of ISO from TSP (TCN)	Completed
5.	Recapitalisation of Licensees in the sector	Determination of Capital Adequacy for DisCos	Completed
6.	Sustained growth in availability and quality of supply	Monitoring of the Implementation of DisCos PIPs	Ongoing
		Review of 2021 Proposed CAPEX by TCN	Ongoing
		Evaluation and alignment of investments required by TCN and DisCos at all TCN/DisCo interface points.	Completed
		NESI Assets (Feeders) Nomenclature	Completed
		Development of Ramp up trajectories for generation and supply	Ongoing
7.	Enhancement of the Nation's security supply for electricity	Development of regulatory guidance and recommended policy support for the realisation of clean coal-to-power generation, on-grid renewables, large hydros, small hydros and other alternative sources.	Completed
		Contract activation and securitisation of payment in the NESI	Completed

S/N	Goal	Action Item	Status
		Review of Mini Grid Regulations, 2016	Ongoing
8.	Promotion of local content and manpower development in the NESI	Monitoring Compliance with Local Contents Regulations in NESI	On hold
9.	Enforcement of safety standards	Order on compensation for safety breach arising from licensees' negligence	Ongoing
		Develop a framework to ensure effective enforcement of Safety Code issued to licensees	Completed
		Review of Protective Schemes standards at 11kV and 33kV levels	Ongoing
		Review of operational procedures for Distribution System Operators	Ongoing
		Work with NAPTIN for the certification of Distribution and Transmission System Operators (TSO) and Safety Professionals in NESI	Completed
		Partnership with NEMSA to revise design and standards for construction/installations at the distribution level	Ongoing
10.	Review and Enforcement of standards for customer care	Establishment of a contact call centre for prompt response to customer needs and close monitoring of DisCos' customer complaints handling process	Ongoing
		Review of Customer Protection Regulations	Ongoing
		Review of the roles of the Forum in customer complaint/resolution in order to make Forum Offices more effective	Completed

3.3. Staff Composition

The total manpower of the Commission in 2022 was one hundred and forty-three (143) consisting of Seven (7) commissioners, thirty-five (35) management staff, eighty (80) mid-management staff and twenty-one (21) junior staff. 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 distribution of staff by division, cadre, gender, position, age and geopolitical zone is detailed in the sections below:

3.3.1. Distribution by Division

The distribution of staff across the different Divisions in the year is presented in Table 3.2. The Finance & Management Services Division had the highest number of staff; forty-three (43), while the PRS Division had eight (8) staff during the year.

Table 3.2: Distribution of the Commission's Staff by Divisions in 2022

S/N	*Divisions*	*Number of staff*	*Percentage Share*
1	Chairman's office	16	11.76%
2	Consumer Affairs (including Forum Offices)	40	29.41%
3	Engineering, Performance & Monitoring	10	7.35%
4	Finance & Management Services (Including Junior Staff)	43	31.62%
5	Legal Licensing & Compliance	10	7.35%
6	Market, Competition & Rates	9	6.62%
7	Planning, Research & Strategy	8	5.88%
	Total	136	100.00%

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

3.3.2. Distribution by Cadre

The distribution of staff by cadre presented in Table 3.3 shows that as at 31st December 2022, the Commission has thirty-five (35) senior management staff,

eighty (80) mid-management staff, and twenty-one (21) lower level & junior staff representing 25.74%, 58.82% and 15.44% respectively of the total Commission's staff.

Table 3.3: Distribution of the Commission's Staff by Cadre in 2022

S/N	Position	Number of Staff	Cadre	Number of staff	Percentage share
1	General Manager	6	Mgt. Cadre	35	25.74%
2	Deputy General Manager	5			
3	Assistant General Manager	24			
4	Principal Manager	23	Senior Cadre	71	52.21%
5	Senior Manager	22			
6	Manager	26			
7	Assistant Manager	6	Middle Cadre	30	22.05%
8	Analyst I	3			
9	Analyst II	0			
10	Analyst III	0			
11	Junior Staff	21	Junior Cadre		
	Total	136	All Cadre	136	100.00%

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

3.3.3. Distribution by Gender

The distribution of staff by gender as at December 2022 illustrated in Figure 3.2 shows that approximately 26.47% of the professional workforce of the Commission were female in furtherance of the Commission's commitment to gender balance.

Figure 3.3 presents the gender distribution of staff of the Commission in 2022 for each Cadre. The representation of females in the cadre ranges from 15.38% (Manager cadre) to 100% (Analyst cadre). This further buttress the fact that the Commission acknowledges the key role women play in the power sector and is committed to increasing their participation.

Figure 3.2: Distribution of the Commission's Staff by Gender in 2022

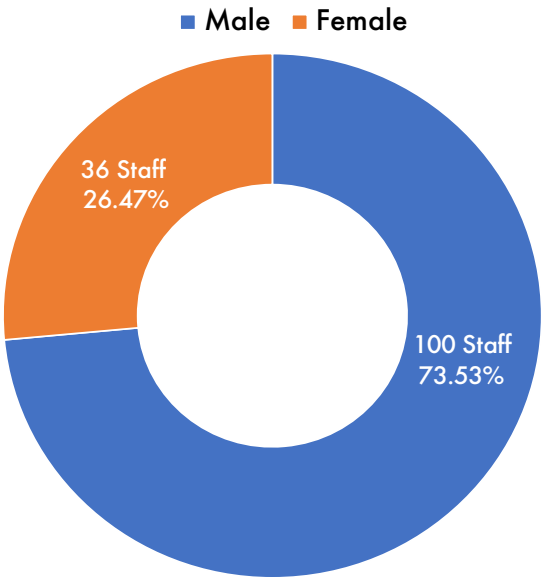
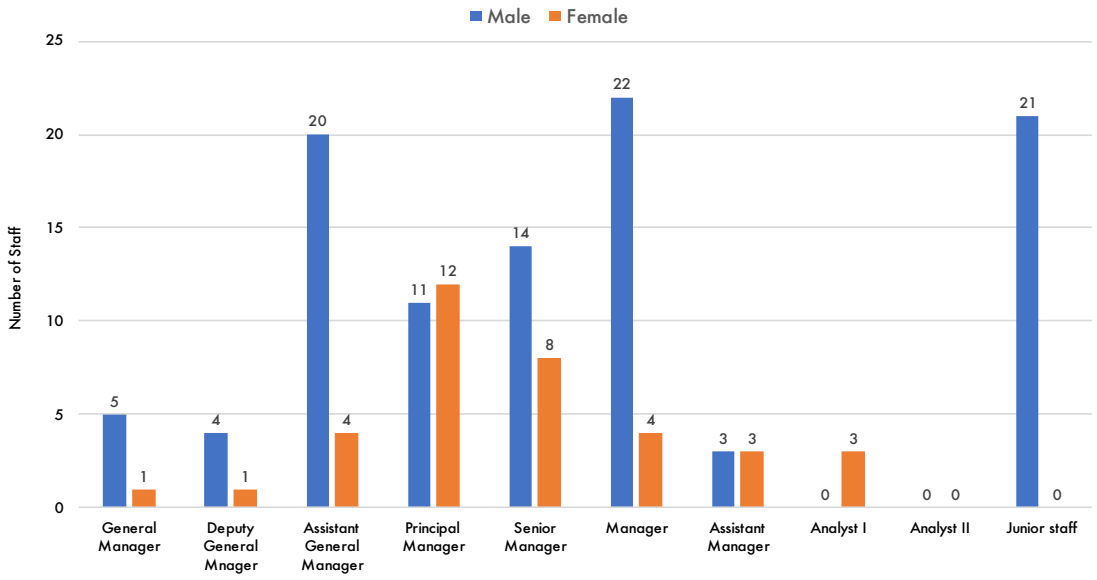


Figure 3.3: Distribution of the Commission's Staff by Cadre & Gender in 2022

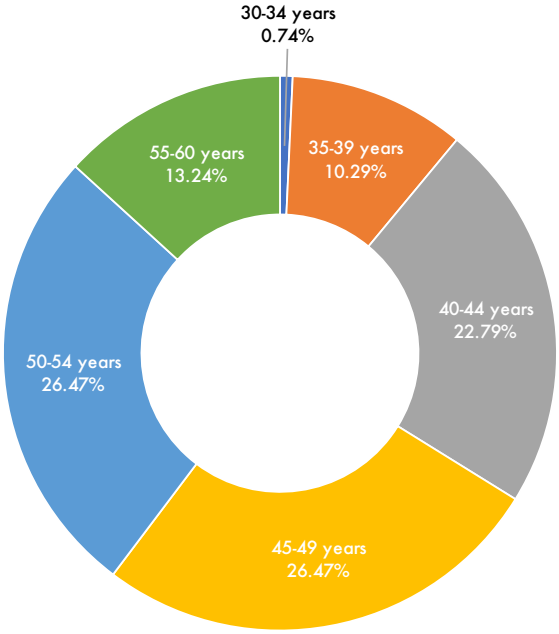


3.3.4. Distribution by age

The age distribution of staff shown in Figure 3.4 indicates that the Commission has only one (1) staff below the age of thirty-five (35) and 88.97% of the staff are 40 years and above. Based on the 60 years mandatory retirement age for public servants, eighteen (18) staff are set to retire within the next 5 years and

another thirty-six (36) staff are to retire within 10 years. The Commission acknowledges the importance of succession planning and has developed a succession strategy. In line with this, the Commission initiated a recruitment process during the year to employ suitably qualified Nigerians to join its workforce.

Figure 3.4: Staff Distribution by Age as at 31st December 2022



3.4. Capacity Development

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

In addition, the Commission also organised a number of in-house virtual training and workshops for staff development. Members of staff of the Commission were

sponsored to attend annual conferences of their respective professional bodies among which included the Chartered Institute of Personnel Management of Nigeria (CIPM), Nigerian Institute of Public Relations (NIPR), Nigerian Institute of Management (NIM), Institute of Chartered Accountants of Nigeria (ICAN), Association of National Accountants of Nigeria (ANAN), Nigerian Society of Engineers (NSE) and the Nigerian Bar Association (NBA).

3.5. Promotion, Awards and Retirement

Consistent with its policy to conduct regular and transparent promotion exercises for eligible staff, the Commission undertook performance appraisal for all staff and conducted the promotion exercise for all eligible staff. At the end of the exercise, members of staff who were adjudged to have satisfied the stipulated requirements were duly promoted.

The Commission held an award ceremony to recognise staff who had exhibited excellence in the delivery of their duties as well as long-service awards to relevant staff. Eight (8) members of staff exited the Commission in 2022.

3.6. Reporting Obligations

3.6.1. Quarterly Reports

Pursuant to Section 55(3) of the EPSRA which states that - "the Commission shall present quarterly reports on all its activities to the President and the National Assembly", the Commission has published its four (4) quarterly reports for 2022. The reports contain analyses of the state of the Nigerian electricity industry (covering both the operational and commercial indices), regulatory functions, consumer affairs, the Commission's finances, and staff development during a given quarter.

3.6.2. Financial Reports

The Commission's financial statement for the year ended 31st December 2022 was prepared in compliance with Section 55(1) of the EPSRA, which 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".

Furthermore, in compliance with Section 56(1)-(3) of the EPSRA mandating the auditing of the Commission's account within six (6) months after the end of each financial year, PricewaterhouseCoopers (PwC) was swiftly engaged to audit the account of the Commission for the 2022 financial year.

PART 4: STATE OF THE NIGERIAN ELECTRICITY SUPPLY INDUSTRY

4.1. Operational Performance

The Nigerian Electricity Regulatory Commission (NERC) in line with the mandate derived from the Electric Power Sector Reform Act (EPSRA) monitors the technical and operational performance of the Nigerian Electricity Supply Industry (NESI). This is to ensure that the Commission's decision-making process is data-driven leading to the implementation of interventions that seek to optimise service delivery to customers.

4.1.1. Electricity Generation

In 2022, the average daily available generation capacity of all grid-connected plants was 4,526.83MW. The average daily available capacity decreased by 727.20MW (-13.84%) from 5,254.03MW in 2021 to 4,526.83MW in 2022. Figure 4.1 summarises the average daily available capacity in 2021 and 2022. The available generation capacity in 2022 was notably lower than in 2021, except in the month of April. In 2022, generation capacity fell below 4,500MW (the lowest point in 2021) during the following four months: May, June, September, and October.

The unavailability of thermal plants, which was due to gas constraints, annual maintenance, and shutdown due to mechanical/technical faults, contributed to the dip in available generation capacity during the year. Egbin ST Gas, Geregu, Okpai, Delta Gas and Paras had less than 50% of their capacities available due to a combination of the aforementioned factors.

Between April and June 2022, the four (4) hydro power plants; Kainji, Jebba, Shiroro and Dadin Kowa also experienced decreases in available capacity due to low water head and water management. This was due to seasonal variations occasioned by the commencement of the rainy season in Nigeria.

Figure 4.1: Average Daily Available Capacity in 2021 and 2022

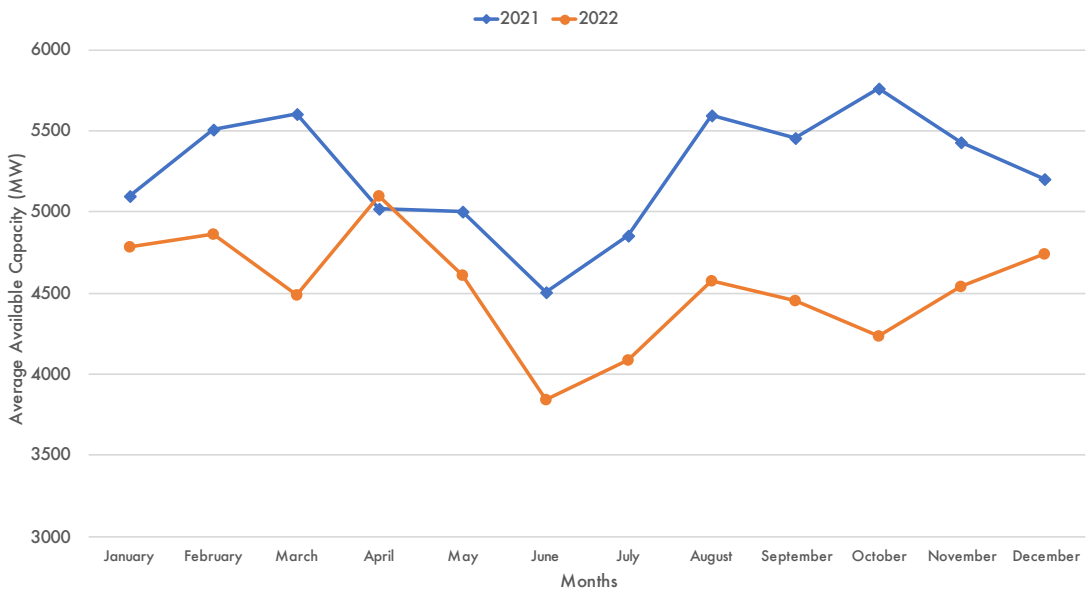
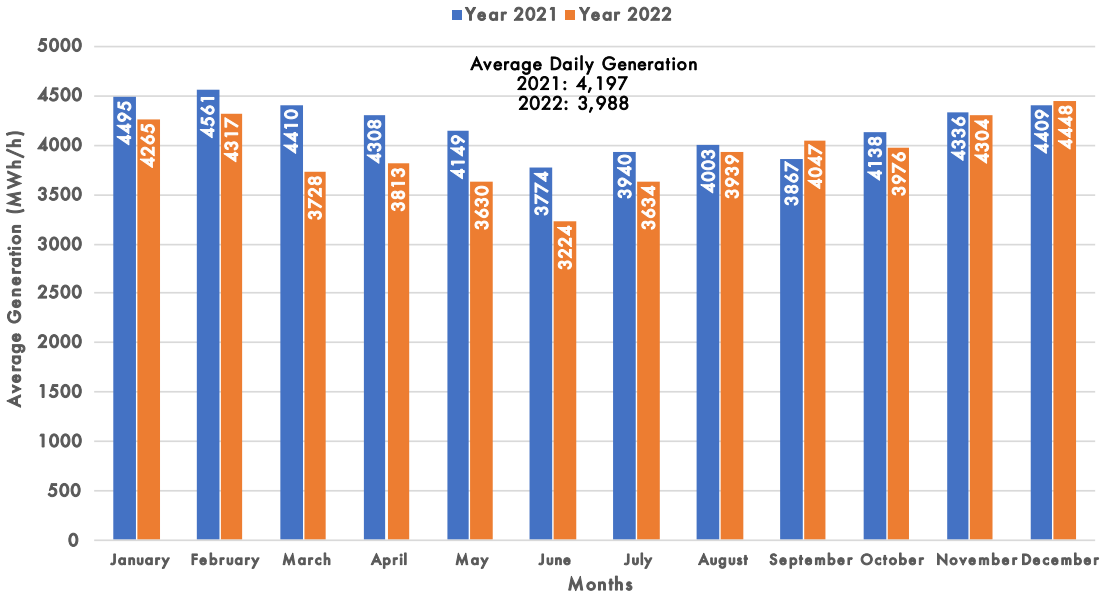


Figure 4.2 presents a summary of the average daily electricity generation for each month in 2021 and 2022. On the 12th February 2022, the national grid recorded its highest average hourly generation of 4,598.05MWh/h.

Figure 4.2: Average Daily Generation in 2021 and 2022



The average daily energy generated in 2022 declined by 209MWh/h (-4.98%) from 4,197MWh/h in 2021 to 3,988MWh/h. This can be attributed

to the reduction in available capacity in 2022 compared to 2021 although it is noteworthy that the scale in reduction of generation was significantly lower than reduction in available generation, caused by increased utilisation of available capacity. Creating an incentive for the relevant licensees to work towards the complete resolution of the technical and operational challenges in the NESI remains a top priority of the Commission.

As explained in each of the 2022 quarterly reports, the lack of liquidity and payment assurance for upstream players especially Gas suppliers has been a major contributory factor to the decline in available generation. Liquidity challenges also lead to delays or total lack of routine maintenance of machines which cause unscheduled outages.

Since 2020, as part of the efforts to improve payment assurance to upstream players in the sector, the Commission in partnership with the Central Bank of Nigeria (CBN) has implemented an escrow arrangement which provides visibility into the collection performance of the DisCos with payments being made on their behalf to the upstream players.

The Commission continued the execution of several actionable items identified in its Strategic Plan 2021-2023 to resolve the technical and operational challenges in the NESI. Pursuant to this, the Commission finalised the review and communicated its decisions on the Performance Improvement Plans (PIP) filed by the DisCos[1] to ensure the execution of projects critical to improving their operational and technical performances. The PIPs review focused on the:

I. Utilisation of capital and operating expenditure allowances for relevance and cost-efficiency.

[1] The PIPs cover the period 2021-2025 and prepared with the guidelines provided by the Commission with an overall objective to ensure that utilities invest in projects critical to addressing the technical and operational constraints affecting their operational efficiency.

II. Investments required to address distribution network bottlenecks and free up part of the unutilised generation capacities and address other related constraints inhibiting the flow of energy.

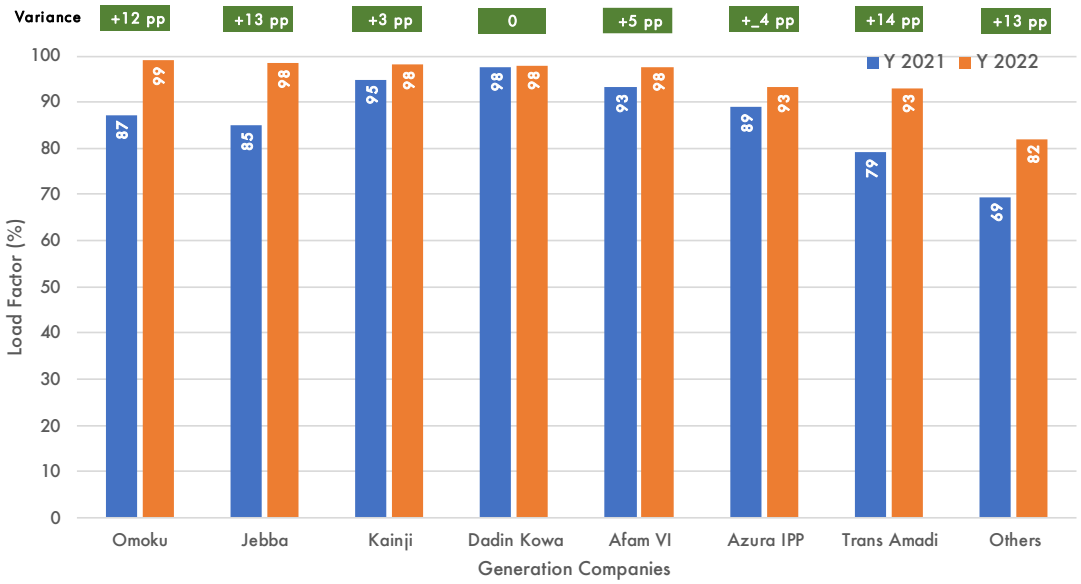
4.1.2. Load Factor and Average Generation of Power Plants

The Load Factor is a measure of the utilisation of a power plant's capacity, calculated as the ratio of the average electricity generated to the maximum possible generation over the period, based on the available capacity. A higher load factor results in better capacity utilisation, 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 reflects both demand for energy and a plant's ability to supply it. The formula for Load Factor is represented by equation 4.1:

$$\text{Load Factor} = \frac{\text{Total Energy Generated (MWh)}}{\text{Average Available Capacity (MW)} \times 24\text{hrs} \times \text{period (in days)}} \quad (4.1)$$

The average load factor across all grid-connected power plants in 2022 was 86.05%, indicating that 13.95% of available capacity was not utilised. The load factor in 2022 (86.05%) represents an increase of 10.03pp from the 76.02% recorded in 2021. The increase in load factor during the year despite a decrease in total energy generated relative to 2021 indicates there was an improvement in load offtake by DisCos. Figure 4.3. shows the load factors of the seven (7) top performing power plants in 2021 and 2022.

Figure 4.3: Average Plant Load Factor (%) in 2021 and 2022



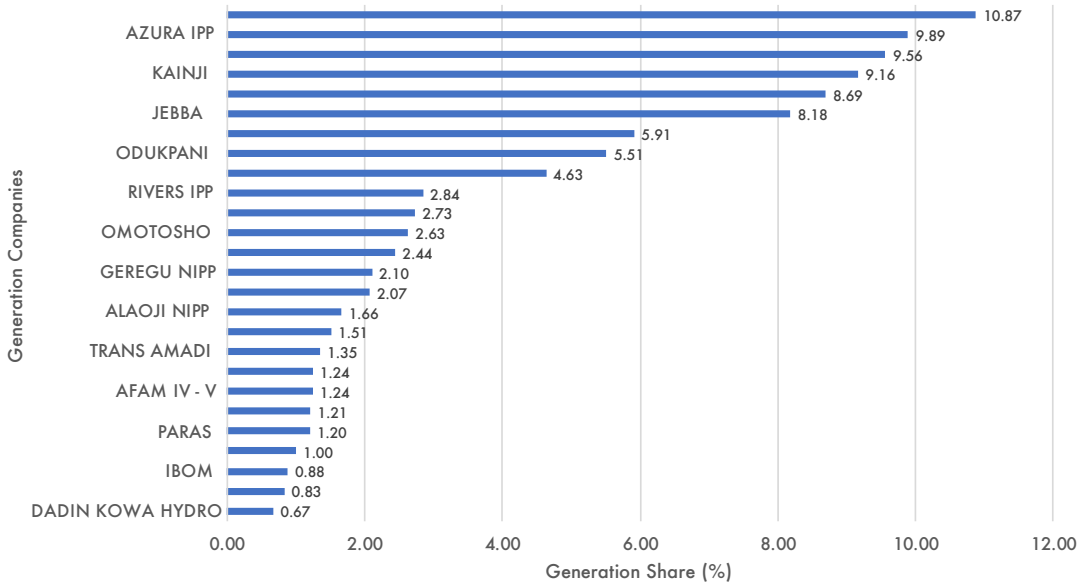
Eleven (11) power-plants had over 90% of energy generated being evacuated by the TSP in 2022 with Omoku (99.03%), Jebba (98.44%), and Kainji (98.09%), being the best performers in this metric. The hydro plants had an average dispatch rate of 96.02%; Jebba (98.44%), Kainji (98.09%), Dadin Kowa (97.93%), and Shiroro (89.63%). The dispatch rate of these hydro plants complies with the Commission's Order NERC/182/2019, declaring hydropower plants as "must-run" by the SO. This is to ensure that the hydro plants are efficiently dispatched given their low tariffs. Relative to 2021, all power plants with the exception of Ibom (-16.05pp) recorded improvements in load factor, with Jebba having the highest increase (+13.48pp).

4.1.3 GenCo Energy Generation Performance

The contribution of each power plant to the total energy output in 2022 is represented in Figure 4.4. Twelve (12) of the twenty-six (26) operational power plants accounted for 80.60% of the total electricity generated in 2022. As was the case in 2021, Egbin and Azura continue to lead the share of total energy

generated. Egbin accounted for the highest share of 10.87% (15.04% share of energy generated in 2021), followed by Azura which accounted for 9.89% (8.85% share of energy generated in 2021) energy share. Delta GS, Kainji, Shiroro and Jebba were other top contributors to energy generated in 2022. Conversely, Dadin Kowa, being the grid connected plant with the lowest capacity (40MW), accounted for the lowest share of output contributing 0.67% of the total energy generated within the year.

Figure 4.4: Average Share (%) of Generation Output by Plants in 2022



The share of generation output contained in Figure 4.4 indicates NESI over-reliance on some power plants. The Commission has commenced the phased activation of contracted capacity effective 1st July 2022 to promote incremental growth in generation availability and utilisation of other plants especially those that have significant installed capacities that have not been utilised in prior years.

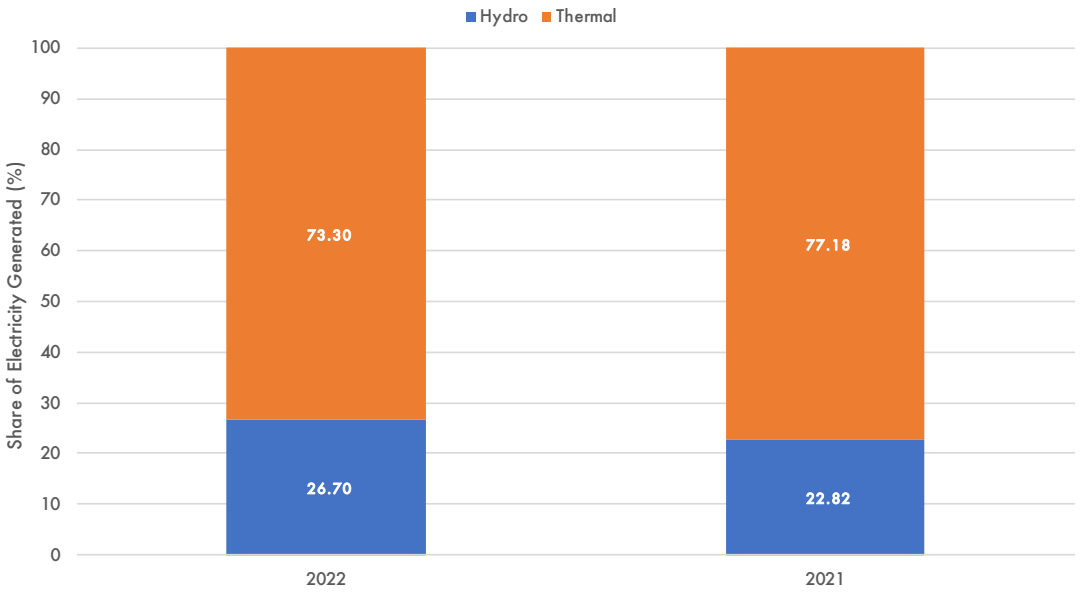
4.1.4. Generation Mix

The electricity generation mix refers to the combination of fuels used to generate electricity over a period of time. 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 variations. An ideal energy mix must balance the three key objectives of the energy trilemma: energy affordability, environmental sustainability, and energy security. The formula for electricity generation by fuel sources is given by equation 4.2:

$$\text{Share of fuel}_i = \frac{\text{Total Electricty Generated from Fuel}_i\ (\text{MWh})}{\text{Total Electricity Generated from all Fuel Sources (MWh)}} \qquad (4.2)$$

The share of electricity generation by energy sources for 2021 and 2022 is presented in Figure 4.5. The share of electricity generated from hydropower plants in 2022 was 26.70% representing an increase of 3.88pp from 22.82% in 2021. The country's current energy mix means that seasonal variation in water volume and security of gas supply both constitute high-risk factors for electricity supply. While both hydro and thermal (gas) plants being used on the grid are relatively clean sources from an emissions perspective, the Commission remains committed to monitoring the generation mix in furtherance of the Government's climate change mitigation commitments.

Figure 4.5: Share of Electricity Generated by Energy Sources



4.1.5. Grid Performance

The Transmission Company of Nigeria (TCN) which has the responsibility of wheeling energy from power plants to DisCos holds two licensees; 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 and load dispatch. To assess the performance of the grid, the Commission focuses on four (4) key performance indicators (KPI) that relate to power transmission. These are;

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

4.1.5.1. Transmission Loss Factor

Transmission Loss Factor (TLF) refers to the proportion of energy lost during the transmission of power from GenCos to the DisCos. The TLF has an inverse relationship with system efficiency which means that a decline in the TLF

indicates an improvement in transmission efficiency. The formula for TLF is represented by equation 4.3:

$$TLF = \left(1 - \frac{\text{Energy delivered to all DisCos + Energy Exported}}{\text{Energy Sent out by all GenCos}}\right) \times 100 \qquad (4.3)$$

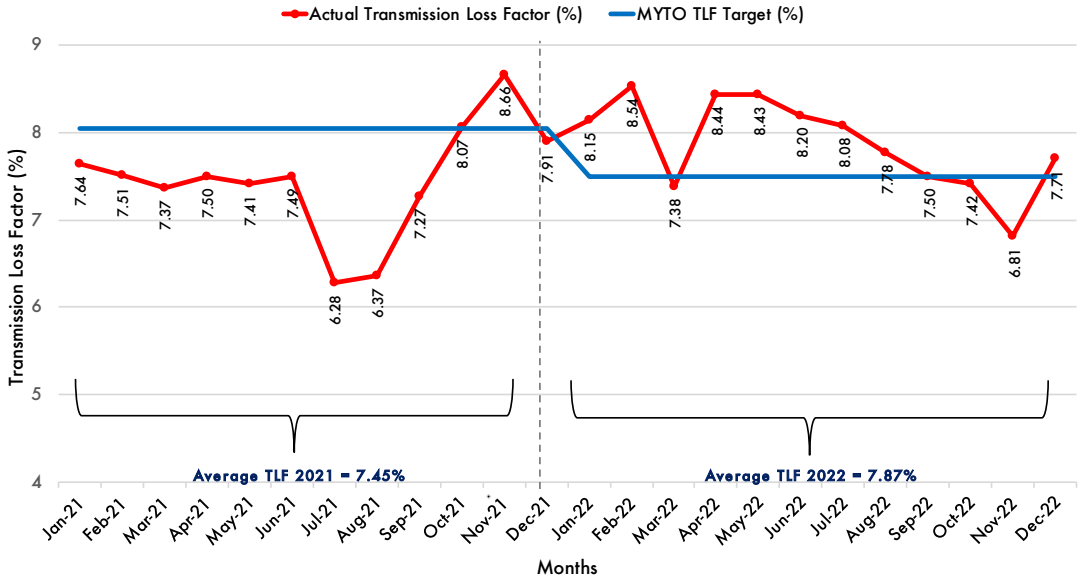
As illustrated in Figure 4.6, the average TLF in 2022 was 7.87%; a 7.87% TLF implies that for every 100 MWh of energy injected into the grid from the generation stations in 2022, 7.87MWh of the energy was dissipated in transit as transmission loss and utilised to power the transmission substations. This is 0.37pp higher than the allowed Multi-Year Tariff Order (MYTO) reference loss factor of 7.50% which became effective in January 2022.

Since TLF is supposed to cover efficient losses for which customers are meant to pay, the Commission has an obligation to review TLF targets to reflect the maturity in the NESI taking into account investments made by the TSP. In view of considerable improvements recorded in TCN's operational efficiency with an average TLF of 7.68% and 7.29% in 2019 and 2020 respectively, as against the 8.05% TLF provided in transmission tariff since 2012, the Commission reviewed the efficiency target for TCN in 2021 and set TLF reduction trajectory for the next five (5) years to encourage the TCN towards better operational efficiency as shown in Table 4.1

Table 4.1: TLF Improvement Trajectory 2022 - 2026

Year	2022	2023	2024	2025	2026
Regulated Loss	7.50%	7.25%	7.00%	6.75%	6.50%

Figure 4.6: Transmission Loss Factor in 2021 and 2022



4.1.5.2. Grid Frequency

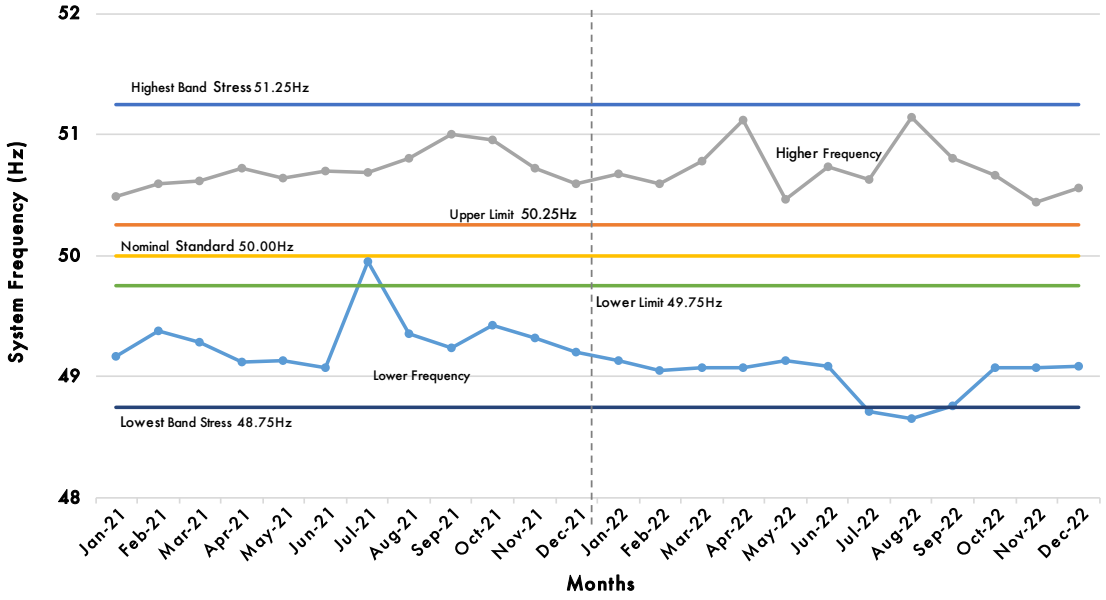
Frequency is a major power quality parameter that consumers (especially industrial customers) are concerned about because of the sensitivity of their machines to frequency fluctuation. Most industrial production assembly lines have machines that are frequency sensitive and would not operate outside the pre-set frequency tolerance limits. As specified in the Grid Code, the system frequency under normal circumstances is expected to be between a lower limit of 49.75Hz and an upper limit of 50.25Hz (allowance of +/- 0.5%) but may reach an upper bound stress limit of 51.25Hz and a lower bound stress limit of 48.75Hz in extreme circumstances (allowance of +/- 2.5%).

A summary of the system frequency performance in 2021 and 2022 is presented in Figure 4.7. The average highest and lowest daily system frequency readings in 2022 were 50.72Hz and 48.99Hz with a range of 1.73Hz. Comparatively, in 2021, the average highest and lowest daily system frequency readings were 50.71Hz and 49.30Hz with a range of 1.41Hz. Based on this, it can be deduced that the grid operated with more stability in

2021 than 2022 - the lower the deviation from the specified range, the better the frequency performance.

In 2022, the upper and lower bounds of the system frequency were all outside the normal operation limits but within the stress limits except in July and August (when the lower bounds exceeded the limits). It is clear that the SO struggled more with managing the lower bound frequency of the system which is an indication that demand often outstripped supply. This is consistent with the reduction in available generation which was experienced in 2022 (discussed earlier). The SO's lack of systems to grant it real-time visibility of the network e.g., Supervisory Control and Data Acquisition (SCADA) is a major causal factor leading to poor frequency management in the NESI.

Figure 4.7: Average System Frequency (Hz) in 2021 and 2022



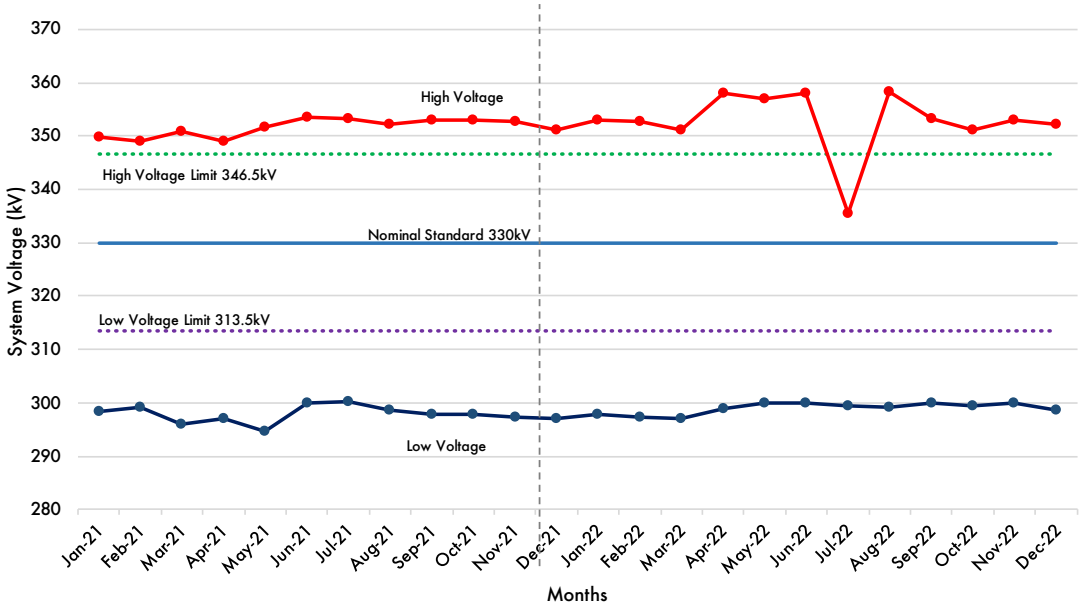
4.1.5.3. Voltage Fluctuation

To guarantee high-quality power, the Grid Code specifies a nominal system voltage of 330kV with a tolerance range of +/- 5% (313.5kV to 346.5kV). Fluctuations in grid voltage, including spikes, dips, flickers, brownouts, and blackouts, 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 thereby compelling industrial customers to seek alternative sources of power generation.

The system voltage performance for 2021 and 2022 is shown in Figure 4.8. The average upper and lower operating voltage bounds for the network in 2022 were 352.74kV and 298.97kV respectively with a range of 53.77kV. Both values are outside the respective specified limits which indicates that the voltage performance in 2022 did not meet the expected levels. Comparatively, in 2021, the average upper and lower operating voltage bounds for the network were 351.61kV and 297.87kV respectively with a range of 53.74kV.

Figure 4.8: System Voltage (kV) in 2021 and 2022



The lower range in 2021 indicates that overall system voltage performance in 2021 was better than 2022. This is consistent with the findings on system frequency performance as discussed above and highlights the importance of renewed efforts by the SO/TSP to improve the overall technical performance of the NESI.

4.1.5.4. System Collapse

The national power grid, a network of electrical transmission lines connecting generating stations to loads over the entire country, is designed to operate within certain stability limits in terms of voltage (330kV±5%) 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. This can range from a partial collapse of a section of the grid to a full system-wide blackout.

The SO is responsible for ensuring that the frequency remains within a ±0.5% tolerance threshold. When there is a significant deviation between demand and supply on the grid, this can cause grid parameters to move outside of their stability ranges indicated above thereby creating the risk of a collapse. This usually occurs when demand is greater than supply, thereby causing the grid frequency to drop outside safe operational range which causes the most sensitive plants to shut down automatically. These shutdowns further exacerbate the frequency imbalance and can lead to a full or partial system collapse. On the other hand, if supply surpasses demand, the frequency increases, and in severe cases, some power plants may shut down, causing a sudden drop in generation.

The frequency trend throughout the year 2022 showed that the grid was operating close to extreme stress frequencies, making it susceptible to significant disruptions. Table 4.2 shows the total grid incidents from 2018 to 2022; the total number of grid incidents increased from four (4) in 2021 to six (6) in 2022.

Table 4.2: Total and Partial System Collapses

	Years				
Category	2018	2019	2020	2021	2022
Number of Partial Collapses	1	1	0	2	2
Number of Total Collapses	12	10	4	2	4

The year 2022 marked the first year of the last 5 in which the system recorded an increase in collapses. The Commission has intensified efforts to compel TCN to deliver improvements in grid stability and prevent recurrent system collapses. Further to this, the Commission has also continued the strict monitoring of GenCos' compliance with the SO's directives to generators on free governor and frequency control mode in line with the provisions of the subsisting operating codes in the industry.

Over the course of the year, the Commission called for meetings between TCN and DisCos focused on the enforcement of under frequency load-shedding scheme instituted to provide an added layer of security for the grid in case of a sudden loss of generation. Furthermore, the Commission gave directives to TCN to undertake a review of the calibration of relay settings across the network to improve the grid stability.

4.2. Commercial Performance

The commercial performance of the NESI is a measure of the flow of funds from customers to upstream electricity industry players. The financial performance is critical because funds are required to keep all the players along the value chain operational. In evaluating the commercial performance of the NESI in 2022, the following parameters have been considered:

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

- Aggregate Technical, Commercial and Collection (ATC&C) loss
- Remittances to the Market Operator (MO) and the Nigerian Bulk Electricity Trading Company (NBET).

4.2.1. Energy offtake performance

The amount of energy received by DisCos at their trading points in 2022 was 28,351.62GWh, a decrease of 2,142.48GWh (-7.03%) from the 30,494.10GWh recorded in 2021. This decrease is partly attributable to the 4.98% decrease in the total energy generated and the increase in TLF (+0.43pp) in 2022 relative to 2021. Shortfall not attributable to either of these 2 factors was caused by increased energy offtake by bilateral customers (local and/or international) connected to the grid.

For the 1st half of the year, the share of available generation on the national grid that was allocated to each DisCo was based on the share of the energy contracted with NBET as contained in the vesting contracts signed upon privatisation in 2013. The allocation under the framework for each DisCo is referred to as the Multi-Year Tariff Order (MYTO) load allocation. Effective July 1, 2022, the NESI transitioned into the Partial Activation of Contract (PAC) regime which enabled the DisCos to determine their unconstrained power requirements in absolute MW known as their Partially Contracted Capacity (PCC) that replaced the MYTO load allocation.

The PAC 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 contracts and it increases the predictability of revenue flows for the GenCos, thus allowing for critical routine maintenance activities to improve the availability of their plants.

The PAC regime reinforces the DisCos capacity payment scheme which took effect on 1st January 2020 and acts as a deterrent against discretionary non-offtake of load. To further improve contract discipline along the upstream segment of the NESI, the PAC regime provided for Liquidated Damages (LD) to be paid by GenCos or TCN 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. In July 2022, updated Service Level Agreements (SLA) were signed between DisCos and TCN to further institutionalise the compensation mechanism for DisCos when TCN's limitations prevent them from getting their contracted energy.

Each DisCo's load offtake performance (vs. MYTO allocation – H1 2022) and (vs. PCC – H2 2022) is presented in Table 4.3. Relative to H1 2022, there were increases both in available generation (partly attributable to the introduction of the PCC) as well as energy offtake by the DisCos. The DisCos' offtake performance increased in H2 (-1.47%) relative to H1 (-13.03%). This improvement can be partly attributed to the introduction of the PAC regime which put a penalty against DisCos when they do not offtake their pro-rated PCC.

In H1 2022, only Abuja DisCo (0.43%) recorded positive variance on its load offtake compared to its MYTO allocations. In H2 2022, five (5) DisCos recorded positive variance in their offtake compared to the PCC (i.e., the DisCo took more energy than their allocation) with Eko (12.11%) and Abuja (11.78%), recording the most significant positive variances. The Commission has approved Performance Improvement Plans (PIPs) for DisCos and has set up a monitoring process to review the implementation of the constituent projects.

Table 4.3: Energy Offtake Performance in 2022

	Jan-Jun 2022			Jul-Dec 2022		
DisCos	Offtake (MWh/h)	MYTO share (MWh/h)	Variance (%)	Offtake (MWh/h)	PCC (MWh/h)	Variance (%)
Abuja	417.30	415.34	0.43	474.18	424.22	11.78
Benin	305.37	325.05	-6.05	310.51	328.02	-5.34
Eko	334.35	397.28	-15.84	378.85	337.94	12.11
Enugu	310.07	325.05	-4.61	286.46	320.67	-10.67
Ibadan	385.90	469.51	-17.81	401.72	400.43	0.32
Ikeja	445.98	541.74	-17.68	485.63	481.78	0.80
Jos	167.51	198.64	-15.67	189.85	244.01	-22.20
Kaduna	246.09	288.93	-14.83	235.73	228.74	3.06
Kano	209.00	288.93	-27.66	229.81	235.66	-2.48
Port Harcourt	218.95	234.76	-6.73	242.90	249.51	-2.65
Yola	100.75	126.41	-20.30	94.69	128.93	-26.56
All DisCos	3,141.09	3,611.63	-13.03	3,330.33	3,379.91	-1.47

As explained in the quarterly reports, inadequate gas supply continues to be a major challenge for the NESI as it limits available generation. In an effort to address this problem, the Commission also introduced the Gas Supply Stabilisation Fund (GSSF) in July 2022 to provide payment assurance to gas suppliers and increase the quantity of gas supplied to the GenCos. The GSSF is a revolving fund (seed funding was obtained from legacy FGN debt obligations to the DisCos) which is used to settle gas invoices at source i.e., the Gas Aggregation Company of Nigeria (GACN) compiles and sends all gas-to-power invoices to NBET for payment at source. Once NBET receives the market remittance for the next month, the GSSF is refunded wholly with the balance being used to settle the GenCo invoices[2].

[2] The amount paid to the GSSF is netted-off the GenCo's invoice to NBET.

4.2.2. Energy Billed and Billing Efficiency

Billing efficiency is the ratio of the proportion of energy that has been billed (both billing-post-paid customers and vending-prepaid customers) to customers in comparison to the total energy supplied to an area within a given period. The formula for billing efficiency is represented by equation 4.4:

$$\text{Billing Efficiency (\%)} = \frac{\text{Total Units Billed (kWh)}}{\text{Total Energy Received by the Network (kWh)}} \times 100 \qquad (4.4)$$

The amount of energy received, billed and billing efficiency by DisCos in 2021 and 2022 are presented in Table 4.4. Out of the 28,351.62GWh total energy received by all DisCos in 2022, 21,770.79GWh was billed to the end-users, resulting in a billing efficiency of 76.79%. This is a 0.22pp increase from the billing efficiency in 2021 (76.57%). Billing Efficiency covers the technical and commercial loss components in the Aggregate, Technical, Commercial and Collection (ATC&C) loss. This implies that there was very marginal improvement (0.22pp) in technical and commercial loss that was recorded in 2022 (23.21%) relative to 2021 (23.43%). Some of the major factors that contribute to billing losses include:

- Poor customer enumeration: this is the inability of DisCos to identify all electricity consumers
- 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.
- Energy theft: this is the deliberate action by some electricity consumers to consume electricity without making payments
- 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 performance of all DisCos contained in Table 4.4 shows that Eko and Ikeja had the highest billing efficiencies with 89.15% and 88.51% respectively for 2022. Conversely, Yola recorded the lowest billing efficiency of 56.79%, indicating that Yola DisCo lost 43.21% of the energy received to technical and commercial inefficiencies in 2022. In addition to those factors identified as causes of low billing efficiency in the industry, the state of insecurity within the franchise areas of Yola DisCo has contributed to the low operational performance of the utility.

Table 4.4: Energy Received and Billed by DisCos for 2021 and 2022

	Total Energy Received (GWh)		*Total Energy Billed (GWh)*		*Billing Efficiency (%)*	
DisCos	*2021*	*2022*	*2021*	*2022*	*2021*	*2022*
Abuja	4,050	3,906	2,682	2,677	66.22	68.54
Benin	2,683	2,698	2,246	2,274	83.73	84.29
Eko	3,591	3,125	3,141	2,786	87.47	89.15
Enugu	2,841	2,612	2,035	1,852	71.62	70.90
Ibadan	4,092	3,450	2,920	2,567	71.37	74.41
Ikeja	4,548	4,082	4,081	3,613	89.73	88.51
Jos	1,403	1,566	976	1,181	69.57	75.40
Kaduna	2,324	2,110	1,767	1,349	76.03	63.95
Kano	1,951	1,923	1,454	1,346	74.52	69.99
Port Harcourt	2,109	2,024	1,625	1,639	77.06	81.00
Yola	901	856	420	486	46.56	56.79
All DisCos	30,494	28,352	23,348	21,771	76.57	76.79

In 2022, relative to 2021, all DisCos with the exception of Kaduna, Kano, Ikeja and Enugu recorded an improvement in their billing efficiency. The highest increase was recorded by Yola and Jos DisCos with +10.23pp and +5.83pp respectively. Kaduna DisCo recorded the most significant loss of -12.08pp in billing efficiency (76.03% in 2021 compared to 63.95% in 2022).

The Commission continues to engage DisCos on regulatory interventions required to address some of the factors driving DisCos' billing inefficiency. A key element for reducing billing losses is the DisCos' asset mapping and tagging the customer enumeration process. This is designed to identify illegal consumers and enrol them on the DisCos' billing platforms.

In its effort to improve DisCos' technical and commercial efficiency, the Commission has finalised the review of the 2021–2025 Performance Improvement Plans (PIP) filed by DisCos. The PIPs are developed based on the Commission's directive for DisCos to submit PIPs containing proposed investments that are targeted towards critical infrastructure to free up stranded capacity and improve service delivery to customers.

4.2.3. 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. For various reasons, many customers continue to default in payment of their billed amounts resulting in collection losses. The formula for collection efficiency is represented by equation 4.5:

$$\text{Collection Efficiency (\%)} = \frac{\text{Revenue Collected}}{\text{Billed Amount}} \times 100 \qquad (4.5)$$

The total revenue collected by the DisCos from customers in 2022 was ₦841.81 billion out of the total bill of ₦1,185.31 billion to customers, leaving an outstanding balance of ₦343.50 billion. This translates to a collection efficiency of 71.02% which implies that for every ₦100.00 worth of energy billed to customers by DisCos in 2022, approximately ₦28.98 was not recovered from customers. The low collection efficiency 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 investment.

In 2022, only Ikeja had a collection efficiency above 90% which can be partly attributable to the fact that it leads the DisCos in terms of overall metering rate (58.82%) as at the end of 2022. This was followed by Eko and Abuja DisCos with collection efficiencies of 84.45% and 82.87% respectively while Kaduna DisCo had the lowest collection efficiency of 39.25%.

As shown in Table 4.5 the overall collection efficiency for all DisCos in 2022 was 71.02% representing an increment of 1.60pp from 69.42% reported in 2021. On the DisCo-by-DisCo level, Ikeja, Kaduna, Ibadan, Port Harcourt, Benin, Yola and Eko DisCos recorded improvements in collection efficiency between 2021 and 2022 with Ikeja having the highest increase of +6.83pp (85.44% in 2021 vs 92.27% in 2022). Conversely, four (4) DisCos recorded reductions in their collection efficiency performance in 2022 relative to 2021 with Jos DisCo having the most significant reduction of -8.13pp (50.29% in 2021 vs 42.15% in 2022).

Table 4.5: Revenue Performance of DisCos in 2021 and 2022

	Total Billings (₦'Million)		*Revenue Collected (₦'Million)*		*Collection Efficiency (%)*	
DisCos	2021	2022	2021	2022	2021	2022
Abuja	140,633	154,221	117,612	127,804	83.63	82.87
Benin	105,773	122,073	58,159	69,903	54.98	57.26
Eko	145,614	151,312	120,886	127,788	83.02	84.45
Enugu	98,004	101,343	69,826	70,927	71.25	69.99
Ibadan	139,714	137,330	91,365	95,675	65.39	69.67
Ikeja	184,220	182,418	157,399	168,309	85.44	92.27
Jos	49,318	73,592	24,800	31,013	50.29	42.15
Kaduna	89,769	71,978	30,643	28,249	34.14	39.25
Kano	69,170	73,791	47,388	48,906	68.51	66.28
Port Harcourt	76,234	90,344	47,718	58,775	62.59	65.06
Yola	18,474	26,930	9,539	14,463	51.63	53.71
All DisCos	1,116,923	1,185,312	775,336	841,811	69.42	71.02

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

The Aggregate Technical, Commercial and Collection (ATC&C) loss is a summation of billing losses incurred by the DisCo due to its inability to bill 100% of delivered energy to consumers (technical and commercial losses) and the collection losses arising from the DisCo's inability to collect 100% of the invoices issued out to consumers. The ATC&C loss is a critical performance parameter for tariff determination because it represents the efficient losses which the DisCos are allowed to recover from customers. 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 earlier, 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 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 4.6:

$$\text{ATC\&C Loss} = [1 - (\text{Billing Efficiency} \times \text{Collection Efficiency})] \times 100 \qquad (4.6)$$

The average ATC&C loss for all the DisCos in 2022 was 45.46% comprising 23.21% technical and commercial losses, and 28.98% 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. Non-payment of bills by Federal/State

Ministries, Departments and Agencies (MDA) also continue to contribute to the ATC&C loss incurred by DisCos. To avoid a moral hazard that may hinder regulatory action on underperforming DisCos, it is critical for the government across all tiers to pay their bills fully and in a timely manner.

Table 4.6: ATC&C Loss of DisCos in 2021 and 2022

	MYTO Targets	*Average ATC&C Loss*	
DisCos	2022	2021	2022
Abuja	19.27%	44.62%	43.20%
Benin	17.37%	53.96%	51.73%
Eko	14.18%	27.38%	24.71%
Enugu	11.31%	48.97%	50.38%
Ibadan	15.47%	53.33%	48.16%
Ikeja	11.37%	23.34%	18.33%
Jos	27.27%	65.02%	68.22%
Kaduna	10.65%	74.05%	74.90%
Kano	15.85%	48.94%	53.61%
Port Harcourt	21.45%	51.76%	47.30%
Yola	64.12%	75.96%	69.50%
Overall MYTO Level	20.75%		
Aggregate technical, commercial & collection Loss	-	46.85%	45.46%
Technical & Commercial Losses	-	23.43%	23.21%
Collection Losses	-	30.58%	28.98%

The overall ATC&C loss of 45.46% in 2022 was substantially higher than the expected allowable ATC&C loss (20.75%) provided in the MYTO applicable in 2022. In absolute terms, Ikeja maintained its record of having the lowest ATC&C in the market (18.33%) for the fifth consecutive year. Conversely, Kaduna was the worst performing DisCo with an ATC&C of 74.90% in 2022, this means that for every ₦100.00 worth of energy delivered to the DisCo in 2022, it only collected ₦25.09 in revenue from customers.

Although none of the DisCos met their MYTO ATC&C targets, Yola and Ikeja were the closest to attaining its MYTO target for the year with variances of -5.38pp (69.50% vs target of 64.12%) and -6.96pp (18.33% vs target of 11.37%) respectively. Kaduna, Jos, and Enugu DisCos had the widest

variances relative to their allowed MYTO targets for the year with -64.25pp (74.90% vs a target of 10.65%), -40.95pp (68.22% vs a target of 27.27%), and -39.07pp (50.38% vs a target of 11.31%) respectively.

As shown in Table 4.6 the ATC&C loss improved in 2022 by 1.39pp from the ATC&C loss of 46.85% reported in 2021. The reduction in ATC&C loss is due to the combined decrease in both technical & commercial, as well as in collection loss which decreased by 0.22pp and 1.60pp respectively, in 2022 relative to 2021.

At the micro (DisCo) level, seven (7) DisCos recorded improvements (reductions) in their ATC&C performance between 2021 and 2022 with the biggest improvements being achieved at Yola, Ibadan and Ikeja which reduced their ATC&C losses by 6.46pp, 5.17pp and 5.00pp respectively. Conversely, four (4) DisCos; Kano (+4.67pp), Jos (+3.20pp), Enugu (+1.41pp) and Kaduna (+0.86pp) recorded increases in ATC&C loss between 2021 and 2022.

As highlighted earlier, none of the eleven (11) DisCos had an actual ATC&C loss that was less than or equal to the target contained in their tariff orders for 2022. The inability of the DisCos to meet their allowed loss targets means they are unable to meet revenue requirements thereby compromising their long-term financial position.

4.2.5. Market Remittance

In the absence of cost-reflective tariffs, the Government commits to cover the resultant gap (difference between the cost-reflective and allowed tariff) in the form of tariff shortfall subsidy – this is applied to the NBET invoices that are to be paid by DisCos. The Commission is saddled with the responsibility of determining each DisCo's Minimum Remittance Obligation (MRO) based on its allowed tariff – the MRO is contained in the periodic Tariff Orders issued by

the Commission. For ease of administration of the subsidy, the MRO is only applied on the NBET invoice – the MRO represents the share (in percentage) of an NBET invoice for which the DisCo is expected to make payments. DisCos are required to pay 100% of the invoice issued to them by the MO.

The implementation of the MRO sought to end the discretionary remittance by DisCos, ensure transparency and equity in the disbursement of market funds for the benefit of all participants in the industry and ultimately address the liquidity crisis facing the industry[3]. The applicable MRO (%) for each DisCo to NBET and MO in 2022 is contained in Table 4.7.

Table 4.7: Minimum Remittance Obligation to NBET & MO by DisCos in 2022

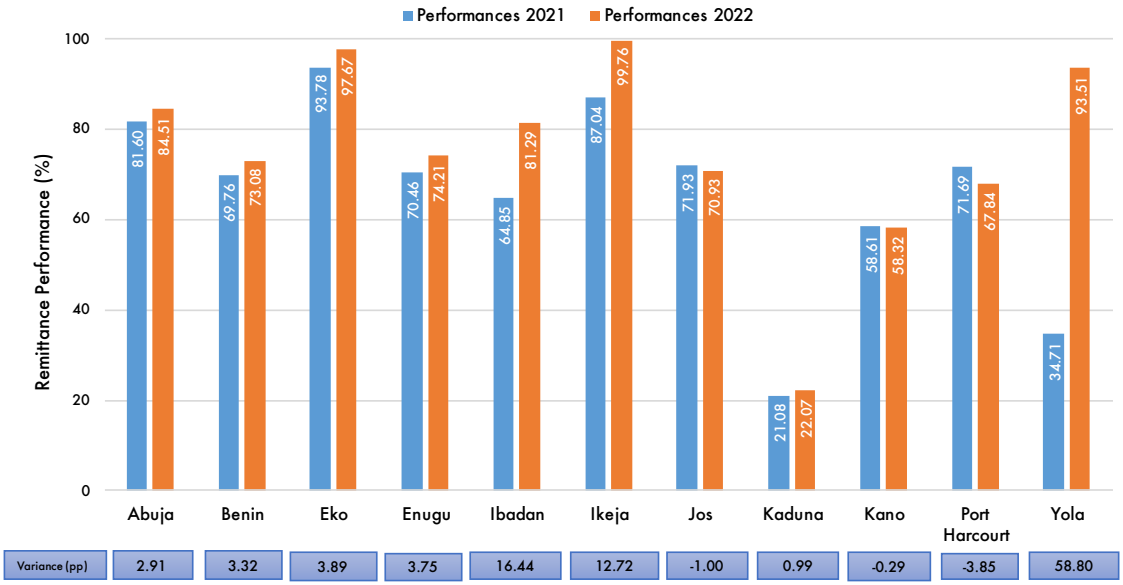
DisCos	*Minimum Remittance Obligation (NBET)*	*Minimum Remittance Obligation (MO)*	*Remittance Obligation (NBET & MO)*
Abuja	90.04%	100%	91.59%
Benin	83.53%	100%	86.35%
Eko	85.88%	100%	88.26%
Enugu	88.98%	100%	90.88%
Ibadan	80.52%	100%	83.87%
Ikeja	85.57%	100%	87.87%
Jos	63.08%	100%	69.61%
Kaduna	82.76%	100%	85.34%
Kano	82.46%	100%	85.30%
Port Harcourt	81.00%	100%	84.15%
Yola	10.50%	100%	23.00%
All DisCos	81.32%	100%	84.38%

An MRO adjusted invoice of ₦816.25 billion was issued by NBET and MO for energy costs and administrative services to DisCos in 2022. The DisCos remitted a total of ₦632.25 billion, resulting in a deficit of ₦184.00 billion during the year – this underpayment is known as "market shortfall". The remittance performance by DisCos to the market (NBET and MO) in 2021 and 2022 is detailed in Figure 4.9. The overall remittance performance increased by

[3] Specifically, low remittance in the industry adversely affects the ability of NBET to honour its financial obligations to GenCos while service providers (i.e., TSP, SO, MO, NBET and NERC) struggle with paucity of funds which adversely impact on their ability to optimally discharge their functions.

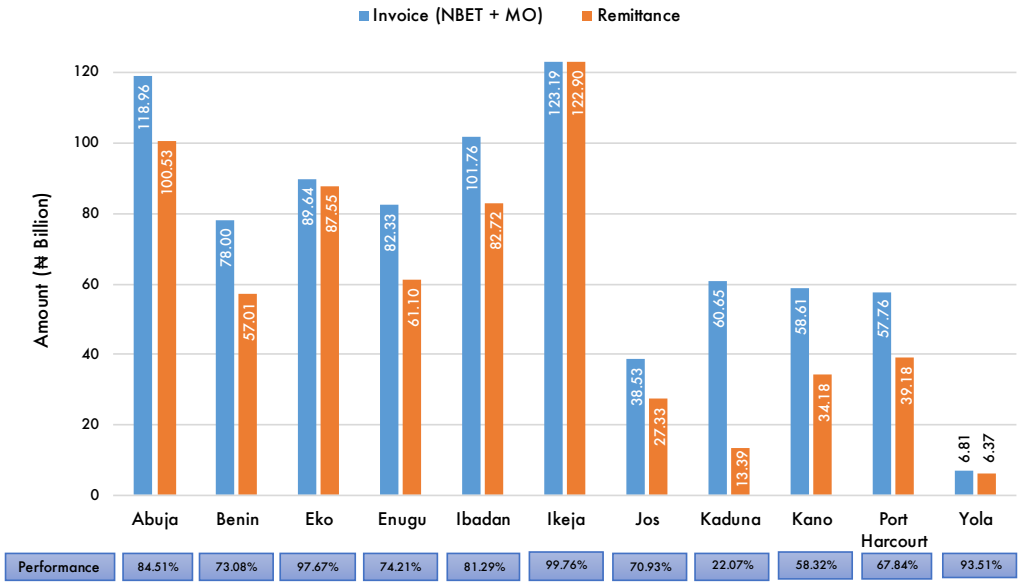
6.11pp from 71.35% in 2021 to 77.46% in 2022. Between 2021 and 2022, all DisCos except Port Harcourt, Jos and Kano recorded improvements in their remittance performances with Yola recording the highest increase of +58.80pp.

Figure 4.9: Remittance Performance by DisCos in 2021 and 2022



A comparative analysis of DisCos' market invoice and remittance performance in 2022 is presented in Figure 4.10. Only 3 DisCos namely Ikeja, Eko, and Yola recorded remittance performances above 90% (99.76%, 97.67% and 93.51% respectively). Kaduna DisCo recorded the lowest remittance rate of 22.07% in 2022 due to its significant ATC&C losses, as mentioned previously.

Figure 4.10: DisCos' Remittance Performance to NBET and MO in 2022



The DisCos' disaggregated remittances to NBET and MO are summarised in Table 4.8. The overall remittance performance by all DisCos to NBET for energy costs in 2022 was 78.08% which translates an increase of 8.68pp compared to 69.40% performance in 2021. Only Ikeja and Eko DisCos had remittance rates above 90% (102.04% and 99.81% respectively). On the other end of the spectrum, Kaduna DisCo recorded the lowest remittance performance to NBET in 2022 (20.21%). The largest improvement in remittance to NBET was recorded by Yola with an increase of +46.79pp (2022 - 86.46% vs. 2021 - 39.67%).

The DisCos had an overall remittance performance of 74.89% to the MO in 2022. Yola (98.08%) is the only DisCo with remittance above 90% to the MO in 2022. Conversely, 2 DisCos recorded MO remittance rates below 60%; Kaduna (30.81%) and Kano (58.09%). The biggest improvement in remittance was recorded by Yola where its 2022 remittance rate (98.08%) represents a +70.44pp increase compared to 2021 (27.64%).

Table 4.8: Annual Remittance Performance to NBET and MO

	NBET (₦' Billion)				MO (₦' Billion)			
	Invoice	Remit.	Performance		Invoice	Remit.	Performance	
DisCos	2022	2022	2022	2021	2022	2022	2022	2021
Abuja	98.69	83.07	84.17%	73.33%	20.27	17.46	86.16%	108.48%
Benin	62.56	46.64	74.55%	67.02%	15.44	10.39	67.13%	75.32%
Eko	72.50	72.37	99.81%	92.40%	17.14	15.12	88.59%	97.82%
Enugu	66.75	51.08	76.53%	67.37%	15.59	10.02	64.30%	78.60%
Ibadan	80.89	64.18	79.35%	61.66%	20.87	18.54	88.82%	73.17%
Ikeja	100.89	102.95	102.04%	91.63%	22.30	19.95	89.45%	73.10%
Jos	28.74	21.05	73.25%	69.70%	9.79	6.27	64.10%	74.76%
Kaduna	50.02	10.11	20.21%	17.56%	10.63	3.28	30.81%	31.65%
Kano	47.49	27.72	58.37%	56.46%	11.12	6.46	58.09%	66.28%
Port Harcourt	46.39	31.96	68.88%	69.30%	11.36	7.23	63.59%	77.43%
Yola	2.68	2.31	86.46%	39.67%	4.14	4.06	98.08%	27.64%
All DisCos	657.60	513.43	78.08%	69.40%	158.65	118.82	74.89%	76.64%
Special Customer: ('Million)								
Ajaokuta Steel (₦)	1,394.20	0.00	0.00%	0.00%	271.25	0.00	0.00%	0.00%

1. NBET and MO are Nigeria Bulk Electricity Trader and Market Operator respectively.
2. Remittances above 100% are due to payment of outstanding invoices.

It is clear from the remittance figures above that the upstream market liquidity challenges reported in 2021 persisted in 2022. With the payment assurance waterfall in place, DisCos inability to remit also confirms that they were unable to earn their entire revenue requirement, this will have prevented them from having the funds to undertake necessary operational/capital investments. Therefore, the imperative is on DisCos to implement solutions geared towards reducing their ATC&C loss to the levels approved in their respective tariffs. This will allow them earn revenue to meet their market obligations, cover operational costs and provide return on investment for their shareholders.

On its part, the Commission is committed to ensuring full compliance with MROs for which failure to comply will result in appropriate sanctions. In this regard, to enforce market discipline and compliance with payment obligations, the Commission has ordered NBET to exercise its contractual rights on the payment security cover provided by DisCos in accordance with the provisions of the Market Rules.

No payment was made by the special customers (Ajaokuta Steel Co. Ltd and the host community) in respect of the ₦1.39 billion and ₦0.27 billion energy invoices and service charges received from NBET and MO respectively. The total debt obligation of Ajaokuta to NBET and the MO as at 31st December 2022 stands at ₦22.98 billion[4] and ₦2.08 billion respectively.

The issue of Ajaokuta has been a pressing one for the Commission and engagements have been held with the responsible federal ministries to find a lasting solution to the non-payment of its electricity bills. Failure to settle the obligations may put the Ajaokuta complex at the risk of being disconnected by its service providers (NBET and MO) on the grounds of gross indebtedness.

The remittance performance of international and bilateral customers to MO in 2022 are contained in Table 4.9. The international customers (i.e., Societe Nigerienne d'electricite – NIGELEC, Societe Beninoise d'Energie Electrique – SBEE and Compagnie Energie Electrique du Togo – CEET) received a total invoice of $52.72 million from the MO and made a total payment of $50.68 million corresponding to a remittance performance of 96.13%. The 2022 remittance performance translates to a 61.41pp increase from 34.72% remittance performance to the MO that was recorded in 2021. The bilateral customers received a total invoice of ₦5,791.85 million from MO and made a payment of ₦5,516.76 million corresponding to a remittance performance of 95.25%.

The Commission has requested the MO to ensure that all International Customers are registered as market participants in line with the market rules and particularly, enforce the provision that allows the use of security deposit to settle unpaid market invoices. The MO has an obligation to enforce all payment

[4] This comprises of outstanding invoice of ₦8.62 billion and accrued interest of ₦14.36 billion as at December 2022

securitisation mechanisms provided in the agreements for the different international transactions to improve payment discipline going forward.

Table 4.9: International & Bilateral Customers Invoices & Remittances in 2022

	Invoice (Million)	*Remittance (Million)*	*Performance (%)*
International Customers			
PARAS - SBEE ($)	9.91	9.56	96.59
TRANSCORP/SBEE ($)	10.46	10.46	100.00
MAINSTREAM/NIGELEC ($)	23.17	22.83	98.53
ODUKPANI/CEET ($)	9.18	7.81	85.14
Total	52.72	50.68	96.13
Bilateral Customers			
EKO EGBIN (₦)	0.00	0.00	-
EKO PARAS (₦)	0.00	0.00	-
IKEJA EGBIN (₦)	0.00	0.00	-
MAINSTREAM/INNER GALAXY (₦)			
MAINSTREAM/KAM INDUSTRIES (₦)			
MAINSTREAM/CROWN FLOOR MILLS (₦)			
MAINSTREAM/LORD'S MINT (₦)			
MAINSTREAM/KAM INTEGRATED (₦)	3,580.94	3,647.92	101.7
MAINSTREM/PRISM (₦)			
KAM STEEL SHAGAMU (₦)			
MAINSTREAM/ADEFOLORUNSHO VENTURE (₦)			
NDPHC/SUNFLAG (₦)	0.00	0.00	-
NDPHC/WEEWOOD (₦)	0.00	0.00	-
TRANSCORP/PREMIUM STEEL (₦)	0.00	0.00	-
NORTH SOUTH/ STAR PIPE (₦)	75.38	75.38	100.00
TRANS-AMADI/ OAU (₦)	99.09	99.10	100.01
OMOTOSHO 11/EKOEDC (₦)	1,214.91	1,214.91	100.00
OMOTOSHO 11/PULKIT (₦)	9.18	7.81	85.14
APLE (₦)	760.70	420.00	55.21
TAOPEX/KAM STEEL SHAGAMU (₦)	51.61	51.61	100.00
Total	5,791.85	5,516.76	95.25

PART 5: REGULATORY FUNCTIONS

5.1 Regulations, Orders and Guidelines
5.2 Licensing and Permits
5.3 Captive Power Generation Permits
5.4 Certification of Meter Asset/Service Providers
5.5 Eligible Customer Authorisation
5.6 Mini-grid Registrations
5.7 Public Consultation and Awareness
5.8 Compliance Monitoring and Enforcement
5.9 Litigation and Alternative Dispute Resolution

5.1. Regulations, Orders and Guidelines

5.1.1. Regulations

The Commission issues regulations to optimise the performance of licensees and achieve the goals of the Electric Power Sector Reform Act (EPSRA) 2004. In 2022, no new regulations were issued by the Commission. The Commission however commenced the amendment process for the review of the Mini-grid Regulations, 2016. A consultation paper was released to the public in September 2022 for a period of 21 days. This was followed by a series of stakeholder consultation and engagement workshops. The workshops and meetings provided a platform and opportunity for robust stakeholder engagement and input on proposed amendments to the Regulation.

The Commission also continued with the monitoring of compliance based on the provisions in the existing Regulations, Standards and other industry rules governing the NESI.

5.1.2. Orders

The Commission issued thirty-nine (39) new Orders in 2022. The highlights of these Orders are summarised below:

1. NERC/307/2022 –Methodology for the determination of monthly energy caps for unmetered customers of successor distribution Licensees in the NESI: This Order is dated 30th June 2022 and became effective 1st July 2022. The objective of the Order is to adopt a more dynamic methodology for the determination of monthly energy caps in the interest of end-use customers and DisCos. The new methodology will compute monthly energy caps to reflect the availability of supply to end-use customers within a DisCo's network over the preceding three (3) months.

2. NERC/319/2022 – Securitisation of contracts and payment waterfall in the NESI: This Order is dated 11th May 2022 and became effective 1st July 2022. The objectives of this Order are to;

- Provide visibility and certainty of market payments to market participants and gas suppliers, thereby ensuring certainty and stability in generation.
- Enforce the fulfilment of financial obligations between contracting parties to boost liquidity and investment in the NESI, and
- Secure the commitment for gas supply.

The Order is intended to address the constraints to gas supply, transportation contracts and the challenges surrounding securitisation of payments across the NESI value chain.

3-13. NERC/316–318, 319A–326A/2022 – Order on Performance Monitoring Framework:

This Order was issued by the Commission on September 29, 2022, and became effective on October 1, 2022. The Order sets specific Key Performance Indicators (KPIs) for the DisCos to ensure market discipline, operational efficiency required to improve reliability, quality of service, long-term performance improvement and sector sustainability. The objectives of the Order are to:

- Ensure that DisCos maintain market discipline and operate in compliance with industry targets.
- Ensure improved reliability and quality of supply in accordance with DisCos' commitment in the Performance Improvement Plan (PIP).
- Lay the foundation for long term sustainability of DisCos.
- Hold the Board and management of DisCos accountable for meeting operational targets specified in the Order.

14-26.NERC/320-330, 332/2022 – July 2022 Minor Review of the Multi-year Tariff Order 2022 issued to the 11 DisCos and TCN: The objectives of the Tariff Orders which took effect from July 1, 2022, are to;

- Reflect the impact of changes in the projected Minor Review Variables for the period January to June 2022 for the determination of Cost Reflective Tariffs (CRT).
- Ensure sustained improvement in reliability and supply in line with DisCos CAPEX proposal and PIP commitment.
- Ensure that tariffs payable by customers are commensurate and aligned with the quality and availability of power supply committed to customer clusters by DisCos, and
- Steer the market to gradual transitioning to CRT and activation of market contracts in line with power sector reform objectives.

27. NERC/333/2022 – Securitisation of Gas Payments in the Nigerian Electricity Supply Industry (NESI): The objectives of the Tariff Order which took effect from 1st July 2022 are;

- The provision of payment assurance for the supply and transportation of gas to generators under PPAs with the NBET.
- Ensure adequacy and reliability in the supply of gas to generators.
- Provide visibility and payment certainty to market participants and gas suppliers.

The Gas Supply Stabilisation Fund (GSSF) was introduced to provide assurance to gas suppliers and increase the quantity of gas supplied to the GenCos. The GSSF is a revolving fund (seed funding was obtained from legacy FGN debt obligations to the DisCos) which is used to settle gas invoices at source i.e., the Gas Aggregation Company of Nigeria (GACN) compiles and sends all gas-to-power invoices to NBET for payment at source.

Once NBET receives the market remittance for the next month, the GSSF is refunded wholly with the balance being used to settle the GenCo invoices. Note that the amount paid to the GSSF is netted off the GenCo's invoice to NBET.

28-38. NERC/334-344/2022 – December 2022 Minor Review of Multi-Year Tariff Order- 2022: The objectives of the Tariff Order which took effect from 1st December 2022 are to;

- Reflect the impact of changes in the projected Minor Review Variables for the period January to December 2022 for the determination of Cost Reflective Tariffs.
- Ensure sustained improvement in reliability and supply in line with DisCos' CAPEX proposal and PIP commitment.
- Ensure that tariffs payable by customers are commensurate and aligned with the quality and availability of power supply committed to customer clusters by DisCos, and
- Sustain the improved contracting framework heralded by the partial activation of Generation Company contracts in July 2022, steer the market to gradually transition to CRT and move the market towards direct bilateral contracting between DisCos and GenCos in line with power sector reform objectives.

39. NERC/348/2022 – December 2022 Minor Tariff Review of Multi-Year Tariff Order (MYTO) 2022 for the TCN: The objectives of the Tariff Order which took effect from 1st January 2023 are to;

- Provide appropriate incentives towards ensuring continuous improvement in TCN's performance in reducing network losses.

- Apply the impact of changes in the projected Minor Review Variables for the period January to June 2022 for the determination of Cost-Reflective Tariffs (CRT).
- Reaffirm the interim payment arrangements and flow of funds from DisCos to the Market Operator.
- Steer the market to gradually transition into CRT and activate market contracts in line with the requirements of the Transitional Electricity Market (TEM).
- Reaffirm the obligation of the System Operator (SO) Division of the TCN to comply with the EMOD prescribed in this Order towards ensuring compliance with the projected least generation cost prescribed in this Order.
- Reaffirm the obligation of the Transmission System Provider (TSP) under the TCN for the payment of "generation capacity charge" and "loss revenue" to DisCos based on the deviation between energy delivered to a DisCo and the MYTO allocation arising from the TCN's inability to deliver power to the affected DisCo.
- Reaffirm the obligation of DisCos for the payment of "loss of revenue" in favour of the TCN in line with the provisions of the executed Service Level Agreement.

5.1.3. Guidelines

The Commission did not issue any Guideline in 2022.

5.2 Licensing and Permits

5.2.1. Generation, Trading and Distribution Licenses

In furtherance of its mandate to steer the NESI towards adequacy of electricity to consumers, the Commission approved/issued a total of twenty-five (25)

generation, trading and distribution licences to qualified applicants in 2022. The details of on-grid, off-grid and embedded generation licences issued by the Commission in 2022 are provided in Table 5.1. The Commission issued a total of twenty-five (25) new and approved the renewal of four (4) licences with a total nameplate capacity of 2,290.00MW. The Commission also approved the transfer of two (2) generation license. In addition, the Commission approved the amendment of two (2) on-grid generation licences from Ibom Power Company Limited and Omotosho Generation Company Limited. The amendments allowed the plants to sell their energy to third-party consumers other than NBET.

Table 5.1: Summary of New Licences Granted in 2022

S/N	*Category*	*New issue*		*Renewal*	
		Count	Capacity (MW)	Count	Capacity (MW)
1.	On-grid Licence	1	50.00	3	2,270.00
2.	Off-grid Licence	15	45.29	1	20.00
3.	Embedded Generation	4	46.50	-	-
4.	Independent Electricity Distribution Network ("IEDN") Licence	2	N/A	-	-
5.	Bulk Electricity Trading Licence	2	N/A	-	-
6.	License amendment	1	561.00	-	-
8.	Licence Transfer	-	-	2	400.00
	Total	25	702.79	6	2,690.00

Furthermore, the Commission also approved the issuance of two (2) trading licences to Commercio Electricity Exchange Limited and Ecof Nigeria Limited. It is noteworthy that these are the first private electricity trading licensees within the NESI. This is pursuant to the Commission's commitment to transition the market into a bilateral one with little to no Government intervention along the value chain in compliance with the provisions of the EPSRA 2004. With such licences, both companies may, subject to specific approval from the

Commission, undertake generation aggregation and sale to eligible customers or the DisCos.

5.2.2. Captive Generation Permits

Captive power plants are energy-generating plants owned and maintained by the generating entity for its own consumption and not for sale to a third party. In 2022, the Commission granted twelve (12) new captive power generation permits and approved the renewal of eleven (11) permits with a total nameplate capacity of 160.98MW and 517.92MW respectively. Details of the captive generation permits approved in 2022 are presented in Table 5.2.

Table 5.2: Captive Generation Plants Approved in 2022

S/N	*Company Name*	*Location/State*	*Capacity (MW)*
	New Approvals		
1	African Natural Resources & Mines Limited	Abuja	50.00
2	Duport Midstream Company Limited	Edo State	2.00
3	Julius Berger Company Limited	Abuja	6.00
4	Niger Mills Limited	Cross River	8.80
5	Mikano International Limited	Lagos State	22.90
6	Premier Polypack Limited	Lagos State	3.48
7	Cadbury Nigeria Limited	Lagos State	5.80
8	Ariel Foods FZE	Lagos State	5.60
9	Aspira Nigeria Limited	Kano State	4.00
10	BUA International Limited	Kwara State	15.00
11	Honeywell Flour Mills	Lagos State	26.60
12	Honeywell Flour Mills	Ogun State	10.80
	Renewals		
13	Nigeria LNG Limited	Abuja	360.00
14	Speciality Pulp and Paper Limited	Ogun State	3.50
15	The Shell Petroleum Company Nigeria Limited	Bayelsa State	50.00

16	The Shell Petroleum Company Nigeria Limited	Bayelsa State	6.00
17	The Shell Petroleum Company Nigeria Limited	Bayelsa State	2.00
18	The Shell Petroleum Development Company of Nigeria Limited	Bayelsa State	3.98
19	The Shell Petroleum Development Company of Nigeria Limited	Bayelsa State	15.86
20	The Shell Petroleum Development Company of Nigeria Limited	Bayelsa State	4.29
21	The Shell Petroleum Development Company of Nigeria Limited	Bayelsa State	4.29
22	Mobil Producing Nigeria Limited	Akwa Ibom State	18.00
23	Greenvile Oil and Gas Limited	Rivers State	50.00

5.2.3. Certification of Meter Asset Providers/Metering Service Providers

A Metering Service Provider (MSP) is an entity that is certified by the Commission as a manufacturer, supplier, vendor, or installer of electric energy meters and/or metering systems. A Meter Asset Provider (MAP) is an entity to which the Commission has issued a permit to provide metering services, including meter financing, procurement, supply, installation, maintenance, and replacement. In 2022, the Commission issued 4 permits to MAP applicants and certified 36 MSPs. A summary of the MSP certificates approved by the Commission in 2022 is presented in Table 5.3. The full list of companies issued with MAP permits and MSP certificates in 2022 is presented in Table D.4 of the Appendix.

Table 5.3: Category of Meter Service Providers Certified in 2022

S/N	*Meter Service Providers Category*	*Quantity*
1.	Meter Manufacturer	9
2.	Meter Importers	4
3.	Meter Installers	22
4.	Meter Vendor	1
	Total	36

5.2.4. Eligible Customer Authorisations

The Eligible Customer Regulations set a framework for electricity generation companies and Independent Power Producers (IPP) to sell electricity bilaterally to "Eligible Customers" while leveraging the national grid system (transmission network and sometimes distribution). Eligible Customers must have an average consumption of not less than 2MWh/h, and the regulation provides a framework for the owners of electricity transportation infrastructure to be compensated through "Use of System" charges.

In 2022, the Commission approved five (5) Eligible customer applications as presented in Table 5.4 below;

Table 5.4: Eligible Customers Authorised in 2022

S/N	*Applicant*	*Supplier*	*Capacity*	*Date*
1	Inner Galaxy Steel Company Limited	Kianji Hydro Electric Power Plc	25MW	Nov 2022
2	Prism Steel Mills Limited	Mainstream Energy Solutions	8MW	Jan 2022
3	Pulkit Alloy and Steel Limited	Calabar Generation Company Limited	2MW	April 2022
4	Sunflag Steel Mills Limited	Calabar Generation Company Limited	2MW	April 2022
5	Adefolorunsho Tech Ventures Limited	Mainstream Energy Solutions	5MW	Sept 2022

5.2.5. Mini-grid Operators Registered with the Commission

The Commission in 2022 approved forty-eight (48) Mini-grid permits and issued seventy (70) registration certificates. The details of the successful Mini-grid applicants in 2022 are provided in Table D.3 of the Appendix.

5.3. Public Consultation and Awareness

In 2022, the Commission commenced the process to amend the Mini-Grid Regulations, 2016. A series of stakeholder consultation workshops and engagement meetings were conducted across selected locations in the country. The consultation meetings provided a platform for stakeholders to make necessary input and contributions with respect to proposed changes to the Regulations. Stakeholder feedback from the consultation programmes are currently undergoing collation and review at the Commission.

In addition, the Commission conducted several customer and stakeholder engagements through radio programs (e.g., Electricity Update) and eight (8) town hall meetings. These engagements aim to improve stakeholders' understanding of existing regulations, consumer rights and obligations, and industry rules.

5.4. Compliance Monitoring and Enforcement

The Commission initiated several enforcement actions against licensees in the NESI within the year. These enforcement actions were to ensure compliance with industry rules and regulations. The infractions include violations of regulations and orders, accidents and electrocution cases, failure to provide required data within stipulated timelines, and failure to comply with Forum decisions within the designated timeframe.

In line with its strategic goals, the Commission has intensified efforts at implementing various safety programmes aimed at minimising accidents in the industry. Some of the safety programmes implemented by the Commission include the standardisation of protective schemes, public enlightenment on health & safety, engagement of government agencies on Right of Way (RoW)

violations, and a review of an operational procedure for distribution system operators on fault clearing.

5.5. Litigation and Alternative Dispute Resolution

5.5.1. Litigation

The Commission was involved in some litigations during the year. New litigations involving the Commission in 2022 include:

1. Suit No: FHC/ABJ/CS/113/2022- Vigeo Power Limited v. Fidelity Bank Plc, NERC & 6 Others. An order of interlocutory injunction restraining the 1st Defendant, whether directly by itself or indirectly, through its directors, managers, officers, employees, servants, consultants, attorneys, agents, representatives, privies, however so-called, persons acting under its instructions and control, including the entities set out in the schedule to this application from altering or further altering the board composition of BEDC Electricity Plc (BEDC) or working in concert with any person or party to alter the board composition of BEDC, pending the hearing and determination of the substantive suit. The matter was adjourned to 1st March 2023 for the hearing of pending applications.
2. Suit No: FHC/ABJ/CS/1135/2022- Northwest Power Limited v. Fidelity Bank, NERC, BPE & FGN. An Order of interlocutory Injunction restraining the 1st Defendant by itself, servants, agents, privies or howsoever described from dealing with any of the assets, be it fixed or floating, belonging to the Plaintiff, its directors, shareholders, privies, agents, and proxies used as one form of collateral or the other for the Term Loan Facility granted by the 1st Defendant pending the determination of the Plaintiff's Suit. The matter has been transferred to

Court 10 from Court 8 (Vacation Judge) but the Court is yet to communicate a date for hearing.

3. Suit No: FHC/L/CS/1351/19 - PIPP LVI Disco v. NERC. The Plaintiff challenged the Order of the Commission on the grounds that they were not given a fair hearing and that the matter was sub-judice when the Commission intervened. The Commission issued an Order after a Notice of Intention to Commence Enforcement (NICE) had been sent to PIPP. The matter was adjourned to 8th March 2023 for a hearing of all pending applications.
4. Suit No: FHC/ABJ/CS/681/21 – Ibadan Electricity Distribution Company Plc v. NERC and two others. The matter was adjourned to 26th January 2023 for all pending applications to be heard.
5. Suit No: NICN/ABJ/04/2021 – Mr O. Expo v. NERC and Another. The matter was adjourned indefinitely pending the outcome of an arbitration proceeding. The arbitration was adjourned to the 5th and 6th of April 2023 for hearing.

5.5.2. Alternative Dispute Resolution among market participants

Alternative Dispute Resolution (ADR) refers to the settlement process instituted by the Commission for the resolution of disputes that may arise among market participants. In accordance with Market Rule 42.3.7, the Commission constitutes a Dispute Resolution Panel (DRP) responsible for arbitrating or otherwise resolving disputes between market participants. Market Rule 42.3.8 stipulates that the DRP shall consist initially of at least three members and, upon the initiation of the Medium-Term Market, shall consist of at least ten (10) qualified persons, each of whom shall be appointed by the Commission. The DRP currently consists of twelve (12) members. The DRP did not handle any

dispute between stakeholders of the industry as there was no pending dispute and no new dispute was reported in 2022.

Section 42.3 of the Market Rule empowers the Commission to appoint a Dispute Resolution Counsellor (DRC) and constitute a Dispute Resolution Panel (DRP). The DRC, usually with extensive knowledge and experience in dispute resolution, is appointed by the Commission to administer and ensure an effective operation of the dispute resolution provisions of Market Rules and the Grid Code. In 2022, the Commission appointed a DRC as provided for under the Market Rules. The DRC is expected to work very closely with the DRP in discharging its duties.

PART 6: CONSUMER AFFAIRS

6.1 Consumer Education and Enlightenment

6.2 Metering of End-use Customers

6.3 Customer Complaints

6.4 Forum Office

6.5 Health and Safety

6.1 Consumer Education and Enlightenment

Section 4 of the Electricity Distribution License NERC/LC/049 states that "The Licensee shall; (a) draw the attention of the consumers to the existence of the consumer protection standards, and substantive revisions and they may inspect or obtain a copy of the code in their latest form, (b) make copies of the standards available for inspection by members of the public at each of the relevant premises during normal working hours". In furtherance of this, the Commission continued to monitor the customer enlightenment programmes across all the DisCos. In 2022, the Commission conducted eight (8) town hall meetings with electricity consumers as listed below;

- Benin (March 15th – 17th)
- Eko (May 11th – 13th)
- Port-Harcourt (June 8th – 10th)
- Sokoto (June 21st – 23rd)
- Owerri (July 6th – 8th)
- Ibadan (November 15th – 17th)
- Katsina (November 22nd – 24th) and
- Abuja (December 6th – 9th).

During the meetings, discussions centered around several critical items including:

- Issues around Service Based Tariff (SBT)
- Customers' rights and obligations
- Customers' redress mechanisms
- Capping of estimated billing
- Metering gaps, and
- Strategies being adopted by the Commission to bridge the metering gap in the industry.

During the year, the Commission continued the airing of a pre-recorded radio enlightenment program, 'Electricity Update' across twelve (12) states in the country including the Federal Capital Territory (FCT). Live radio sessions where the Commission's staff addressed key issues in the Nigerian Electricity Supply Industry (NESI) were also aired.

The Commission continued its Annual Electricity Essay Competition for secondary school students across the country in 2022. An award gala was held at the Commission on February 13th 2023 where the 3 best performers were presented with awards.

6.2. Metering of End-use Customers

The status of the metering of end-use customers is presented in Table 6.1. The total number of registered customers as of December 2022 was 12,152,106 with 5,134,871 (42.25%) of them metered – metering rate increased by +5.79pp from 36.46% in 2021.

Table 6.1: Customers Metering Status by DisCos

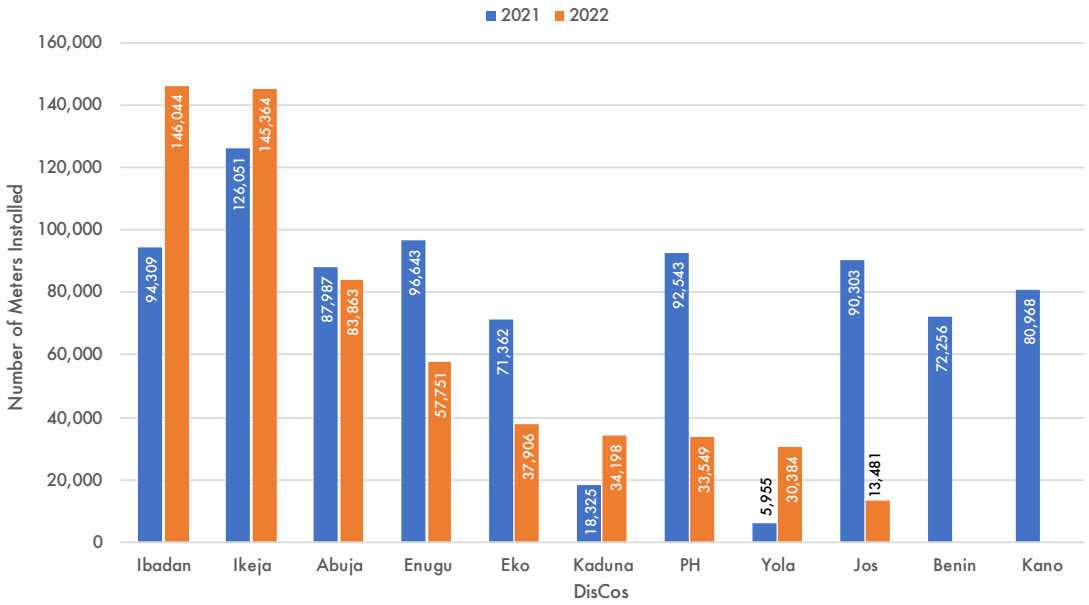
DisCos	*Registered Customer 2022*	*Metered Customer 2022*	*Metered Customer 2021*	*Metering Progress as 2022*	*Metering Gap 2022*
Abuja	1,290,977	757,458	701,781	58.67%	41.33%
Benin	1,186,922	607,902	622,429	51.22%	48.78%
Eko	689,237	391,398	347,116	56.79%	43.21%
Enugu	1,391,562	537,408	545,035	38.62%	61.38%
Ibadan	2,220,266	905,824	782,105	40.80%	59.20%
Ikeja	1,298,323	763,680	633,562	58.82%	41.18%
Jos	705,249	226,611	212,265	32.13%	67.87%
Kaduna	844,996	197,442	166,814	23.37%	76.63%
Kano	849,311	205,280	190,834	24.17%	75.83%
Port Harcourt	1,179,194	445,174	404,439	37.75%	62.25%
Yola	496,069	96,694	84,774	19.49%	80.51%
Total	12,152,106	5,134,871	4,691,154	42.25%	57.75%

In 2022, 589,997 end-use customer meters were installed under the four (4) metering frameworks; Meter Asset Provider (MAP), National Mass Metering Programme (NMMP), Vendor Financed and DisCo Financed Metering. This was a 29.49% decrease compared to the 836,702 meters installed in 2021. The decrease in customer metering is attributed largely to the winding down of the NMMP phase 0. The metering gap for end-use customers remains a key challenge in the NESI with meter deployment being a critical strategy for reducing collection losses.

Under the MAP framework, a total of 480,344 (+757.16%) meters were installed in 2022 compared to 56,039 installations in 2021. The increase is largely attributable to the winding down of the NMMP; when the distribution of free meters to customers ended, there was increased willingness for customers to procure meters under the MAP. MAP uptake was also aided by the issuance of the Meter Asset Provider and National Mass Metering Regulations (NERC-R-113-2021) which addressed some challenges with the implementation of the MAP.

In the same period, 103,436 meters were installed under the NMMP framework, compared to 771,754 meters in 2021. The decrease is due to the winding down of phase 0 of the NMMP scheme. Except for Kaduna (30,920, +105.94%) and Yola (30,384, +410.23%), all other DisCos recorded a decline in their customer metering under the NMMP in 2022. The highest reduction was recorded by Ikeja DisCo as it had fully utilised its NMMP phase 0 meter allocation as at December 2021. As at the end of 2022, Abuja, Ibadan, Ikeja and Port Harcourt achieved 100% installation of their phase 0 meter allocation under the scheme while Eko, Enugu, Jos and Kano have attained over 90% installation of their meter allocations.

Figure 6.1: Meter Installation in 2021 and 2022



In terms of annual meter deployment, Yola (+410%), Kaduna (+86.62%), Ibadan (+54.86%), and Ikeja (+15.32%) had increase in number of meters installed in 2022 compared to 2021. Conversely, Kano (-98.79%), Benin (-91.10%), Jos (-85.07%), Port Harcourt (-63.75%), Eko (-46.88%), Enugu (-40.24%) and Abuja (-4.69%) recorded decrease in total meter installations in 2022 compared to 2021 (Figure 6.1).

The MAP and NMMP frameworks continue to provide the clearest path for mass customer metering. On NMMP, the Commission is actively engaging with the CBN, World Bank and other relevant stakeholders to accelerate the financial close and funds disbursement for the subsequent phases of the program (Phase 1 – funded by CBN and phase 2 – funded by the World Bank). On MAP, DisCos have been tasked to undertake extensive customer enlightenment campaigns to increase the uptake of MAP by customers. Furthermore, the Commission is working on finalising its regulatory directive to DisCos for customer refund under the MAP; it is expected that this will further incentivise other customers to procure meters under MAP.

The December 2022 Minor Review of MYTO 2022 provides that N0.75/kWh from the DisCo's revenue requirement be set aside as a contribution to the Meter Acquisition Fund (MAF) in 2023. The fund shall be centrally managed and used as securitisation for long-term financing to fund rapid closure of the current metering gap in the NESI – currently estimated at over 50%.

6.3. Customers Complaints

The complaints received and resolved by DisCos in 2021 and 2022 are presented in Table 6.2. The total number of complaints received in 2022 was 1,002,998 across all DisCos and 927,722 of these complaints were resolved. The average resolution rate in 2022 was 92.49%. Compared to 2021, the number of complaints received, number of cases resolved, and average resolution rate changed by 54,826 (+5.78%), 21,132 (+2.33%) and -3.12pp respectively.

Within the year, Port Harcourt DisCo had the highest number of complaints (192,443 representing 19.19% of total complaints received), while Yola DisCo had the lowest number of complaints (8,802 representing 0.88% of the total complaints received). All the DisCos except Eko, Ikeja and Ibadan had over 90% resolution rates in 2022.

Compared to 2021, Ibadan (+233.59%), Port Harcourt (+60.35%), Yola (+28.63%) and Jos (+13.87%) DisCos recorded an increase in the number of complaints received. Conversely, Benin (-46.56%), Eko (-25.02%), Abuja (-13.25%), Kaduna (-12.72%), Kano (-11.06%) and Ikeja (-7.13%) recorded decreases in their number of complaints received.

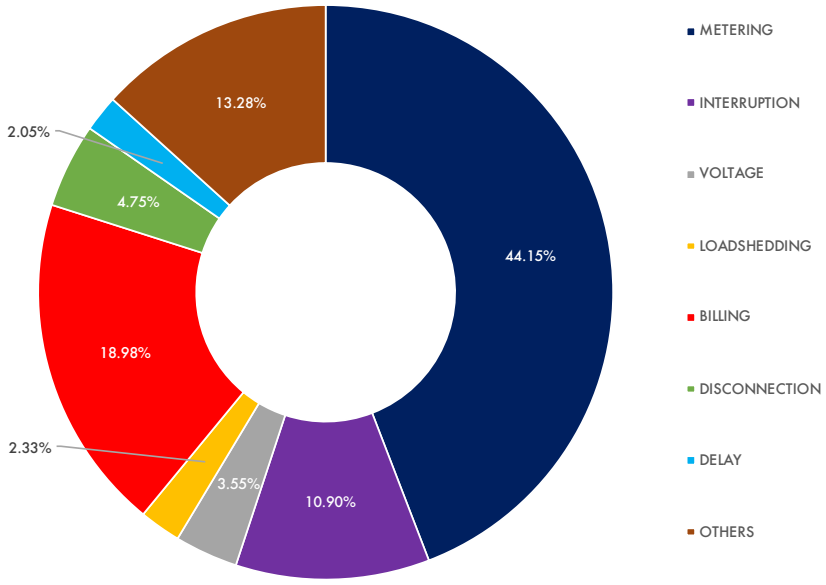
Table 6.2: Complaints Received and Resolved by DisCos in 2021 and 2022

DisCos	2021 Complaints			2022 Complaints		
	Received	Resolved	Resolution Rate	Received	Resolved	Resolution Rate
Abuja	131,857	128,570	97.51%	114,388	112,324	98.20%
Benin	57,290	54,374	94.91%	30,616	28,168	92.00%
Eko	197,603	194,182	98.27%	148,165	136,075	91.84%
Enugu	101,979	94,441	92.61%	103,666	92,313	89.05%
Ibadan	37,339	33,103	88.66%	124,560	104,039	83.53%
Ikeja	149,578	137,063	91.63%	138,918	119,525	86.04%
Jos	50,121	48,310	96.39%	57,072	55,530	97.30%
Kaduna	36,864	33,688	91.38%	32,175	29,876	92.85%
Kano	58,681	57,381	97.78%	52,193	51,785	99.22%
Port Harcourt	120,017	118,794	98.98%	192,443	189,391	98.41%
Yola	6,843	6,684	97.68%	8,802	8,696	98.80%
Total	948,172	906,590	95.61%	1,002,998	927,722	92.49%

In 2022, customer complaints were predominantly on metering (44.15%), billing (19.98%), and service interruptions (10.90%), accounting for over 74% of total complaints (Figure 6.2).

To address these major customer concerns, the Commission has introduced a few initiatives. For instance, the Commission has initiated a process to independently verify DisCos' compliance with capping regulations to protect unmetered customers from overbilling with respect to issues on billing and metering. The Commission now has access to the DisCos' billing platforms, allowing it to access billing records for each unmetered customer and compare the energy billed with the energy cap set by the Commission. Any DisCo that bills a customer above the approved energy cap will be subject to enforcement action by the Commission as stipulated in the Commission's Order on Performance Monitoring Framework (NERC/316-326/2022) issued in September 2022.

Figure 6.2: Categories of Complaints Received by DisCos



In furtherance of its mandate to ensure adequate and timely customer complaints resolution, the Commission continues to monitor complaints handling and resolution processes adopted by DisCos. In this regard, it requires monthly submission of customer complaints reports from DisCos to ensure timely regulatory intervention when necessary. Within the year, the Commission also commenced the review of its strategy for monitoring DisCos' customer complaints handling and resolution processes to further enhance regulatory oversight. This review includes the operations of the Commission's Forum Offices, which are established to address customer complaints that are not satisfactorily resolved at the DisCos' Customer Complaints Units (DisCos-CCU).

6.4. Forum Offices

In line with the Commission's mandate on customer protection, Forum Offices are set up pursuant to section 80(1)(b) of the EPSRA to hear and resolve customer complaints that are not satisfactorily resolved at the DisCos' Customer Complaints Units (DisCos-CCU). The Forum Office is managed by the Forum

Secretariat (staff of the Commission) while the Hearings are conducted by five Forum Members who are not Commission staff and are selected from the following groups/agencies –

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

The Forum enables customers and DisCos to explore options to resolve service-related disputes as enshrined in the NERC's Customer Complaints Handling Standards and Procedures (CCHSP) Regulations. As at 31st December 2022, the Commission had thirty-one (31) operational Forum Offices in twenty-nine (29) states and the FCT, Abuja. The details, including names, addresses and contacts of the Commission's Forum Offices are presented in Table E.7 of the appendix.

Table 6.3 presents a summary of the appeals across the Forum Offices in 2022. A total of 9,972 (6,963 new appeals and 3,009 pending appeals from 2021) appeals were received across all Forum Offices. This represents an increase of 13.62% compared to 8,777 appeals in 2021. The Forum Office serving Ikeja DisCo received the highest number of appeals (1,886) while Yola DisCo

received the fewest (104) corresponding to 18.91% and 1.04% of total appeals respectively.

Cumulatively, the Forum Offices resolved 57.10% of the total active appeals. This is a decline of -8.62pp in resolution rate compared to 65.72% achieved in 2021. This decrease is attributed to the higher number of appeals received in 2022. The Commission is taking steps to increase the frequency of sittings; this is intended to hasten the resolution of appeals at Forum Offices. Fifty-nine (59) cases (0.59%) of the undecided appeals at the Forum Offices were due to incomplete submissions.

Table 6.3: Appeals Handled by Forum Offices in 2022

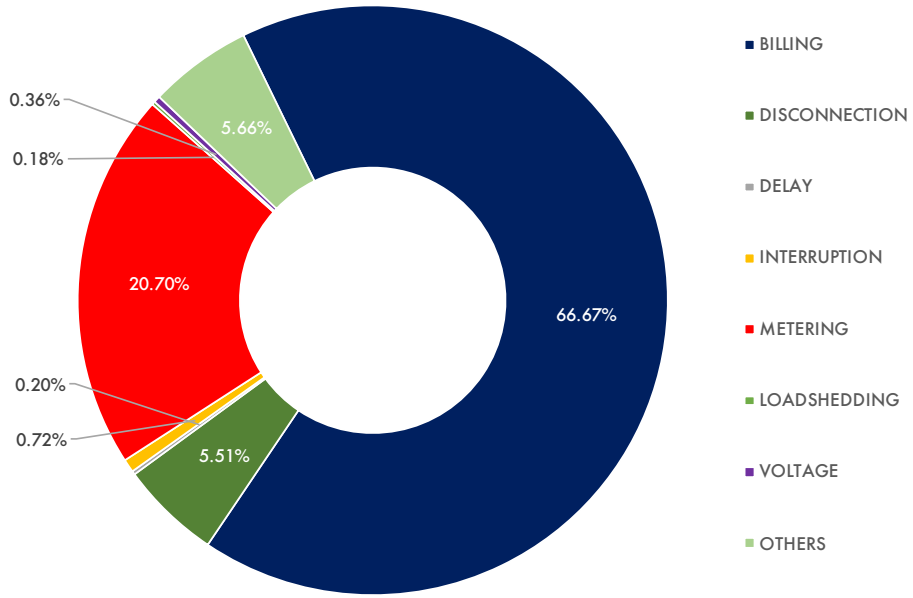
Forum Offices	*DisCos*	*Appeals Received*	*Appeals Resolved*	*Appeals Pending*	*Resolution Rate*	*No of Sittings*
Abuja, Lafia & Lokoja	Abuja	254	226	28	88.98%	22
Asaba & Benin	Benin	464	434	30	93.53%	31
Eko	Eko	328	263	65	80.18%	16
Abakaliki, Akwa, Enugu, Owerri & Umuahia	Enugu	928	771	157	83.08%	57
Ibadan, Ilorin & Osogbo	Ibadan	1352	1088	264	80.47%	40
Ikeja	Ikeja	1886	1157	729	61.35%	25
Bauchi, Gombe, Jos & Makurdi	Jos	243	176	67	72.43%	14
Gusau, Kaduna, Kebbi & Sokoto	Kaduna	395	353	42	89.37%	24
Jigawa, Kano & Katsina	Kano	136	91	45	66.91%	5
Calabar, Port Harcourt & Uyo	P/H	1279	982	297	76.78%	34
Yola	Yola	104	98	6	94.23%	6
All Forum Offices	All	9972	5694	4278	57.10%	274

Note of tables: [1.] Appeals received includes outstanding complaints from the preceding year.
[3.] Some of the pending appeals are still within the regulatory timeframe of 2 months to resolve.

The breakdown of the various categories of appeals received at the Forum Offices is presented in Figure 6.3. Billing was the most prevalent complaint within the year, accounting for 66.67% of the total. Complaints about metering and disconnection represented 20.70% and 5.51% of the appeals respectively. To ensure DisCos comply with the forum rulings, the Commission has introduced "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 N10,000 per day for non-compliance with the forum ruling. Furthermore, the Commission is reviewing its customer service standards regulations and also exploring other measures to increase definitive and mutually satisfactory case resolution at the DisCos-CCU. This will reduce the number of complaints escalated to the Forum Offices.

Figure 6.3: Category of Complaints Received by Forum Offices in 2022



Finally, the Commission is seeking to establish additional Forum Offices and other customer complaint resolution channels, while also exploring strategies to improve the operational efficiency of Forum Offices. This will improve overall customer complaint management in the NESI, helping the Commission achieve its strategic objective of providing high-quality customer service.

6.5. Health and Safety

Pursuant to its objective "to ensure the provision of safe and reliable electricity to consumers" as specified in Section 32(1)(e) of the EPSRA, the Commission monitors health and safety performance of the NESI.

Accident statistics for the NESI in 2021 and 2022 are presented in Table 6.4. The total number of accidents in 2022 was one hundred and seventy-three (173), which resulted in 93 injuries and 109 fatalities. Compared to 2021, the total number of accidents, injuries and fatalities changed by –1.70%, +52.46% and -5.22% respectively.

Table 6.4: NESI Licensee Health and Safety Reports of 2021 and 2022

Item	*Year*		Net Change
	2021	2022	
Number of accidents	176	173	-3
Number of injuries	61	93	+32
Number of fatalities (employees & third parties)	115	109	-6

In line with its mandate to ensure licensees' commitment to safe energy delivery, the Commission commenced investigations into all the health and safety accidents in 2022. Upon the completion of investigation, the Commission will commence enforcement action against the relevant licensees with a view of creating deterrence against unsafe operations in the NESI.

In line with its 2021-2023 strategic goals, the Commission is taking initiatives at implementing various safety programmes aimed at minimising accidents in the NESI. Some of such initiatives include the standardisation of protective schemes, public enlightenment on health and safety, engagement of government agencies on Right of Way (RoW) violation, and a review of an operational procedure for distribution system operators on fault clearing.

APPENDIX: KEY STATISTICS

A. Electricity Generation
B. Grid Performance
C. Commercial Performance
D. Licence, Permit and Certification
E. Consumer Enlightenment, Metering and Customer Complaints

A. Electricity Generation

Table A.1: Daily available capacity, available units and synchronised units, 2019-2022

Period	Installed Available Capacity (MW)				Number of Available Plant Units				Number of synchronised plant Units			
	2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019
January	4,783	5,103	5,663	5,597	63	58	65	58	63	57	56	53
February	4,863	5,513	5,755	6,553	63	58	68	63	63	56	64	55
March	4,491	5,601	5,275	6,158	59	60	65	62	59	55	62	57
April	5,099	5,023	6,315	6,094	67	54	73	61	60	51	63	53
May	4,608	5,002	6,421	5,949	60	64	73	62	57	52	66	53
June	3,845	4,505	6,341	6,162	54	59	73	63	53	57	61	53
July	4,092	4,858	6,301	6,617	56	60	74	67	55	56	61	54
August	4,575	5,593	6,673	6,862	60	63	77	68	58	60	64	55
September	4,456	5,453	6,048	6,647	58	58	71	64	58	56	61	49
October	4,233	5,764	6,710	6,697	58	54	77	66	58	52	65	48
November	4,537	5,432	5,893	6,486	63	63	68	68	63	60	66	51
December	4,740	5,200	5,888	5,532	65	62	68	56	64	61	67	49
Average	4,527	5,254	6,107	6,280	60	60	71	63	59	55	63	52

Table A.2: Daily transmission capacity, energy generated and energy sent out, 2019-2022

Period	Transmission Capacity (MW)				Energy Generated (MW)				Energy Sent Out (MW)			
	2022	2021	2020	2019	2022	2021	2020	2019	2022	2021	2020	2019
January	8,100	7,300	4,800	4,800	4,265	4,495	3,817	4,003	4,187	4,424	3,732	3,952
February	8,100	7,300	4,800	4,800	4,317	4,561	4,114	4,209	4,225	4,482	4,008	4,148
March	8,100	7,300	4,800	4,800	3,728	4,410	3,912	4,228	3,680	4,328	3,858	4,167
April	8,100	7,300	4,800	4,879	3,813	4,308	4,099	4,068	3,765	4,229	4,031	4,008
May	8,100	7,300	4,800	4,848	3,630	4,149	4,168	3,831	3,579	4,075	4,100	3,774
June	8,100	7,300	4,800	4,818	3,224	3,774	3,726	3,711	3,178	3,705	3,660	3,648
July	8,100	7,300	4,800	4,917	3,634	3,940	3,821	3,737	3,593	3,866	3,757	3,676
August	8,100	7,300	4,800	4,886	3,939	4,003	4,045	3,584	3,883	3,934	3,981	3,526
September	8,100	7,300	4,800	4,856	4,047	3,867	3,863	3,524	3,940	3,801	3,806	3,474
October	8,100	7,300	4,800	4,825	3,976	4,138	4,155	3,463	3,937	4,078	4,088	3,411
November	8,100	7,300	4,800	4,828	4,304	4,336	4,424	3,804	4,264	4,275	4,358	3,751
December	8,100	7,300	4,800	4,713	4,448	4,409	4,504	3,744	4,395	4,339	4,432	3,688
Average	8,100	7,300	4,800	4,831	3,944	4,199	4,054	3,826	3,886	4,128	3,984	3,768

Table A.3: Plants' average load factor, 2019-2022

	Load Factor (%)			
GenCos	2022	2021	2020	2019
AES Barge IPP	0	0	0	0
Afam IV-V	78.90	75.69	62.84	44.13
Afam VI IPP	97.72	92.91	68.79	38.13
Alaoji NIPP	80.10	51.29	40.06	37.26
ASCO IPP	0	0	0	0
Azura Edo IPP	93.23	88.90	79.74	57.47
Dadin Kowa	97.93	0	0	0
Delta	87.69	82.27	67.77	68.60
Egbin	91.48	81.59	65.36	56.06
Gbarain NIPP	0	0	42.91	44.54
Geregu	76.05	76.14	64.04	57.5
Geregu NIPP	64.74	64.91	64.84	63.74
Ibom Power IPP	52.37	80.69	55.02	62.20
Ihovbor NIPP	50.55	50.60	36.79	66.36
Jebba	84.96	85.08	78.73	75.04
Kainji	94.93	95.05	83.60	81.60
Odukpani NIPP	72.89	72.88	61.62	47.49
Okpai IPP	78.24	78.52	59.02	58.06
Olorunsogo	75.46	75.45	61.87	57.90
Olorunsogo NIPP	66.08	65.11	60.54	66.43
Omoku IPP	87.31	87.26	55.60	71.39
Omotosho	84.09	84.07	65.69	67.61
Omotosho NIPP	52.69	52.76	60.50	69.05
Paras Energy IPP	79.14	79.20	73.87	83.51
Rivers IPP	71.49	71.72	72.92	67.77
Sapele	52.37	51.87	55.98	38.12
Sapele NIPP	77.43	77.37	33.71	72.23
Shiroro	74.54	74.54	67.59	59.62
Trans-Amadi IPP	79.08	79.12	65.98	65.91
Average	85.94	79.92	61.74	60.26

Table A.4: Annual electricity output and share by fuel type, 2019-2022

		Total Electricity Output (GWh)				*Fuel Share of Electricity Output (%)*			
Period	Fuel Type	*2022*	*2021*	*2020*	*2019*	*2022*	*2021*	*2020*	*2019*
Q1	*Thermal*	6,497.92	7,515.43	6,327.40	7,449.26	73.44	77.53	73.45	82.28
	Hydro	2,350.12	2,174.89	2,286.59	1,604.64	26.56	22.47	26.55	17.72
	Aggregate	8,848.04	9,690.32	8,614.00	9,053.89	100	100	100	100
Q2	*Thermal*	6,324.19	7,295.96	7,121.44	7,128.99	81.44	81.91	81.53	84.35
	Hydro	1,442.48	1,609.71	1,613.49	1,322.43	18.56	18.09	18.47	15.65
	Aggregate	7,766.66	8,905.67	8,734.93	8,451.43	100	100	100	100
Q3	*Thermal*	6,027.94	6,737.64	6,318.88	6,608.10	70.58	77.42	76.45	82.76
	Hydro	2,512.51	1,956.13	1,946.54	1,376.59	29.42	22.58	23.55	17.24
	Aggregate	8,850.45	8,693.77	8,265.42	7,984.68	100	100	100	100
Q4	*Thermal*	6,438.98	6,830.77	7,248.67	6,239.04	70.90	72.06	75.29	77.01
	Hydro	2,926.67	2,649.44	2,379.53	1,862.15	31.10	27.94	24.71	22.99
	Aggregate	9,365.65	9,480.21	9,628.20	8,101.19	100	100	100	100
Annual	*Thermal*	25,613.29	28,379.80	27,016.40	27,425.38	73.30	77.17	76.69	81.64
	Hydro	9,328.98	8,390.16	8,213.82	6,165.81	26.70	22.83	23.31	18.36
	Aggregate	34,942.27	36,769.97	35,230.22	33,591.20	100	100	100	100

Table A.5: Plant share of total electricity output, 2019-2022

	Electricity Output by Plant (GWh)				*Electricity Output by Plant (%)*			
GenCos	*2022*	*2021*	*2020*	*2019*	*2022*	*2021*	*2020*	*2019*
AES Barge IPP	0	0	0	0	0	0	0	0
Afam IV-V	432.31	587.38	0.00	288.63	1.24	1.59	1.29	0.86
Afam VI IPP	853.46	2,411.35	83.41	1,460.62	2.44	6.53	6.36	4.35
Alaoji NIPP	578.62	508.29	130.43	208.90	1.66	1.37	1.53	0.62
ASCO IPP	0	0.00	185.75	0	0	0	0	0
Azura Edo IPP	3,454.41	3,254.17	250.10	2,269.72	9.89	8.84	8.27	6.76
Dadin Kowa	233.81	112.14	0	0	0.67	0	0	0
Delta	3,341.28	2,770.46	306.09	2,756.92	9.56	7.53	7.56	8.21
Egbin	3,799.76	5,529.23	326.47	3,795.47	10.87	15.29	13.54	11.3
Egbin ST6	0	85.37	0	0	0	0	0	0
Gbarain NIPP	0	0	453.12	265.12	0	0	0.24	0.79
Geregu	1,618.57	2,460.19	481.93	1,905.80	4.63	6.70	5.76	5.67
Geregu NIPP	733.81	679.03	492.86	1,209.92	2.10	1.85	2.31	3.60
Ibom Power IPP	308.65	110.73	539.31	490.62	0.88	0.30	0.93	1.46
Ihovbor NIPP	529.07	148.56	628.27	699.62	1.51	0.40	0.53	2.08
Jebba	2,858.69	3,073.83	652.29	2,865.32	8.18	8.37	7.68	8.53
Kainji	3,201.66	2,830.66	814.57	2,971.92	9.16	7.70	8.31	8.85
Odukpani NIPP	1,924.90	2,537.68	834.17	1,951.38	5.51	6.90	6.99	5.81
Okpai IPP	2,066.14	2,347.39	1,054.82	1,357.83	5.91	6.40	4.46	4.04
Olorunsogo	952.53	1,080.27	1,128.71	1,392.73	2.73	2.94	3.20	4.15
Olorunsogo NIPP	348.71	64.85	1,571.30	215.16	1.00	0.17	0.37	0.64
Omoku IPP	423.94	377.34	2,028.42	505.71	1.21	1.03	1.78	1.51
Omotosho	917.86	1,018.62	2,240.29	1,036.13	2.63	2.77	2.99	3.08
Omotosho NIPP	721.59	280.70	2,463.93	806.31	2.07	0.76	1.85	2.40
Paras Energy IPP	419.88	399.46	2,579.19	483.27	1.20	1.09	1.37	1.44
Rivers IPP	992.57	638.44	2,663.93	829.89	2.84	1.74	2.37	2.47
Sapele	433.30	268.75	2,705.71	289.33	1.24	0.72	0.87	0.86
Sapele NIPP	289.71	340.01	2,915.11	590.09	0.83	0.92	0.71	1.76
Shiroro	3,034.82	2,373.54	2,928.92	2,616.21	8.69	6.45	7.32	7.79
Trans-Amadi IPP	472.23	481.52	4,771.13	328.56	1.35	1.31	1.40	0.98
Total	34,942.27	36,769.97	35,230.22	33,591.20	100	100	100	100

B. Grid Performance

Table B.1: Average monthly transmission loss factor, 2020-2022

	Energy Injected into Grid (GWh)			Energy Delivered to DisCos & Exported (GWh)			Transmission Losses Factor (%)			MYTO Allowance (%)
Month	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022
January	3,136	3,295	2,813	2,812	3,043	2,603	8.15%	7.64%	7.48%	7.50%
February	2,860	3,007	2,826	2,554	2,781	2,593	8.54%	7.51%	8.23%	7.50%
March	2,754	3,220	2,863	2,487	2,982	2,665	7.38%	7.37%	6.91%	7.50%
April	2,717	3,004	2,900	2,446	2,816	2,730	8.44%	7.49%	5.87%	7.50%
May	2,662	3,033	3,062	2,081	2,809	2,820	8.43%	7.41%	7.93%	7.50%
June	2,291	2,664	2,640	2,465	2,464	2,441	8.20%	7.49%	7.55%	7.50%
July	2,677	2,834	2,810	2,593	2,654	2,601	8.08%	6.34%	7.45%	7.50%
August	2,870	2,890	2,967	2,637	2,705	2,741	7.78%	6.43%	7.60%	7.50%
September	2,847	2,714	2,743	2,701	2,522	2,535	7.50%	7.07%	7.56%	7.50%
October	2,917	3,030	3,067	2,851	2,785	2,843	7.42%	8.07%	7.30%	7.50%
November	3,059	3,091	3,118	3,012	2,828	2,903	6.81%	8.50%	6.90%	7.50%
December	3,263	3,243	3,295	2,755	2,983	3,053	7.71%	8.03%	7.34%	7.50%
Average	2,838	3,005	2,925	2,616	2,781	2,711	7.87%	7.45%	7.34%	7.50%
Total	34,054	36,065	35,104	31,393	33,373	32,527	7.87%	7.45%	7.34%	7.50%

Table B.2: Number of system collapses, 2011-2022

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

Table B.3: Average daily system frequency, 2019-2022

Period	Nominal Standard	Upper bound Frequency				Lower bound Frequency			
		2022	2021	2020	2019	2022	2021	2020	2019
January	50	50.68	50.49	50.82	50.65	49.13	49.17	49.67	49.50
February	50	50.60	50.59	50.7	50.46	49.05	49.38	49.75	49.77
March	50	50.78	50.62	50.65	50.46	49.07	49.29	49.48	49.60
April	50	51.12	50.72	50.77	50.43	49.08	49.12	49.63	49.71
May	50	50.47	50.64	50.67	50.62	49.13	49.13	49.70	49.72
June	50	50.73	50.70	50.86	50.51	49.09	49.07	49.73	49.77
July	50	50.63	50.69	50.78	50.51	48.71	49.95	49.83	49.73
August	50	51.14	50.81	50.74	50.61	48.65	49.35	49.84	49.78
September	50	50.81	51.00	50.81	50.74	48.76	49.24	49.86	50.22
October	50	50.66	50.96	50.88	50.93	49.08	49.43	49.70	49.89
November	50	50.44	50.72	50.58	50.88	49.07	49.32	49.34	49.72
December	50	50.56	50.59	50.44	50.81	49.09	49.20	49.40	49.52
Average	50	50.72	50.71	50.73	50.63	48.99	49.30	49.66	49.74

Notes of the table:

1. Upper Limit (50.25Hz), Lower Limit (49.75), Higher Bound (51.25Hz), and Lower Bound (48.57Hz)

Table B.4: Average daily system voltage, 2019-2022

Period	Nominal Standard (kV)	Upper bound Voltage (kV)				Lower bound Voltage (kV)			
		2022	2021	2020	2019	2022	2021	2020	2019
January	330.00	352.90	349.81	355.48	348.26	297.74	298.48	298.19	295.00
February	330.00	352.76	348.96	351.52	349.36	297.36	299.21	299.00	298.39
March	330.00	351.18	350.87	352.65	350.23	297.00	296.07	299.03	294.03
April	330.00	358.00	349.13	356.80	360.83	299.00	297.17	290.97	299.40
May	330.00	357.00	351.75	355.29	355.71	300.00	294.78	290.87	298.23
June	330.00	358.00	353.47	355.90	356.13	300.00	299.97	297.50	299.03
July	330.00	335.42	353.35	355.00	354.13	299.53	300.16	296.93	299.48
August	330.00	358.24	352.23	354.47	356.29	299.10	298.74	297.67	299.39
September	330.00	353.21	352.90	354.83	355.03	299.83	297.74	300.97	299.20
October	330.00	351.03	352.90	353.74	357.73	299.45	297.74	296.16	299.61
November	330.00	352.96	352.76	352.37	356.10	299.93	397.36	294.87	299.47
December	330.00	352.21	351.18	349.55	351.47	298.73	297.00	298.61	300.58
Average	330.00	352.74	351.61	353.97	354.27	298.97	297.87	296.73	298.48

Notes of the table:

1. Upper Voltage (346.50kV), and Lower Voltage (313.50kV)

C. Commercial Performance

Table C.1: DisCos' energy received, billed and billing efficiency 2020-2022

	Total Energy Received (GWh)						
	2022 Quarters				Annual		
DisCos	/Q1	/Q2	/Q3	/Q4	2022	2021	2020
Abuja	965	847	983	1,111	3,906	4,050	3,876
Benin	718	609	684	688	2,698	2,683	2,579
Eko	764	688	762	911	3,125	3,591	3,558
Enugu	746	601	623	642	2,612	2,841	2,426
Ibadan	899	777	868	906	3,450	4,092	4,035
Ikeja	1,039	898	1,031	1,113	4,082	4,548	4,581
Jos	378	350	400	438	1,566	1,403	1,378
Kaduna	572	497	499	542	2,110	2,324	2,295
Kano	500	408	476	539	1,923	1,951	1,875
Port Harcourt	490	461	525	548	2,024	2,109	2,027
Yola	230	208	195	223	856	902	1,189
Total	7,301	6,344	7,045	7,662	28,352	30,494	29,819
Average	664	577	640	697	2,577	2,772	2,711
	Total Energy Billed (GWh)						
	/Q1	/Q2	/Q3	/Q4	2022	2021	2020
Abuja	643	594	690	750	2,677	2,682	2,364
Benin	597	508	569	600	2,274	2,246	2,165
Eko	666	616	693	811	2,786	3,141	3,129
Enugu	516	441	444	451	1,852	2,035	1,748
Ibadan	662	593	631	681	2,567	2,920	2,857
Ikeja	910	796	914	992	3,613	4,081	4,167
Jos	287	259	283	352	1,181	976	779
Kaduna	464	382	245	258	1,349	1,767	1,413
Kano	372	291	321	362	1,346	1,454	1,434
Port Harcourt	401	364	425	450	1,639	1,625	1,564
Yola	131	116	110	128	486	420	543
Total	5,649	4,960	5,326	5,836	21,771	23,348	22,163
Average	514	451	484	531	1,979	2,123	2,015
	Billing Efficiency (%)						
	/Q1	/Q2	/Q3	/Q4	2022	2021	2020
Abuja	66.63	70.13	70.19	67.51	68.54	66.22	60.99
Benin	83.26	83.38	83.18	87.29	84.29	83.73	83.96
Eko	87.18	89.53	90.94	89.02	89.15	87.47	87.96
Enugu	69.17	73.38	71.27	70.25	70.90	71.62	72.05
Ibadan	73.55	76.35	72.79	75.15	74.41	71.37	70.82
Ikeja	87.55	88.67	88.69	89.12	88.51	89.73	90.95
Jos	76.01	73.88	70.80	80.28	75.40	69.57	56.51
Kaduna	81.12	76.86	49.10	47.66	63.95	76.03	61.57
Kano	74.39	71.32	67.44	67.15	69.99	74.52	76.46
Port Harcourt	81.84	78.82	81.06	82.04	81.00	77.06	77.16
Yola	57.09	55.87	56.66	57.46	56.79	46.56	45.67
Total	77.38	78.17	75.61	76.16	76.79	76.57	74.33
Average	76.16	76.20	72.92	73.90	74.81	73.99	71.28

Table C.2: Revenue performance by DisCos, 2020-2022

	Total Billing (₦' Billion)						
	2022 Quarters				Annual		
DisCos	/Q1	/Q2	/Q3	/Q4	2022	2021	2020
Abuja	36.49	33.82	39.27	44.64	154.22	140.63	92.97
Benin	31.00	27.17	30.76	33.16	122.07	105.77	85.97
Eko	34.52	32.63	37.69	46.48	151.31	145.61	107.67
Enugu	27.45	23.56	24.40	25.93	101.34	98.00	74.64
Ibadan	34.80	32.01	34.08	36.44	137.33	139.71	101.16
Ikeja	44.53	39.53	46.55	51.81	182.42	184.22	133.33
Jos	16.94	15.55	17.25	23.83	73.57	49.32	30.61
Kaduna	24.15	19.50	13.40	14.94	71.98	89.77	57.14
Kano	19.02	15.81	17.97	21.00	73.79	69.17	52.57
Port Harcourt	21.03	19.65	23.59	26.07	90.34	76.23	61.79
Yola	5.78	6.45	6.71	7.99	26.93	18.47	18.32
Total	295.70	265.68	291.66	332.28	1,185.31	1,116.92	816.16
Average	26.88	24.15	26.51	30.21	107.76	101.54	74.20
	Total Revenue Collected (₦' Billion)						
	/Q1	/Q2	/Q3	/Q4	2022	2021	2020
Abuja	30.42	28.99	32.00	36.40	127.80	117.61	82.61
Benin	16.10	16.22	17.25	20.33	69.90	58.16	45.66
Eko	28.79	27.74	32.28	38.97	127.79	120.89	84.65
Enugu	18.18	16.74	16.96	19.05	70.93	69.83	47.83
Ibadan	21.84	21.24	23.57	29.02	95.67	91.37	61.80
Ikeja	40.62	36.87	43.40	47.42	168.31	157.40	105.23
Jos	7.15	7.64	7.62	8.60	31.01	24.80	17.44
Kaduna	7.49	6.57	6.31	7.88	28.25	30.64	21.53
Kano	11.79	10.20	12.48	14.44	48.91	47.39	33.84
Port Harcourt	13.57	13.01	15.12	17.07	58.77	47.72	31.39
Yola	3.24	3.07	3.69	4.47	14.46	9.54	10.74
Total	199.19	188.29	210.68	243.65	841.81	775.34	542.73
Average	18.11	17.12	19.15	22.15	76.53	70.49	49.34
	Collection Efficiency (%)						
	/Q1	/Q2	/Q3	/Q4	2022	2021	2020
Abuja	83.36	85.72	81.47	81.55	82.87	83.63	88.86
Benin	51.94	59.70	56.09	61.33	57.26	54.98	53.11
Eko	83.42	85.02	85.64	83.85	84.45	83.02	78.62
Enugu	66.23	71.03	69.51	73.46	69.99	71.25	64.08
Ibadan	62.77	66.35	69.16	79.64	69.67	65.39	61.09
Ikeja	91.23	93.27	93.23	91.52	92.27	85.44	78.92
Jos	42.20	49.10	44.20	36.10	42.15	50.29	56.99
Kaduna	30.99	33.72	47.10	52.76	39.25	34.14	37.69
Kano	61.98	64.54	69.45	68.76	66.28	68.51	64.37
Port Harcourt	64.53	66.24	64.09	65.47	65.06	62.59	50.81
Yola	56.00	47.57	55.01	55.91	53.71	51.63	58.61
Total	67.36	70.87	72.23	73.33	71.02	69.42	66.50
Average	63.15	65.66	66.81	68.21	65.72	64.63	63.01

Table C.3: Energy off-take performance, 2022

DisCos	Jan-Jun 2022 Offtake (MWh/h)	Jan-Jun 2022 MYTO share (MWh/h)	Jan-Jun 2022 Variance (%)	Jul-Dec 2022 Offtake (MWh/h)	Jul-Dec 2022 PCC (MWh/h)	Jul-Dec 2022 Variance (%)
Abuja	417.30	415.34	0.43	474.18	424.22	11.78
Benin	305.37	325.05	-6.05	310.51	328.02	-5.34
Eko	334.35	397.28	-15.84	378.85	337.94	12.11
Enugu	310.07	325.05	-4.61	286.46	320.67	-10.67
Ibadan	385.90	469.51	-17.81	401.72	400.43	0.32
Ikeja	445.98	541.74	-17.68	485.63	481.78	0.80
Jos	167.51	198.64	-15.67	189.85	244.01	-22.20
Kaduna	246.09	288.93	-14.83	235.73	228.74	3.06
Kano	209.00	288.93	-27.66	229.81	235.66	-2.48
Port Harcourt	218.95	234.76	-6.73	242.90	249.51	-2.65
Yola	100.75	126.41	-20.30	94.69	128.93	-26.56
All DisCos	3,141.09	3,611.63	-13.03	3,330.33	3,379.91	-1.47

Table C.4: ATC&C losses performance, 2018-2022

DisCos	2022 MYTO Target (%)	2022 ATC&C Losses (%)	2021 MYTO Target (%)	2021 ATC&C Losses (%)	2020 MYTO Target (%)	2020 ATC&C Losses (%)	2019 MYTO Target (%)	2019 ATC&C Losses (%)	2018 MYTO Target (%)	2018 ATC&C Losses (%)
Abuja	19.27	43.20	22.80	44.62	22.33	45.8	24	41.07	22.33	40.15
Benin	17.37	51.73	21.71	53.96	23.91	55.41	31	50.52	23.91	53.24
Eko	14.18	24.71	14.70	27.38	11.23	30.85	14	26.22	11.23	30.56
Enugu	11.31	50.38	19.96	48.97	20.56	53.83	29	30.94	20.56	51.68
Ibadan	15.47	48.16	18.55	53.33	19.67	56.74	25	47.74	19.67	49.96
Ikeja	11.37	18.33	12.52	23.34	10.81	28.21	15	23.91	10.81	21.82
Jos	27.27	68.22	35.98	65.02	39.12	67.79	44	60.4	39.12	69.61
Kaduna	10.65	74.90	17.18	74.05	20.12	76.80	32	66.81	12.47	69.82
Kano	15.85	53.61	18.65	48.94	22.06	50.78	29	43.72	22.06	51.47
Port Harcourt	21.45	47.30	25.85	51.76	29.70	60.80	37	61.62	29.70	63.66
Yola	64.12	69.50	29.44	75.96	23.71	73.24	28	65.08	23.71	68.42
All DisCos:										
MYTO Level	20.75		21.58		22.11		26		20	
ATC&C Losses	-	45.46		46.85		50.57		43.85		47.85
ATC Losses	-	23.21		23.43		25.67		17.23		19.81
C Losses	-	28.98		30.58		33.50		32.16		34.97

Notes of the table: 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 C.5: NBET and MO invoice to DisCos, 2018-2022

	Jan22	Feb22	Mar22	Apr22	May22	Jun22	Jul22	Aug22	Sep22	Oct22	Nov22	Dec22	2022	2021	2020	2019	2018
NBET Invoice	Amount in (₦'Billion)																
Abuja	8.85	8.24	8.06	8.27	7.85	7.09	9.29	9.40	9.87	10.46	11.03	11.21	109.61	101.33	89.91	87.88	76.66
Benin	6.69	6.13	6.26	5.70	5.93	5.65	6.04	6.25	6.47	5.38	6.81	6.59	74.89	72.87	64.93	54.28	53.34
Eko	8.02	7.12	6.60	6.80	7.25	6.26	6.64	7.85	6.75	6.41	6.92	7.75	84.43	93.01	84.12	77.99	68.08
Enugu	6.77	6.42	6.33	5.80	5.80	5.53	6.31	6.41	6.06	5.98	6.50	7.09	75.01	75.05	62.88	52.94	47.69
Ibadan	9.41	8.27	7.97	8.08	8.02	7.17	8.36	8.23	8.25	8.23	8.98	9.50	100.45	108.07	97.72	83.21	72.91
Ikeja	10.81	9.62	9.19	9.18	9.45	8.24	9.10	9.78	10.32	9.67	10.72	11.83	117.90	122.51	107.19	89.52	74.41
Jos	3.79	3.54	3.63	3.53	3.51	3.24	3.64	3.72	3.88	4.15	4.27	4.66	45.56	41.33	37.44	29.46	26.36
Kaduna	5.70	5.22	5.15	5.24	4.95	4.50	4.44	4.80	4.83	5.09	5.12	5.38	60.44	63.97	58.34	45.69	44.65
Kano	5.47	5.00	4.55	4.77	4.40	4.04	5.39	4.72	4.56	5.06	5.21	5.41	57.59	58.66	52.43	41.27	41.65
Port Harcourt	4.51	4.55	4.46	4.21	4.16	4.06	5.15	4.97	5.07	4.96	5.29	5.86	57.28	54.28	48.39	45.77	41.09
Yola	2.28	2.18	2.28	2.24	2.06	1.94	1.93	1.91	1.97	2.10	2.23	2.37	25.48	26.38	27.37	26.49	20.68
Total	72.30	66.33	64.49	63.82	63.37	57.72	65.29	68.07	68.01	68.51	73.08	77.62	808.65	817.46	730.71	634.47	567.53
Average	6.57	6.03	5.86	5.80	5.76	5.25	5.94	6.19	6.18	6.23	6.64	7.06	73.51	74.31	66.43	57.68	51.59
MO Invoice	Amount in (₦'Billion)																
Abuja	1.67	1.50	1.45	1.53	1.31	1.19	1.74	1.96	1.92	2.00	2.06	1.93	20.26	25.60	19.66	15.11	13.96
Benin	1.50	1.31	1.36	1.15	1.25	1.24	1.14	1.32	1.33	1.29	1.39	1.16	15.44	20.21	13.51	9.33	9.72
Eko	1.56	1.40	1.41	1.52	1.48	0.99	1.27	1.68	1.47	1.52	1.38	1.47	17.15	23.43	18.02	13.38	12.4
Enugu	1.47	1.22	1.41	1.37	1.34	1.21	1.21	1.33	1.26	1.23	1.23	1.30	15.58	20.42	13.08	9.09	8.69
Ibadan	2.04	1.73	1.88	1.71	1.81	1.64	1.59	1.73	1.65	1.54	1.77	1.78	20.87	29.03	20.81	14.29	13.33
Ikeja	2.16	1.66	1.68	1.75	1.74	1.25	1.75	2.00	2.04	1.92	2.11	2.22	22.28	32.16	21.61	15.3	13.51
Jos	0.92	0.78	0.81	0.79	0.84	0.75	0.69	0.82	0.82	0.85	0.86	0.86	9.97	12.32	7.4	5.07	4.82
Kaduna	1.27	0.94	0.72	0.69	0.60	0.56	0.83	1.00	0.95	1.03	1.02	1.02	10.63	15.85	11.86	7.9	8.26
Kano	1.01	1.00	0.91	0.89	0.72	0.81	0.84	1.00	0.87	1.01	1.03	1.01	11.10	12.84	10.1	7.11	7.47
Port Harcourt	1.11	0.91	0.96	0.63	0.74	0.89	0.99	1.06	1.04	0.92	1.03	1.10	11.38	13.29	10.14	7.86	7.5
Yola	0.28	0.30	0.42	0.36	0.18	0.17	0.36	0.40	0.39	0.40	0.42	0.43	4.11	5.21	5.84	4.58	3.78
Total	15.01	12.75	13.01	12.38	12.02	10.71	12.41	14.31	13.78	13.70	14.30	14.27	158.65	210.37	152.03	109.03	103.45
Average	1.36	1.16	1.18	1.12	1.09	0.97	1.26	1.30	1.25	1.25	1.30	1.30	14.54	19.12	13.82	9.91	9.41

Notes of the table:
1. NBET and MO are Nigeria Bulk Electricity Trader and Market Operator respectively.

Table C.6: Remittances to NBET and MO by DisCos, 2018-2022

	Jan22	Feb22	Mar22	Apr22	May22	Jun22	Jul22	Aug22	Sep22	Oct22	Nov22	Dec22	2022	2021	2020	2019	2018
Remittances to NBET	Amount in (₦'Billion)																
Abuja	6.18	6.98	6.00	6.51	5.74	6.52	9.04	7.76	7.90	6.91	6.94	6.60	83.07	64.90	34.23	34.98	26.03
Benin	1.96	3.27	2.57	2.93	2.44	2.80	4.81	4.37	5.38	5.49	5.45	5.14	46.64	33.09	19.70	14.10	16.15
Eko	6.75	6.38	5.43	6.08	6.46	5.20	6.64	7.74	5.63	5.29	5.01	5.75	72.37	64.12	35.60	31.92	26.30
Enugu	3.52	3.55	2.65	3.10	2.47	2.93	5.97	5.68	5.01	5.38	5.52	5.29	51.08	42.26	19.74	12.45	16.53
Ibadan	4.45	3.58	3.12	4.44	3.06	3.70	6.92	6.07	6.89	7.83	6.86	7.27	64.18	53.36	30.31	22.74	23.95
Ikeja	10.09	8.04	7.37	9.18	4.70	6.89	9.10	9.75	9.99	9.34	8.77	9.72	102.95	93.37	47.99	34.37	31.15
Jos	1.10	1.11	1.07	1.39	0.71	1.23	2.68	2.38	2.52	2.41	2.32	2.16	21.05	13.13	4.66	2.12	2.38
Kaduna	0.69	0.48	0.20	0.68	0.20	0.38	1.74	1.90	0.84	1.17	1.11	0.72	10.11	14.28	12.42	6.92	6.20
Kano	2.44	2.37	1.53	2.57	1.58	1.83	2.79	1.46	3.12	2.56	2.30	3.15	27.72	31.72	13.02	10.20	6.66
Port Harcourt	1.35	4.09	1.84	2.43	2.98	2.00	3.14	3.12	2.28	3.04	3.08	2.60	31.96	24.62	8.93	8.55	7.61
Yola	0.34	0.23	-	0.24	0.21	-	0.20	0.20	0.21	0.22	0.23	0.22	2.31	2.96	2.76	2.99	2.44
Total	38.88	40.08	31.80	39.55	30.57	33.48	53.03	50.38	49.77	49.67	47.60	48.63	513.43	437.81	229.36	181.34	165.40
Average	3.53	3.64	2.89	3.60	2.78	3.04	4.82	4.59	4.52	4.52	4.33	4.42	46.68	39.80	20.85	16.49	15.04
Remittances to MO	Amount in (₦'Billion)																
Abuja	1.54	1.88	1.08	1.20	0.96	1.15	1.57	1.49	1.80	1.54	1.65	1.60	17.46	27.78	16.68	11.08	4.50
Benin	1.10	0.74	0.59	0.63	0.55	0.76	0.79	0.72	1.08	1.10	1.24	1.06	10.36	15.23	13.64	7.09	5.09
Eko	0.78	1.25	1.16	1.36	1.32	0.99	1.88	1.13	1.36	1.33	1.17	1.47	15.20	22.93	17.99	12.02	8.78
Enugu	0.43	0.67	0.59	0.73	0.57	0.70	1.03	1.01	0.95	1.06	1.20	1.07	10.01	16.06	13.07	6.76	2.65
Ibadan	1.10	0.75	1.63	0.94	2.09	1.04	1.07	2.86	1.25	1.73	2.08	2.01	18.55	21.25	20.27	11.24	4.32
Ikeja	0.41	1.35	1.25	1.61	0.78	1.73	1.93	2.00	2.34	1.32	2.53	2.72	19.97	23.51	21.61	13.35	8.07
Jos	0.59	0.33	0.33	0.42	0.23	0.47	0.63	0.45	0.85	0.47	0.92	0.59	6.28	9.21	7.04	3.58	0.76
Kaduna	1.70	0.09	0.03	0.09	0.02	0.05	0.13	0.20	0.14	0.23	0.27	0.32	3.27	5.02	9.21	5.70	1.49
Kano	1.25	0.47	0.31	0.48	0.26	0.44	0.45	0.24	0.61	0.52	0.57	0.86	6.46	8.50	9.19	4.92	1.28
Port Harcourt	0.15	1.23	0.44	0.40	0.59	0.55	0.61	0.68	0.53	0.64	0.75	0.66	7.23	10.30	9.46	5.74	1.75
Yola	0.07	0.58	0.38	0.40	0.43	0.38	0.32	0.41	0.39	0.38	0.44	0.38	4.06	1.44	2.82	3.89	2.59
Total	9.13	8.81	7.79	8.26	7.80	8.27	10.39	11.18	11.31	10.31	12.81	12.75	118.82	161.23	140.98	85.36	41.28
Average	0.83	0.80	0.71	0.75	0.71	0.75	0.94	1.01	1.03	0.94	1.16	1.16	19.15	14.66	12.82	7.76	3.75

Notes of the table:
1. NBET and MO are Nigeria Bulk Electricity Trader and Market Operator respectively.

Table C.7: Annual shortfalls to NBET and MO by DisCos, 2018-2022

	Jan22	Feb22	Mar22	Apr22	May22	Jun22	Jul22	Aug22	Sep22	Oct22	Nov22	Dec22	2022	2021	2020	2019	2018
Shortfalls to NBET	Amount in (₦'Billion)																
Abuja	-2.66	-1.26	-2.06	-1.77	-2.11	-5.72	-2.48	-1.64	-1.98	-3.55	-4.09	-4.61	-26.54	-36.43	-55.68	-52.89	-50.6
Benin	-4.71	-2.26	-3.69	-2.77	-3.49	-2.85	-1.23	-1.88	-1.09	-8.90	-1.36	-1.44	-28.26	-39.77	-45.22	-40.18	-37.20
Eko	-1.27	-7.90	-1.17	-7.12	-7.94	-1.06	-0.02	-1.03	-1.12	-1.12	-1.91	-2.00	-12.06	-28.89	-48.52	-46.07	-41.78
Enugu	-3.25	-2.87	-3.69	-2.70	-3.32	-2.60	-3.44	-0.73	-1.04	-6.00	-9.81	-1.80	-23.93	-32.79	-43.14	-40.49	-31.16
Ibadan	-4.96	-4.68	-4.85	-3.65	-4.96	-3.47	-1.44	-0.22	-1.35	-4.01	-2.13	-2.23	-36.27	-54.72	-67.41	-60.47	-48.95
Ikeja	-0.71	-1.58	-1.81	-0.03	-4.76	-1.35	0.00	-3.23	-3.27	-3.27	-1.94	-2.11	-14.95	-29.13	-59.20	-55.14	-43.26
Jos	-2.69	-2.43	-2.56	-2.14	-2.79	-2.01	-9.59	-1.38	-1.36	-1.73	-1.95	-2.50	-24.51	-28.20	-32.78	-27.34	-23.99
Kaduna	-5.01	-4.74	-4.95	-4.55	-4.74	-4.12	-2.70	-2.94	-3.98	-3.92	-4.01	-4.66	-50.33	-49.69	-45.92	-38.77	-38.45
Kano	-3.03	-2.63	-3.02	-2.20	-2.82	-2.21	-1.61	-3.26	-1.44	-2.49	-2.91	-2.26	-29.87	-26.94	-39.41	-31.07	-34.98
Port Harcourt	-3.17	-4.60	-2.62	-1.77	-1.18	-2.06	-2.00	-1.86	-2.79	-1.92	-2.21	-3.27	-25.32	-29.66	-39.46	-37.22	-33.48
Yola	-1.92	-1.94	-2.28	-2.01	-1.85	-1.94	-1.73	-1.71	-1.76	-1.87	-2.00	-2.15	-23.17	-23.42	-24.60	-23.50	-18.25
Total	-33.43	-26.24	-21.70	-24.27	-32.81	-24.23	-12.26	-17.69	-18.25	-18.83	-25.48	-29.03	-295.21	-379.65	-501.35	-453.13	-402.13
Average	-3.04	-2.39	-2.97	-2.21	-2.98	-2.20	-1.11	-1.61	-1.66	-1.71	-2.32	-2.64	-26.84	-34.51	-45.58	-4-1.19	-36.56
Shortfalls to MO	Amount in (₦'Billion)																
Abuja	+0.13	-0.38	+0.37	+0.33	+0.35	+0.04	+0.17	+0.47	+0.11	+0.46	+0.41	+0.32	+2.81	+2.18	2.97	4.03	9.46
Benin	+0.40	+0.57	+0.76	+0.52	+0.71	+0.48	+0.36	+0.60	+0.25	+0.18	+0.15	+0.09	+5.08	-4.98	-0.13	2.24	4.63
Eko	-0.77	+0.15	+0.25	+0.16	+0.16	+0.00	-0.61	+0.55	+0.12	+0.19	+0.21	0.00	+1.95	-0.50	0.04	1.36	3.62
Enugu	+1.04	+0.54	+0.82	+0.64	+0.77	+0.51	+0.19	+0.32	+0.31	+0.17	+0.02	+0.23	+5.57	-4.36	0.01	2.34	6.04
Ibadan	+0.94	+0.98	+0.24	+0.77	-0.28	+0.60	+0.52	-I.12	+0.41	-0.19	-0.30	-0.22	+2.33	-7.79	0.55	3.05	9.01
Ikeja	+1.77	+0.32	+0.43	+0.15	+0.96	-0.48	-0.17	0.00	-0.30	+0.60	-0.42	-0.50	+2.35	-8.65	0.01	1.95	5.44
Jos	+0.33	+0.45	+0.49	+0.37	+0.61	+0.28	+0.06	+0.38	-0.02	+0.38	-0.06	+0.27	+3.51	-3.11	0.36	1.49	4.07
Kaduna	-+0.43	+0.86	+0.69	+0.60	+0.58	+0.51	+0.71	+0.79	+0.80	+0.80	+0.75	+0.69	+7.36	-10.84	2.64	2.19	6.77
Kano	+-0.24	+0.53	+0.60	+0.41	+0.46	+0.37	+0.39	+0.76	+0.28	+0.50	+0.46	+0.15	+4.66	-4.35	0.90	2.18	6.19
Port Harcourt	-0.95	-0.32	+0.52	+0.22	+0.15	+0.33	+0.38	+0.38	+0.51	+0.28	+0.29	+0.44	+4.14	-3.00	0.68	2.13	5.76
Yola	-0.21	+0.24	+0.04	-0.04	-0.24	-0.21	+0.04	0.00	0.00	+0.02	-0.02	+0.04	+0.08	-3.76	3.01	0.69	1.19
Total	5.87	+3.94	+5.22	+4.12	+4.22	+2.44	+2.02	+3.14	+2.47	+3.39	+1.49	+1.52	+39.84	-49.14	11.05	23.66	62.17
Average	0.53	+0.36	+0.47	+0.37	+0.38	+0.22	+0.18	+0.29	+0.22	+0.31	+0.14	+0.14	+3.62	-4.47	1.00	2.15	5.65

Notes of the table:
1. NBET and MO are Nigeria Bulk Electricity Trader and Market Operators respectively.

Table C.8: Market invoice, remittance and shortfall by DisCos, 2018-2022

	Invoice (₦' Billion)					Remittances (₦' Billion)				
DisCos	2022	2021	2020	2019	2018	2022	2021	2020	2019	2018
Abuja	118.96	126.93	109.57	102.99	90.62	100.53	92.68	50.91	46.07	30.53
Benin	78.00	93.08	78.44	63.61	63.06	57.01	48.32	33.34	21.19	21.23
Eko	89.64	116.44	102.14	91.37	80.49	87.55	87.05	53.58	43.94	35.09
Enugu	82.33	95.47	75.96	62.03	56.39	61.10	58.32	32.81	19.21	19.18
Ibadan	101.76	137.1	118.53	97.50	86.24	82.72	74.61	50.58	33.98	28.28
Ikeja	123.19	154.67	128.80	104.82	87.92	122.90	116.88	69.60	47.72	39.22
Jos	38.53	53.65	44.84	34.52	31.18	27.33	22.34	11.70	5.70	3.13
Kaduna	60.65	79.82	70.20	53.58	52.91	13.39	19.3	21.64	12.62	7.69
Kano	58.61	71.5	62.52	48.38	49.13	34.18	40.22	22.21	15.12	7.96
Port Harcourt	57.76	67.57	58.53	53.63	48.59	39.18	34.92	18.39	14.28	9.36
Yola	6.81	31.59	33.20	31.07	24.47	6.37	4.4	5.59	6.88	5.03
Total	816.25	1,027.83	882.73	743.50	670.98	632.25	599.04	370.34	266.71	206.68
Average	74.20	93.44	80.25	67.59	61.00	57.48	54.46	33.67	24.25	18.79

	Shortfalls (₦' Billion)					Remittance Performance (%)				
DisCos	2022	2021	2020	2019	2018	2022	2021	2020	2019	2018
Abuja	18.43	-34.25	58.66	56.92	60.10	84.51	73.02	46.46	44.73	33.67
Benin	21.00	-44.75	45.10	42.42	41.83	73.08	51.91	42.51	33.31	33.67
Eko	2.09	-29.39	48.56	47.43	45.40	97.67	74.76	52.46	48.09	43.59
Enugu	21.23	-37.15	43.15	42.82	37.21	74.21	61.09	43.20	30.96	34.01
Ibadan	19.04	-62.51	67.96	63.52	57.96	81.29	54.42	42.67	34.85	32.79
Ikeja	0.29	-37.78	59.21	57.10	48.70	99.76	75.57	54.03	45.52	44.61
Jos	11.20	-31.31	33.14	28.82	28.05	70.93	41.64	26.09	16.50	10.04
Kaduna	47.27	-60.53	48.57	40.96	45.22	22.07	24.18	30.82	23.56	14.53
Kano	24.43	-31.29	40.31	33.25	41.17	58.32	56.25	35.52	31.26	16.19
Port Harcourt	18.57	-32.66	40.14	39.35	39.23	67.84	51.68	31.42	26.63	19.26
Yola	0.44	-27.18	27.61	24.19	19.43	93.51	13.93	16.83	22.14	20.56
Total	184.00	-428.79	512.39	476.79	464.30	77.46	58.28	41.95	35.87	30.80
Average	16.73	-38.98	46.58	43.34	42.21	74.84	58.28	38.36	32.51	27.54

Notes of the table:
1. NBET and MO are Nigeria Bulk Electricity Trader and Market Operator respectively.
2. 2022 market data is based on MRO.

Table C.9: Collection and remittance performances by DisCos, 2019-2022

	Collection Efficiency (%)				Percentage Point Change in Collection Efficiency (pp)			Remittance Performance (%)				Percentage point Change in Remittance Performance (pp)		
DisCos	*2022*	*2021*	*2020*	*2019*	*2022-21*	*2021-20*	*2020-19*	*2022*	*2021*	*2020*	*2019*	*2022-21*	*2021-20*	*2020-19*
Abuja	82.87	83.63	88.86	75.64	-0.76	-5.23	13.23	84.51	73.02	46.46	44.73	11.49	26.56	1.73
Benin	57.26	54.98	53.11	56.99	2.28	1.88	-3.88	73.08	51.92	42.51	33.31	21.16	9.41	9.20
Eko	84.45	83.02	78.62	83.33	1.44	4.39	-4.71	97.67	74.76	52.46	48.09	22.91	22.3	4.37
Enugu	69.99	71.25	64.08	72.63	-1.26	7.17	-5.11	74.21	61.09	43.20	30.96	13.12	17.89	12.24
Ibadan	69.67	65.39	61.09	62.93	4.27	4.30	-1.84	81.29	54.41	42.67	34.85	26.88	11.74	7.82
Ikeja	92.27	85.44	78.92	86.33	6.82	6.52	-7.41	99.76	75.57	54.03	45.52	24.19	21.54	8.51
Jos	45.15	50.29	56.99	55.21	-8.13	-6.70	1.78	70.93	41.64	26.09	16.50	29.29	15.55	9.59
Kaduna	39.25	34.14	37.69	40.80	5.11	-3.55	-3.11	22.07	24.18	30.82	23.56	-2.11	-6.64	7.26
Kano	66.28	68.51	64.37	68.51	-2.23	4.14	-4.14	58.32	56.24	35.52	31.26	2.08	20.72	4.26
PH	65.06	62.59	50.81	51.27	2.46	11.79	-0.47	67.84	51.68	31.42	26.63	16.16	20.26	4.79
Yola	53.70	51.63	58.61	51.29	2.07	-6.97	7.39	93.51	13.93	16.83	22.14	79.58	-2.9	-5.31
Total	71.02	69.42	66.50	67.84	1.60	2.92	-1.34	77.46	58.28	41.95	35.87	19.18	16.33	6.08
Average	65.72	64.63	63.01	64.08	1.10	1.61	-0.75	74.84	52.59	38.36	32.51	22.25	14.23	5.85

D. Licence, Permit and Certification

Table D.1: Licences issued and renewed by the Commission in 2022

S/N	Applicants	Capacity (MW)	Licence Type	Location	Fuel Type
A.	*New Issue*				
1	Daybreak Power Solutions Nigeria Limited	1.50	Off-Grid Generation	NBC Idu, Abuja	Solar
2	Daybreak Power Solutions Nigeria Limited	1.60	Off- Grid Generation	NBC Asejire, Oyo	Solar
3	Daybreak Power Solutions Nigeria Limited	3.50	Off-grid generation	NBC Challawa, Kano	Solar
4	CKS Power Nigeria Limited	5.00	Embedded generation	Yabo, Sokoto	Gas
5	Globeleq Power Solutions Limited	5.50	Off- Grid Generation	NBC Port Harcourt	Gas
6	Daybreak Power Solutions Limited	1.74	Off-grid generation	Kudenda, Kaduna	Solar
7	Daybreak Power Solutions Limited	6.00	Off- Grid Generation	7UP Ikeja, Lagos	Solar
8	Daybreak Power Solutions Limited	2.00	Off- Grid Generation	1A Lateef Jakande Road, Ikeja, Lagos	Solar
9	Daybreak Power Solutions Limited	2.00	Off- Grid Generation	1B Lateef Jakande Road, Ikeja	Solar
10	Genco Sunrise Limited	1.50	Embedded generation	Sunrise Hills Estate, Asokoro	Diesel
11	Electro Sunrise Limited	NA	Independent distribution	Sunrise Hills Estate, Asokoro	NA
12	Commercio Electricity Exchange Limited	NA	Trading Licence	Lagos	NA
13	Calabar Generation Company Limited	561.00	On-Grid Generation/ Amendment	Odukpani, Calabar	Gas
14	Cross Boundary Energy Nigeria Limited	4.00	Off-Grid Generation	Ama Brewery	Gas
15	Haske Solar Company Limited	10.00	Embedded Generation	Challawa, Kumbotso	Solar
16	Daybreak Power Solutions Limited	1.60	Off-Grid Generation	NBC Benin (A), Edo	Solar
17	Daybreak Power Solutions Limited	2.00	Off-Grid Generation	NBC Benin (B), Edo	Solar
18	Daybreak Power Solutions Limited	2.10	Off-Grid Generation	NBC Owerri, Imo	Solar
19	Daybreak Power Solutions Limited	1.75	Off-Grid Generation	NBC Port Harcourt	Solar
20	Daybreak Power Solutions Limited	3.50	Off-Grid Generation	NBC Badagry	Solar
21	Victoria Island Power Limited	30.00	Embedded Generation	Victory Island, Lagos	Gas
22	Ecof Nigeria Limited	NA	Trading Licence	Kaduna	NA
23	Ibom Utility Company Limited	NA	IEDN*	Ikot Abasi, Akwa Ibom	NA

S/N	Applicants	Capacity (MW)	Licence Type	Location	Fuel Type
24	MEPP Limited	50.00	On-grid	Baga road, Maiduguri, Borno	solar
25	Quest Oil & Engineering Services Ltd	6.50	Off-grid	Nigerian Bottling Company, Idu, FCT	Solar
B.	*Renewal*				
26	Olorunshogo Power Generation Company Limited	750.00	Renewal of on-grid generation	Olorunshogo, Ogun	Gas
27	Ogorode Power Generation Company Limited	450.00	Renewal of on-grid generation	Sapele, Delta	Gas
28	Alaoji Generation Company Limited	1070.00	Renewal of On-Grid Generation	Alaoji, Abia	Gas
29	Tower Power Utility Limited	20.00	off-grid generation	Ota, Ogun	Gas
C.	Licence Transferred				
30	Wapsila Nigeria Limited	310.00	Bilateral sale agreement with Lord's Mint Technologies Ltd	Ota, Ogun	Gas
31	Transfer of Licence issued to Standard Metallurgical Company Limited to Taopex Energy Services Company Limited	90.00	on-grid generation	Sagamu, Ogun	Gas

Notes of the table:
IEDN is an acronym for an Independent Electricity Distribution Network

Table D.2: Captive power generation Permits granted by the Commission in 2022

S/N	Applicants	Location	Capacity (MW)
A.	*Permit Issued*		
1	Speciality Pulp and Paper Company Limited	Ijebu Ode, Ogun	3.50
2	African Natural Resources & Mines Ltd	Gujeni, Abuja	50.00
3	Nigerian Breweries Plc	Aba Malting Plant	7.97
4	Nigerian Breweries Plc	Ibadan Breweries	7.97
5	Nigerian Breweries Plc	Aba Malting Plant	7.20
6	Nigerian Breweries Plc	Ama Bwereries	10.59
7	Nigerian Breweries Plc	Aba Bwereries	5.60
8	Nigerian Breweries Plc	Awo Omama Breweries	4.40
9	Nigerian Breweries Plc	Ijebu-Ode, Ogun	5.80
10	Greenville Oil & Gas Limited (renewal)	Emuoha, Rivers	80.00
11	Duport Midstream Company Limited	Egbokor, Edo	2.00
12	Julius Berger Nigeria Plc	Utako, FCT	3.00
13	Julius Berger Nigeria Plc	Idu, FCT	3.00
14	Mobil Producing Nigeria Unlimited	East Area Project Ibeno, Akwa Ibom	15.00
15	The Shell Petroleum Development Co. Nig. Ltd	Ogbotobo AG-Booster-Station	3.98
16	The Shell Petroleum Development Co. Nig. Ltd	Tunu CPF	15.86

S/N	Applicants	Location	Capacity (MW)
17	The Shell Petroleum Development Co. Nig. Ltd	Opukushi AG Booster StatioBenisede AG	4.28
18	The Shell Petroleum Development Co. Nig. Ltd	Booster Station	4.29
19	The Shell Petroleum Development Co. Nig. Ltd	Sea Eagle FPSO	50.00
20	The Shell Petroleum Development Co. Nig. Ltd	Kolo Creek Oil & NAG Manifold	6.00
21	The Shell Petroleum Development Co. Nig. Ltd	Okoloma	2.00
22	Niger Mills Limited	Murtala Muhammad Highway, Calabar	8.80
23	Mikano International Limited	Akinwande Street, Off Badagry Express Way	22.90
24	African Natural Resources & Mines Limited	Liverpool Road, Apapa, Lagos	50.00
25	Premier Polypack Limited	Plot 1 Block A Gbagada Industrial Estate Lagos	3.43
26	Wacot Rice Limited	Km 10 Argungu Sokoto Expressway Kebbi	3.40
27	Cadbury Nigeria Plc	Lateef Jakande, Agidingbi, Ikeja, Lagos	5.80
28	Niger Mills Company Limited	Murtala Mohammed Highway, Calabar	8.80
29	Chi Limited	Ajao, Estate, Lagos	23.59
30	Nigerian Breweries Plc	Aba, Abia	7.97
31	Nigerian Breweries Plc	New Ife Road, Ibadan	7.20
32	Nigerian Breweries Plc	Mile Corner Ama-Eke, Ngwo Enugu	5.60
33	Nigerian Breweries Plc	Ama, Abua	10.80
34	Nigerian Breweries Plc	Awo-Omama	4.40
35	Nigerian Breweries Plc	Ijebu Ode, Ogun	5.80

Notes of the table:
CPG is an acronym for Captive Power Generation

Table D.3: Mini-grid registrations and Permits approved by the Commission in 2022

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

S/N	Name	Location	Capacity (Kw)
18	Power Gen Nigeria Assets Limited	Sosa, Lavun, Niger	106
19	Power Gen Nigeria Assets Limited	Ebangi, Lavun, Niger	106
20	Power Gen Nigeria Assets Limited	Gbade, Lavun, Niger	186
21	Power Gen Nigeria Assets Limited	Dukugi, Lavun, Niger	256
22	Power Gen Nigeria Assets Limited	Danchitagi, Lavun, Niger	330
23	Power Gen Nigeria Assets Limited	Toto, Toto, Nasarawa	362
24	ABSI Building System International Limited	Abuke Oluwo, Owode, Ogun	80
25	Decrown West Africa Company Limited	Sule Camp, Ovia Southwest, Edo	100
26	Husk Power Energy Systems Nigeria	Acura, Lafia, Nassarawa	100
27	Darway Coast Nigeria Limited	Odiopiti, Ahoada West, Rivers	71
28	Darway Coast Nigeria Limited	Ekowe, Southern Ijaw, Bayelsa	99
29	Darway Coast Nigeria Limited	Odeke, Ibaji, Kogi	88
30	Darway Coast Nigeria Limited	Amala 2, Ngor Okpala, Imo	99
31	Darway Coast Nigeria Limited	Okumbiri, Sagbama, Bayelsa	71
32	Darway Coast Nigeria Limited	Umudora, Anambra West, Anambra	99
33	Darway Coast Nigeria Limited	Emirikpoko, Abua/Odual, Rivers	78
34	Darway Coast Nigeria Limited	Oroma-Etiti, Anambra West, Anambra	99
35	Darway Coast Nigeria Limited	Umuawaibu, Okigwe, Imo	71
36	Darway Coast Nigeria Limited	Emago- Kugbo, Abua/Odual, Rivers	99
37	Darway Coast Nigeria Limited	Amatolo, Sagbama, Bayelsa	71
38	Darway Coast Nigeria Limited	Akeddei, Sagbama, Bayelsa	99
39	Privida Power Limited	Sati-Ikov, Ushongo Benue	50
40	Privida Power Limited	Nyanikhume, Kwande, Benue	50
41	Privida Power Limited	Ugbedomagwu, Igalamela Odolu, Kogi	45
42	Privida Power Limited	Odamagu-Odo, Omala, Kogi	8
43	Privida Power Limited	Ugbamaka, Ofu, Kogi	45
44	Privida Power Limited	Kpnache Ozongulo, Bassa, Kogi	55
45	Privida Power Limited	Ikem Ogugu, Olamaboro, Kogi	60
46	Privida Power Limited	Igoti-Iboko, Ofu, Kogi	71
47	Privida Power Limited	Emonoji, Omala, Kogi	15
48	Privida Power Limited	Emakpe, Igalamela Odolu, Kogi	15
49	Privida Power Limited	Emagaba II, Olamaboro, Kogi	71
50	Privida Power Limited	Ekelekwu, Igalamela Odolu, Kogi	15
51	A4 & T Power Solutions	Orisunbare, Ondo East, Ondo State	15
52	Husk power Limited	Rukubi, Doma, Nasarawa	100
53	Triple E System Limited	Onirogbo, Odigbo, Ondo	5
54	Ay Global Integrated Resource	Binjun Muza Bunji Sokoto	60
55	Maskh Limited Bauchi	Magorta Hos Gatour	50
56	Maskh Limited Bauchi	Hakatafi Ganjuwa Bauchi	30
57	Maskh Limited	Hakatafi, Ganjuwa, Bauchi	30
58	Maskh Limited	Dunari, Itas Gadua, Bauchi	30
59	Maskh Limited	Shagari Ganjuwa Bauchi	30
60	Maskh Nigeria Limited	Mela dige, Itas Gadau, Bauchi	50
61	A4 & T Power Solutions	Ilugha, Ondo West, Ondo	96
62	Prado Power Ltd	Aninigi Paikoro Niger	54
63	Prado Power Ltd	Mbiabet Eseiyete Ini Akwa Ibom	36

S/N	Name	Location	Capacity (Kw)
64	Solad Tnt Power Solutions Limited	Ikenne Market, Ikenne, Ogun	58
65	ACOB Lighting Tech Limited	Otu Costain Odigbo Ogun	70
66	ACOB Lighting Tech Limited	Bolorunduro Odigbo Ogun	40
67	ACOB Lighting Tech Limited	Mile 13 Ajebamijoko Odigbo Ogun	55
68	ACOB Lighting Tech Limited	Adaja Odigbo Ogun	40
69	ECOF Kaduna Limited	Chikaji Giwari Igabi Kaduna	42
70	Havenhill Synergy Limited	Olokoto, Orile-north, Oyo	16
	B. Approved Permits		
71	Ventura Logistic Services Limited	Mebiowa Okposi, Ohaozara LGA, Ebonyi State	98
72	Zanoplus Energy Limited	Ifite-Ogwari, Aguata LGA, Anambra State	199
73	Blue Camel Energy Limited	Kasuwan Magani, Kajuru, Kaduna	100
74	Husk Power Energy Systems Nigeria Limited	Gidan Buba, Lafia, Nassarawa	110
75	Privida Power Limited	Ugah,1, Lafia Nasarawa	220
76	Privida Power Limited	Ugah,2, Lafia Nasarawa	240
77	Privida Power Limited	Ochi- Adegbe, ofu Kogi	205
78	Privida Power Limited	Alla Ejima, ofo, Kogi	230
79	Privida Power Limited	Bagaji- Ofo Omola, Kogi	225
80	Privida Power Limited	Azara, awe, Nasarawa	250
81	Privida Power Limited	Otukpo, Apa, Benue	155
82	Privida Power Limited	Adupi fzmimko, olamaboro, Kogi	170
83	Renewvia Solar Nigeria Limited	Ekong – Anaku, Akampa, Cross River	60
84	Renewvia Solar Nigeria Limited	Opu, Ikom, Cross River	14
85	Renewvia Solar Nigeria Limited	Bendeghe Afi, Ikom, Cross River	18
86	Renewvia Solar Nigeria Limited	Emereoke Eastern Obolo Akwa Ibom	28
87	Renewvia Solar Nigeria Limited	Balep Ikom Cross River	9
88	Engie Energy Access	Gbangba, Gbako, Niger	90
89	Husk Power Limited	Kiguna, Lafia, Nassarawa	100
90	Husk Power Limited	Sabon Gida, Lafia, Nassarawa	100
91	Husk Power Limited	Akura, Lafia, Nassarawa	100
92	Husk Power Energy System Nig. Limited	Yelwa Ediya Doma Nassarawa	100
93	Nayo Tropical Tech Limited	Soba Mashegu Niger100	100
94	Nayo Tropical Tech Limited	Sahon Rami Mashegu Niger	228
95	Nayo Tropical Tech Limited	Sabon Rijiya Mashegu Niger	198
96	Nayo Tropical Tech Limited	Bokani Mokwa Niger	150
97	Nayo Tropical Tech Limited	Shafini Magama Niger	60
98	Nayo Tropical Tech Limited	Adogo Mallam Mashegu Niger	180
99	Wavelength-Commur pwr Networks Limited	Imula Danre Ondo	132
100	Darway Coast Nig. Ltd	Lokpowkwu 1, Uwunneochi Abia	449
101	Darway Coast Nig. Ltd	Lokpowkwu 2, Uwunneochi Abia	449
102	Darway Coast Nig. Ltd	Fule-Uma Ahoada West Rivers	449
103	Darway Coast Nig. Ltd	Orwu-Ogita Teche Rivers	269
104	Darway Coast Nig. Ltd	Umuoye Eteche Rivers	221
105	Darway Coast Nig. Ltd	Akpokui lopai Niger	159
106	Husk Power Energy Systems Nigeria Limited	Ijajun Doma, Nasarawa	100

S/N	Name	Location	Capacity (Kw)
107	Husk Power Energy Systems Nigeria Limited	Fadama Bauna North, Lafia Nasarawa	100
108	Powergen Nig Asset Limited	Araromi Olatapo Otiglo, Ondo	224
109	Prado Power Limited	Maijaki Lapai, Niger	45
110	Prado Power Limited	Lafia Kpada Lapai Niger	50
111	Ceesolar Energy Limited	Abaribara Abayong Biase, Cross River	22
112	Ventura Logistics Services Limited	Odege Okposi Ohaozora	99
113	NXT Grid Nigeria Limited	Matari Soba Kaduna	117
114	Darway Coast Nigeria Limited	Agbokim Etung Cross River	130
115	Darway Coast Nigeria Limited	Abia Etung Cross River	71
116	Darway Coast Nigeria Limited	Bendeghe Etung Cross River	140
117	Darway Coast Nigeria Limited	Etomi Etung LGA Cross River	115
118	Enaro Energy Mini Grid Limited	Ishoka phase 1, Mercy Land and Mercy phase 1 Estate, Ajobo Ipaja LGA, Lagos	999

Table D.4: Meter service providers certified by the Commission in 2022

S/N	Applicant	Application Type
1	Bajis Limited	Installer
2	Nextsol Nigeria Limited	Installer
3	Tis & P Dynamic Solutions Limited	Installer
4	Jofebo Global Resources Limited	Installer
5	Tinutten Nigeria Limited	Installer
6	Watts & Grid Limited	Installer
7	Global Hydro Cool Water Limited	Installer
8	Information Management Technology Limited	Installer
9	Felcon Multi Services Ltd	Installer
10	Pro Engineering Innoveture Ltd	Installer
11	Tee jay -Ade-Afolabi Electrical Enterprises	Installer
12	Crestzone Resource Ltd	Installer
13	Princaasi Integrated Services	Installer
14	Specline Integrated Services Ltd	Installer
15	Estervo System Company Limited	Installer
16	Teejay Ade Afolabi Electrical Enterprises	Installer
17	Panida Resources Ltd	Installer
18	Damijosh Energy Limited	Installer
19	HACOM Energy Limited	Installer
20	Elvic Professional Services Ltd	Installer
21	Estervo System Company Ltd	Installer
22	Universal Integrated Power & Utility Services ltd	Installer
23	ASBA Synergy Concept Limited	Manufacturer
24	Sandex Global Resources Limited	Manufacturer
25	Payafrik International Limited	Manufacturer
26	Chintec Electro Nig. Ltd	Manufacturer
27	News Engineering Nig Ltd	Manufacturer
28	Marks and Adams	Manufacturer
29	Anietronic Limited	Manufacturer

30	Kobeissi Electrical & Mechanical Engineering Ltd	Manufacturer
31	Morgan Energy Limited	Manufacturer
32	Nigerian Energy Support Program	Importer
33	Conlog Meter Solutions Nigeria Limited	Importer
34	Sparkmeter West Africa Limited	Importer
35	Q-Tech Nigeria Limited	Importer
36	Utility Performance Limited	Vendor
	MAP	DisCo
37	Erasko Energy Ltd	Ikeja
38	Mojec Meter Asset Management Company Ltd	Yola
39	Volvo & Vision Business Ltd.	Yola
40	Crest Hill Engineering Ltd	Yola

E. Consumer Enlightenment, Metering and Complaints

Table E.1: Customers registered, metered and unmetered, 2018-2022

	Registered Customers (RC) by DisCos							
	2022/Q1 As at 31 March		2022/Q2 As at 30 June		2022/Q3 As at 31 September		2022/Q4 As at 31 December	
DisCos	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share
Abuja	1,126,682	8.98	1,163,553	9.20	1,250,563	9.78	1,290,977	10.62
Benin	1,652,722	13.18	1,665,886	13.18	1,680,279	13.14	1,186,922	9.77
Eko	646,023	5.15	654,184	5.17	660,087	5.16	689,237	5.67
Enugu	1,665,264	13.28	1,666,840	13.18	1,691,865	13.23	1,391,562	11.45
Ibadan	2,121,325	16.91	2,141,404	16.94	2,176,067	17.01	2,220,266	18.27
Ikeja	1,298,323	10.35	1,298,323	10.27	1,298,323	10.15	1,298,323	10.68
Jos	692,474	5.52	696,211	5.51	699,455	5.47	705,249	5.80
Kaduna	809,003	6.45	818,890	6.48	837,389	6.55	844,996	6.95
Kano	884,710	7.05	884,799	7.00	838,091	6.55	849,311	6.99
Port Harcourt	1,177,641	9.39	1,178,868	9.32	1,179,194	9.22	1,179,194	9.70
Yola	468,414	3.63	474,672	3.75	480,584	3.76	496,069	4.08
Total	12,542,581	100.00	12,643,630	100.00	12,791,897	100.00	12,152,106	100.00
	Metered Customers by DisCos							
	2022/Q1 As at 31 March		2022/Q2 As at 30 June		2022/Q3 As at 31 September		2022/Q4 As at 31 December	
DisCos	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC
Abuja	675,098	14.24	710,870	14.51	726,553	14.47	757,458	14.75
Benin	627,764	13.24	631,898	12.90	634,457	12.63	607,902	11.84
Eko	353,232	7.45	360,152	7.35	372,113	7.41	391,398	7.62
Enugu	551,703	11.64	559,810	11.43	571,700	11.38	537,408	10.47
Ibadan	800,888	16.90	828,061	16.90	858,822	17.10	905,824	17.64
Ikeja	645,862	13.63	686,705	14.02	713,508	14.21	763,680	14.87
Jos	212,449	4.48	219,243	4.48	222,868	4.44	226,611	4.41
Kaduna	179,482	3.79	192,848	3.94	196,599	3.91	197,442	3.85
Kano	194,628	4.11	199,234	4.07	210,537	4.19	205,280	4.00
Port Harcourt	414,951	8.75	425,784	8.69	435,670	8.68	445,174	8.67
Yola	84,057	1.77	84,116	1.72	88	0.00	96,694	1.88
Total	4,740,114	100.00	4,898,721	100.00	5,021,862	100.00	5,134,871	100.00
	Unmetered Customers by DisCos							
	2022/Q1 As at 31 March		2022/Q2 As at 30 June		2022/Q3 As at 31 September		2022/Q4 As at December	
DisCos	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC
Abuja	451,584	5.79	452,683	5.84	524,010	6.74	533,519	7.60
Benin	1,024,958	13.14	1,033,988	13.35	1,045,822	13.46	579,020	8.25
Eko	292,791	3.75	294,032	3.80	287,974	3.71	297,839	4.24
Enugu	1,113,561	14.27	1,107,030	14.29	1,120,165	14.42	854,154	12.17
Ibadan	1,320,437	16.92	1,313,343	16.96	1,317,245	16.95	1,314,442	18.73
Ikeja	652,461	8.36	611,618	7.90	584,815	7.53	534,643	7.62
Jos	480,025	6.15	476,968	6.16	476,587	6.13	478,638	6.82
Kaduna	629,521	8.07	626,042	8.08	640,790	8.25	647,554	9.23
Kano	690,082	8.84	685,565	8.85	627,554	8.08	644,031	9.18
Port Harcourt	762,690	9.77	753,084	9.72	743,524	9.57	734,020	10.46
Yola	384,357	4.93	390,556	5.04	480,496	6.18	399,375	5.69
Total	7,802,467	100.00	7,744,909	100.00	7,770,035	100.00	7,017,235	100.00

Table E.1 Cont'd: Customers registered, metered and unmetered, 2018-2022

	Registered Customers (RC) by DisCos							
	2021/Q1 As at 31 March		2021/Q2 As at 30 June		2021/Q3 As at 31 September		2021/Q4 As at 31 December	
DisCos	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share
Abuja	1,533,401	14.23	1,550,062	14.02	1,575,421	12.32	1,581,212	12.29
Benin	1,088,812	10.10	1,119,118	10.12	1,626,697	12.72	1,645,337	12.79
Eko	572,328	5.31	608,252	5.50	611,941	4.79	614,370	4.77
Enugu	1,250,159	11.60	1,284,548	11.62	1,660,084	12.98	1,663,429	12.93
Ibadan	1,983,521	18.41	2,017,113	18.24	2,051,727	16.05	2,084,476	16.20
Ikeja	1,143,431	10.61	1,183,171	10.70	1,298,323	10.16	1,298,323	10.09
Jos	658,657	6.11	671,821	6.07	671,180	5.25	681,002	5.29
Kaduna	736,213	6.83	743,506	6.72	780,793	6.11	791,430	6.15
Kano	668,723	6.21	668,707	6.05	766,590	6.00	766,590	5.96
Port Harcourt	705,038	6.54	766,755	6.93	1,288,197	10.08	1,288,197	10.01
Yola	436,509	4.05	445,886	4.03	453,732	3.55	453,732	3.50
Total	10,776,792	100.00	11,058,939	100.00	12,784,685	100.00	12,868,098	100.00
	Metered Customers by DisCos							
	2021/Q1 As at 31 March		2021/Q2 As at 30 June		2021/Q3 As at 31 September		2021/Q4 As at 31 December	
DisCos	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC
Abuja	764,126	17.66	663,374	15.06	701,489	14.70	701,781	14.96
Benin	574,918	13.29	601,977	13.67	597,819	12.53	622,429	13.27
Eko	296,854	6.86	321,335	7.30	350,844	7.35	347,116	7.40
Enugu	479,799	11.09	499,724	11.35	385,852	8.08	545,035	11.62
Ibadan	672,783	15.55	761,094	17.28	723,718	15.16	782,105	16.67
Ikeja	679,764	15.71	620,144	14.08	761,518	15.96	633,562	13.51
Jos	130,770	3.02	160,204	3.64	253,310	5.31	212,265	4.52
Kaduna	155,425	3.59	158,921	3.61	300,544	6.30	166,814	3.56
Kano	131,113	3.03	147,866	3.36	231,427	4.85	190,834	4.07
Port Harcourt	365,980	8.46	384,611	8.73	393,658	8.25	404,439	8.62
Yola	75,089	1.74	84,763	1.92	72,727	1.52	84,774	1.81
Total	4,326,621	100.00	4,404,013	100.00	4,772,906	100.00	4,691,154	100.00
	Unmetered Customers by DisCos							
	2021/Q1 As at 31 March		2021/Q3 As at 30 June		2021/Q3 As of 31 September		2021/Q4 As of 31 December	
DisCos	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC
Abuja	769,275	11.93	886,688	13.32	873,932	10.91	879,431	10.76
Benin	513,894	7.97	517,141	7.77	1,028,878	12.84	1,022,908	12.51
Eko	275,474	4.27	286,917	4.31	261,097	3.26	267,254	3.27
Enugu	770,360	11.94	784,824	11.79	1,274,232	15.90	1,118,394	13.68
Ibadan	1,310,738	20.32	1,256,019	18.87	1,328,009	16.58	1,302,371	15.93
Ikeja	463,667	7.19	563,027	8.46	536,805	6.70	664,761	8.13
Jos	527,887	8.18	511,617	7.69	417,870	5.22	468,737	5.73
Kaduna	580,788	9.00	584,585	8.78	480,249	5.99	624,616	7.64
Kano	537,610	8.33	520,841	7.83	535,163	6.68	575,756	7.04
Port Harcourt	339,058	5.26	382,144	5.74	894,539	11.17	883,758	10.81
Yola	361,420	5.60	361,123	5.43	381,005	4.76	368,958	4.51
Total	6,450,171	100.00	6,654,926	100.00	8,011,779	100.00	8,176,944	100.00

Table E.1 Cont'd: Customers registered, metered and unmetered, 2018-2022

	Registered Customers (RC) by DisCos							
	2020/Q1 As at 31 March		2020/Q2 As at 30 June		2020/Q3 As at 31 September		2020/Q4 As at 31 December	
DisCos	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share
Abuja	1,271,563	12.14	1,277,921	12.15	1,468,404	12.40	1,468,404	12.40
Benin	1,022,458	9.76	1,027,570	9.77	1,180,650	9.97	1,180,650	9.97
Eko	518,192	4.95	520,783	4.95	541,560	4.57	541,560	4.57
Enugu	1,100,292	10.50	1,105,793	10.52	1,183,093	9.99	1,183,093	9.99
Ibadan	2,139,741	20.42	2,150,440	20.45	2,907,214	24.55	2,907,214	24.55
Ikeja	1,145,622	10.93	1,145,622	10.89	1,145,622	9.67	1,145,622	9.67
Jos	537,726	5.13	540,415	5.14	598,430	5.05	598,430	5.05
Kaduna	675,059	6.44	678,434	6.45	721,436	6.09	721,436	6.09
Kano	699,618	6.68	699,618	6.65	699,618	5.91	699,618	5.91
Port Harcourt	985,782	9.41	985,782	9.37	985,782	8.32	985,782	8.32
Yola	381,803	3.64	383,712	3.65	410,010	3.46	410,010	3.46
Total	10,477,856	100.00	10,516,090	100.00	11,841,819	100.00	11,841,819	100.00
	Metered Customers by DisCos							
	2020/Q1 As at 31 March		2020/Q2 As at 30 June		2020/Q3 As at 31 September		2020/Q4 As at 31 December	
DisCos	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC
Abuja	670,485	52.73	671,822	52.57	707,534	48.18	707,534	48.18
Benin	554,443	54.23	555,174	54.03	571,600	48.41	571,600	48.41
Eko	262,752	50.71	263,503	50.60	286,847	52.97	286,847	52.97
Enugu	493,509	44.85	493,509	44.63	505,136	42.70	505,136	42.70
Ibadan	794,136	37.11	794,136	36.93	807,573	27.78	807,573	27.78
Ikeja	520,859	45.47	520,859	45.47	562,837	49.13	562,837	49.13
Jos	170,989	31.80	170,989	31.64	172,627	28.85	172,627	28.85
Kaduna	159,322	23.60	159,322	23.48	232,405	32.21	232,405	32.21
Kano	147,682	21.11	147,682	21.11	352,493	50.38	352,493	50.38
Port Harcourt	379,729	38.52	379,729	38.52	387,025	39.26	387,025	39.26
Yola	78,034	20.44	78,034	20.34	80,114	19.54	80,114	19.54
Total	4,231,940	40.39	4,234,759	40.27	4,666,191	39.40	4,666,191	39.40
	Unmetered Customers by DisCos							
	2020/Q1 As at 31 March		2020/Q2 As at 30 June		2020/Q3 As at 31 September		2020/Q4 As at 31 December	
DisCos	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC
Abuja	601,078	47.27	606,099	47.43	760,870	51.82	760,870	51.82
Benin	468,015	45.77	472,396	45.97	609,050	51.59	609,050	51.59
Eko	255,440	49.29	257,280	49.40	254,713	47.03	254,713	47.03
Enugu	606,783	55.15	612,284	55.37	677,957	57.30	677,957	57.30
Ibadan	1,345,605	62.89	1,356,304	63.07	2,099,641	72.22	2,099,641	72.22
Ikeja	624,763	54.53	624,763	54.53	582,785	50.87	582,785	50.87
Jos	366,737	68.20	369,426	68.36	425,803	71.15	425,803	71.15
Kaduna	515,737	76.40	519,112	76.52	489,031	67.79	489,031	67.79
Kano	551,936	78.89	551,936	78.89	347,125	49.62	347,125	49.62
Port Harcourt	606,053	61.48	606,053	61.48	598,757	60.74	598,757	60.74
Yola	303,769	79.56	305,678	79.66	329,896	80.46	329,896	80.46
Total	6,245,916	59.61	6,281,331	59.73	7,175,628	60.60	7,175,628	60.60

Table E.1 Cont'd: Customers registered, metered and unmetered, 2018-2022

	Registered Customers (RC) by DisCos							
	2019/Q1 As at 31 March		2019/Q2 As at 30 June		2019/Q3 As at 31 September		2019/Q4 As at 31 December	
DisCos	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share
Abuja	1,080,637	12.22	1,097,279	12.35	1,164,748	12.04	1,228,288	11.84
Benin	970,000	10.97	970,000	10.92	1,001,821	10.36	1,022,458	9.86
Eko	493,639	5.58	493,639	5.56	504,225	5.21	518,192	4.99
Enugu	985,112	11.14	985,112	11.09	1,075,626	11.12	1,100,292	10.61
Ibadan	1,779,751	20.13	1,779,751	20.04	2,090,781	21.61	2,139,741	20.62
Ikeja	972,589	11.00	972,589	10.95	996,769	10.30	1,145,622	11.04
Jos	486,198	5.50	510,198	5.74	512,108	5.29	537,726	5.18
Kaduna	673,848	7.62	673,848	7.59	673,848	6.97	673,848	6.50
Kano	529,114	5.98	529,114	5.96	516,947	5.34	689,304	6.64
Port Harcourt	523,693	5.92	523,693	5.90	761,105	7.87	937,305	9.03
Yola	346,220	3.92	346,220	3.90	376,751	3.89	381,803	3.68
Total	8,840,801	100.00	8,881,443	100.00	9,674,729	100.00	10,374,579	100.00
	Metered Customers by DisCos							
	2019/Q1 As at 31 March		2019/Q2 As at 30 June		2019/Q3 As at 31 September		2019/Q4 As at 31 December	
DisCos	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC
Abuja	568,180	52.58	574,743	52.38	631,387	54.21	641,738	52.25
Benin	548,261	56.52	548,261	56.52	549,211	54.82	553,394	54.12
Eko	239,559	48.53	239,559	48.53	240,663	47.73	255,880	49.38
Enugu	429,623	43.61	438,471	44.51	450,632	41.89	476,955	43.35
Ibadan	687,652	38.64	687,652	38.64	689,123	32.96	783,878	36.63
Ikeja	447,299	45.99	449,639	46.23	458,494	46.00	488,917	42.68
Jos	170,409	35.05	170,492	33.42	170,492	33.29	170,522	31.71
Kaduna	149,588	22.20	149,588	22.20	149,968	22.26	157,576	23.38
Kano	126,539	23.92	126,539	23.92	126,539	24.48	147,104	21.34
Port Harcourt	355,205	67.83	355,205	67.83	357,408	46.96	374,793	39.99
Yola	71,580	20.67	71,580	20.67	71,580	19.00	78,034	20.44
Total	3,793,895	42.91	3,811,729	42.92	3,895,497	40.26	4,128,791	39.80
	Unmetered Customers by DisCos							
	2019/Q1 As at 31 March		2019/Q2 As at 30 June		2019/Q3 As at 31 September		2019/Q4 As at 31 December	
DisCos	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC
Abuja	512,457	47.42	522,536	47.62	533,361	45.79	586,550	47.75
Benin	421,739	43.48	421,739	43.48	452,610	45.18	469,064	45.88
Eko	254,080	51.47	254,080	51.47	263,562	52.27	262,312	50.62
Enugu	555,489	56.39	546,641	55.49	624,994	58.11	623,337	56.65
Ibadan	1,092,099	61.36	1,092,099	61.36	1,401,658	67.04	1,355,863	63.37
Ikeja	525,290	54.01	522,950	53.77	538,275	54.00	656,705	57.32
Jos	315,789	64.95	339,706	66.58	341,616	66.71	367,204	68.29
Kaduna	524,260	77.80	524,260	77.80	523,880	77.74	516,272	76.62
Kano	402,575	76.08	402,575	76.08	390,408	75.52	542,200	78.66
Port Harcourt	168,488	32.17	168,488	32.17	403,697	53.04	562,512	60.01
Yola	274,640	79.33	274,640	79.33	305,171	81.00	303,769	79.56
Total	5,046,906	57.09	5,069,714	57.08	5,779,232	59.74	6,245,788	60.20

Table E.1 Cont'd: Customers registered, metered and unmetered, 2018-2022

	Registered Customers (RC) by DisCos							
	2018/Q1 As at 31 March		2018/Q2 As at 30 June		2018/Q3 As at 31 September		2018/Q4 As at 31 December	
DisCos	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share	Registered Customers	% Share
Abuja	1,129,521	13.88	967,667	12.14	973,926	11.72	983,496	11.40
Benin	856,292	10.53	856,292	10.74	888,143	10.69	920,190	10.66
Eko	470,766	5.79	470,766	5.90	496,442	5.97	494,888	5.73
Enugu	884,992	10.88	884,992	11.10	938,311	11.29	982,155	11.38
Ibadan	1,613,635	19.83	1,613,635	20.24	1,693,346	20.38	1,779,751	20.62
Ikeja	910,338	11.19	910,338	11.42	910,465	10.96	998,673	11.57
Jos	486,198	5.98	486,198	6.10	486,580	5.86	520,585	6.03
Kaduna	484,310	5.95	484,310	6.07	543,654	6.54	589,810	6.83
Kano	508,640	6.25	508,640	6.38	508,943	6.12	495,522	5.74
Port Harcourt	453,818	5.58	453,818	5.69	524,255	6.31	506,488	5.87
Yola	337,220	4.14	337,220	4.23	346,342	4.17	358,982	4.16
Total	8,135,730	100.00	7,973,876	100.00	8,310,408	100.00	8,630,540	100.00
	Metered Customers by DisCos							
	2018/Q1 As at 31 March		2018/Q2 As at 30 June		2018/Q3 As at 31 September		2018/Q4 As at 31 December	
DisCos	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC	Metered Customers	As % of RC
Abuja	430,098	38.08	526,120	54.37	527,900	54.20	482,508*	49.06
Benin	544,828	63.63	548,261	64.03	548,261	61.73	549,789	59.75
Eko	215,987	45.88	235,038	49.93	222,344*	44.79	240,699	48.64
Enugu	409,748	46.30	312,385*	35.30	429,623	45.79	387,758*	39.48
Ibadan	665,609	41.25	687,652	42.62	669,105*	39.51	644,322*	36.20
Ikeja	311,332	34.20	447,299	49.14	447,299	49.13	466,746	46.74
Jos	170,409	35.05	170,409	35.05	170,409	35.02	160,670*	30.86
Kaduna	136,037	28.09	136,037	28.09	136,037	25.02	139,895	23.72
Kano	126,539	24.88	101,732*	20.00	126,539	24.86	135,491	27.34
Port Harcourt	352,533	77.68	310,616*	68.45	355,205	67.75	304,737*	60.17
Yola	70,883	21.02	71,580	21.23	71,580	20.67	70,782*	19.72
Total	3,434,003	42.21	3,547,129	44.48	3,704,302	44.57	3,583,397*	41.52
	Unmetered Customers by DisCos							
	2018/Q1 As at 31 March		2018/Q2 As at 30 June		2018/Q3 As at 31 September		2018/Q4 As at 31 December	
DisCos	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC	Unmetered Customers	As % of RC
Abuja	699,423	61.92	1,361,248	45.63	446,026	45.80	500,988	50.94
Benin	311,464	36.37	308,031	35.97	339,882	38.27	370,401	40.25
Eko	254,779	54.12	235,728	50.07	274,098	55.21	254,189	51.36
Enugu	475,244	53.70	572,607	64.70	508,688	54.21	594,397	60.52
Ibadan	948,026	58.75	925,983	57.38	1,024,241	60.49	1,135,429	63.80
Ikeja	599,006	65.80	463,039	50.86	463,166	50.87	531,927	53.26
Jos	315,789	64.95	315,789	64.95	316,171	64.98	359,915	69.14
Kaduna	348,273	71.91	348,273	71.91	407,617	74.98	449,915	76.28
Kano	382,101	75.12	406,908	80.00	382,404	75.14	360,031	72.66
Port Harcourt	101,285	22.32	143,202	31.55	169,050	32.25	201,751	39.83
Yola	266,337	78.98	265,640	78.77	274,762	79.33	288,200	80.28
Total	4,701,727	57.79	5,346,448	55.52	4,606,106	55.43	5,047,143	58.48

Notes of the table:
1. % Share is the ratio of the registered customers by a DisCo to the registered customers by all DisCos

Table E.2: Summary of customers metering status, 2020-2022

DisCos	Registered Customers As at December 2022	Registered Customers As at December 2021	Registered Customers As at December 2020	Metered Customers As at December 2022	Metered Customers As at December 2021	Metered Customers As at December 2020	Metered Customers Pre-Privatization Policy	DisCos Metering per Annum	Metering Pledge Gaps in 2022	Metering Pledge Gaps in 2021	Metering Pledge Gaps in 2020	Total Metering Gap as at December 2022
Abuja	1,290,977	1,581,212	1,468,404	701,781	701,781	707,534	392,488	150,000	94,323	155,753	84,204	533,519
Benin	1,186,922	1,645,337	1,180,650	622,429	622,429	571,600	425,308	264,000	278,527	213,171	245,794	579,020
Eko	689,237	614,370	541,560	347,116	347,116	286,847	189,542	204,000	159,718	143,731	173,033	297,839
Enugu	1,391,562	1,663,429	1,183,093	545,035	545,035	505,136	218,718	48,000	55,627	8,101	19,819	854,154
Ibadan	2,220,266	2,084,476	2,907,214	782,105	782,105	807,573	413,297	217,611	93,892	243,079	193,916	1,314,442
Ikeja	1,298,323	1,298,323	1,145,622	633,562	633,562	562,837	391,724	120,000	(10,118)	49,275	46,080	534,643
Jos	705,249	681,002	598,430	212,265	212,265	172,627	168,046	100,000	85,654	60,362	97,895	478,638
Kaduna	844,996	791,430	721,436	166,814	166,814	232,405	175,275	187,200	156,572	252,791	112,371	647,554
Kano	849,311	766,590	699,618	190,834	190,834	352,493	146,329	100,000	85,554	261,659	(105,389)	644,031
Port Harcourt	1,179,194	1,288,197	985,782	404,439	404,439	387,025	199,501	252,000	211,265	234,586	239,768	734,020
Yola	496,069	453,732	410,010	84,774	84,774	80,114	61,599	51,600	39,680	46,940	49,520	399,375
Total	12,152,106	12,868,098	11,841,819	4,691,154	4,691,154	4,666,191	2,781,827	1,694,411	1,250,694	1,669,448	1,157,011	7,017,235

Notes of the table:

1. BPE is the Bureau of Public Enterprise

Table E.3: Customer complaints received and resolved by DisCos in 2022

	2022/Q1			2022/Q2			2022/Q3			2022/Q4			2022		
	Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints		
DisCos	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending
Abuja	27,251	26,948	303	25,471	24,908	705	31,004	30,325	679	30,662	30,107	555	114,388	112,324	2,064
Benin	9,546	9,163	383	8,252	7,612	635	8,212	7,168	1,044	4,606	4,225	381	30,616	28,168	2,448
Eko	37,938	37,412	526	36,502	35,995	763	38,638	35,881	2,757	43,997	40,733	3,264	148,165	136,075	12,090
Enugu	29,028	23,466	5,562	20,815	15,742	2,708	20,312	16,430	3,882	24,601	22,729	1,872	103,666	92,313	11,353
Ibadan	15,102	14,179	923	37,186	29,752	1,118	32,094	24,040	8,054	40,178	36,068	4,110	124,560	104,039	20,521
Ikeja	36,802	33,542	3,260	40,790	37,579	3,414	32,044	28,868	3,176	29,282	19,536	9,746	138,918	119,525	19,393
Jos	18,878	18,475	403	11,708	11,524	457	11,671	11,581	90	14,815	13,950	865	57,072	55,530	1,542
Kaduna	8,369	7,425	944	8,410	7,862	819	8,144	7,744	400	7,258	6,845	413	32,175	29,876	2,299
Kano	13,037	12,969	68	10,549	10,461	453	14,880	14,723	157	13,727	13,632	95	52,193	51,785	408
P/H	46,152	45,646	506	49,292	48,458	220	47,550	46,996	554	49,449	48,291	1,158	192,443	189,391	3,052
Yola	1,290	1,268	22	2,032	2,012	15	2,777	2,767	10	2,703	2,649	54	8,802	8,696	106
Average	22,127	20,954	1,173	22,819	21,082	1,737	22,484	20,593	1,891	23,753	21,706	2,047	91,182	84,338	6,843
Total	243,393	230,493	12,900	251,007	231,905	19,102	247,326	226,523	20,803	261,278	238,765	22,513	1,002,998	927,722	75,276

Table E.3 Cont'd: Customer complaints received and resolved by DisCos in 2021

	2021/Q1			2021/Q2			2021/Q3			2021/Q4			2021		
	Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints		
DisCos	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending
Abuja	27,224	26,643	581	37,624	36,919	705	35,958	35,041	917	31,051	29,967	1,084	131,857	128,570	3,287
Benin	18,192	16,985	1,207	14,795	14,160	635	12,920	12,397	523	11,383	10,832	551	57,290	54,374	2,916
Eko	55,200	54,438	762	54,658	53,895	763	50,712	50,092	620	37,033	35,757	1,276	197,603	194,182	3,421
Enugu	28,072	26,529	1,543	29,233	26,525	2,708	20,585	19,341	1,244	24,089	22,046	2,043	101,979	94,441	7,538
Ibadan	9,984	8,573	1,411	8,581	7,463	1,118	8,876	8,050	826	9,898	9,017	881	37,339	33,103	4,236
Ikeja	37,950	34,533	3,417	38,473	35,059	3,414	37,964	35,096	2,868	35,191	32,375	2,816	149,578	137,063	12,515
Jos	10,676	10,030	646	12,825	12,368	457	13,193	12,734	459	13,427	13,178	249	50,121	48,310	1,811
Kaduna	8,905	7,795	1,110	8,058	7,239	819	8,865	8,051	814	11,036	10,603	433	36,864	33,688	3,176
Kano	12,253	12,150	103	10,592	10,139	453	19,363	18,970	393	16,473	16,122	351	58,681	57,381	1,300
P/H	26,807	26,752	55	24,925	24,705	220	36,952	36,459	493	31,333	30,878	455	120,017	118,794	1,223
Yola	1,676	1,634	42	1,712	1,697	15	1,730	1,692	38	1,725	1,661	64	6,843	6,684	159
Average	21,540	20,551	989	21,952	20,924	1,028	22,465	21,629	836	20,240	19,312	928	86,197	82,417	3780
Total	236,939	266,062	10,877	241,476	230,169	11,307	247,118	237,923	9,195	222,639	221,436	10,203	948,172	906,590	41,582

Table E.3 Cont'd: Customer complaints received and resolved by DisCos in 2020

	2020/Q1			2020/Q2			2020/Q3			2020/Q4			2020		
	Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints		
DisCos	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending
Abuja	27,519	26,860	659	20,109	19,761	348	23,531	23,035	496	41,841	39,806	2,035	113,000	109,462	3,538
Benin	11,604	9,966	1,638	9,282	7,751	1,531	14,929	12,665	2,264	15,140	12,907	2,233	50,955	43,289	7,666
Eko	25,560	22,198	3,362	25,441	22,148	3,293	26,032	23,300	2,732	27,177	25,244	1,933	104,210	92,890	11,320
Enugu	57,835	55,690	2,145	63,230	61,460	1,770	54,223	53,446	777	52,966	52,056	910	228,254	222,652	5,602
Ibadan	9,021	6,927	2,094	7,818	6,324	1,494	9,717	7,526	2,191	7,708	6,435	1,273	34,264	27,212	7,052
Ikeja	39,415	35,930	3,485	37,830	34,471	3,359	39,831	36,248	3,583	35,741	32,100	3,641	152,817	138,749	14,068
Jos	5,270	4,816	454	4,460	4,222	238	5,936	5,717	219	11,530	10,635	895	27,196	25,390	1,806
Kaduna	8,078	7,655	423	7,529	7,003	526	8,329	7,803	526	6,422	5,493	929	30,358	27,954	2,404
Kano	6,899	6,711	188	6,456	6,333	123	7,437	7,279	158	8,305	8,152	153	29,097	28,475	622
P/H	11,370	10,062	1,308	18,606	17,883	723	26,848	25,699	1,149	22,224	21,706	518	79,048	75,350	3,698
Yola	1,935	1,934	1	2,355	2,328	27	2,176	2,145	31	1,443	1,406	37	7,909	7,813	96
Average	18,591	17,159	1,432	18,465	17,244	1,221	19,908	18,624	1,284	20,954	19,631	1,323	77,919	72,658	5,261
Total	204,506	188,749	15757	203,116	189,684	13432	218,989	204,863	14126	230,497	215,940	14,557	857,108	799,236	57,872

Table E.3 Cont'd: Customer complaints received and resolved by DisCos in 2019

DisCos	2019/Q1			2019/Q2			2019/Q3						2019		
	Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints			Customers' Complaints		
	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending
Abuja	14,168	11,444	2,724	11,959	9,682	2,277	16,354	12,165	4,189	19,631	17,106	2,525	62,112	50,397	11,715
Benin	15,404	11,970	3,434	13,673	11,598	2,075	10,517	9,754	766	10,665	9,322	1,343	50,259	42,644	7,618
Eko	26,442	26,333	109	17,722	15,821	1,901	16,223	13,977	2,193	17,713	14,797	2,916	78,100	70,928	7,119
Enugu	21,317	18,832	2,485	30,104	28,989	1,115	56,249	45,879	10,370	47,209	45,672	1,537	154,879	139,372	15,507
Ibadan	9,893	6,564	3,329	9,067	6,948	2,119	8,657	6,006	2,651	7,772	5,757	2,098	35,389	25,275	10,197
Ikeja	30,171	26,475	3,696	29,778	25,462	4,316	27,853	24,138	3,715	35,256	31,804	3,405	123,058	107,879	15,132
Jos	5,464	5,150	314	5,378	4,841	537	4,624	4,294	330	5,852	5,337	515	21,318	19,622	1,696
Kaduna	11,862	9,630	2,232	9,486	7,790	1,696	9,364	9,008	356	9,662	9,340	322	40,374	35,768	4,606
Kano	5,965	5,681	284	6,065	5,667	398	4,988	4,684	304	6,481	6,242	239	23,499	22,274	1,225
P/H	9,135	8,082	1,053	10,415	8,941	1,474	15,688	14,116	1,572	15,603	13,535	2,068	50,841	44,674	6,167
Yola	2,117	2,098	19	2,312	2,286	26	2,316	2,305	14	1,963	1,930	33	8,708	8,619	92
Average	13,813	12,024	1,789	13,269	11,639	1,630	15,712	13,302	2,405	16,164	14,622	1,546	58,958	51,587	7,370
Total	151,938	132,259	19,679	145,959	128,025	17,934	172,833	146,326	26,460	177,807	160,842	17,001	648,537	567,452	81,074

Table E.3 Cont'd: Customer complaints received and resolved by DisCos in 2018

DisCos	2018/Q1 Customers' Complaints			2018/Q2 Customers' Complaints			2018/Q3 Customers' Complaints			2018/Q4 Customers' Complaints			2018 Customers' Complaints		
	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending	Received	Resolved	Pending
Abuja	11,525	10,468	1,057	12,486	11,319	1,167	16,371	14,552	1,819	14,036	12,999	1,037	54,418	49,338	5,080
Benin	30,680	7,857	22,823	42,948	11,533	31,415	33,682	15,942	17,740	12,437	7,226	5,211	119,747	42,558	77,189
Eko	11,084	8,431	2,653	11,063	9,118	1,945	3,881	3,837	44	30,531	30,436	95	56,559	51,822	4,737
Enugu	9,191	6,689	2,502	23,610	6,685	16,925	15,548	11,613	3,935	22,608	20,352	2,256	70,957	45,339	25,618
Ibadan	11,619	10,089	1,530	9,236	7,840	1,396	8,222	7,370	852	7,154	6,139	1,015	36,231	31,438	4,793
Ikeja	12,288	9,654	2,634	26,537	22,117	4,420	27,485	24,270	3,215	24,943	21,199	3,744	91,253	77,240	14,013
Jos	1,617	1,492	125	3,519	3,245	274	3,680	3,315	365	5,401	4,923	478	14,217	12,975	1,242
Kaduna	10,315	8,507	1,808	10,001	8,823	1,178	7,838	5,891	1,947	8,615	6,576	2,039	36,769	29,797	6,972
Kano	4,662	4,514	148	5,326	5,168	158	5,507	4,731	776	4,802	4,080	722	20,297	18,493	1,804
P/H	4,143	3,412	731	5,519	4,950	569	4,116	3,414	702	3,405	2,225	1,180	17,183	14,001	3,182
Yola	1,747	1,733	14	2,982	2,899	83	2,461	2,408	53	2,461	2,408	53	9,651	9,448	203
Average	9,897	6,622	3,275	13,930	8,518	5,412	11,708	8,849	2,859	12,399	10,778	1,621	47,935	34,768	13,167
Total	108,871	72,846	36,025	153,227	93,697	59,530	128,791	97,343	31,448	136,393	118,563	17,830	527,282	382,449	144,833

Table E.4: DisCos' Complaints resolution rate, 2018-2022

	2022(%)					2021(%)				
DisCos	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual
Abuja	98.89	97.79	97.81	98.19	98.20	97.87	98.13	97.45	96.51	96.87
Benin	95.99	92.24	87.29	91.73	92.00	93.37	95.71	95.95	95.16	84.96
Eko	98.61	98.61	92.86	92.58	91.84	94.5	98.6	98.78	96.55	89.14
Enugu	80.84	71.67	80.89	92.39	89.05	98.62	90.74	93.96	91.52	97.55
Ibadan	93.89	80.01	74.90	89.77	83.53	85.87	86.97	90.69	91.10	79.42
Ikeja	91.14	92.13	90.09	66.72	86.04	91.00	91.13	92.45	92.00	90.79
Jos	97.87	98.43	99.23	94.16	97.3	93.95	96.44	96.52	98.15	93.36
Kaduna	88.72	93.48	95.09	94.31	92.85	87.54	89.84	90.82	96.08	92.08
Kano	99.48	99.17	98.94	99.31	99.22	99.16	95.72	97.97	97.87	97.86
Port Harcourt	98.9	98.31	98.83	97.66	98.41	99.79	99.12	98.67	98.55	95.32
Yola	98.29	99.02	99.64	98.00	98.8	97.49	99.12	97.80	96.29	98.79
Average	94.78	92.81	92.32	92.26	93.39	94.47	94.68	95.55	95.43	92.38
All DisCos	94.6	92.38	91.58	91.3	92.49	95.41	95.32	96.28	95.39	93.25

	2020(%)					2019(%)				
DisCos	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual
Abuja	97.61	98.27	97.89	95.14	96.87	80.77	80.96	74.39	87.14	81.14
Benin	85.88	83.51	84.83	85.25	84.96	77.71	84.82	92.75	87.41	84.85
Eko	86.85	87.06	89.51	92.89	89.14	99.59	89.27	86.16	83.54	90.82
Enugu	96.29	97.20	98.57	98.28	97.55	88.34	96.3	81.56	96.74	89.99
Ibadan	76.79	80.89	77.45	83.48	79.42	66.35	76.63	69.38	74.07	71.42
Ikeja	91.16	91.12	91.00	89.81	90.79	87.75	85.51	86.66	90.21	87.67
Jos	91.39	94.66	96.31	92.24	93.36	94.25	90.01	92.86	91.20	92.04
Kaduna	94.76	93.01	93.68	85.53	92.08	81.18	82.12	96.2	96.67	88.59
Kano	97.27	98.09	97.88	98.16	97.86	95.24	93.44	93.91	96.31	94.79
Port Harcourt	88.50	96.11	95.72	97.67	95.32	88.47	85.85	89.98	86.75	87.87
Yola	99.95	98.85	98.58	97.44	98.79	99.10	98.88	99.53	98.32	98.98
Average	91.49	92.62	92.86	92.35	92.38	87.05	87.71	84.66	90.46	87.50
All DisCos	92.30	93.39	93.55	93.68	93.25	87.16	87.62	87.58	89.85	88.01

	2018(%)				
DisCos	/Q1	/Q2	/Q3	/Q4	Annual
Abuja	90.83	90.65	88.89	92.61	90.66
Benin	25.61	26.85	47.33	58.10	35.54
Eko	76.06	82.42	98.87	99.69	91.62
Enugu	72.78	28.31	74.69	90.02	63.90
Ibadan	86.83	84.89	89.64	85.81	86.77
Ikeja	78.56	83.34	88.3	84.99	84.64
Jos	92.27	92.21	90.08	91.15	91.26
Kaduna	82.47	88.22	75.16	76.33	81.04
Kano	96.83	97.03	85.91	84.96	91.11
Port Harcourt	82.36	89.69	82.94	65.35	81.48
Yola	99.20	97.22	97.85	97.85	97.90
Average	66.91	61.15	75.58	86.93	72.53
All DisCos	80.35	78.26	83.61	84.26	81.45

Table E.5: Category of customer complaints received by DisCos, 2017-2022

Complaint Categories	2022					2021					2020				
	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual
Metering	79,637	111,956	117,268	122,805	431,666	50,328	50,659	55,293	53,305	209,585	44,662	48,019	71,897	41,455	206,033
Interruption	37,186	23,438	21,750	24,233	106,607	43,611	48,216	45,065	38,450	175,342	41,381	39,869	34,199	37,631	153,080
Voltage	16,272	9,987	4,139	4,346	34,744	22,895	29,326	30,235	26,079	108,535	15,216	17,583	17,623	14,899	65,321
Load Shedding	14,719	5,336	1,303	1,466	22,824	17,792	18,228	14,360	14,148	64,528	16,056	20,342	16,498	16,680	69,576
Billing	41,644	32,930	49,924	61,022	185,520	38,920	42,769	48,542	39,398	169,629	45,746	45,895	40,489	46,399	178,529
Disconnection	26,994	7,251	7,346	4,845	46,436	34,369	31,318	31,019	28,121	124,827	21,427	22,856	20,414	24,666	89,363
Connection Delay	12,794	2,996	1,284	2,952	20,026	19,224	15,989	14,820	14,766	64,799	10,309	14,495	12,401	13,386	50,591
Others	14,141	38,011	38,227	39,438	129,817	9,800	4,971	7,784	8,372	30,927	8,319	9,930	16,976	9,390	44,615
Total	243,387	231,905	241,241	261,107	977,640	236,939	241,476	247,118	222,639	948,172	203,116	218,989	230,497	204,506	857,108

Complaint Categories	2019					2018					2017				
	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual	/Q1	/Q2	/Q3	/Q4	Annual
Metering	37,123	46,435	38,837	41,547	163,942	18,201	43,891	35,873	32,674	130,639	15,275	46,462	36,198	50,628	148,563
Interruption	14,396	12,920	22,097	24,920	74,333	13,659	21,976	28,567	23,603	87,805	19,524	27,898	22,299	23,123	92,844
Voltage	7,118	6,483	7,835	10,091	31,527	6,621	7,084	4,763	4,545	23,013	3,034	3,336	2,954	3,497	12,821
Load Shedding	1,374	8,339	21,622	7,746	39,081	1,386	1,168	1,955	813	5,322	140	3,880	2,935	2,682	9,637
Billing	39,940	46,191	47,053	48,235	181,419	45,996	59,745	32,876	31,117	169,734	24,187	34,661	28,990	21,686	109,524
Disconnection	7,791	9,326	18,061	17,694	52,872	6,081	8,203	7,146	4,813	26,243	1,541	1,832	6,522	7,232	17,127
Connection Delay	516	5,878	7,235	9,150	22,779	97	229	2,267	2,109	4,702	2	38	1,579	3,160	4,779
Others	37,701	16,366	10,093	18,424	82,584	16,830	10,931	15,344	36,719	79,824	294	3,509	7,571	19,661	31,035
Total	145,959	151,938	172,833	177,807	648,537	108,874	153,227	128,791	136,393	527,285	63,997	121,616	109,048	131,669	426,330

Table E.6: Appeals received and resolved by forum offices 2022

S/N	Forum Offices	2022/Q1				2022/Q2				2022/Q3				2022/Q4				2022			
		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	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending	Resolution Rate
1	Abakaliki	41	28	13	68%	77	0	77	0%	50	32	18	64%	63	32	31	51%	231	92	139	40%
2	Abeokuta	NC	NC	NC	NC	39	13	26	33%	70	30	40	43%	94	55	39	59%	203	98	105	48%
3	Abuja	62	47	15	76%	56	33	23	59%	56	34	22	61%	65	49	16	75%	239	163	76	68%
4	Asaba	84	80	4	95%	121	92	29	76%	92	86	6	93%	67	61	6	91%	364	319	45	88%
5	Awka	77	67	10	87%	62	35	27	56%	81	50	31	62%	92	77	15	84%	312	229	83	73%
6	Bauchi	34	25	9	74%	17	14	3	82%	5	4	1	80%	5	5	0	100%	61	48	13	79%
7	Benin	67	45	22	67%	59	43	16	73%	50	28	22	56%	54	54	0	100%	230	170	60	74%
8	B/Kebbi	4	0	4	0%	4	0	4	0%	6	0	6	0%	10	2	8	20%	24	2	22	8%
9	Calabar	48	31	17	65%	58	28	30	48%	61	14	47	23%	73	40	33	55%	240	113	127	47%
10	Dutse	2	1	1	50%	14	0	14	0%	17	0	17	0%	15	1	14	7%	48	2	46	4%
11	Eko	142	114	28	80%	124	55	69	44%	62	47	15	76%	69	47	22	68%	397	263	134	66%
12	Enugu	72	54	18	75%	72	54	18	75%	166	144	22	87%	128	44	84	34%	438	296	142	68%
13	Gombe	15	10	5	67%	18	15	3	83%	13	12	1	92%	8	1	7	13%	54	38	16	70%
14	Gusau	10	3	7	30%	16	13	3	81%	21	17	4	81%	29	16	13	55%	76	49	27	64%
15	Ibadan	231	126	105	55%	168	90	78	54%	162	107	55	66%	157	81	76	52%	718	404	314	56%
16	Ikeja	354	222	132	63%	622	75	547	12%	910	360	550	40%	906	500	406	55%	2792	1157	1635	41%
17	Ilorin	39	37	2	95%	33	28	5	85%	61	14	47	23%	63	32	31	51%	196	111	85	57%
18	Jos	28	20	8	71%	14	8	6	57%	14	13	1	93%	7	7	0	100%	63	48	15	76%
19	Kaduna	174	133	41	76%	54	35	19	65%	60	36	24	60%	65	47	18	72%	353	251	102	71%
20	Kano	25	18	7	72%	19	9	10	47%	38	17	21	45%	45	33	12	73%	127	77	50	61%
21	Katsina	3	3	0	100%	9	5	4	56%	9	4	5	44%	3	0	3	0%	24	12	12	50%
22	Lafia	13	6	7	46%	19	9	10	47%	24	15	9	63%	26	14	12	54%	82	44	38	54%
23	Lokoja	7	6	1	86%	9	5	4	56%	8	7	1	88%	2	1	1	50%	26	19	7	73%
24	Makurdi	32	16	16	50%	17	8	9	47%	36	18	18	50%	22	0	22	0%	107	42	65	39%
25	Osogbo	197	177	20	90%	238	191	47	80%	114	55	59	48%	140	52	88	37%	689	475	214	69%
26	Owerri	23	18	5	78%	22	17	5	77%	10	5	5	50%	11	6	5	55%	66	46	20	70%
27	P/Harcourt	225	176	49	78%	217	179	38	82%	176	0	176	0%	142	119	23	84%	760	474	286	62%
28	Sokoto	8	3	5	38%	12	10	2	83%	26	18	8	69%	27	20	7	74%	73	51	22	70%
29	Umuahia	77	44	33	57%	52	15	37	29%	46	24	22	52%	37	25	12	68%	212	108	104	51%
30	Uyo	156	83	73	53%	165	119	46	72%	173	113	60	65%	143	80	63	56%	637	395	242	62%
31	Yola	29	20	9	69%	35	24	11	69%	40	35	5	88%	26	19	7	73%	130	98	32	75%
All Forum Offices		2279	1613	666	71%	2442	1222	1220	50%	2657	1339	1318	50%	2594	1520	1074	59%	9972	5694	4278	57%

Table E.6: Appeals received and resolved by forum offices 2021

S/N	Forum Offices	2021/Q1				2021/Q2				2021/Q3				2021/Q4				2021			
		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	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending	Resolution Rate
1	Abakaliki	22	17	5	77%	19	7	12	37%	15	6	40%	40%	53	42	7	79%	109	72	37	66%
2	Abuja	45	22	23	49%	87	53	34	61%	76	51	67%	67%	64	52	10	81%	272	178	94	65%
3	Asaba	78	75	3	96%	103	100	3	97%	66	66	100%	100%	76	52	2	68%	323	293	30	91%
4	Awka	81	57	24	70%	89	71	18	80%	87	59	68%	68%	70	48	27	69%	327	235	92	72%
5	Bauchi	5	0	5	0%	6	0	6	0%	1	0	0%	0%	2	0	8	0%	14	0	14	0%
6	Benin	58	0	58	0%	52	52	0	100%	45	45	100%	100%	32	12	0	38%	187	109	78	58%
7	B/Kebbi	69	35	34	51%	138	98	40	71%	40	21	53%	53%	39	27	3	69%	286	181	105	63%
8	Calabar	119	93	26	78%	163	137	26	84%	142	112	79%	79%	190	151	35	79%	614	493	121	80%
9	Dutse	109	80	29	73%	100	68	32	68%	85	42	49%	49%	84	74	2	88%	378	264	114	70%
10	Eko	15	12	3	80%	11	11	0	100%	15	10	67%	67%	8	5	24	63%	49	38	11	78%
11	Enugu	8	6	2	75%	0	0	0	0%	4	2	50%	50%	14	10	38	71%	26	18	8	69%
12	Gombe	143	99	44	69%	271	153	118	56%	195	86	44%	44%	239	140	3	59%	848	478	370	56%
13	Gusau	366	305	61	83%	162	60	102	37%	515	285	55%	55%	553	338	4	61%	1596	988	608	62%
14	Ibadan	55	50	5	91%	33	15	18	45%	45	37	82%	82%	44	25	149	57%	177	127	50	72%
15	Ikeja	4	1	3	25%	4	1	3	25%	3	0	0%	0%	14	14	66	100%	25	16	9	64%
16	Ilorin	7	0	7	0%	4	0	4	0%	4	0	0%	0%	2	0	53	0%	17	0	17	0%
17	Jos	85	51	34	60%	32	10	22	31%	112	48	43%	43%	153	108	4	71%	382	217	165	57%
18	Kaduna	45	39	6	87%	49	27	22	55%	46	40	87%	87%	24	23	31	96%	164	129	35	79%
19	Kano	3	2	1	67%	8	1	7	13%	15	0	0%	0%	20	18	3	90%	46	21	25	46%
20	Katsina	11	9	2	82%	2	0	2	0%	4	0	0%	0%	9	8	2	89%	26	17	9	65%
24	Lafia	54	28	26	52%	41	20	21	49%	40	17	43%	43%	24	10	10	42%	159	75	84	47%
21	Lokoja	13	6	7	46%	11	5	6	45%	12	9	75%	75%	9	3	2	33%	45	23	22	51%
22	Makurdi	27	11	16	41%	1	1	0	100%	6	0	0%	0%	22	4	5	18%	56	16	40	29%
23	Osogbo	156	141	15	90%	215	199	16	93%	205	195	95%	95%	148	133	198	90%	724	668	56	92%
25	Owerri	44	32	12	73%	21	15	6	71%	29	16	55%	55%	29	18	17	62%	123	81	42	66%
26	P/Harcourt	180	167	13	93%	187	0	187	0%	224	147	66%	66%	168	156	11	93%	759	470	289	62%
27	Sokoto	10	7	3	70%	2	0	2	0%	10	4	40%	40%	20	16	3	80%	42	27	15	64%
28	Umuahia	82	48	34	59%	88	20	68	23%	105	39	37%	37%	99	55	38	56%	374	162	212	43%
29	Uyo	144	64	80	44%	138	98	40	71%	139	79	57%	57%	134	81	16	60%	555	322	233	58%
30	Yola	31	24	7	77%	14	7	7	50%	13	6	46%	46%	16	13	11	81%	74	50	24	68%
All Forum Offices		2069	1481	588	72%	2051	1229	822	60%	2298	1422	876	62%	2359	1636	723	69%	8777	5768	3009	66%

Table E.6 Cont'd: Appeals received and resolved by forum offices 2020

S/N	Forum Offices	2020/Q1				2020/Q2				2020/Q3				2020/Q4				2020			
		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	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending	Resolution Rate
1	Abakaliki	21	12	9	57%	15	11	4	73%	25	17	8	68%	30	23	7	77%	70	63	7	90%
2	Abuja	70	33	37	47%	50	32	18	64%	61	40	21	66%	53	43	10	81%	158	148	10	94%
3	Asaba	55	37	18	67%	79	0	79	0%	70	70	0	100%	71	69	2	97%	185	183	2	99%
4	Awka	45	24	21	53%	32	10	22	31%	55	37	18	67%	49	22	27	45%	138	111	27	80%
5	Bauchi	14	11	3	79%	22	2	18	9%	11	0	11	0%	8	0	8	0%	40	32	8	80%
6	Benin	47	25	22	53%	107	107	0	100%	71	71	0	100%	61	61	0	100%	436	436	0	100%
7	B/Kebbi	14	0	8	0%	10	5	5	50%	19	17	2	89%	9	6	3	67%	51	48	3	94%
8	Calabar	34	11	23	32%	41	11	30	27%	59	27	32	46%	64	27	35	42%	89	52	35	58%
9	Dutse	1	1	0	100%	4	4	0	100%	2	0	2	0%	5	1	2	20%	9	5	2	56%
10	Eko	252	137	115	54%	152	120	32	79%	132	108	24	82%	143	119	24	83%	508	484	24	95%
11	Enugu	63	20	43	32%	125	0	125	0%	186	134	50	72%	85	47	38	55%	276	236	38	86%
12	Gombe	1	0	1	0%	1	1	0	100%	26	22	4	85%	16	13	3	81%	17	14	3	82%
13	Gusau	23	15	8	65%	8	4	4	50%	26	22	4	85%	13	9	4	69%	60	56	4	93%
14	Ibadan	249	187	62	75%	365	259	106	71%	259	187	72	72%	226	76	149	34%	1249	1097	149	88%
15	Ikeja	750	516	232	695	432	216	216	50%	621	510	111	82%	327	261	66	80%	1571	1503	66	96%
16	Ilorin	134	104	30	78%	53	35	18	66%	64	62	2	97%	82	29	53	35%	290	237	53	82%
17	Jos	24	6	18	25%	30	12	18	40%	9	0	9	0%	4	0	4	0%	49	45	4	92%
18	Kaduna	109	34	75	31%	82	15	67	18%	87	51	36	59%	72	38	31	53%	171	138	31	81%
19	Kano	65	44	20	68%	299	268	29	90%	70	63	6	90%	25	22	3	88%	363	356	3	98%
20	Katsina	0	0	0	0%	42	41	1	98%	3	2	1	67%	3	1	2	33%	46	44	2	96%
24	Lafia	49	34	5	69%	24	9	13	38%	36	25	7	69%	29	15	10	52%	148	121	10	82%
21	Lokoja	50	7	23	14%	11	5	6	45%	33	6	27	18%	20	18	2	90%	105	103	2	98%
22	Makurdi	32	1	13	3%	36	21	9	58%	12	1	4	8%	11	4	5	36%	36	31	5	86%
23	Osogbo	511	115	396	23%	185	128	57	69%	253	232	21	92%	217	19	198	9%	553	355	198	64%
25	Owerri	22	14	8	64%	26	2	24	8%	49	42	7	86%	36	19	17	53%	94	77	17	82%
26	P/Harcourt	104	96	8	92%	101	24	77	24%	154	118	24	77%	122	111	11	91%	477	466	11	98%
27	Sokoto	33	21	12	64%	52	45	7	87%	38	35	3	92%	15	12	3	80%	121	118	3	98%
28	Umuahia	20	10	10	50%	20	1	19	5%	40	12	25	30%	55	15	38	27%	112	64	38	57%
29	Uyo	67	15	52	22%	141	45	96	32%	152	134	18	88%	66	50	16	76%	669	653	16	98%
30	Yola	22	12	10	55%	270	246	24	91%	56	42	14	75%	39	28	11	72%	347	336	11	97%
All Forum Offices		2,881	1,542	1,282	54%	2,815	1,679	1,124	60%	2,679	2,087	563	78%	1,956	1,158	782	59%	8438	7612	782	90%

Table E.6 Cont'd: Appeals received and resolved by forum offices 2019

		2019/Q1				2019/Q2				2019/Q3				2019/Q4				2019			
		Customers' Complaints				Customers' Complaints				Customers' Complaints				Customers' Complaints				Customers' Complaints			
S/N	Forum Offices	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending[4]	Resolution Rate
1	Abakaliki	37	22	15	59%	48	31	17	65%	33	28	5	85%	37	32	5	86%	117	113	5	97%
2	Abuja	438	214	224	49%	261	148	110	57%	197	162	35	82%	98	80	18	82%	625	604	18	97%
3	Asaba	126	80	46	63%	62	55	7	89%	88	67	21	76%	77	69	8	90%	265	271	8	102%
4	Awka	86	41	45	48%	84	33	51	39%	92	54	38	59%	35	16	19	46%	203	144	19	71%
5	Bauchi	11	8	2	73%	5	2	3	40%	6	5	1	83%	7	5	2	71%	24	20	2	83%
6	Benin	52	16	36	31%	84	59	25	70%	97	84	12	87%	30	18	12	60%	173	177	12	102%
7	Birnin Kebbi	10	6	4	60%	9	5	4	56%	11	4	7	36%	9	1	8	11%	32	16	8	50%
8	Calabar	15	12	3	80%	8	1	7	13%	9	0	9	0%	16	2	14	13%	40	15	14	38%
9	Dutse	6	0	6	0%	0	0	0	0%	2	0	2	0%	2	1	1	50%	4	1	1	25%
10	Eko	333	70	263	21%	332	115	217	35%	194	162	32	84%	171	121	50	71%	734	468	50	64%
11	Enugu	67	52	15	78%	48	30	18	63%	35	14	21	40%	56	47	9	84%	144	143	9	99%
12	Gombe	10	1	9	10%	10	5	5	50%	8	1	7	13%	16	16	0	100%	23	23	0	100%
13	Gusau	21	3	18	14%	20	9	11	45%	14	7	7	50%	19	4	15	21%	49	23	15	47%
14	Ibadan	223	72	151	32%	301	205	96	68%	236	19	213	8%	263	122	141	46%	599	418	141	70%
15	Ikeja	456	153	298	34%	637	269	368	42%	1193	802	386	67%	799	398	401	50%	2307	1622	401	70%
16	Ilorin	45	11	34	24%	58	14	42	24%	137	93	40	68%	92	52	39	57%	215	170	39	79%
17	Jos	12	2	10	17%	5	0	5	0%	14	0	14	0%	24	16	8	67%	25	18	8	72%
18	Kaduna	43	23	16	53%	39	11	25	28%	65	10	51	15%	96	31	59	32%	151	75	59	50%
19	Kano	87	8	74	9%	82	68	13	83%	18	9	4	50%	85	43	42	51%	153	128	42	84%
20	Katsina	7	1	6	14%	12	10	0	83%	1	1	0	100%	3	3	0	100%	17	15	0	88%
24	Lafia	42	22	10	52%	77	50	20	65%	94	49	39	52%	23	5	13	22%	132	126	13	95%
21	Lokoja	23	13	10	57%	57	14	43	25%	41	2	39	5%	27	7	20	26%	115	36	20	31%
22	Makurdi	14	0	5	0%	7	0	2	0%	14	0	7	0%	46	23	11	50%	67	23	11	34%
23	Osogbo	219	86	133	39%	408	172	236	42%	630	505	125	80%	290	0	290	0%	1049	763	290	73%
25	Owerri	22	10	12	45%	31	12	19	39%	29	18	11	62%	29	23	6	79%	69	63	6	91%
26	P/Harcourt	131	62	69	47%	31	20	11	65%	158	124	34	78%	88	86	2	98%	334	292	2	87%
27	Sokoto	28	12	16	43%	16	8	8	50%	32	15	17	47%	20	3	17	15%	70	38	17	54%
28	Umuahia	54	19	34	35%	79	21	58	27%	78	60	15	77%	23	21	2	91%	142	121	2	85%
29	Uyo	51	32	19	63%	33	33	0	100%	59	11	47	19%	50	15	35	30%	154	91	35	59%
30	Yola	9	6	3	67%	12	8	4	67%	17	4	13	24%	28	17	11	61%	42	35	11	83%
All Forum Offices		2,678	1,057	1,586	39%	2,856	1,408	1,425	49.%	3,602	2,310	1,252	64%	2,559	1,277	1,258	50%	8,074	6,052	1,258	75%

Table E.6 Cont'd: Appeals Received and Resolved by Forum Offices 2018

S/N	Forum Offices	2018/Q1				2018/Q2				2018/Q3				2018/Q4				2018			
		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	Received	Resolved	Pending	Resolution Rate	Received	Resolved	Pending	Resolution Rate
1	Abakaliki	17	0	17	0%	15	4	9	27%	45	30	15	67%	49	44	5	90%	85	78	5	92%
2	Abuja	101	0	101	0%	170	91	79	54%	214	106	108	50%	267	105	162	39%	464	302	162	65%
3	Asaba	79	2	77	3%	73	70	3	96%	115	76	39	66%	95	30	65	32%	243	178	65	73%
4	Awka	56	0	56	0%	73	33	40	45%	51	26	25	51%	63	46	17	73%	122	105	17	86%
5	Bauchi	-	-	-	-	-	-	-	-	-	-	-	-	4	0	4	0%	4	0	4	0%
6	Benin	64	0	64	0%	37	-	37	0%	50	26	24	52%	48	31	17	65%	74	57	17	77%
7	Birnin Kebbi	0	0	0	-	1	1	-	100%	0	0	0	0%	1	0	1	0%	2	1	1	50%
8	Calabar	14	9	5	64%	16	10	6	63%	30	7	23	23%	14	3	11	21%	40	29	11	73%
9	Eko	191	95	96	50%	329	76	253	23%	173	4	169	2%	543	174	361	32%	718	349	361	49%
10	Enugu	170	0	170	0%	111	97	14	87%	86	38	48	44%	73	37	36	51%	208	172	36	83%
11	Gombe	22	3	19	14%	9	3	6	33%	12	4	8	33%	9	8	1	89%	19	18	1	95%
12	Gusau	12	6	6	50%	11	9	2	82%	4	2	2	50%	1	1	0	100%	18	18	0	100%
13	Ibadan	263	20	243	8%	556	87	469	16%	375	246	129	66%	537	213	324	40%	890	566	324	64%
14	Ikeja	670	56	614	8%	605	206	399	34%	380	66	314	17%	688	414	236	60%	1016	742	236	73%
15	Ilorin	-	-	-	-	-	-	-	-	-	-	-	-	24	8	16	33%	24	8	16	33%
16	Jigawa	9	4	5	44%	4	-	4	0%	6	6	0	100%	1	1	0	100%	11	11	0	100%
17	Jos	11	0	11	0%	3	1	2	33%	8	7	1	88%	13	6	7	46%	21	14	7	67%
18	Kaduna	14	0	14	0%	3	-	3	0%	21	6	15	29%	19	2	17	11%	25	8	17	32%
19	Kano	12	4	8	33%	8	8	-	100%	25	21	4	84%	7	6	1	86%	40	39	1	98%
20	Katsina	1	1	0	100%	2	-	0	0%	8	2	6	25%	2	0	2	0%	7	3	2	43%
24	Lafia	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2	0%	2	0	2	0%
21	Lokoja	-	-	-	-	-	-	-	-	-	-	-	-	6	0	6	0%	6	0	6	0%
22	Makurdi	11	5	6	45%	13	5	2	38%	18	3	15	17%	8	4	4	50%	27	17	4	63%
23	Osogbo	-	-	-	-	-	-	-	-	-	-	-	-	145	144	1	99%	145	144	1	99%
25	Owerri	31	0	31	0%	34	8	26	24%	34	23	11	68%	32	30	2	94%	63	61	2	97%
26	P/Harcourt	122	63	59	52%	91	68	23	75%	171	93	78	121%	148	61	87	41%	372	285	87	77%
27	Sokoto	12	4	8	33%	8	3	3	38%	11	2	9	18%	5	0	5	0%	16	9	5	56%
28	Umuahia	34	0	34	0%	50	39	11	78%	40	15	25	38%	43	31	12	72%	97	85	12	88%
29	Uyo	36	16	20	44%	37	19	18	51%	77	31	46	40%	87	36	51	41%	153	102	51	67%
30	Yola	17	4	13	24%	13	9	4	69%	5	2	3	40%	5	4	1	80%	20	19	1	95%
	All Forum Offices	1,969	292	1,677	15%	2,272	847	1,413	37%	1,959	842	1,117	43%	2,939	1,439	1,454	49%	4,932	3,420	1,454	69%

Table E.7: List and Addresses of NERC Forum Offices as at December 2022

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	*Benin, Edo State*	34, Akpakpava Street, Benin City, Edo State	9037808592	beninforum@nerc.gov.ng
8	*B/Kebbi, Kebbi State*	8, Ahmadu Bello Way, Opp. Kebbi State Govt House, Kebbi State	9062863161	birninkebbiforum@nerc.gov.ng
9	*Calabar, C/Rivers State*	Plot 109, MCC Road by Ibok Street, Calabar, Cross River State	9062863159	calabarforum@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	*Enugu, Enugu State*	John Anichukwu Close, Plot 7 Mkpokiti Pocket Layout, Enugu, Enugu State	8146862230	enuguforum@nerc.gov.ng
13	*Gombe, Gombe State*	Government Layout GDP/2, Along Ministry of Education Road, Gombe State	8140440079	gombeforum@nerc.gov.ng
14	*Gusau, Zamfara State*	2 Canteen Daji, J. B. Yakubu Road, Gusau, Zamfara State	9062863163	gusauforum@nerc.gov.ng
15	*Ibadan, Oyo State*	Jibowu Str, Opp. Magara Police Station, Iyaganku, G.R.A, Ibadan, Oyo State	8146862252	ibadanforum@nerc.gov.ng
16	*Ikeja, Lagos State*	199, Obafemi Awolowo Way, Alausa, Ikeja, Lagos State	8106807298	ikejaforum@nerc.gov.ng
17	*Ilorin, Kwara State*	30, Stadium Road, Off Taiwo Road, Ilorin, Kwara State	9062924603	ilorinforum@nerc.gov.ng
18	*Jos, Plateau State*	5a, Ray-field Road, Jos, Plateau State	9037808597	josforum@nerc.gov.ng
19	*Kaduna, Kaduna State*	22, Ahmadu Bello Way, Opposite NNDC Building, Kaduna, Kaduna State	8106807299	kadunaforum@nerc.gov.ng
20	*Kano, Kano State*	2, Miller Road, Bompai, Nasarawa G.R.A, Kano, Kano State	8146862222	kanoforum@nerc.gov.ng
21	*Katsina, Katsina State*	7, Abuja Crescent, Off Hassan Usman Katsina Road, Katsina, Katsina State	7031704821	katsinaforum@nerc.gov.ng
22	*Lafia, Nasarawa State*	Manyi Street, Off Jos Road, Bukan Sidi, Lafia, Nasarawa State	9062924599	lafiaforum@nerc.gov.ng
23	*Lokoja, Kogi State*	Hassan Kastina Rd, Opp. State Civil Service Commission, Zone 8 Police HQ, Lokoja, Kogi State.	9062924601	lokojaforum@nerc.gov.ng
24	*Makurdi, Benue State*	Hephzibah Plaza, Atom Kpera Road, Opp. Makurdi Int'l School, Benue State	9062277249	makurdiforum@nerc.gov.ng
25	*Osogbo, Osun State*	51, Isiaka Adeleke Way, Along Okefia-Alekuwodo Rd, Osogbo, Osun State	9062924604	osogboforum@nerc.gov.ng
26	*Owerri, Imo State*	1, C.B Anyanwu Rd, Housing Area B, Exclusive Garden, Owerri	9062277245	owerriforum@nerc.gov.ng
27	*P/Harcourt, Rivers State*	The Vhelberg Imperial Hotel, Plot 122 & 122a, Bank Anthony Avenue, Off Ordinance Rd, P/Harcourt	8146862223	phforum@nerc.gov.ng
28	*Sokoto, Sokoto State*	1, Garba Duba Road, Sokoto, Sokoto State	9062863157	sokotoforum@nerc.gov.ng
29	*Umuahia, Abia State*	House 2, Adelabu Str., Amaokwe Housing Estate, Umuahia Ibeku, Abia State	9062277251	umuahiaforum@nerc.gov.ng
30	*Uyo, Akwa Ibom State*	63, Osongama Road, Off Oron/Uyo Airport Road, Uyo, Akwa Ibom State	9062863165	uyoforum@nerc.gov.ng
31	*Yola, Adamawa State*	5, Nguroje Str., Karewa Extension, Jimeta, Yola, Adamawa State	9037808535	yolaforum@nerc.gov.ng

NIGERIAN ELECTRICITY REGULATORY COMMISSION

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