

ORDER/NERC/2023/029

# BEFORE THE NIGERIAN ELECTRICITY REGULATORY COMMISSION IN THE MATTER OF THE TARIFF REVIEW APPLICATION BY JOS ELECTRICITY DISTRIBUTION PLC

#### Title

 This regulatory instrument shall be cited as the Multi-Year Tariff Order ("MYTO") 2024 for Jos Electricity Distribution Plc.

#### Commencement

2. This Order shall take effect from 1st January 2024 and it shall cease to be effective on the issuance of a new tariff review order for Jos Electricity Distribution Plc ("JED") by the Nigerian Electricity Regulatory Commission ("NERC" or the "Commission").

#### **Objectives**

#### 3. This Order seeks to:

- a. Ensure that prices charged by JED are fair to customers and are sufficient to allow JED to fully recover the efficient cost of operation, including a reasonable return on the capital invested in the business in accordance with section 116 of the Electricity Act 2023 ("EA").
- Reset industry parameters and performance obligations to incentivise improvement of efficiency and service experience of electricity consumers.
- c. Ensure sustained improvement in meter deployment and quality of supply in line with JED's CAPEX proposal and service improvement commitment.
- d. Ensure that tariffs payable by JED's customers are commensurate and aligned with the quality and availability of power supply committed to customer clusters by JED.
- e. Provide a framework for the settlement of imbalances between TCN and JED on delivery and off-take of available energy in accordance with the Market Rules, Vesting Contracts and other industry documents.
- f. Support payment securitisation of market contracts and market discipline.
- g. Support transition to bilateral contracts and procurements of bulk energy to meet the supply needs of customers.

#### Context

- 4. JED applied for the review of its tariffs under section 116 of the EA, given changes to macroeconomic indices and other tariff variables in order to maintain effective business operations. The key highlights of JED's application include:
  - a. Changes to the Nigerian and United States inflation and foreign exchange rates in view of significant movement in these indices.
  - A reset of the Aggregate Technical Commercial and Collection ("ATC&C") losses applied in tariff determination to 40.00% effective from 1st January 2024 to reflect operating realities.
  - c. Plan to deploy **605,288** end-use customer meters over a 5-year tariff period to eliminate estimated billing.
  - d. Commitment to execute capital investment projects that will enable the utility to achieve service delivery targets.
  - e. Revision of operating expenses ("OPEX") to improve responsiveness to fault clearing and customer complaints.
  - f. Plan the exit of JED from NBET's Vesting Contract regime thereby allowing JED to procure electricity directly from Generation Companies ("GenCos") through bilateral contracts.
- 5. The details of the rate application filed by JED are summarised in Table 1 below -

Table - 1 Summary of JED's Rate Application

	Parameter	JED's Request
1	Average Energy offtake (MWh/h)	225MWh/h
2	ATC&C Loss Target	40.00%
3	Annual OPEX (₩' billion)	20.32
4	Annual Meter CAPEX (₩' billion)	6.89
5	Annual Other CAPEX (₩' billion)	14.96
6	Annual Revenue Requirement (₦' billion)	193.74
7	Cost-reflective tariff (₩/kWh)	152.44
8	Allowed Tariff (₦/kWh)	133.11
9	Tariff shortfall (₦/kWh)	19.32

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#### **Review of the Application**

- 6. Further to the receipt of the JED's application for rate review, the Commission, in compliance with the provisions of the EA and extant regulatory instruments, published the Application on its website and issued notices in 4 national newspapers on July 14, 2023, soliciting stakeholder comments and participation in a public hearing on the Rate-Case Application. A total of 54 written and oral submissions were received and considered during and after the public hearing held on 26th July 2023 before making a ruling on the tariff application.
- 7. The public hearing on the rate-case application was presided over by a panel of 3 commissioners in compliance with the Business Rules of the Commission, with special invitations for the participation of key stakeholders including the Federal Competition and Consumer Protection Commission ("FCCPC"), Consumer Advocacy Groups ("CAGs"), Nigerian Society of Engineers ("NSE"), National Union of Electricity Employees ("NUEE"), Manufacturers Association of Nigeria ("MAN"), Nigerian Association of Chambers of Commerce, Industry, Mines, and Agriculture ("NACCIMA"), the Bureau of Public Enterprises ("BPE"), Transmission Company of Nigeria Plc ("TCN"), registered intervenors and JED's customers. The rate case application was subjected to robust interrogation/scrutiny by attendees.
- 8. The comments received on the application were duly considered by the Commission during the evaluation process. The highlights of the comments made by stakeholders included
  - a. The need to minimise or delink the exposure of electricity tariffs to fluctuations in exchange rates and the international oil and gas market.
  - b. The slow pace of meter rollout contributing to higher losses and the cost of the operations of the public utility.
  - c. Low quality of services rendered by JED and non-adherence to the service-based obligation.
  - d. Need to ensure that the DisCo excludes assets contributed/procured by customers from its revenue requirement.
  - e. Concerns over the prudence of DisCos' historic operating expenses ("OPEX") and capital expenditures ("CAPEX").
  - f. Concerns over corporate governance practices and internal control policies inhibiting service delivery.
- 9. The review of the application by the Commission duly considered the comments including the impact of changes in macroeconomic variables, prudence in expenditure, and operational efficiency parameters including ATC&C losses, energy offtake requirements and meter rollout plans provided in JED's revenue requirement and resultant end-user tariffs.

- 10. In reviewing JED's application, the varying levels of infrastructural development in the utility's network that is directly attributable to the differential level of supply quality experienced by customers in JED's network were considered. Accordingly, this Order reiterates the industry's commitment to Service-Based Tariffs ("SBT") in ensuring that rates paid by customers are in alignment with the quality of service to customer clusters as measured by the daily average availability of power supply on 33kV and 11kV feeders over a 2-month reference period. The Order further seeks to incentivise the public utility to invest across its entire network towards improving access and reduction of losses.
- 11. Pursuant to the review of the application filed by JED and the outcome of the public hearing on the rate-case application, the Commission hereby approves the following key components of JED's rate application as summarised in Table 2 below.

Table - 2 Summary of NERC's Decision on JED's Application

1	Parameter	JED's Request	NERC's Approval
	Nigeria Inflation	28.2	
2	United States Inflation	3.10	) %
3	Foreign Exchange (₦/\$)	₩919.:	
4	Average Energy Offtake (MWh/h)	225MWh/h	225MWh/h
5	ATC&C Loss Target	40.00%	32.72%
6	Annual OPEX (₩' billion)	20.32	21.20
7	Annual Meter CAPEX (₦' billion)	6.89	6.25
8	Annual Other CAPEX (₩' billion)	14.96	2.02
9	Annual Revenue Requirement (₦' billion)	193.74	184.13
10	Cost-reflective tariff (₩/kWh)	152.44	138.90
11	Allowed Tariff (₦/kWh)	133.11	60.60
12	Tariff shortfall (₦/kWh)	19.32	78.30

#### **Basis for the Decision**

12. Section 34(d) of the EA mandates the Commission to ensure that prices charged by licensees are fair to customers and are sufficient to allow the licensees to fully recover the efficient cost of operation, including a reasonable return on the capital invested in the business. Section 116(2)(c) of the EA further provides for approval of tariffs that incentivise continuous improvement of the quality of service. Pursuant to the aforementioned sections of the EA and in line with the subsisting MYTO methodology, the underlisted indices with potential impact on electricity rates were considered in deciding on the JED application.

- a. Nigerian Inflation Rates: The Nigerian rate of inflation for November 2023 as obtained from the National Bureau of Statistics ("NBS") was 28.20%. This rate was adopted to project Nigerian inflation rates for the year 2024 and beyond.
- b. Exchange Rate: The Naira to the US Dollar exchange rate of \$\frac{1}{2}9.39/US\$1 representing the average forex rate of \$\frac{1}{2}9.11.29/US\$1 during 18 22 December 2023 as obtained from the website of the Central Bank of Nigeria ("CBN") plus 1% in line with the MYTO methodology, was adopted to project the Naira to US Dollar exchange rate.
- c. **US Inflation Rates:** Based on the data obtained from the United States Bureau of Labor Statistics (<a href="http://www.bls.gov">http://www.bls.gov</a>), the US inflation rate for November 2023 was 3.10%. This rate was adopted for this review to project US Inflation rates for the year 2024 and beyond.
- d. Contracted energy offtake: This Order recognises a revision to JED's partially contracted capacity to ensure a minimum energy offtake of 225MWh/h with effect from 1st January 2024. JED is obligated by this Order to finalise its bilateral contract negotiations by 30th June 2024.
- e. **Gas Price:** The benchmark gas price of US\$2.18/MMBTU, gas transportation cost of US\$0.80/MMBTU, and contracted gas prices outside Domestic Gas Delivery Obligation quantities and based on effective Gas Sale Agreements ("GSAs") approved by the Commission were adopted.
- f. CAPEX Adjustment: Pursuant to the provision of Section 7(a) of Regulations on Procedure for Electricity Tariff Reviews in the NESI, adjustments were made to TCN and DisCos' MYTO CAPEX provisions to account for material variances between the actual CAPEX utilisation and MYTO CAPEX provisions.

# 13. Aggregate Technical Commercial and Collection Losses

The Performance Agreement ("PA") between JED and the Bureau of Public Enterprises ("BPE") provided the minimum performance indices expected of JED for the initial years of the privatisation transaction. The expiration of the PA in December 2021 provided the opportunity to reset the performance parameters relative to operating conditions and market realities. JED proposed a review to reset its new baseline ATC&C loss levels to 40.00%. Following the review, the Commission approved a new baseline ATC&C loss level of 32.72% for JED effective from 1st January 2024. The approved ATC&C loss level is considered to be fair and reasonable given current operating conditions and comparable benchmarks within and outside NESI. Table 3 below provides JED's proposed and approved ATC&C loss targets for the period 2023 to 2027.

Table-3: ATC&C Loss Target for JED 2024 - 2027

2024	2025	2026	2007
40.00%	- Companyage of conferral date (12)		2027
			25.43% 16.58%
	<b>2024</b> 40.00% 32.72%	40.00% 40.00%	40.00% 40.00% 31.89%

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### 14. Operating Expenses

JED applied for an upward review of its annual operating expenses ("OPEX") to reflect changes in the macroeconomic environment to sustain and improve service delivery to its customers. JED's OPEX proposal was reviewed in line with relevant industry benchmarks and peculiarities of JED's operating conditions. Table 4 below provides a summary of JED's approved OPEX in relation to its application.

Table - 4: Approved Annual OPEX for JED

Year	IED/s OBEY D	HINGS HIS TONE OF THE PARTY OF
The second secon	JED's OPEX Request	NERC Approved OPEX
	<b>₩</b> 'Million	N'Million
Admin OPEX	9,203	9,540
Fixed OPEX	1,454	·
Variable OPEX		2,120
	9,661	9,540
Total OPEX	<u>20,317</u>	21,199

### 15. Meter Rollout Programme

In addition to other sector-led end-user metering initiatives in the NESI, this Order has considered JED's proposed end-user customer meter rollout programme to eliminate estimated billing within the next 5 years. Over the tariff review period, JED is mandated to install a minimum of **65,000** meters annually over 5 years towards phasing out the use of estimated billing methodologies in its network. Table-5 below provides the details of the meter rollout plan for JED from 2023 to 2027.

Table 5: Meter Rollout Programme for JED for the period 2024 - 2027

<b>2025</b> 65,000	2026	2027
65.000		2027
65.000	15.000	
10,000	65,000	65,000
on ¥6.25Billio	on NA 25Billion	¥6.25Billion
	on ¥6.25Billio	on \(\frac{1}{2}\)6.25Billion \(\frac{1}{2}\)6.25Billion

# 16. Aggregate Capital Expenditure ("CAPEX") Plan

In addition to end-user meter rollout, JED's rate-case filling included proposed CAPEX for other service improvement initiatives. JED may, subject to the approval of the Commission, front-load its expenditure in any year to achieve its service improvement objectives on critical investment needs based on its Performance Improvement Plan ("PIP"). The allowed returns on any unutilised portion of JED's annual CAPEX provision shall be clawed back during minor reviews of tariffs in addition to further regulatory sanctions as applicable. Accordingly, the approved rates contained in this Order have allowed limited provisions to finance planned CAPEX programmes as well as applied necessary adjustments to the verified historical investments of JED. Table-6 below provides the annual approved aggregate CAPEX (inclusive of meter rollout) provision for JED.

Table-6: JED's Aggregate CAPEX Programme for 2024 - 2027

V	Jogale CAPE	A Programm	ie for 2024 -	- 2027	
Year	2024	2025	2026	2027	
	N' Million	N Million	N Million	N' Million	
JED's Request	21,853	21,853	21,853		
NERC's Approval	8,271	8,271	8,271	21,853	
			0,27	<u>8,271</u>	

# 17. Minimum Energy Offtake and Transition to Bilateral Contracts

The Order recognises a revision to JED's partially contracted capacity to ensure a minimum energy offtake of 225MWh/h with effect from 1st January 2024. JED is required by this Order to secure adequate bilateral contracts to facilitate a seamless exit from NBET's vesting contract regime. Through bilateral contracts, JED is required to mitigate its exposure to volumetric energy risks. Effective January 2024, JED shall have no recourse to claim revenue shortfall arising from generation shortfalls. JED is required to continually procure additional energy volumes to serve its customers and ensure steady migration of customers to higher service bands on account of improved level of supply. Table–7 below provides the minimum energy offtake requirement of JED for the period.

Table-7: Minimum Energy Offtake Requirement of JED 2024 - 2027

Year		redon e	illent of JED 2	024 – 202
	2024	2025	2026	2027
MWh/h	225	249	249	
			247	287

# 18. Servicing National Mass Metering Programme ("NMMP") Loan of CBN

The Order recognises JED's obligation to service CBN's loan (interest and principal) for the National Mass Metering Programme ("NMMP") in line with the terms of the loan agreement and has duly provided same in the JED's revenue requirement. The costs shall be updated in subsequent reviews to reflect adjustments applied by the fund managers in line with the terms of disbursement.

### 19. Contribution to Meter Acquisition Fund

In addition to JED's metering plan, this Order makes provision for the accruing of funds to the Meter Acquisition Fund ("MAF") established to support the deployment of end-user customer meters. The MAF shall be centrally managed and used as securitisation for long-term financing to facilitate the rapid closure of the current metering gap in the NESI. Accordingly, a provision of #1.185/kWh has been made in the JED's revenue requirement as a contribution to the Meter Acquisition Fund. The Commission may review the amount provided for MAF contribution during periodic minor reviews to reflect changes in the administration of the MAF and other macroeconomic variables.

### **RESULTS OF THE REVIEW**

### 20. Revenue Requirement

Table 8 below summarises the key building blocks that summed up the projected revenue requirement of JED for 2023 - 2027.

Table 8: Approved Revenue Requirement for JED 2024 - 2027

	e 8: Approved	2024	2025	2026	
		#' Millio	The second secon	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWIND TWO IS NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NAMED IN	2027
	Capacity Cost	55,374	61,622	62,035	
GenCos Co	st Opex	72,219	80,126	81,325	72,344
	Total	127,594			94,007 166,351
					100/05
	Орех	3,150	4,235	5,291	6,575
TCN and	RO Investment	180	188	258	7,006
ADMIN Cos	<u>Depreciation</u>	<u>5,280</u>	5,504	5,599	
	Total	8,610	9,927	11,147	5,450 19,032
				/ /	17,032
System	Opex	1,510	1,747	1,955	2.227
Operations	RO Investment	90	97	112	2,236
Cost	Total	1,600	1,844	2,066	128 <b>2,364</b>
					2,304
Market	Opex	244	253	273	201
Operations -	RO Investment	9	16	16	301
Cost	Total	253	269	<u>10</u> 290	18
				270	319
Ancillary	Cost	368	527	677	1014
					1,014
	Opex	21,395	26,916	33,973	42.000
	RO Investment	13,548	19,812	21,598	42,998
isCo Cost	Depreciation	5,517	5,776	6,012	22,614
	Debt Repayment	5,245	3,037	899	6,249
	Total	45,706	55,542	62,482	899
	<u> </u>				72,760
<u>evenue Requ</u>	jired	184,131	209,857	220,022	261 020
					261,839

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# 21. Summary of Tariff Variables/Assumptions

Table 9 below provides a summary of the key tariff review variables approved for JED from 1 January 2024 to 31 December 2027.

Table – 9: Key Tariff Review Variables/Assumptions for JED

Parameter	y Idriii K	eview vo	riables/A	ssumption	ns for JED	)
Parameter	Unit	2023	2024	2025	2026	2027
Loss Target	%	27.27%	32.72%	26.09%	20.80%	16.58%
Nigerian Inflation	%	24.5%	28.2%	28.2%	28.2%	
US Inflation	%	4.1%	3.1%	3.1%	3.1%	28.2%
Exchange Rate ₦/\$	N	649.0	919.4	919.4		3.1%
Transmission Loss Factor	%	7.25%	7.00%	6.75%	919.4	919.4
Energy Delivered to DisCo	GWh	1,604	1,971		6.50%	6.50%
Energy Delivered to DisCo	MWh/h	183	225	2,177	2,183	2,516
Generation Cost		100	223	249	249	287
	<b>₩/kWh</b>	44.5	63.8	64.1	64.7	65.1
Transmission & Admin Cost	N/kWh	7.2	6.9	7.2	8.0	10.6
End-User Cost Reflective Tariff	₩/kWh	99.3	138.9	130.4	127.3	124.8
End-User Allowed Tariffs	₩/kWh	60.6	60.6	130.4	127.3	124.8
Tariff Shortfall (Subsidy)  ptes: *Estimated Annual Subsidy fo	₩million	45,159	103,779*	0		0

Notes: \*Estimated Annual Subsidy for 2024. The monthly subsidy from January 2024 is NGN8.65bn

# 22. Approved Cost-Reflective and Subsidised Tariffs

Pursuant to Section 116 of the EA and extant regulations, the Commission considered and approved for JED the cost-reflective tariffs contained in Table 10 below with effect from 1st January 2024 and shall remain in force subject to automatic monthly adjustments on pass-through indices including Nigerian and US Inflation rates, Naira/US\$ exchange rates and gas to power tariffs.

In line with the policy direction of the FGN on electricity subsidy, the allowed tariffs as contained in Table 10 below are frozen for all customers at the rates payable since December 2022. With this policy, the estimated subsidy benefit for customers under JED franchise in 2024 is approximately NGN103.779bn (i.e., NGN8.65bn monthly). The allowed tariff is with effect from 1st January 2024 and shall remain in force, subject to further policy direction of the FGN. M Y.A. L. My



Table 10: Approved Cost Reflective and Allowed Tariffs (#/kWh) for JED

	Approved (	023	2	024	2025		The state of the s
Category	Cost- Reflective Tariff	Allowed Tariff		Allesses		5 2020 st-Reflecti	
Life-line	4.00	4.00	4.00	4.00	5.00	6.00	7.00
A - Non-MD	112.45	68.61	147.58	68.61	133.60		
A - MD1	119.29	72.78	158.20	72.78	143.22		1.2
A - MD2	124.90	76.20	166.92	76.20	151.11	147.45	100.77
B - Non-MD	103.68	63.26	140.71	63.26	127.39		1
B-MD1	111.48	68.02	152.83	68.02	138.36	135.01	
B - MD2	117.96	71.97	162.90	71.97	147.47	143.90	132.35
C - Non-MD	86.59	52.83	134.53	52.83	126.32		141.06
C-MD1	95.08	58.01	147.72	58.01	133.73	123.26	120.83
C - MD2	97.44	59.45	151.38	59.45	137.05	130.49	127.92
D - Non-MD	65.75	40.12	102.15	40.12		133.73	131.09
D-MD1	88.90	54.24	138.11	to see a la l	117.08	114.24	111.99
D - MD2	88.90			54.24	129.68	126.54	124.05
E - Non-MD			138.11	54.24	129.68	126.54	124.05
E-MD1		39.90	101.61	39.90	107.37	104.77	102.70
	86.78	52.95	134.83	52.95	126.53	123.47	121.04
E - MD2	88.90	54.24	38.11	54.24	129.68	126.54	124.05

# 23. Automatic Monthly Adjustments of Tariffs

This Order provides for the implementation of Monthly Adjustments of tariffs arising from changes in exogenous indices, not within the control of licensees in the NESI. Thus, JED's revenue requirements and associated tariffs shall be subject to monthly adjustments to allow for changes in the inflation rates, Naira/US\$ exchange rates, and gas-to-power prices.

### 24. Market Payment Discipline

Effective from the January 2024 market cycle, JED is required to pay 100% of its market obligations to NBET, MO, and other bilateral counterparties for energy and

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market administration services rendered to the utility. JED shall provide relevant payment securities in line with the Market Rules and relevant contractual (PPA, Vesting Contracts, etc.) provisions including the posting of bank guarantees and the NESI escrow framework. Thus, effective from 1st January 2024, failure to meet 100% settlement of market invoices shall constitute a breach of Condition 2(5) of JED's license and shall attract full enforcement measures in line with Section 75 of the EA.

# 25. JED's Remittance Obligation for 2023 and 2024

The Power Sector Recovery Plan ("PSRP") provides for a gradual transition to cost-reflective tariffs with safeguards for the less privileged electricity consumers in society. The Federal Government, under the PSRP financing plan, has committed to funding the revenue gap arising from the difference between cost-reflective tariffs approved by the Commission and the actual end-user tariffs during the transition to cost-reflective tariffs where applicable. The waterfall of market revenues during the transitional period shall be in line with the following:

- a. NBET shall issue energy invoices to JED net of the applicable tariff shortfall approved by the Commission on a monthly basis, while MO shall issue the full transmission and administrative services invoices to JED at the applicable tariff;
- JED shall make full settlement (100%) of the market invoices issued by MO and NBET as provided in Section 25(a) above.
- c. Regulatory Net-offs are specific directives issued by the Commission to the Principal Collection Accounts ("PCA") Settlement Administrator on net-offs (+/-) in a fixed sum requiring no calculation applied to JED's minimum remittance obligations to the MO or the NBET for a specific number of months to accommodate financial offsets by market participants and/or amortization of deferred assets" as approved by the Commission.
- d. FGN intervention from the PSRP financing plan and budgetary appropriation for funding tariff shortfall shall be applied by NBET to ensure 100% settlement of market invoices as issued by generating companies ("GenCos").
- JED shall be liable to relevant penalties/sanctions for failure to meet the payment obligation in any payment cycle under the terms of its respective contracts with bilateral counterparties including NBET and MO.
- f. JED shall maintain adequate securitisation for energy off-take in line with the provisions of the Market Rules and relevant bilateral contracts.
- g. JED shall settle its market invoices under the minimum remittance thresholds as provided in Table 11 effective 1<sup>st</sup> January 2024. All settlements are subject to regulatory net-offs as may be issued from time to time by the Commission.

Table - 11: Remittance Obligation for JED, 2023 and 2024

Head	Subhead Subhead	2023	2024
		₩'Million	N'Million ∺
red	NEMSF	3,673	3,674
Required	Meter Acquisition Fund	875	1,571
8 –	Unadjusted GenCo Invoice	72,490	125,708
- nue	TCN & Admin Services	9,873	13,508
Revenue	DisCo	28,936	39,670
Total		115,848	184,131
	Allowed Recovery	70,688	80,352
	Tariff Shortfall (Subsidy)	45,159	103,779
1	NBET Adjusted Invoice to JED	27,331	21,929
	NEMSF	3,673	3,674
Obligation	Meter Acquisition Fund	875	1,571
	NBET Remittance Obligation	27,331	21,929
3 රී ├	MO Remittance Obligation	9,873	13,508
-	DisCo	28,936	39,670
	Total Distribution	70,688	80,352
DisCo rer	nittance to NBET (Adjusted Invoice)	100%	100%
	DisCo remittance to MO	100%	100%

### **Effective Date**

26. This Order shall be effective from 1st January 2024.

Dated this 28th day of December 2023

Sanusi Garba

Chairman

Dafe C. Akpeneye Commissioner

Legal Licence and Compliance

# Appendix – 1: JED's Customer Classifications

Service Bands	New Ta Class	
Lifeline	R1	Life-Line customers with energy consumption of r
	A - Non-	-MD Customers with single or three-phase connections located within <b>Band–A</b> Service Level Foodors
A (Minimum of	A - MD	Customers with LV Maximum Demand connection located within <b>Band-A</b> Service Level Fooders
20hrs/day)	A - MD	Customers with MV/HV Maximum D
	A - Speci	ial Customer under special supply agreement
В	B - Non-M	Customers with single or three-phase connections located within <b>Band-B</b> Service Level Fooders
(Minimum of 16hrs/day)	B - MD 1	Customers with LV Maximum Demand connection located within <b>Band-B</b> Service Level Fooders
· oms/udy/	B – MD 2	Customers with MV/HV Maximum D
C	C - Non-Mi	Customers with single or three-phase connections located within <b>Band - C</b> Service Level Foodow
(Minimum of 12hrs/day)	C - MD 1	located within <b>Band—C</b> Service Level Fooders
7.571	C - MD 2	Customers with MV/HV Maximum D
	D - Non-MD	Customers with single or three-phase connections located within <b>Band-D</b> Service Level Fooders
(Minimum of 8hrs/day)	D - MD 1	located within <b>Band-D</b> Service Level Fooders
	D - MD 2	(11/33kV) connection located within <b>Band – D</b> Service Level Feeders
	E - Non-MD	located within Band-E Service Level Feed
<b>E</b> (Minimum of 4hrs/day) –	E - MD I	located within <b>Band-E</b> Service Level Fooders
		Customers with MV/HV Maximum Demand (11/33kV) connection located within <b>Band-E</b> Service Level Feeders

Appendix - 2: JED's Service Level Commitments for Janu

Pand Band Band Band Band Band Band Band B	OMBE	Minimum  Duration of Supply (Hrs/Day) 22.76 22.76 22.80 22.81 22.81 22.81 22.82 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84 22.84	Average Frequency Average Duration of Interruptions Per Day Of Da	Frequency Average Duration Average ptions Per of Interruptions (Mins) to calls (in Mins)  20	Average Response time to calls (in Mins) 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.0	Average Response time to resolving complaints (in Hrs) 4.00 4.00 5.00 5.00 5.00 5.00 6.00 4.00 4.00 4.00 4.00 4.00 4.00 4	Service Voltage Level 33.00 33.00 32.50 32.50 32.50 32.50 32.50 32.50 32.50 32.50 32.50 32.50 10.50 11.00 10.60 10.60
	CBN MAKURDI	21.19	1.70	168.57	5.00		11.00
	WATER WORKS GOMBE	21.81	1.90	63.00 131.43 132.00	5.00		32.50 11.00

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-							
Band	Feeders	Minimum Duration of	Average Frequency, of Interruptions Per	<b>Q</b>	Average	Average Response	Service
∢	1900	Supply (Hrs/Day)	Day	(Mins)	Kesponse time	time to resolving	Voltage
4	CCGCGAN	23.50	1.00	30.00	S calls (in Mins)	complaints (in Hrs)	Level
4	OGNOGO	21.00	2.00	180.00	5.00	3.00	32.80
<	DAONOR OF THE PROPERTY OF THE	21.00	2.00	180.00	00.6	9.00	32.50
4	Maco Dedicated	21.00	1.60	100.00	2.00	90.9	32.00
< <	INNPC MAKURDI	21.29	1 90	1,00.00	5.00	4.00	11 00
<	YANDEV	19.40	2 60	162.86	5.00	6.00	31.40
( <	GOVI. HOUSE GOMBE	21.10	2 60	276.00	5.00	9.00	32.00
<	INDUSTRIAL JOS	21.10	200	1/4.29	5.00	6.00	10.00
<	DCP II	23.50	1.00	1/4.00	5.00		32.80
( <	JUTH	21.59	1.50	30.00	5.00	3.00	32.80
<	JUTH II	21.59	7 7	144.60	5.00		32 30
< <	NORTH BANK	20.50	2.30	144.60	5.00		32.30
∢ .	AIRFORCE BASE BAUCHI	21 05	1.00	210.00	5.00		22.50
∢ .	ATBU PERMANENT SITE	21.05	0.50	177.14	5.00		02.20
∢	NINGI	21.00	2.00	177.14	5.00		31.30
⋖	TUNFURE	20.00	2.00	180.00	5.00		31.30
⋖	i a A A	20.73	1.97	182.86	200		32.00
∢	ATRII	20.80	2.20	192.00	2.00		10.90
4		21.23	2.45	146.20	2.00		10.60
4	mad down dam	20.53	2.20	208.20	00.0	6.00	10.90
<b>4</b>	CBOKO BOAR	20.53	2.39	208.20	5.00	5.00	31.40
4	COCA COLA	20.48	2.14	211.43	2.00		10.80
✓	COCA COLA	21.20	1.66	148 00	00.6	4.00	10.60
4	GRA/ PALACE	21.62	1.00	142.00	5.00	5.00	10.90
. 4	WURUKUM	21.00	1.32	180.00	5.00	3.00	32.30
. 4	WOKARI	20.90	2.52	186.00	5.00		10.70
<b>A</b>	AZAKE	21.40	1.69	156.00	2.00	6.00	31.30
4	ZAPIA ROAD	20.20	2.48	228.00	5.00	6.00	32.00
	ZARIA KOAD	20.00	0.47	240.00	5.00		10.70
				00.01	2.00	4.00	32.50.91

10.50

Service	Voltage	Level	10.80	10.30	11.00	30.30	31.00	31.30	10.90	10.80	10.80	10.70	10.80	10.90	8	90	40	30	30	0,0	õ	0	0	0	0	0	0	0	
	)		<u> </u>	1	-1	30	31	31	10	10	10	10	10	10.	11.00	10.60	10.40	31.30	10.80	10.60	10.60	10.90	10.50	10.50	10.80	11.00	10.50	10.80	11 00
Average Response	time to resolving	compidints (in Hrs.	9.00	5.00	4.00	90.9	4.00	3.00	5.00	4.00	5.00	4.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00	5.00	9.00	5.00	6.00	4.00
	Response time to calls (in Mine)	5 00	00.5	2.00	2.00	2.00	5.00	5.00	2.00	5.00	5.00	00.5	00.0	2.00	2.00	2.00	00.0	2.00	2.00	2.00	5.00	2.00	2.00	5.00	2.00	5.00	5.00	2.00	00.0
Average Duration	(Mins)	224.76	144.00	251 43	162.00	162.86	60.00	240.00	180.00	198 00	198,00	198.00	198.00	156 00	205.80	234 00	180.00	204.00	214 10	210.17	192.00	204 00	118 10	128.57	168.00	157 14	142.86	148 57	100.00
Average Frequency of Interruptions Per	Day	2.00	2.40	2.45	2.00	1.95	1.00	1.32	1.93	1.41	1.94	1.66	2.25	1.49	2.31	4.89	2.70	1.49	2.20	2.90	2.36	2.42	2.87	3.26	2.50	2.87	1.90	2.40	1.75
Minimum Duration of	Supply (Hrs/Day)	27.73	21.60	19.81	21.30	21.29	23.00	20.00	21.00	20.70	20.70	20.70	20.70	21.40	20.57	20.10	21.00	20.60	20.40	20.29	20.80	20.60	22.03	21.86	21.20	21.38	21.62	21.52	21.00
Feeders	DISTRICT	MURTALA MOHAMMED	GOVT. HOUSE BAILCHI	KUMO	AIRFORCE BASE MANIBEL	ASA	HWOISHE	BSU	HIGH I EVE	WUNTI ROAD	OTUKPO TOWN	DADIN KOWA	GOVT. HOUSE MAKIIPAI	FED. LOW COST BALLOUI	BUKURU TOWN	TAFAWA RAIEWA	GRA MAKIIDA	GADA BILL	STATAN	ZARIA POAR 11157	TUDIN SALASHII	BAUCHI ROAD TOWNSHIP	LAMINGO	INDUSTRIAL MAKIBEL	BAUCHI RING POAR	GRA GOMBE	UNIAGRIC	STADILIA	WO CO
Tariff	⋖	∢	4	4	A	∢	∢	4	∢	⋖	∢	∢	4	<b>∀</b>	4	4	4	<	<	4	4	A	4	∢	4	4	4	4	

ice	age	•	20	20	0	0	0	C					<u>,                                    </u>	0	0	0			T	T	T	T		T	Т	_	$\overline{}$		$\overline{}$		1	19
		Level	10.50	10.50	10.50	11.00	10.50	10.90	10.70	30.00	21.0	20.00	10.80	31.00	32.30	31.00	10.70	31 20	10.20	10.20	10.00	10.00	10.00	10.80	10.50	20.0	10.30	10.80	10.50	10.90	10.50	10.50
Average Response	time to resolving	complaints (in Hrs)	4.00	4.00	4.00	4.00	4.00	5.00	9.00	6.00	6.00	5.00	00.5	0.00	00.9	9.00	5.00	9.00	5.00	5.00	5.00											4.00
	Response time	(sulm mins)	3.00	3.00	2.00	5.00	5.00	5.00	5.00	9.00	5.00	5.00	5.00	2,00	00.0	3.00	00.0	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	500	2000
1	(Mins)	180.00	214.29	180.00	192.00	180.00	100.00	150.12	152.40	125.71	300.00	180.00	420.00	390.00	300.00	420.00	200.000	370.00	330.00	420.00	420.00	384.00	420.00	420.00	420.00	360.00	390.00	438.00	396.00	444.00	378.00	
Average Frequency of Interruptions	Day	1.75	2.53	2.05	2.08	2.19	2.32	3.00	1.80	00.7	2.30	2.80	2.80	2.55	2.03	2.35	2.52	3 35	0.50	27.12	2.30	2.30	2.07	2.67	2.4	2.04	07.7	2.33	3.18	2.70	2.70	
Minimum Duration of	Supply (Hrs/Day)	21.00	20.43	21.00	20.80	21.00	20.48	21.46	21.90	19.00	21.00	17.00	17.50	00.7	19.00	17.00	17.50	18.50	17.00	17.00	17.60	17.00	17.00	17.00	18.00	17.50	16.70	17.40	14.40	17.70	0/:/1	
Feeders	AMINII STDEET	MIDAIAWAI	AZARE TOWN	COF/FIDE SERVICE	CDA ATAR	EED LOW COOL	LED. LOW COST GOMBE	TUGUDA FARM	GUBI	DASS	GWALLAMEJI	MAKURDI TOWN	ANKPA	KATSINA AI A	ZAWAN	TAPALI	DARAN	NIPSS KURU	DILIMI	UTAN	NARAGUTA	CONGO	NASARAWA	RUKUBA ROAD	BAPTIST	BBL	RAILWAY	OLD ENUGU ROAD	OTADA	IGBANOMAJE		
Tariff	<	4	4	∢	<	4	< ⊲	<	<	∢ -	∢ ′	20	Δ	മ	8	В	~	2 6	۵ ۵	Δ α	20 20	۵ ۵	20 02	20 0	۵ ۵	2	8	<b>a</b>	2	В	6	/

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	Voltage	<u>•</u>	20	20	0	0	O.	0	0	0	0		0	0	0		_									T	Т	Γ	
_	-	Level	32.20	10.20	30.00	32.20	32.20	31.30	10.60	31.20	10.80	0.00	10.80	10.50	30.30	10.30	10.30	10.50	10.50	11.00	10.90	10.70	10.70	10.60	29.40	10.20	10.50	31.30	30.30
Average Response	time to resolving	complaints (in Hrs)	90.9	9.00	9.00	4.00	5.00	6.00	5.00	6.00	5.00	5.00	5.00	5.00	9.00	4.00	4.00	5.00	5.00	4.00	5.00	9.00	5.00					6.00	5.00
	Response time	o calls (In Mins)	00.0	5.00	5.00	5.00	5.00	5.00	2.00	3.00	2.00	5.00	2.00	2.00	2.00	3.00	2.00	2.00	5.00	00:0	3.00	2.00	2.00	0.00	2.00	5.00	2.00	2.00	00.0
Average Duration	(Mins)	324 00	324.00	324.00	340.00	360.00	360.00	360.00	360.00	360.00	300.00	305.71	344 76	300 00	362.86	397.14	370.48	474.00	360.00	365.71	420.00	480.00	900.009	540.00	00 009	582.00	582.00	582 00	502.00
Average Frequency Average Duration of Interruptions Per	Day	4.58	2.52	3.46	4.61	2.79	4.00	1.27	4.89	2.05	2.70	6.24	5.40	3.38	2.22	2.39	6.33	5.06	2.03	2.40	3.00	2.45	2.64	2.70	2.40	2.53	4.00	4.20	4.20
Minimum Duration of	Supply (Hrs/Day)	18.60	18.60	18.60	18.00	18.00	18.00	18.00	18.00	18.00	19.00	18.90	18.25	19.00	17.95	17.38	17.83	16.10	12.00	17.90	00.71	1,00	17.00	00.61	14.00	14.30	14.30	14.30	14.30
Feeders	DOMA	RUKUBA	DOROWA	GOMBE STATE IINIVERSITY	RUKUBA BADDACKE		MAKURDI TOWN 11KV	YANKARI	TUDUN WADA JOS	FOBUR	BCGA	POLICE STAFF COLLEGE/POLV	DARAZO/DIIKKII	BANK ROAD	INDUSTRIAL BAUCHI	SCIENCE SCH KIIRII	BARRACK	FGC/RADIO MONITORING	TUDUN WADA GOMBE	YELWA	NASME	POLO	MALLAM SIDI	WOV	SRS	Gamawa/Dambam	OBARIKE TOWN	Info	
Tariff	В	В	В	В	В	В	В	В	8	В	В	В	В	В	В	В	В	В	В	В	В	U	U	U	U	O	O	U	

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	Service	Pave	0 70	07.0	10.80	10.00	11.00	5 5	00.	10.90	10.90	10.90	29.40	9.20	30.00	10.50	20 00	0 50	0 50	0.50	0.50	9.50	0000	0 20	02.0	02.0	02.0	9.20
	time to recolving	complaints (in Hrs)	5.00	5.00	5.00	5.00	400	700	0000	5.00	2.00	00.0	0.00	5.00	5.00	5.00	5.00	5.00	5.00	200	5.00	5.00	5.00	5.00	5.00	5 00	5.00	
Average		to calls (in Mins)	5.00	5.00	5.00	5.00	5.00	5.00	200	5.00	5.00	5.00		00.0	2.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Average Duration	of Interruptions	(Mins)	934.33	936.35	943.65	971.45	1037.43	1037.94	1200.00	960.00	960.00	420.00	864.00	00.400	008.00	888.08	892.00	1064.00	1064.00	1064.00	1064.00	1064.00	1064.00	1112.00	1112.00	1112.00	1112.00	1112.00
Average Frequency Average Duration	of Interruptions Per	yeu.	4.28	4.19	3.40	3.20	4.22	4.22	3.43	3.00	3.00	3.32	3.46	3.32	20.0	0.50	20.0	3.49	3.52	3.46	3.77	3.94	3.40	3.40	3.46	3.46	3.46	3.46
Minimum	Supply (Hre/Day)	8 43	05.00	8.27	7.81	10.00	10.00	0.00	0.40	8.00	8.00	0.40	9.60	9.53	9.20	9.13	6.77	6.27	4.27	77.0	6.27	627	5.47	5.47	5.47	5.47	2.47	74.0
Feed		J.D. GOMWALK	GENERAL HOSPITAL PANKSHIN	HARDAWA	KALSHINGI TOWN I	BOGORO I	BOGOROII	Emir Palace Darazo	KIIMO TOWN	EMIR PALACE KLIMO 115%	OKPOGA	PINACIIA		BENPOLY	SHIRA-YANA	UGBOKOLO	TOTAL	GRA SHENDAM	Shendam Army Barracks	PAJAT	KUFFEN	WASE GARKUWA	WASE PRISON	DENGI TOWN	GANAWURI (NESCO)	MIANGO 3.3KV	Mbar Town	
Tariff	Bana	۵	Δ	۵	Δ	Δ	۵	٥	۵	Δ	ш	ш	ш	J L	<b>"</b>	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	1

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