ORDER/NERC/2023/030

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

Title

1. This regulatory instrument shall be cited as the **Multi-Year Tariff Order ("MYTO") 2024 for Kaduna 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 Kaduna Electricity Distribution Plc ("KAEDC") by the Nigerian Electricity Regulatory Commission ("NERC" or the "Commission").

Objectives

3. This Order seeks to:

   a. Ensure that prices charged by KAEDC are fair to customers and are sufficient to allow KAEDC 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").

   b. 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 KAEDC's CAPEX proposal and service improvement commitment.

   d. Ensure that tariffs payable by KAEDC's customers are commensurate and aligned with the quality and availability of power supply committed to customer clusters by KAEDC.

   e. Provide a framework for the settlement of imbalances between TCN and KAEDC 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. KAEDC 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 KAEDC's application include:

a. Changes to the Nigerian and United States inflation and foreign exchange rates in view of significant movement in these indices.

b. A reset of the Aggregate Technical Commercial and Collection ("ATC&C") losses applied in tariff determination to **45.00%** effective from 1st January 2024 to reflect operating realities.

c. Plan to deploy **629,996** 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 KAEDC from NBET's Vesting Contract regime thereby allowing KAEDC to procure electricity directly from Generation Companies ("GenCos") through bilateral contracts.

5. The details of the rate application filed by KAEDC are summarised in Table 1 below –

Table – 1 Summary of KAEDC's Rate Application

	Parameter	KAEDC's Request
1	Average Energy offtake (MWh/h)	258MWh/h
2	ATC&C Loss Target	45.00%
3	Annual OPEX (₦' billion)	25.16
4	Annual Meter CAPEX (₦' billion)	16.14
5	Annual Other CAPEX (₦' billion)	36.62
6	Annual Revenue Requirement (₦' billion)	235.40
7	Cost-reflective tariff (₦/kWh)	189.42
8	Allowed Tariff (₦/kWh)	189.42
9	Tariff shortfall (₦/kWh)	0

14. Operating Expenses

KAEDC 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. KAEDC's OPEX proposal was reviewed in line with relevant industry benchmarks and peculiarities of KAEDC's operating conditions. Table 4 below provides a summary of KAEDC's approved OPEX in relation to its application.

Table – 4: Approved Annual OPEX for KAEDC

Year	KAEDC's OPEX Request	NERC Approved OPEX
	₦'Million	₦'Million
Admin OPEX	13,073	10,959
Fixed OPEX	1,462	2,435
Variable OPEX	10,628	10,959
Total OPEX	**25,163**	**24,353**

15. Meter Rollout Programme

In addition to other sector-led end-user metering initiatives in the NESI, this Order has considered KAEDC's proposed end-user customer meter rollout programme to eliminate estimated billing within the next 5 years. Over the tariff review period, KAEDC 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 KAEDC from 2023 to 2027.

Table 5: Meter Rollout Programme for KAEDC for the period 2024 – 2027

Year	2024	2025	2026	2027
Number of meters	65,000	65,000	65,000	65,000
Amount	₦6.25Billion	₦6.25Billion	₦6.25Billion	₦6.25Billion

16. Aggregate Capital Expenditure ("CAPEX") Plan

In addition to end-user meter rollout, KAEDC's rate-case filling included proposed CAPEX for other service improvement initiatives. KAEDC 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 KAEDC'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 KAEDC. Table-6 below provides the annual approved aggregate CAPEX (inclusive of meter rollout) provision fr KAEDC

Table–6: KAEDC's Aggregate CAPEX Programme for 2024 – 2027

Year	2024	2025	2026	2027
	₦' Million	₦' Million	₦' Million	₦' Million
KAEDC's Request	52,755	52,755	52,755	52,755
NERC's Approval	15,456	15,456	15,456	15,456

17. Minimum Energy Offtake and Transition to Bilateral Contracts

The Order recognises a revision to KAEDC's partially contracted capacity to ensure a minimum energy offtake of 258MWh/h with effect from 1st January 2024. KAEDC is required by this Order to secure adequate bilateral contracts to facilitate a seamless exit from NBET's vesting contract regime. Through bilateral contracts, KAEDC is required to mitigate its exposure to volumetric energy risks. Effective January 2024, KAEDC shall have no recourse to claim revenue shortfall arising from generation shortfalls. KAEDC 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 KAEDC for the period.

Table–7: Minimum Energy Offtake Requirement of KAEDC 2024 – 2027

Year	2024	2025	2026	2027
MWh/h	258	285	286	329

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

The Order recognises KAEDC'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 KAEDC'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 KAEDC'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 KAEDC'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 KAEDC for 2023 – 2027.

Table 8: Approved Revenue Requirement for KAEDC 2024 – 2027

		2024	2025	2026	2027
		₦' Million	₦' Million	₦' Million	₦' Million
GenCos Cost	Capacity Cost	63,496	70,660	71,133	82,954
	Opex	82,812	91,878	93,252	107,795
	Total	**146,307**	**162,538**	**164,386**	**190,749**
TCN and ADMIN Cost	Opex	3,612	4,856	6,067	7,540
	RO Investment	206	215	295	8,033
	Depreciation	6,055	6,311	6,420	6,250
	Total	**9,873**	**11,382**	**12,782**	**21,823**
System Operations Cost	Opex	1,732	2,004	2,241	2,564
	RO Investment	103	111	128	146
	Total	**1,835**	**2,115**	**2,369**	**2,711**
Market Operations Cost	Opex	280	290	313	345
	RO Investment	10	18	19	21
	Total	**290**	**308**	**332**	**365**
Ancillary	**Cost**	**422**	**604**	**777**	**1,162**
DisCo Cost	Opex	24,578	30,919	39,026	49,394
	RO Investment	19,881	28,894	31,121	32,446
	Depreciation	10,513	11,023	11,465	11,907
	Debt Repayment	5,540	3,381	757	757
	Total	**60,513**	**74,218**	**82,369**	**94,504**
Revenue Required		**219,240**	**251,166**	**263,015**	**311,315**

21. Summary of Tariff Variables/Assumptions

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

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

Parameter	Unit	2023	2024	2025	2026	2027
Loss Target	%	6.60%	25.00%	21.32%	18.18%	15.50%
Nigerian Inflation	%	24.5%	28.2%	28.2%	28.2%	28.2%
US Inflation	%	4.1%	3.1%	3.1%	3.1%	3.1%
Exchange Rate ₦/$	₦	649.0	919.4	919.4	919.4	919.4
Transmission Loss Factor	%	7.25%	7.00%	6.75%	6.50%	6.50%
Energy Delivered to DisCo	GWh	1,871	2,260	2,496	2,503	2,885
Energy Delivered to DisCo	MWh/h	848	258	285	286	329
Generation Cost	₦/kWh	44.1	63.8	64.1	64.7	65.1
Transmission & Admin Cost	₦/kWh	7.3	6.9	7.3	8.1	10.7
End-User Cost Reflective Tariff	₦/kWh	82.2	129.4	127.9	128.4	127.7
End-User Allowed Tariffs	₦/kWh	57.5	57.5	127.9	128.4	127.7
Tariff Shortfall (Subsidy)	₦million	43,278	121,882*	0	0	0

Notes: Estimated Annual Subsidy for 2024. The monthly subsidy from January 2024 is NGN10.16bn

22. Approved Cost-Reflective and Subsidised Tariffs

Pursuant to Section 116 of the EA and extant regulations, the Commission considered and approved for KAEDC 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 KAEDC franchise in 2024 is approximately NGN121.88bn (i.e., NGN10.16bn monthly). The allowed tariff is with effect from 1st January 2024 and shall remain in force, subject to further policy direction of the FGN.

Table 10: Approved Cost Reflective and Allowed Tariffs (₦/kWh) for KAEDC

Category	2023		2024		2025	2026	2027
	Cost-Reflective Tariff	Allowed Tariff	Cost-Reflective Tariff	Allowed Tariff	Cost-Reflective Tariff		
Life-line	4.00	4.00	4.00	4.00	4.00	4.00	4.00
A - Non-MD	90.25	67.53	142.04	67.53	140.38	140.99	140.19
A - MD1	96.93	71.74	152.56	71.74	150.78	151.43	150.58
A - MD2	103.96	76.16	163.61	76.16	161.70	162.40	161.49
B - Non-MD	86.68	62.63	136.42	62.63	134.83	135.41	134.65
B - MD1	92.57	66.34	145.69	66.34	143.99	144.61	143.80
B - MD2	96.46	68.78	151.80	68.78	150.04	150.68	149.84
C - Non-MD	81.12	51.12	127.66	51.12	126.18	126.72	126.01
C - MD1	83.91	52.88	132.06	52.88	130.52	131.08	130.35
C - MD2	88.10	55.52	138.65	55.52	137.04	137.63	136.86
D - Non-MD	56.19	35.41	88.43	35.41	87.40	87.78	87.28
D - MD1	73.63	46.40	115.89	46.40	114.54	115.03	114.38
D - MD2	73.63	46.40	115.89	46.40	114.54	115.03	114.38
E - Non-MD	56.19	35.41	88.43	35.41	87.40	87.78	87.28
E - MD1	73.63	46.40	115.89	46.40	114.54	115.03	114.38
E - MD2	73.63	46.40	115.89	46.40	114.54	115.03	114.38

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, KAEDC'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, KAEDC is required to pay 100% of its market obligations to NBET, MO, and other bilateral counterparties for energy and

market administration services rendered to the utility. KAEDC 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 KAEDC's license and shall attract full enforcement measures in line with Section 75 of the EA.

25. KAEDC'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 KAEDC 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 KAEDC at the applicable tariff;

b. KAEDC 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 KAEDC'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").

e. KAEDC 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. KAEDC shall maintain adequate securitisation for energy off-take in line with the provisions of the Market Rules and relevant bilateral contracts.

g. KAEDC shall settle its market invoices under the minimum remittance thresholds as provided in Table 11 effective 1st 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 KAEDC, 2023 and 2024

Head	Subhead	2023	2024
		₦'Million	₦'Million
Revenue Required	NEMSF	3,532	3,532
	Meter Acquisition Fund	1,311	2,008
	Unadjusted GenCo Invoice	83,815	144,145
	TCN & Admin Services	11,511	15,616
	DisCo	43,517	53,938
	Total	143,686	219,240
Allowed Recovery		100,408	97,358
Tariff Shortfall (Subsidy)		43,278	121,882
NBET Adjusted Invoice to KAEDC		40,537	22,263
DisCo Remittance Obligation	NEMSF	3,532	3,532
	Meter Acquisition Fund	1,311	2,008
	NBET Remittance Obligation	40,537	22,263
	MO Remittance Obligation	11,511	15,616
	DisCo	43,517	53,938
	Total Distribution	100,408	97,358
DisCo remittance 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: KAEDC's Customer Classifications

Service Bands	New Tariff Class	Description
Lifeline	**R1**	Life-Line customers with energy consumption of not more than 50kWh/month
A (Minimum of 20hrs/day)	**A – Non-MD**	Customers with single or three-phase connections located within **Band–A** Service Level Feeders
	A – MD 1	Customers with LV Maximum Demand connection located within **Band–A** Service Level Feeders
	A – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within **Band – A** Service Level Feeders
	A – Special	Customer under special supply agreement
B (Minimum of 16hrs/day)	**B – Non-MD**	Customers with single or three-phase connections located within **Band–B** Service Level Feeders
	B – MD 1	Customers with LV Maximum Demand connection located within **Band–B** Service Level Feeders
	B – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within **Band – B** Service Level Feeders
C (Minimum of 12hrs/day)	**C – Non-MD**	Customers with single or three-phase connections located within **Band – C** Service Level Feeders
	C – MD 1	Customers with LV Maximum Demand connection located within **Band–C** Service Level Feeders
	C – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within **Band – C** Service Level Feeders
D (Minimum of 8hrs/day)	**D – Non-MD**	Customers with single or three-phase connections located within **Band–D** Service Level Feeders
	D – MD 1	Customers with LV Maximum Demand connection located within **Band–D** Service Level Feeders
	D – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within **Band – D** Service Level Feeders
E (Minimum of 4hrs/day)	**E – Non-MD**	Customers with single or three-phase connections located within **Band–E** Service Level Feeders
	E – MD 1	Customers with LV Maximum Demand connection located within **Band–E** Service Level Feeders
	E – MD 2	Customers with MV/HV Maximum Demand (11/33kV) connection located within **Band–E** Service Level Feeders

Appendix – 2: KAEDC's Service Level Commitments for January to June 2024

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
A	33KV AREWA	21	0.70	2.18	10	10.61
A	11KV NASSARAWA MKR	21	0.68	2.32	10	9.61
A	11KV GWARI AVENUE	21	1.05	1.94	10	9.62
A	33KV PAN	21	0.55	1.39	20	10.61
A	11KV SUNGLASS	21	0.83	5.02	10	10.40
A	33KV UNTL (DEDICATED)	21	0.92	1.39	10	10.30
A	33KV NARAYI VILLAGE	21	0.68	2.32	10	10.40
A	33KV UNGUWAN BORO	21	0.22	0.80	10	10.50
A	33KV KRPC (DEDICATED)	21	0.37	0.70	10	10.30
A	33KV MOGADISHU	21	0.73	3.33	10	10.30
A	11KV GOVERNMENT HOUSE KD	22	0.80	2.51	10	32.64
A	11KV POLY ROAD	22	0.72	3.84	10	32.64
A	11KV LEVENTIS	22	0.36	3.84	10	31.62
A	33KV RIGASA	21	1.49	1.98	10	10.10
A	33KV KINKINAU	21	0.60	1.05	10	10.10
A	11KV WATER RESOURCES RIG	22	0.88	5.27	10	31.62
A	33KV AIRPORT ROAD	21	0.82	1.88	10	10.10
A	11KV FIFTH CHUKKER	22	0.85	3.61	10	31.62
A	11KV MC (DEDICATED)	21	0.44	2.96	10	10.30
A	11KV NTA DKA	21	0.10	0.76	10	10.40
A	33KV NAF	21	0.77	4.75	10	10.40
A	11KV NAFBASE	22	0.49	1.44	10	31.62

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
A	33KV UNGWAN DOSA	21	0.52	4.75	10	11.00
A	11KV LEGISLATIVE QUARTERS	21	0.81	2.33	10	10.71
A	33KV ABAKPA	22	0.68	3.53	10	31.62
A	11KV ISA KAITA	22	0.48	0.91	28	32.64
A	11KV AHMADU BELLO WAY	21	0.97	4.30	10	31.62
A	33KV OLAM	21	0.68	2.87	10	10.10
A	33KV JAJI	21	0.79	0.90	10	10.10
A	33KV WATER WORKS	21	0.82	1.13	10	10.10
A	11KV NACB	21	0.38	1.04	10	10.10
A	11KV NEW MILLENNIUM CITY	21	0.54	3.51	10	10.10
A	11KV UNGUWAN RIMI	21	0.68	3.53	20	10.10
A	11KV URBAN SHELTER	22	1.03	6.70	10	32.64
A	11KV MALALI	21	0.70	1.11	10	10.30
A	11KV DAWAKI	21	0.44	1.81	10	10.30
A	33KV INDEPENDENCE	21	0.33	1.43	10	10.30
A	11KV TEACHING HOSPITAL DKA	21	0.69	2.00	28	10.30
A	11KV CONSTITUTION ROAD	22	0.46	2.01	10	32.64
A	33KV DOKA	21	0.69	2.00	10	32.64
A	11KV LUGGARD HALL	21	0.58	0.77	10	9.60
A	33KV PZ	21	1.12	3.57	10	9.60
A	11KV GRA ZAR	21	0.69	0.96	10	9.60
A	11KV CANTEEN	21	0.81	4.03	20	9.60
A	33KV KOFAN DOKA	22	0.51	2.83	10	31.62
A	33KV HANWA	21	0.63	2.39	10	10.10

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
A	11KV ABU	21	1.06	1.87	10	10.10
A	11KV NNPC ZAR	22	0.28	1.06	10	10.10
A	33KV AVIATION	23	3.01	4.94	10	31.62
A	11KV SAMARU	21	0.68	3.12	10	10.10
A	33KV SOBA	21	1.09	3.05	10	10.10
A	33KV ZARIA WATER WORKS (DEDICATED)	21	0.46	2.01	20	10.10
A	33KV POWER HOUSE	22	0.38	6.23	10	29.00
A	33KV NNPC GUSAU	21	0.43	3.91	10	10.10
A	11KV GADA BIYU	21	0.96	6.65	28	29.00
A	33KV MAGAMI	22	0.40	6.57	10	29.00
A	33KV KAURAN NAMODA	21	0.69	1.42	10	10.10
A	33KV TSAFE	22	0.83	6.82	10	29.00
A	33KV POWER STATION	21	0.68	2.72	20	10.30
A	33KV NEW INJECTION	22	0.69	7.95	10	29.00
A	33KV CCNN	21	0.65	4.20	10	29.50
A	33KV KWARE/UNIVERSITY	21	0.99	4.57	10	9.80
A	33KV FADAMA 2	22	0.62	4.00	10	29.00
A	33KV FADAMA 1	21	0.46	2.01	20	10.10
A	33KV KAMBA	21	0.88	3.29	10	29.00
A	33KV LABANA (DEDICATED)	21	0.46	0.06	10	29.00
A	33KV UNIVERSITY (DEDICATED)	21	0.43	0.37	10	10.10
A	33KV YAURI	21	0.82	8.40	10	30.60
A	33KV KAFANCHAN	21	0.61	0.41	20	10.20
A	11KV BANK KAFANCHAN	22	0.07	0.93	10	29.00

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
B	11KV KAKURI	17	0.53	1.94	10	10.10
B	11KV NORTEX	17	0.53	1.94	10	10.10
B	11KV BARNAWA MKR	17	0.53	1.94	10	10.10
B	11KV UNGUWAN YELWA	17	0.53	1.94	10	10.10
B	11KV FEDERAL HOUSING	17	0.53	1.94	10	10.10
B	11KV NOCACO	17	0.53	1.94	10	10.10
B	11KV AREWA BOTTLERS	17	0.53	1.94	10	10.10
B	11KV GRA BARNAWA	17	0.53	1.94	10	10.10
B	11KV VILLAGE	17	0.53	1.94	10	10.10
B	11KV MAHUTA	17	0.53	1.94	10	10.10
B	11KV PAMA	17	0.53	1.94	10	10.10
B	11KV MANDO ROAD	17	0.53	1.94	10	10.10
B	11KV YANTUKWANE	17	0.55	5.02	10	10.51
B	11KV DANKANDE	17	0.45	1.98	20	10.10
B	11KV STATEHOUSE	17	0.35	2.10	20	10.10
B	11KV NASFAT	17	0.41	1.13	20	10.00
B	11KV ZARIA ROAD	17	0.52	4.75	20	10.10
B	11KV TEACHING HOSPITAL ZAR	17	0.60	1.48	20	10.10
B	11KV GASKIYA	17	0.53	1.94	10	10.10
B	11KV GRA ZAM	17	0.53	1.94	10	10.10
B	11KV INDUSTRIAL ZAM	17	0.53	1.94	10	10.10
B	T2B	17	0.53	1.94	10	10.10
B	11KV DAMBA	17	0.53	1.94	10	10.10
B	33KV MAFARA	17	0.53	1.94	10	10.10

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
B	11KV KADUNA ROAD	17	0.53	1.94	10	10.10
B	11KV LODGE ROAD	17	0.53	1.94	10	10.10
B	11KV MABERA	17	0.53	1.94	10	10.10
B	11KV ARMY BARRACK	17	0.53	1.94	10	10.10
B	33KV TOWNSHIP	17	0.53	1.94	10	10.10
B	11KV ARKILLA	17	0.53	1.94	10	10.10
B	11KV INDUSTRIAL SOK	17	0.53	1.94	10	10.10
B	33KV YABO/SHAGARI	17	0.53	1.94	10	10.10
B	11KV GRA KBI	17	0.53	1.94	10	10.10
B	11KV BULASA	17	0.53	1.94	10	10.10
B	11KV GWADANGWAJI	17	0.53	1.94	10	10.10
B	33KV ARGUNGU	17	0.53	1.94	10	10.10
B	11KV GRA ARGUNGU	17	0.53	1.94	10	10.10
B	33KV JEGA	17	0.53	1.94	10	10.10
B	11KV GRA JEGA	17	0.53	1.94	10	10.10
B	11KV YELWA	17	0.53	1.94	10	10.10
B	11KV YAURI	17	0.53	1.94	10	10.10
B	11KV GARAGE KAFANCHAN	17	0.53	1.94	10	10.10
B	11KV KAFANCHAN (TOWNSHIP)	17	0.53	1.94	10	10.10
C	11KV CHELCO	14	0.31	2.48	14	10.50
C	11KV HIGH COST	14	0.65	4.03	28	10.30
C	11KV SABON TASHA	14	0.65	4.03	28	10.30
C	11KV TUDUN WADA RIG	14	0.65	4.03	28	10.30
C	11KV KATABU	14	0.65	4.03	28	10.30

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
C	11KV KAWO	14	0.65	4.03	28	10.30
C	11KV RAFIN GUZA	14	0.65	4.03	28	10.30
C	11KV KURMIN MASHI	14	0.65	4.03	28	10.30
C	11KV NDA	14	0.65	4.03	28	10.30
C	11KV COSTAIN	14	0.65	4.03	28	10.30
C	11KV RABAH ROAD	14	0.65	4.03	28	10.30
C	11KV SABON GARIN ZAR	14	0.65	4.03	28	10.30
C	11KV WUSASA	14	0.65	4.03	28	10.30
C	11KV KOFAN KIBO	14	0.65	4.03	28	10.30
C	11KV SHIKA	14	0.65	4.03	28	10.30
C	33KV MAKARFI	14	0.65	4.03	28	10.30
C	11KV TUDUN WADA ZAM	14	0.65	4.03	28	10.30
C	11KV ZAMTEX	14	0.65	4.03	28	10.30
C	11KV FGGC	14	0.65	4.03	28	10.30
C	11KV SULTAN PALACE	14	0.65	4.03	28	10.30
C	11KV WATERWORKS SOK	14	0.65	4.03	28	10.30
C	11KV DURBAWA	14	0.65	4.03	28	10.30
C	11KV DIORI HAMMANI	14	0.65	4.03	28	10.30
C	11KV NTA SOK	14	0.65	4.03	28	10.30
C	33KV FARFARU	14	0.65	4.03	28	10.30
C	11KV BADO	14	0.65	4.03	28	10.30
C	11KV INSTITUTE	14	0.65	4.03	28	10.30
C	11KV TOWN	14	0.65	4.03	28	10.30

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
C	33KV TAMBUWAL	14	0.65	4.03	28	10.30
C	11KV KARA	14	0.65	4.03	28	10.30
C	11KV NASSARAWA KBI	14	0.65	4.03	28	10.30
C	11KV TUDUN WADA KBI	14	0.65	4.03	28	10.30
C	11KV ARGUNGU CITY	14	0.65	4.03	28	10.30
C	11KV MERA	14	0.65	4.03	28	10.30
C	11KV KANTA	14	0.65	4.03	28	10.30
C	11KV SABON GARI JEGA	14	0.65	4.03	28	10.30
C	33KV ALIERO	14	0.65	4.03	28	10.30
C	33KV GWANDU	14	0.65	4.03	28	10.30
C	33KV BUNZA	14	0.65	4.03	28	10.30
C	33KV ZURU	14	0.65	4.03	28	10.30
C	11KV BARRACKS ZURU	14	0.65	4.03	28	10.30
C	11KV RIKOTO/ZURU	14	0.65	4.03	28	10.30
C	33KV NGASKI	14	0.65	4.03	28	10.30
C	33KV KOKO	14	0.65	4.03	28	10.30
D	33KV GONIN GORA (GWAGWADA LEG)	9	0.81	1.84	38	29.30
D	11KV SABON GARIN RIG	9	0.81	1.84	38	29.30
D	11KV ASIKOLAYE	9	0.81	1.84	38	29.30
D	11KV HAYIN RIGASA	9	0.81	1.84	38	29.30
D	11KV MAKARFI ROAD	9	0.81	1.84	38	29.30
D	11KV UNGUWAN MUAZU	9	0.81	1.84	38	29.30
D	33KV BIRNIN GWARI	9	0.81	1.84	38	29.30
D	11KV BIRNIN GWARI	9	0.81	1.84	38	29.30

Tariff Band	Feeder	Average Duration of Supply (Hrs/Day)	Average Frequency of Interruptions Per Day	Average Duration of Interruptions (minutes)	Average Response time to Resolving Complaints (Hours)	Service Voltage Level (kV)
D	11KV JAJI	9	0.81	1.84	38	29.30
D	11KV ZARIA CITY	9	0.81	1.84	38	29.30
D	11KV DAM	9	0.81	1.84	38	29.30
D	33KV KUDAN	9	0.81	1.84	38	29.30
D	11KV MAKARFI	9	0.81	1.84	38	29.30
D	T2A	9	0.81	1.84	38	29.30
D	11KV SABON GARIN ZAM	9	0.81	1.84	38	29.30
D	11KV KUEPPERS	9	0.81	1.84	38	29.30
D	11KV SARKIN FADA	9	0.81	1.84	38	29.30
D	11KV ILLELA ROAD	9	0.81	1.84	38	29.30
D	11KV BUNZA	9	0.81	1.84	38	29.30
D	11KV KAGORO	9	0.81	1.84	38	29.30
D	11KV MANCHOK	9	0.81	1.84	38	29.30
E	33KV TURUNKU	6	0.93	7.69	36	29.00
E	33KV MARADUN	6	0.93	7.69	36	29.00
E	33KV BAKURA	6	0.93	7.69	36	29.00
E	33KV ANKA	6	0.93	7.69	36	29.00