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Chairman
Nigerian Electricity Regulatory Commission
Plot 1387, Cadastral Zone A00
Off Shehu Shagari Way
Abuja, FCT, Nigeria

Attention- Engr. Sanusi Garba

Dear Sir,

JUSTIFICATION FOR UPDATE OF EEDC CUSTOMER TARIFFS

This letter is prepared in accordance with the letter NERC/REG/EEDC/DSPONMO/6163/T/1 dated 21st June, 2023 in accordance to minor review process set for July 2023, wherein EEDC is to provide updates pertaining to its customer tariffs and related assumptions to the commission. The commission's requirements dictate that any rate filing submission must be substantiated with an updated MYTO model and a cogent justification for the proposed tariff amendments.

In this letter, we detail the principal modifications to the tariffs, drawing upon factors such as energy, load allocation, tariff weightings, and tariff spread. We also highlight the major projects and inititiatives planned for implementation in support of these tariff modifications.

Through this communication, we intend to disseminate our revised tariffs and present the corresponding justifications for these adjustments.

1. Updated Assumptions used in calculating tariffs.

To update our tariffs, we have made changes to several parameters and will highlight and discuss the key parameters in the sections below.

- General Assumptions

The fundamental assumptions utilized for this analysis are presented in Table 1 below. These presuppositions have been extracted from the MYTO Model dated December 2022. In terms of macroeconomic assumptions, both local and US inflation have been maintained at a steady rate of 22% and 5.13% respectively throughout the projected period. The foreign exchange rate has also been preserved at a constant level throughout this period, adhering to the existing forex rate found in the MYTO, which stands at 639 USD/NGN.

Table 1: Macroeconomic Assumptions for Tariff Review

Macroeconomics		2023	2024	2025	2026	2027	2028
Nigeria Inflation	%	22.0	22.0	22.0	22.0	22.0	22.0
US Inflation	%	5.13	5.13	5.13	5.13	5.13	5.13

Macroeconomics		2023	2024	2025	2026	2027	2028
Forex	Naira	639	639	639	639	639	639

- **CAPEX AND OPEX**

The Capex has been maintained at MYTO levels, while the OPEX has also been kept at MYTO level adjusted at the Forex exchange rate of 639:1

- **ATC&C LOSSES**

The ATC & C loss trajectory has been reset to a more realistic one.

Year	2023	2024	2025	2026	2027	2028
Loss Reduction Commitment		16.67%	14.29%	10.00%	7.41%	8.00%
ATC&C loss target	**42.00%**	**35.00%**	**30.00%**	**27.00%**	**25.00%**	**23.00%**

- **EEDC Energy Delivered**

The energy delivered as presented in our submission is a 34% increase from our actual energy received in 2022. The table below shows the energy delivered to Discos and collected sales used to determine our tariffs.

Table 2: Energy Delivered and Collected Sales

Parameter	2023	2024	2025	2026	2027	2028
Delivered to Transco (GWh)	3,789	4,293	4,734	5,222	5,695	6,132
Delivered to Discos (GWh)	3,484	3,947	4,353	4,801	5,237	5,639

- **Load allocation**

We have been able to allocate 78.2% of our energy to customers in bands A-C. This is in line with our efforts at optimizing our load allocations to the commission's projections that 80% of the energy consumed by Disco customers should go to customers in Bands A to C. The table below show the breakdown of our 2023 load allocation used in calculating our tariffs.

Table 3: Service Band Load Allocation

	Tariff Band Breakdown	EEDC 2023 Load Allocation
A	A – Non-MD	8.8%
	A – MD1	6.6%
	A – MD2	7.2%
B	B – Non-MD	19.2%
	B – MD1	3.6%
	B – MD2	0.9%
C	C – Non-MD	28.0%
	C – MD1	3.6%
	C – MD2	0.3%
D	D – Non-MD	16.3%
	D – MD1	0.8%
	D – MD2	0.5%
E	E – Non-MD	3.9%
	E – MD1	0.2%
	E – MD2	0.0%
	Total	**100.0%**

The load allocation was also adjusted to give the non-domestic customers (MD-1 and MD-1) 23.8% of the total energy delivered, this is up from the 16.4% allocation in 2022. We expect that by giving more electricity supply and reliability to those customers we can achieve corresponding revenue improvements from those same bands. This will enable us to improve customer satisfaction, boost service delivery, increase revenues, and improve our ability to settle our market invoices.

- **Tariff Weightings**

The tariff weightings used allowed us to equalize the tariff within the bands. We have adjusted the tariff for MD and NMD consumers within the band to have the same tariff as they are on the same feeder and enjoy the same service band availability. Through our focused efforts on feeder maintenance, we expect to improve the supply availability of feeders on designated A&B bands to be at the top of the band hour. The table below shows the exact weightings used in calculating the tariffs.

Table 4: EEDC Tariff Weightings

	Tariff Band Breakdown	EEDC Tariff Weightings
A	A – Non-MD	1.10
	A – MD1	1.10
	A – MD2	1.10
B	B – Non-MD	1.06
	B – MD1	1.06
	B – MD2	1.06
C	C – Non-MD	1.01
	C – MD1	1.01
	C – MD2	1.01

	Tariff Band Breakdown	EEDC Tariff Weightings
D	D – Non-MD	0.81
	D – MD1	0.86
	D – MD2	0.86
E	E – Non-MD	0.81
	E – MD1	0.86
	E – MD2	0.86

- **CAPEX**

The MYTO CAPEX provisions for EEDC were maintained in determining the tariffs.

Table 5: MYTO CAPEX

		2023	2024	2025	2026	2027	2028
CAPEX	Nbn	5.10	5.10	5.10	5.10	5.10	5.10

The projects are directed towards load growth, network capacity upgrade, system reliability improvement and operations automation. A comprehensive 5-year CAPEX plan is submitted to the NERC.

2. End-User Tariffs

Revenue Projection and Market Obligation Settlement

Before our tariff redesign above, a review of EEDC's load allocation showed that energy allocation to commercial & industrial customers stood at 16.3% and 83.7% to non-commercial customers. This sub-optimal energy allocation mix contributes significantly to EEDC's underperformance. The tariff weighting proposed is such that 23.8% of energy allocation is allocated to commercial customers and the impact is such that an increase in the energy allocation, will increase monthly expected revenue which will in turn enable EEDC to meet its market obligations.

Using all the key assumptions and parameters discussed above, we calculated an average tariff of N117N/kWh in 2023, with the highest tariff being that of band A MD-2. We have also adjusted the tariff for MD and NMD consumers within the band have the same tariff as they are on the same feeder and enjoy the same service band availability. Through our focused efforts on feeder maintenance, we expect to improve the supply availability to attain the top of the band hour. These tariffs are competitive with the tariffs of our neighboring Discos and will allow EEDC to recover its revenue required in line with the MYTO provisions.

3. Accelerating Projects & Improvements to Enable Investments

Based on the tariffs outlined in this justification letter, the presentation of the key assumptions used, and the supporting projects to enable EEDC to achieve incremental revenue and better operational efficiencies, we pray the commission approves the tariffs we have submitted.

1. Liquidating financial liabilities

The Enugu Electricity Distribution Company (EEDC) has prioritized enhancing its revenue collection and improving its collection efficiency to mitigate liquidity challenges. Since 2022, EEDC has been utilizing an advanced block-chain based technology based platform along with an online application-TOPUP, that offers real-time visibility into commercial activities conducted by its staff, including marketing personnel, feeder managers, service center managers, and District Business Unit Managers.

TOPUP provides actionable customer data regarding payment behaviors, debt status, and customer-staff interactions. To encourage widespread adoption of the app across all commercial processes, the company has implemented a system where field staff can earn loyalty points for using the application. These points can be converted into cash incentives when targets are met. Field staff can accrue points by logging their attendance, achieving successful customer payment responses, disconnecting, reconnecting services, and onboarding unauthorized consumers

The implementation of TOPUP has resulted into increase collection efficiency from 77% to 89% between the first and second quarters, resulting in an estimated additional annual revenue of approximately 15 billion. As of now, the execution of this initiative is progressing as planned. This significant boost in monthly collections is expected to generate sufficient cash flow to meet EEDC's market obligations before the depletion of the market payment surplus, anticipated to last until June 2023. The plan's success largely hinges on enhanced visibility and control over field operations.

Apart from Top-Up, EEDC is also implementing the Accelerated Settlement of Arrears Project (ASAP) in 2023 to increase arrear recovery. This project is expected to contribute annually 12.5 billion Naira to the collections this financial year. As of January 2023, EEDC customers owe over 161 billion Naira, offering a significant opportunity for the company's financial turnaround.

Before ASAP, EEDC had been operating the One Time Payment Scheme (OTS) since 2021, which collected arrears of N5.1 billion and N4.5 billion in 2021 and 2022 respectively. However, the declining trend in collected amounts necessitates a new, innovative scheme - ASAP. This redesigned scheme provides a wider scope for revenue collection through graded discounts, redefined qualifying requirements, and employee incentives for successful transactions.

The introduction of employee incentives for promoting the OTS scheme is designed to increase its coverage and throughput. Furthermore, it's intended to extend the arrears recovery drive beyond the limited number of Revenue Recovery Group (RRG) and Revenue Protection Group (RPG) team members. A new performance monitoring application will provide visibility to track the arrears recovery process.

2. Claim /Seek Regulatory Adjustments

There are some claims that require Regulatory ruling. These include the settlement of liabilities between EEDC and APLE after ceding off two districts to Geometrics. There is an impasse on the sharing of current assets and liabilities. Similarly Inner Galaxy illegally exited from EEDC network thereby creating CTC liabilities that are yet to be agreed and settled. Finally, the failure of NBET to expunge disputed interest standing as EEDC's liabilities remains unresolved

3. Seek redressal to impact on business due insecurity in SE region

Business activities in the region are suspended every Monday due to a mandatory stay-at-home campaign, affecting both EEDC and its customers. Similar disruptions occur whenever there is a court case. Additionally, there are areas where, despite the supply of electricity, revenue collection enforcement is not possible. Regulatory relief could significantly contribute to sustaining the business. EEDC's has submitted to the NERC the revenue loss due Sit-at-Home, Vandalism and the incessant insecurity conditions which have severely impacted business operations and revenue collection of EEDC. A suitable mechanism of compensation after verification of these losses through joint inspection of the restive and NO-GO areas is expected as support from NERC and FGN.

4. Vendor Financing for Meters

EEDC is exploring vendor financing options through two distinct schemes. Firstly, EEDC as part of its franchise initiative is in discussion with Anambra state to support vendor financing to close the metering gap within the state of Anambra. It's envisaged that several investors will syndicate to close the 500,000-metering gap. The actual framework is yet to be finalized.

Secondly EEDC has run a vendor procurement process and is in discussion to engage mini franchise arrangements in restive clusters under a model of Build-Operate-Transfer.

5. Planning Meters through NMMP-1, DISREP

Summary of Metering Plan

Metering Scheme	National Mass Metering Ph- 1	Vendor Franchise (Anambra Region)	Meter Asset Provider (MAP)	Vendor Finance	Total
Non-MD Allocation	**467,404**	**500,000**	**101,989**		**1,069,393**

Metering Suspended Customers and debulk Communities

Meter Type	Unmetered Active	Unmetered Suspended	Additional Growth	De-Bulked	Total
NON-MD	**422835**	**278304**	**255254**	**113000**	**1069393**

Metering Plan under NMMP Phase 1

DSITRICT	Metering Plan under NMMP Scheme	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	Total
ABAKALIKI DISTRICT	29354	1100	1109	1700	1700	1500	1525	1000	1250	1700	1800	1700	1533	1487	1500	2000	2100	2300	2350	29354
ABAKPA DISTRICT	37768	1800	2369	2311	2395	2795	2395	2395	2395	2395	2395	1622	2375	1711	1712	1596	2369	1369	1369	37768
AWKUNANAW DISTRICT	36266	1143	1143	1429	1911	2000	2300	2200	2100	2000	2200	2300	2110	2429	2429	2143	2143	2143	2143	36266
MBAISE DISTRICT	44223	2000	2251	2563	2200	2188	2300	2200	2700	2600	2200	2300	2350	2429	2429	2900	3079	2823	2711	44223
NEW OWERRI DISTRICT	45035	1251	2300	3000	2188	2952	2188	2188	2188	2000	2230	3110	3000	2600	2567	2600	2251	3222	3200	45035
NSUKKA DISTRICT	25475	701	1700	876	1200	2910	2350	1227	2910	2350	1227	1227	1976	976	876	701	767	800	701	25475
OGUI DISTRICT	29573	1500	1700	1450	1641	2641	1700	1725	1641	1600	1800	1993	1600	1437	1172	1437	1344	1750	1442	29573
ORLU DISTRICT	27278	700	700	1330	2200	1500	1267	2200	1700	1550	1600	1900	1275	1300	1500	1528	1728	1800	1500	27278
OWERRI DISTRICT	103249	4990	4950	5057	5700	5200	6100	5350	5900	5620	4726	5800	6727	5727	5927	6835	5950	6800	5890	103249
UMUAHIA DISTRICT	89183	5921	6030	5905	5701	3300	4550	5670	3922	4900	5060	4900	3907	5589	5900	4300	4806	3800	5022	89183
Total	467404	21106	24252	25621	26836	26986	26675	26155	26706	26715	25238	26852	26853	25685	26012	26040	26537	26807	26328	467404

Metering Plan under Vendor Financing

District	Metering Plan under Vendor Franchising Scheme	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	Total
AWKA DISTRICT	82651	4320	4000	4220	4701	3462	4550	5270	3922	4922	5060	4900	3907	5589	5900	4300	4806	3800	5022	82651
EKWULOBIA DISTRICT	75536	3900	3543	4056	3800	4200	4100	4250	4814	4600	4726	3800	3800	3797	3900	4700	3950	5800	3800	75536
NNEWI DISTRICT	105047	4990	4950	5157	5900	6200	6100	5350	5900	5620	5224	5800	6727	5727	5927	6835	5950	6800	5890	105047
OGBARU DISTRICT	55790	3251	3300	4155	4188	4952	2588	3388	2188	2000	2230	3110	3000	3600	2567	2600	2251	3222	3200	55790
OGIDI DISTRICT	108035	6190	6936	5057	5700	5200	6100	5350	5900	5620	6726	5800	6327	5727	5927	6835	5950	6800	5890	108035
ONITSHA DISTRICT	72941	2000	3000	4250	3000	3300	4550	5044	3922	4900	4060	4900	3907	3620	4560	4300	4806	3800	5022	72941
Grand Total	**500000**	**24651**	**25729**	**26895**	**27289**	**27314**	**27988**	**28652**	**26646**	**27662**	**28026**	**28310**	**27668**	**28060**	**28781**	**29570**	**27713**	**30222**	**28824**	**500000**

6. Network Projects through FGN

EEDC is implementing CAPEX projects that were carefully designed to increase service band availability reliability and increase the quantum of supplied Enugu in underserved areas. This will boost commercial performance through increased sales and promotion service bands from lower bands to higher bands

7. Exploring Embedded Generation

EEDC is discussion with s a number of investors such as Phoenix, Konecia for a 24 MW waste to power embedded generation in Anambra and Power-Gen to collaborate in the provision of embedded generation in underserved clusters such as Okigwe. The MOUs for collaboration for feasibility studies and technical planning have been signed and are progressing ahead to create a case for investments in selected areas

8. Planning Source power through Bilaterals

EEDC is in discussion with NDPH to enter into agreement to procure power for selected key customers including Anambra airport. Additionally, EEDC is collaborating to source bilaterally, 300 MW of power from the upcoming NDPHC Alojie Power Plant through a dedicated transmission system at 66kV

(HVDN project) sub-transmission system. The project is in an advanced stage for sourcing investments and financial closure approvals. Going forward the relationship will be expanded with a view of procuring more power to meet its growing demand

9. Exploring Franchising state geographies

EEDC is exploring implementation of the NERC approved franchising model in collaboration with the five states in its franchise area. Starting with Anambra where an MOU has already been signed and discussions are advanced to actualize the franchisee framework.

10. Funding Plan

Based on the CAPEX programs listed above, and the Accelerated Improvements the following funding plans will be used to execute the CAPEX.

CAPEX financing will be sourced through EEDC IGR, Vendor financing, FGN-Siemens funding, DFI's/donors – World Bank DISREP and other Institutional Investors

4. Conclusion

Based on the tariffs outlined in this justification letter, the presentation of the key assumptions used, the supporting projects and improvements EEDC plans to achieve incremental revenue and better operational efficiencies. The submission also includes the MYTO model excel sheets which contain the detailed computation and proposed End user Tariff. We pray the commission approves the tariffs we have submitted.

The combination of strategic options deployed to date has led to improved operational efficiencies as the disco strives to sustain an upward trajectory in its collection efficiency to enable it to meet its market obligations and achieve sustainable business growth going forward.

Yours faithfully,
For: Enugu Electricity Distribution Company

Praveen Chorghade
Managing Director/Chief Executive Officer