



ENCLAVE POWER COMPANY LIMITED

A SOUTHERN UTILITIES SUBSIDIARY

Southern Utilities

2022 MAJOR TARIFF PROPOSAL

PRESENTED TO THE PUBLIC UTILITIES REGULATORY COMMISSION (PURC)





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INTRODUCTION



ABOUT ENCLAVE POWER COMPANY LIMITED

- Ghana's only private, licensed electricity distribution company.
- Currently Licensed Operational Areas include Tema Multi-Purpose Industrial Enclave(840 acres) and Dawa Industrial Zone(2000 acres).
- Customer Base is largely Special Load Tariff(SLT) Customers across several distribution voltage levels.

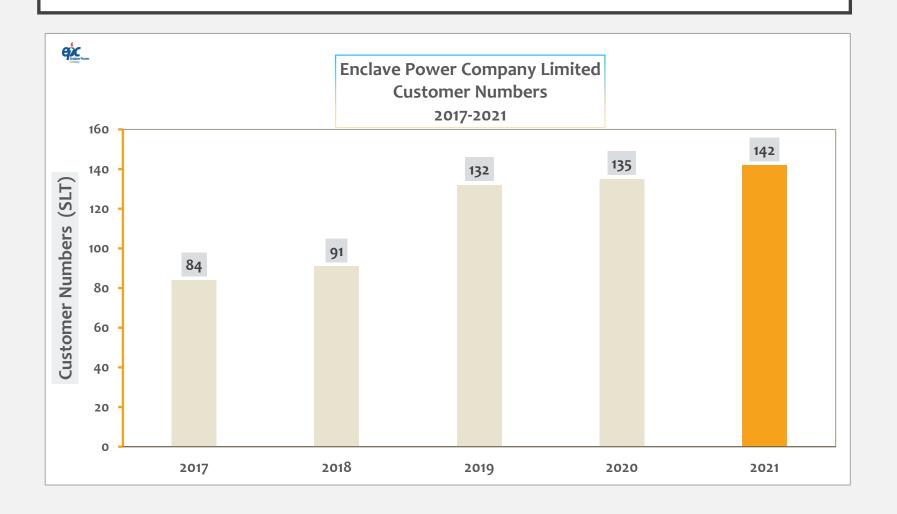




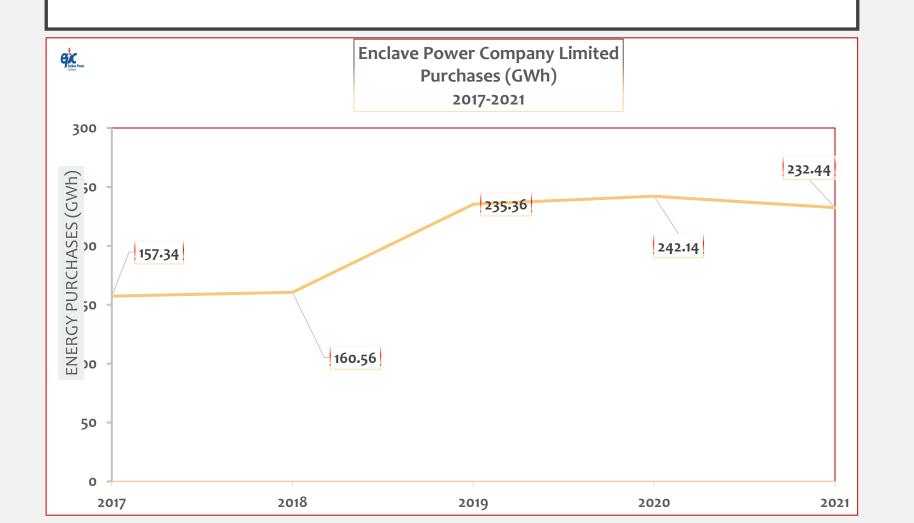


KEY PERFORMANCE INDICATORS

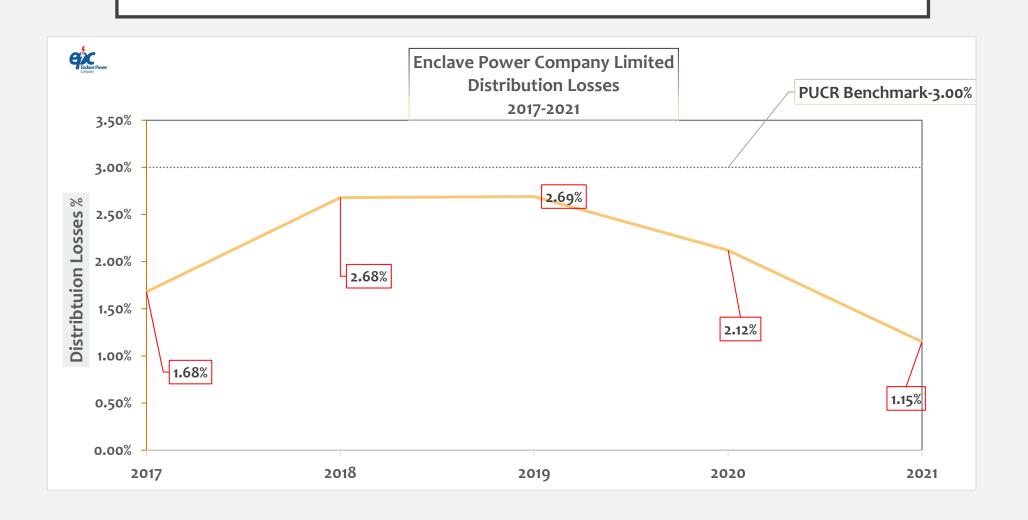
I.CUSTOMER NUMBERS



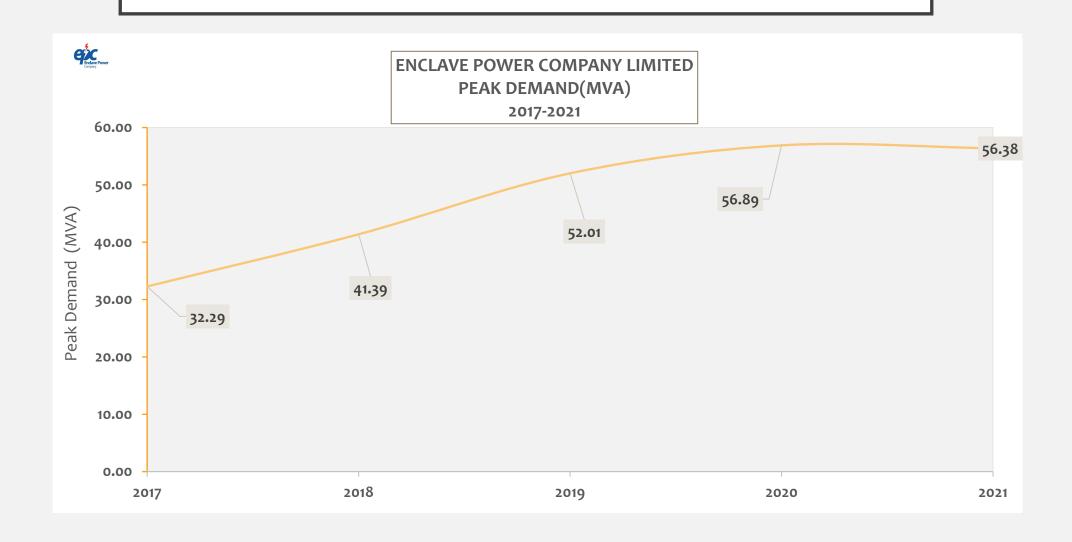
2.ENERGY PURCHASES



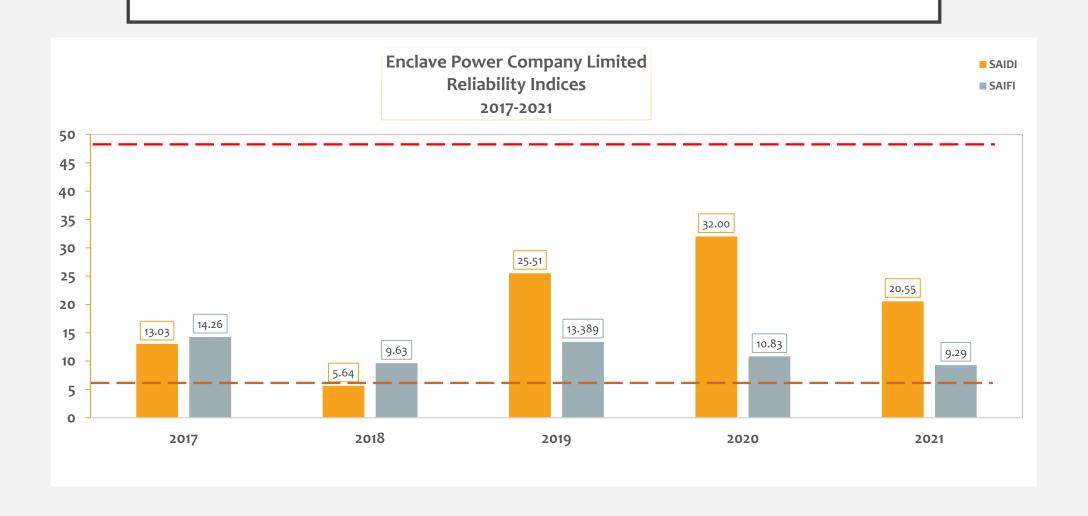
3. DISTRIBUTION LOSSES



4.DEMAND



5.RELIABILITY INDICES





OUR CUSTOMERS

- Customers are mainly Special Load Tariff Customers, split between local and foreign companies manufacturing for local and/or foreign use
- Maximum demand of our customers has grown to 58MVA, up from 42 MVA in 2018



























































EDUBA CAPITAL

COMMODITY WAREHOUSIN

AFRICAN CEMENT FACTORY

DISTRONICS



PROJECTS & INITIATIVES UNDERTAKEN SINCE JULY 2019 TARIFF REVIEW



PROJECTS

	ritojasto						
	DESCRIPTION	STATUS					
1	Extension of 72F12 sub-transmission line	completed					
2	Extension of Feeder 80F7 Sub-transmission & Distribution Line	completed					
3	Construction of Feeder 80F3 Sub-transmission & Distribution Line	in-progress					
4	Redesign and Upgrade of LV and MV lines	phase 1 completed					
5	Construction of Feeder 72F11 Sub-transmission Line	Completed					
6	Distribution Automation	Phase 1 completed					



PROJECTS DESCRIPTION STATUS Laboratory completed 8 2,500m square warehouse completed Dawa Staff Quarters completed 9 Completed Tema Multipurpose block



INFO-GRAPHICS

1.UPGRADE OF 72F4 FEEDER MAY 2020



2. COMPLETION
OF MULTIPURPOSE BLOCK
DECEMBER 2019



3. ACQUISITION OF TEST EQUIPMENT AND SPECIALIZED TOOLS MAY 2020











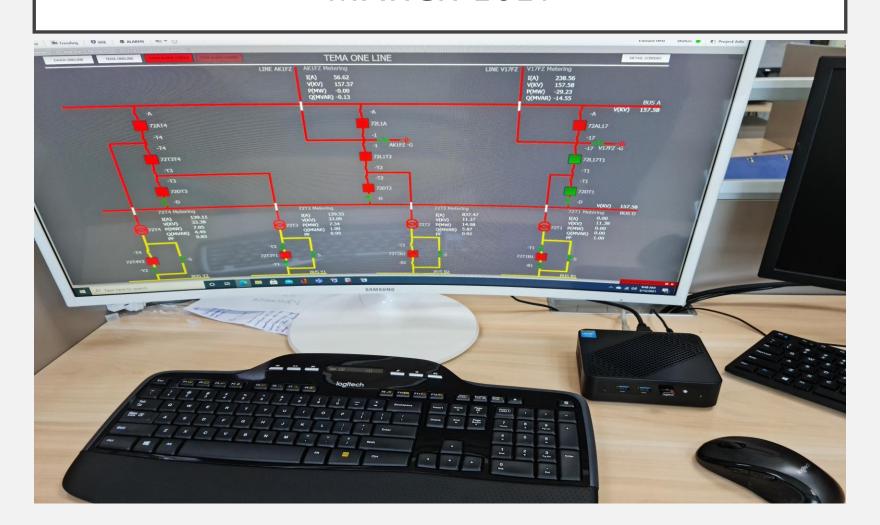


4. COMPLETION OF STAFF ACCOMMODATION IN THE DAWA AREA SEPTEMBER 2019





6.DEPLOYMENT OF MINI-SCADA MARCH 2021



7.COMPLETION
OF LABORATORY
DECEMBER 2020





INITIATIVES UNDERTAKEN SINCE JULY 2019 TARIFF REVIEW

ID	Initiative						
1	Capacity Building						
a.	Recruitment Drive and Training of engineers and technicians						
b	Acquisition of Specialized Tools and Equipment						
C	c Completion of Multi-Purpose Office Building						
2	Loss Control						
a.	Introduction of Enterprise Software for Metering, Billing and Revenue Collection						
b.	Acquisition of Power System Simulation Software						
3	Establishment of Customer Relations Office						



ONGOING PROJECTS

	Project	Status
1	Construction of 8oF3 sub-transmission and distribution network	On-going (10% completed)
2	Roll-out of tele-metering to customers	On-going (5% completed)
3	161 alternative line from SMII substation to 72FZ substation	On-going (5% completed)
4	161kV connection to AKSA	On-going (5% completed)



RATIONALE/OBJECTIVES UNDERPINNING PROPOSAL



RATIONALE/OBJECTIVES UNDERPINNING PROPOSAL-1

- EPC aims at achieving full recovery of its operational and capital expenditure in this tariff proposal because, as a private company, it does not benefit from the government subsidies and/or foreign grants that other distribution companies typically access.
- Support Massive Infrastructure Investment aimed at serving EPC's growing customer base.
- Meeting the Energy Commission's supply reliability and quality targets agreed to under the recentlysigned Memorandum of Understanding.



RATIONALE/OBJECTIVES UNDERPINNING PROPOSAL-2

- Run profitable operations while still abiding by the PURC's directive to offer a preferential rate to Steel Companies.
- EPC has recently settled, out of court, \$13 MIL in contested debt with the VRA. There is an agreement between EPC and VRA to clear this debt obligation in the next three years.





SERVICE DELIVERY AND EFFICIENCY TARGETS

	Item	Targets
1	Average Feeder Uptime/Availability	99%
2	Total Distribution Loss	2.65%
3	Response Time to Customer Complaints	
	a. Commercial	24 hours
	b Technical	1 hour
4	New Service Delivery Post-payment(Existing Lines)	5 days
5	New Service Delivery Post-payment (New Lines)	10 days
6	Customer End Voltage Variation	±5%



PROPOSED SERVICE DELIVERY AND EFFICIENCY IMPROVEMENTS

- Roll-out of tele-metering to customers
- Carry out Network Analysis and Systems Studies, as well as Power Systems Audits.
- Acquisition of additional Maintenance Tools and Specialised Equipment to enhance fault detection and speed up repairs.
- Enhancement of the capability of staff at all levels through extensive and advanced training.
- Improve reliability and quality of supply by continuing to implement the Distribution Master Plan.
- Roll-out of a performance management system to improve staff productivity and operational efficiency.



KEY POLICY ISSUES FOR TARIFF CONSIDERATION



KEY POLICY ISSUES FOR TARIFF CONSIDERATION

- Prioritization of the cheapest electricity generation resources for industries/businesses, instead of households.
- Amend the gazette to reflect VRA's ,rather than GRIDCo's, collection and recovery of the TSC-2 charge.
- Increase transparency on build-up components of Transmission Service Charge to encourage private sector participation in transmission asset ownership.
- Reverse the end-user energy charge for 11.5kV customers and 34.5kV customers as HV customers contribute much less to distribution losses than MV customers do.



KEY CHALLENGES LIKELY TO IMPACT SERVICE DELIVERY



KEY CHALLENGES LIKELY TO IMPACT SERVICE DELIVERY-1

Suppressed Demand

Complains about high tariff levels have caused customers to hold back on expansion plans.

Billing and collection

Difficulties in collections from some steel mills, who incidentally, enjoy preferential tariffs under PURC regulation.

Bad and Doubtful Debt

Post-Covid Challenges have led to bad debt on EPC's books, with a major customer who owes EPC GHS 9 million currently in administration

Surcharges and Subsidies

EPC is excluded from government subsidies that other distribution companies can access. To that point, EPC continues to experience difficulties any time the government announces special subsidies and interventions, as the government fails to fully account for what EPC requires to fully implement these interventions.

Access to Finance and Repayment of Financing Costs.

Because we have no government backstop, guarantee, or support, loans are secured at full commercial rates, which are high

KEY CHALLENGES LIKELY TO IMPACT SERVICE DELIVERY-2

Embedded Generators and Interconnection

Several of EPC's customers have sought alternate supplies in the form of off-grid renewable energy plants. There is a real risk of EPC having stranded assets should this trend continue.

Human Resource-Skilled Manpower

Being a small player in a relatively niche market, EPC faces the challenge of losing its human resource to its bigger rivals after investing a lot in training. EPC is working on bridging the remuneration gap between it and its larger peers to engender key staff retention.



PROPOSED TARIFF AND RATES STRUCTURE



SUPPLY PLAN 2021-2026

	(5)44	(5)41)	(5)411.)	(5)44	(5)44	(5)411.)	C (C) (I)
Generating Station	2020 (GWh)	2021 (GWh)	2022 (GWh)	2023 (GWh)	2024 (GWh)	2025 (GWh)	2026 (GWh)
VRA	242	232	310.96	368.45	325.95	429.18	443.32

IPPs (Solar)	_	_	7	29	87	87	120
irrs (Solai)			/	<u> </u>			120
Total	242	306.03	317.95	397-45	412.95	516.19	536.32



TARIFF PROPOSAL

	2021	2022	2023	2024	2025	2026
Depreciation	16,129,388.01	16,0299961.41	17,049,476.41	18,099,772.66	22,394,080.26	25,670,661.07
Interest on Local Loans	5,413,101.33	2,971,856.02	3,504,077.51	6,156,610.58	8,437310.01	6229633.32
Interest on Working Capital	-454461.46	3544060.76	3718624.03	3271814.96	2775924.06	1,204,185.21
Ops. & Maint. Expenses	227,439.86	375428.00	4078170.80	4415387.88	4774926.70	5155819.35
Admin. & Gen. Expenses	12,127,513.81	29814244.25	36952729.41	45825154.42	56882127.99	70734610.34
HR Expenses	4,124,750.28	8680497.78	11503601.38	16087912.05	20052927.47	21662958.43
Distribution Losses	3,614,185.94	2615877.00	3105272.61	4120943.31	4957534.89	6089764.23
VRA Contested Debt Repayment	28,800,000.00	25,200,000.00	27,000,000.00	7,509,046.96	-	-
ROCE	100,219,245.19	35,876,815.65	42,340,881.91	49,965,890.73	58,959,751.07	73,659,716.12
Total Cost	170,201,162.97	128,491,740.87	149,252,834.06	155,453,533.56	179,234,582.45	211,650,123.48
kWH Billed	-	308,421,176	308,421,176	385,526,470	400,562,002	500,702,502.5
Cost/kWh (GHp)		42	48	40	44	42