

Challenges and Opportunities in the Power Sector Reform of Abuja Electricity Distribution Company

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Abstract

The Nigeria Power sector reform was performed between the year 2010 and 2013 but has undoubtedly been adjudged unsuccessful by most stakeholders. The failure of the reform is evidenced by a myriad of seemingly insurmountable economic, institutional, technical, financial and socio-political challenges exacerbated by the recent macroeconomic crisis. This study examined challenges and opportunities in the power sector reform of Abuja electricity distribution company with a sample size of 251 determined using the Raosoft calculator. Data collection utilized a self-structured questionnaire, and analysis employed descriptive statistics like frequency count and mean. The findings showed power sector reform in Abuja Electricity Distribution Company (AEDC) has revealed challenges related to poor funding, inadequate implementation of reforms, and a lack of essential infrastructure. The study recommends prompt, continuous and effective stakeholders' engagement is critical at the states, local government and communities to resolve the socio-political and conflict of interest issues such as the tariff design, gas pipeline vandalization etc.

Keywords: Challenges, Opportunity, Power, Reform, Electricity

Introduction

In Nigeria, hydropower plays a significant role in electricity supply, similar to Ghana, Benin, Togo, Guinea, and Mali. However, frequent outages have plagued these countries. Senegal faces similar challenges with oil-based electricity generation, experiencing power plant outages due to low reliability and fuel procurement difficulties (Babatunde, Elutunji, Oluwatobi, Ayegbusi, Innocent & Desmond, 2022). Despite Nigeria's status as a major oil producer, its electricity situation is worse than other West African nations. This led to government reforms in the sector in 2007 (Umeiza, Ahmed, & Patrick, 2023). From 1972 to early 2006, the federal-owned National Electric Power Authority (NEPA) monopolized electricity production in Nigeria. Ogunbiyi (2022) notes that despite Nigeria's global oil production ranking, adequate power supply remains elusive. Spectator's Index (2017) indicates Nigeria has the world's worst electricity supply, similar to Yemen. Over 80 million Nigerians lack access to electricity, affecting industries and businesses. To address power shortages, the Nigerian government-initiated reforms, starting with the Electricity Supply Industry (ESI) rehabilitation in 2010. While some scholars acknowledge the reforms' contributions to industrial development, others argue that electricity upgrades and industrial expansion have been insufficient.

Historically, power shortages have hindered Nigeria's economic, political, and technological progress. The 1960s to 1980s saw better power availability due to reliable colonial-era infrastructures. However, the 1990s brought challenges, attributed to military involvement and

personalized leadership (Abada, Okafor, & Onah, 2022). Despite a transition to democracy in 1999, power generation and distribution issues persist, posing a significant obstacle to the nation's survival and development (Abada, et al. 2022). The Nigerian government is actively pursuing significant reforms in the power sector, involving privatization initiatives and the Power Sector Recovery Program (PSRP). These measures, including privatizing key entities and implementing policies, aim to tackle long-standing issues of inefficiency, financial sustainability, and technical losses.

The PSRP, responding to sector-wide challenges, provides a roadmap for comprehensive recovery and improvement (Dahunsi et al., 2021). Abuja Electricity Distribution Company (Abuja Disco), based in the capital city of Abuja, was established in 1997 to serve central Nigeria following the capital's transfer from Lagos in 1991 (Adelowo & Fadare, 2023). Abuja Disco's franchise covers Minna, Suleja, Lokoja, and Lafia Districts. Despite past infrastructure investments, demand in its service area surpasses supply due to the growing population of the Federal Capital. Abuja Disco, ranking fourth among the 11 discos, distributes an average of 204,150 KW of electricity annually (Adelowo & Fadare, 2023). While facing high demand, Abuja Disco maintains modern and well-kept infrastructure, including 60 units of 15 KW, 11 units of 7.5 KW, and 35 units of 2.5 KW injected into the substations. In 2013, the company enhanced collection efforts by introducing prepayment meters, route sequencing, and feeder-by-feeder energy audits (Adelowo & Fadare, 2023). This study explores the challenges and opportunities in the power sector reform of Abuja electricity distribution company against this backdrop.

Empirical Review

Challenges Faced by Electricity Distribution Companies

Charlse and Mohammed (2022) examine the nexus of power sector and industrial development in Nigeria using Ikeja Electricity Distribution Company as a case study. Industrial development necessitates efficient management of available resources, as well as equitably allocating these resources and effectively utilizing them productively for industrial growth. Contemporary, industries use modern operational technologies in respect to production, resource allocation and utilization. These are designed and tied strictly to the use of energy in one form or the other. Over a decade ago, lack of improvement in the power sector has led to total collapse of industrial sector in Nigeria. The resultant effect of poor power generation, distribution and transmission has crippled many manufacturing companies in Nigeria leading to mass exodus of investors in the industrial sector. The study adopts a survey research design and chi-square statistical method. The population of the study which consist of employees of Ikeja Electricity Distribution Company were purposely selected for the study. Findings provide that significant relationship exists between power generation, transmission and distribution and industrial development in Nigeria. Based on the findings, the major recommendations proffered require power sector operators to ensure adequate investment in power infrastructure that will meet the electricity needs of consumers, render qualitative services at affordable tariffs, taking post-privatization challenges into account by creating a good governance structure that will boost consumers' confidence.

Ajenikoko (2022) study analyzes the performance of Nigerian power sector so as to suggest possible means of ensuring improvements of the sector. Specification and estimation techniques were used for a period of eleven years. Secondary data were sourced from Central Bank of Nigeria (CBN) Statistical Bulletin of 2018 and Nigerian Electricity Regulatory Commission (NERC). The

performance of the power generated was evaluated using the overall efficiency and thermal efficiency. The results showed that the average value of the overall efficiency for the ten years period of study was 15.68% while the thermal efficiency had the average value of 15.37%. The result confirmed that deregulation of power sector has no effect on the efficiency of Nigerian power sector when the results were compared with the international best practice standards which are 30% and above for overall efficiency and 45% and above for thermal efficiency. The study therefore suggested possible strategies for efficient power sector improvement.

Isang (2022) examine the relationship between power sector reforms and economic development in Nigeria with a view to identifying gaps as it relates to technological infrastructures and competence of personnel. The relationship of these variables with infrastructure and employment was also assessed using enterprise structure indicators. Survey design method was adopted in this study. A total of 397 copies of questionnaire were distributed across the two study locations (Calabar and Uyo) using structured questionnaire. Empirical analysis result showed that application of technology and engagement of professional personnel have strong positive relationships with economic development in Nigeria. It was also revealed that, enterprise structure has significant impact in moderating the relationship between power sector reform and economic development. The study recommended comprehensive restructuring of the enterprise, the use of modern technology, application of requisite techniques and methods to ensure adherence of best practices enhance productivity as well as preserve the lifespan of the infrastructures. Recruitments should be based on merit as this will reduce incompetence and help check unethical behavior in the sector.

Adelowo and Fadare (2023) examined the kernels of power sector reforms, the depth of the reforms' awareness, the level of implementation, and the degree to which customers were satisfied with the electricity supply. Primary data were collected through a cross-sectional survey conducted on the management and customers of electricity distribution companies in Ibadan, Ekiti and Lagos States, using two sets of validated questionnaires. Six hundred and sixty-seven (667) management and staff members, and one thousand one hundred and nineteen (1,119) customers participated in the survey. The results show that a major reform to the sector is privatisation, leading to the unbundling of the Power Holding Company of Nigeria. Some of the measures taken to implement the reforms include staff training and redeployment, organisation restructuring, public sensitisation, disengagement of redundant staff, and introduction of more efficient monitoring and evaluation mechanisms. The study observes that a large proportion of customers are aware of the power sector reforms and understood the implications but they claimed there was no significant improvement in the power supply compared to pre-reform periods. The study concludes with appropriate policy recommendations for the government, operators and stakeholders in the sector.

Perceptions of Stakeholders Toward the Challenges Encountered by the Power Sector Reform.

Arowolo and Perez (2020) performs a comparative analysis of the Nigeria reform with the "Standard model" of electricity reform to understand the root cause of the reform failures while taking cognizance of the starting conditions of Nigeria. Our result reveals that incomplete privatization coupled with the horizontal integration of the transmission and network operations, the underdeveloped gas supply infrastructure network and the ineffective/weak regulatory framework as the root problems. Thereafter, we recommended strengthening the regulatory framework as a good starting point to resolve sectoral problems. The study argued that,

considering the depth of the regulatory concerns, strengthening the framework will resolve the problems of investment, access and pricing and improve the overall sectoral performance (ex-post). Furthermore, we recommended the need for a workable market design and regulatory framework for decentralized solar PV generation and integration that is adaptable and nicely fits with a strengthened centralized generation framework.

Isiwu (2022) examined the challenges and prospects of power sector reform and power value chain in Nigeria. Data for the study were collected from documentary sources and analyzed using content analysis. It is revealed that power sector still faces challenges such as financial constraints, which hinder power generation and distribution, vandalism of electric infrastructures, poor billing method, etc. It is recommended that for the reform to bring positive impact on the economy, the federal government should endeavour to provide employment opportunities to unemployed youths to reduce or eliminate the vandalism of power infrastructures in the county. Furthermore, the government and the stakeholders in the power sector should provide prepaid meters to power consumers to solve the challenges with the estimated billing method. Most importantly, the consumers of energy should be given basic education to enlighten them on the most efficient use of energy to avoid waste.

Theoretical Framework (System Theory)

System theory is adopted as an anchor for this work. The theory origin is traceable to the biological science scholar, Ludwig von Berla, highlighting human body functioning base on differing organ inter-dependency, stressing a necessity for inter-disciplinary synergy for cross-fertilisation of ideas as the panacea to common predicaments (Olaniyi, 2001). Put differently, it suggests a symbiotic relationship existing in micro and macro levels of machines, humans, and society. Further, Mayrhofer (2004) maintains that system theory developmental stages is influenced by the trio of machines as its foundation, cybernetics that reveals the influence of environment on the steering of systems, and non-linearity, which reveals the unpredictability of some system due to their specific characteristics. By implication, industrial revolution leading to the invention of machines took its cue from the harmonious nature of the human configuration, its origin in the first place, before its applications spread to the behavioural sciences and contemporaneous disciplines.

Moreover, the theory posits that the system comprises of subsystems that are not only inter-related and interdependent but also make it function via their contributions (Akinboye and Ottoh, 2007). As such, an alteration of a sub-unit working would, invariably, disrupt the degree of the entire system functionality, possibly lead to its collapse or ground the system. Hence, ensuring a healthy state of the sub-systems largely guarantees a harmonious and compact running of the system, making it capable of meeting the intended purpose (s). Also, it takes, as it seems, maintenance of the component sub-system or units to sustain the performance of the whole (system). The essentiality of this is predicated on the cybernetic nature of the system that permits feedbacks, like a communication channel, from the environment receiving the output.

The electrical power sector is an integrated network comprising of three value-chain of generation, transmission, and distribution. While the power generation takes the lead, the transmission collects for onward supply to the distribution who distribute to end-users making none of them indispensable and transmission and distribution the transportation mediums between the generation and consumption. Therefore, the electricity sector is system-like, having the

generation, transmission and distribution as the interdependent sub-system. The contribution of each is essential for the inter-dependent operation cum sustenance of the sector and, a disturbance in any of them, would hurt the smooth functioning alongside its effectiveness and efficiency, more importantly, the delivery of a qualitative and reliable electric-power-output to consumers.

In Nigeria, the power sector reform was embarked upon with the ultimate purpose of ending the unstable supply of electricity to consumers. But, the extent at which the reforms have been able to transform the value chain sub-components-generation, transmission and distribution-optimum performance towards meeting the stated goals especially qualitative electricity supply, with the non-holistic privatisation of the transmission subunit of the system, constitute a great concern. In addition, a misalignment in inter-dependent sector between the ownership, equipment capacity, and human competency among the sub-units would threaten the sanity of the system functioning as well as its maintenance and sustenance. It is imperative to know this has generated knotty issues in the post-reform era in the Nigeria electricity sector in this work.

Research Methodology

Research Design

The cross-sectional survey was employed for the study. Primary data were collected from the staff of Abuja electricity distribution company in Abuja Municipal Area Council, Suleja, Nasarawa and Kogi State. This was chosen because the researcher gathered and analysed data from a limited number of subjects deemed representative of the entire population.

Population of the Study

The population of this study are staff of Abuja Electricity Distribution Company. This was obtained through distribution database in Maitama business unit, Mararaba Business Unit, Lokoja Business Unit and Suleja business unit. Maitama business unit has 317 staff, Mararaba Business Unit has 281 staff, Suleja Business Unit has 105 staff and Lokoja Business Unit has 133 staff. The total population of the study is 836. These staff are considered appropriate for their knowledge in personnel matters.

Sample Size

The total sample size of the study from Maitama, Mararaba, Suleja and Lokoja is 264. The researcher determined the sample size based on a Raosoft sample calculator indicating that for a population of 836, the appropriate sample size is 264.

Sampling Technique

The research study adopted the stratified and simple random sampling in grouping areas. Two selected areas represent the strata. Simple random sampling is then applied in each stratum for data collection.

Method of Data Collection

The method of data collection procedure adopted was direct face to face whereby questionnaires were distributed personally by the researcher. The questionnaire given was structured to elicit information from the organization's staff and electricity consumers. Respondents rated each item on a four-point scale (Strongly Agree, Agree, Disagree, Strongly Disagree).

Method of Data Analysis

Tools used for analysing collected data included mean scores, frequency tables, and simple percentages.

Data Presentation and Analysis

This section presents the results of data obtained on the respondents in frequency counts and percentages. A total of two hundred and sixty-four (264) questionnaires were administered during data collection of this study. However, only 251 (95.1%) were duly responded and return, while the remaining 13 (4.9%) were either damaged or more than one option was indicated by the respondents.

Table 1 Sex Distribution of Respondents

Gender	Frequency	%age
Male	144	57.4
Females	107	42.6
Total	251	100

Source: Field Survey, December, 2023.

Table 1 depicts the analysis of data collected with respect to gender of the respondent. It shows that 144 representing 57.4 % of the respondents are males and 107 representing 42.6% of the respondents are females. This translates to mean that majority of the respondents are males due to the nature of electricity industry in Nigeria.

Table 2. Age Distribution of Respondents

Age (years)	Frequency	%age
12-20	13	5.2
21-30	121	48.2
30-49	83	33.1
50- years and above	34	13.5
Total	251	100

Source: Field Survey, December, 2023.

The result presented in Table 2 shows the distribution of respondents' age. The table reveals that 13 (5.2%) of the respondents were below 30 years; 121 (48.2%) of the respondents were between the ages of 21-30 years; while 83 (33.1%) of the respondents were between the ages of 30-49 years

of age and 34 (13.5%) of the respondents were from 50 years and above. This also indicates that respondents, who were between 21-30 years, participated more in the study.

Table 3: Educational Attainment of Respondents

Education	Frequency	%age
No formal education	15	6
Primary education	31	12.4
Secondary education	138	54.9
Tertiary education	67	26.7
Total	251	100

Source: Field Survey, December, 2023.

Table 3 shows the analysis of data collected with respect to educational qualification of the respondent. It depicts those 15 respondents representing 6 % of the respondents not having formal education, 31 respondents representing 12.4% have primary school certificate, 138 respondents representing 54.9% have secondary school certificate; while only 67 respondents representing 26.7% have tertiary educational qualification amongst the respondents. Judging from the frequency distribution table 4, the highest frequency is 138 with 54.9%. This translates to mean that majority of the respondents are literates. The level of an individual’s education is believed to influence their perception of the challenges and opportunities of power sector reform in Nigeria.

Table 4 Department of Respondents

Department	Frequency	%age
Distribution	67	26.7
Commercials	141	56.2
Finance/ Account	43	17.1
Total	251	100

Source: Field Survey, December, 2023.

The result presented in Table 4 shows the analysis of data collected with respect department of the respondents in AEDC. It depicts that 67 (26.7%) % of the respondents were in the distribution department, 141(56.2%) of the respondents were in the commercial

department and 43(17.1%) of the respondents were with the finance/ Account department of AEDC. Judging from the frequency distribution table above, the highest frequency is 141 with 56.2%, this translates to mean that majority of the respondents were with the commercial department of AEDC.

Table 5 Location of Respondents

Location	Frequency	%age
Maitama	91	36.3
Mararaba	84	33.5
Suleja	29	11.5
Lokoja	47	18.7
Total	251	100

Source: Field Survey, December, 2023.

The result presented in Table 5 shows the analysis of data collected with respect to location of the respondents. It depicts that 91 (36.3%) % of the respondents were working with Maitama Business Unit of AEDC, 84(33.5%) of the respondents were affiliated to Mararaba Business Unit of AEDC, 29 (11.5%) of the respondents were working with Suleja Business Unit of AEDC and 47(18.7%) of the respondents were working with Lokoja Business Unit of AEDC. Judging from the frequency distribution table above, the highest frequency is 91 with 36.3%, this translates to mean that majority of the respondents were working with Maitama Business Unit of AEDC. The implication of the above is that AEDC staff are represented in the states provided electricity by AEDC in Nigeria.

Table 6 Years of Service in the Industry

Years of Service	Frequency	%age
1-5	55	21.9
6-10	91	36.3
11-15	79	31.5
15 years and above	26	10.3
Total	251	100

Source: Field Survey, December, 2023.

The result presented in Table 6 shows the analysis of data collected with respect to years of experience of the respondents. It depicts that 55 (21.9%) % of the respondents have worked in AEDC for a period of 1-5 years; 79(36.3%) of the respondents have worked in AEDC for a period of 6-10 years, 79 (31.5%) of the respondents have worked in AEDC for a period of 11-15 years and 26(10.3%) have worked for a period of 15 years and above in AEDC. Judging from the frequency distribution table above, the highest frequency is 91 with 36.3%, this translates to mean that majority of the respondents have worked for a period of 6-10 years in AEDC. The implication of the above is that all the respondents have primary knowledge about AEDC.

Table 7 Number of Reforms Witnessed

Number of Reforms	Frequency	%age
One	147	58.6
Two	91	36.3
Above Two	13	5.1
Total	251	100

Source: Field Survey, December, 2023.

The result presented in Table 7 shows the analysis of data collected with respect to number of power sector reforms witnessed by the respondents. It depicts that 147 (58.6%) % of the respondents have witnessed one reform, 91(36.3%) of the respondents have witnessed two reforms and 13 (5.1%) of the respondents have witnessed more than 2 power sector reforms. Judging from the frequency distribution table above, the highest frequency is 147 with 58.6%, this translates to mean that majority of the respondents have witnessed at least one power sector reforms in Nigeria.

Table 8: The Challenges faced by Abuja Electricity Distribution Company in the Context of the Power Sector Reform

	SA	A	D	SD	Mean (\bar{x})
	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	
Abuja Electricity Distribution Company (AEDC) faces challenges related to aging and	164(65.3%)	63(25.1%)	18(7.2%)	6(2.4%)	3.5

inadequate infrastructure.						
Power distribution often involves technical losses due to factors like resistance in power lines, as well as non-technical losses, which include issues such as theft and unauthorized connections	160(640) (63.7%)	77(231) (30.7%)	7(20) (2.8%)	7(7) (2.8%)		3.6
AEDC encounters difficulties in aligning its operations with changing regulations, managing reporting requirements, and navigating the complexities of the regulatory environment.	127(508) (50.6%)	107(321) (42.6%)	10(20) (4%)	7(7) (2.8%)		3.4
AEDC face challenges related to revenue collection, tariff structures, and financial management.	147(588) (58.6%)	87(261) (34.7%)	13(26) (5.2%)	4(4) (1.5%)		3.5
AEDC encounter challenges in effectively communicating these changes to consumers, managing expectations, and addressing customer concerns	159(636) (63.3%)	61(183) (24.3%)	29(58) (11.6%)	2(2) (0.8%)		3.5
Average Overall Mean						3.5

Source: Field Survey, December, 2023.

Table 8 indicates the challenges faced by Abuja Electricity Distribution Company in the context of the power sector reform. The sectional mean of 3.5 shows that the respondents agreed with the items above. On the challenges faced by AEDC in Suleja, Hamza Aliu, a staff with the organisation asserts that: “Aging infrastructure has been a significant challenge. We have faced difficulties in upgrading the distribution network to keep pace with the growing demand and technological advancements” (KII, December, 2023).

Buttressing the above, another respondent, Lydia Kuta argued that: Keeping up with evolving regulations has been challenging. There is a need for continuous monitoring and adjustments to ensure compliance with changing industry standards. This according to her have led to unforeseen challenges which includes unexpected shifts in consumer behaviour and unforeseen technical issues arising from the integration of new technologies (KII, December, 2023).

Table 9: Perceptions of Stakeholders Toward the Challenges Encountered by the Power Sector Reform in AEDC.

	SA	A	D	SD	Mean (\bar{x})
	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	
Consumers perceive challenges with AEDC, such as frequent power outages, billing discrepancies, and inadequate customer service, impacting their satisfaction and trust in the power sector reforms.	143(57%)	104(41.4%)	3(1.2%)	1(0.4%)	3.6
Government focus on regulatory compliance, financial stability, and the overall contribution of AEDC to the success of power sector reforms, aiming for efficient	130(51.8%)	64(25.5%)	30(12%)	27(10.7%)	3.2

and transparent utility operations.

Investors are concerned about the financial viability of AEDC, regulatory uncertainties, and the potential return on their investments, influencing their confidence in participating in the power sector.	114(456) (45.4%)	126(378) (50.2%)	9(18) (3.6%)	2(2) (0.8%)	3.4
AEDC's workforce perceive challenges related to job security, workplace safety, and the effectiveness of management in addressing operational issues, affecting their morale and commitment to the organization.	137(548) (54.6%)	100(300) (39.8%)	9(18) (3.6%)	5(5) (2%)	3.5
Stakeholders concerned with environmental sustainability assess AEDC's efforts in adopting green energy practices, reducing carbon footprint, and implementing eco-friendly technologies amidst the challenges faced in	150(600) (59.8%)	90(270) (35.9%)	6(12) (2.3%)	5(5) (2%)	3.5

the power sector
reform.

Average Overall Mean

3.5

Source: Field Survey, December, 2023.

Table 9 shows the perceptions of stakeholders on the challenges faced by Abuja Electricity Distribution Company following power sector reform. The sectional mean of 3.5 shows that the respondents agreed that there are various changes in AEDC due to power sector reform in Nigeria. An AEDC Staff at the distribution department of Maitama business district of AEDC, Joy Francis, highlighted “regulatory bottlenecks as challenges for AEDC, suggesting that smoother compliance processes would enable the company to adapt more effectively to power sector reforms and contribute positively to the energy landscape” (KII, December, 2023). When asked about the challenges faced by AEDC towards power sector reform, a staff in the operations department of AEDC business district in Lokoja, stated that: “issues like employee morale, training gaps, and management practices affecting operational efficiency. According to him suggestion for improvement include investing in employee development programs and fostering a positive work culture” (KII, December, 2023). Another Staff of AEDC, Suleja business district, Amina Yusuf, asserts that: “Power sector reform has impacted our financial stability. Adapting to new tariff structures while ensuring a balance between affordability for consumers and the financial needs of the company has been challenging” (KII, December, 2023).

Discussion of Findings

- i. The study found that aging infrastructure has been a significant challenge. This means difficulties in upgrading the distribution network to keep pace with the growing demand and technological advancements. Study by Charlse and Mohammed (2022) found that The Nigeria electricity market is yet to efficiently allocate resources and yield favorable outcomes for market participants. The supply side of the market is struggling to find its footing after a promising reform that saw the government-owned utility that failed to deliver reliable power unbundled and mostly sold to private investors. Similarly, Aondona (2020) found that the power sector is characterized by many challenges which include decay of infrastructure, low connection rates, inadequate generation, ineffective power regulation, high technical losses and insufficient transmission and distribution facilities.
- ii. The study found that stakeholders have a perception that there are challenges affecting the implementation of power sector reforms in AEDC. This is in agreement with the result of a study by Arowolo and Perez (2020) which reveals that incomplete privatization coupled with the horizontal integration of the transmission and network operations, the underdeveloped gas supply infrastructure network and the ineffective/weak regulatory framework as the root problems. Similarly, a study by Idowu found that capital investment, technical losses, national grid system, enabling environment, high debt profile and politicization of the power sector, amongst others, are challenges besetting the actualization of the reform objectives.

Conclusion

The result of this study confirmed that deregulation of power sector did not achieve desired effect on efficiency of the Nigerian power sector. There are still power outages as reflected in the responses from the respondents as electricity power supply can be said to have improved despite the reforms in the last two decades. However, it is imperative that power sector reforms are gradually packing up and it will be a matter of time before development is achieved. In conclusion, the power sector reform in Abuja Electricity Distribution Company (AEDC) has revealed challenges related to poor funding, inadequate implementation of reforms, and a lack of essential infrastructure. To enhance operational efficiency, it is imperative to address these issues strategically.

Recommendations:

- i. Implementing diverse funding mechanisms, such as public-private partnerships, attracting investments, and securing government support, can bolster AEDC's financial position. This would provide the necessary resources to upgrade infrastructure, invest in advanced technologies, and improve overall operational capabilities.
- ii. Prompt, continuous and effective stakeholders' engagement is critical at the states, local government and communities to resolve the socio-political and conflict of interest issues such as the tariff design, gas pipeline vandalization etc.

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