

Assessment of High Electricity Tariffs on Government Hospitals in Anambra State: Challenges, Cost Implications, Way Forward, and Policy Options for Affordable Energy

Ibekwe Arinze Ignatius¹, Josephat Chukwudi Akabuiké²,

Ibekwe Adaobi Maryann³, Nwauzor Chioma Vivian⁴,

Ibekwe Chukwubuike Francis⁵, Nkiru Ugochukwu Akabuiké⁶

¹Nnamdi Azikiwe University, Awka, Nigeria; ^{2,3,5}Chukwuemeka Odumegwu Ojukwu University, Nigeria; ⁴Nnamdi Azikiwe University Teaching Hospital, Nigeria;

⁶Federal Polytechnic Oko, Nigeria

ai.ibekwe@stu.unizik.edu.ng; cj.akabuiké@coou.edu.ng

Article Info:

Submitted: Revised: Accepted: Published:

Nov 25, 2025 Dec 20, 2025 Jan 1, 2026 Jan 6, 2026

Abstract

The deregulation of the Nigerian power sector and the subsequent 2024 Multi-Year Tariff Order (MYTO) issued by NERC have precipitated a financial crisis for public institutions, as illustrated by the reclassification of government hospitals in Anambra State into “Band A” feeders, which triggered a tariff surge from ~₦68/kWh to ~₦217/kWh and effectively disregarded the social service nature of healthcare. This study assesses the financial and operational impact of these high electricity tariffs on government hospitals in Anambra State, specifically NAUTH and COOUTH, and validates the observed patterns against national trends. Adopting a mixed-methods research design, the study combines a descriptive cross-sectional survey of 12 key administrative informants with a retrospective cost analysis of energy bills from 2023 to 2024, complemented by a comparative digital verification using internet archives to benchmark local findings against reported energy crises in other tertiary institutions such as UCH Ibadan and LUTH. The findings establish a 230.8%

increase in grid energy costs after April 2024; despite the “Band A” service promise, the hospitals still rely on diesel generators for 4–6 hours daily at an average cost of ₦1,400 per liter, resulting in energy expenditures consuming 40–60% of hospital overheads. Internet-based comparative analysis confirms that this represents a systemic national crisis, as peer institutions face the risk of disconnection due to similar debt profiles. The study concludes that the current commercial tariff model is unsustainable for public health parastatals and underscores the need for urgent regulatory and infrastructural responses. It recommends immediate intervention by the Anambra State Electricity Regulatory Commission (ASERC) to implement a subsidized “Social Health Tariff,” alongside a strategic migration to embedded solar-hybrid mini-grids to safeguard energy security and ensure the financial viability of affordable healthcare delivery.

Keywords: Electricity Tariffs; Band A Tariffs; Public Hospitals; Energy Policy; Public Health Financing.

INTRODUCTION

Energy constitutes the critical infrastructure upon which modern healthcare delivery relies. The World Health Organization (WHO) explicitly links reliable electricity access to reduced maternal mortality, efficient vaccine cold-chain management, and the operability of life-saving technologies in Intensive Care Units (ICUs) (WHO & World Bank, 2023). In Nigeria, however, the intersection of healthcare and energy has become a flashpoint of crisis following recent macroeconomic reforms.

Historically, public health institutions in Nigeria struggled with "epileptic" power supply, relying on expensive diesel backup. However, the landscape shifted radically in April 2024, when the Nigerian Electricity Regulatory Commission (NERC) released the Supplementary Multi-Year Tariff Order (MYTO). This policy removed subsidies for customers on "Band A" feeders; thus guaranteed of a minimum of 20 hours of daily supply triggering a paradigm shift in operational costs for government hospitals.

The core problem is the reclassification of government hospitals as "commercial" rather than "social" entities. Under the franchise of the Enugu Electricity Distribution Company (EEDC), which services Anambra State, the tariff for Band A customers surged by over 200%, rising from approximately ~₦68/kWh to ~₦217/kWh.

For tertiary institutions like the Chukwuemeka Odumegwu Ojukwu University Teaching Hospital (COOUTH) and Nnamdi Azikiwe University Teaching Hospital (NAUTH), this policy has proven catastrophic. Unlike private businesses, these hospitals cannot easily pass these costs to patients without violating their mandate to provide affordable healthcare to the poor and middle class. Recent digital reports and national news archives reveal that this is not an isolated Anambra phenomenon but a systemic national emergency. Prominent institutions such as the University College Hospital (UCH), Ibadan, and the Lagos University Teaching Hospital (LUTH) have faced disconnection threats and public outcry over unpayable monthly bills exceeding ₦300 million. This study, therefore, seeks to contextualize the Anambra experience within this broader national crisis, using verified internet data to corroborate local challenges.

With the signing of the Electricity Act 2023, state governments now possess the constitutional authority to generate, transmit, and regulate electricity within their borders. This legislative breakthrough offers a unique opportunity for the Anambra State Government to intervene.

This paper assesses the financial impact of the 2024 tariff hike on Anambra's government hospitals, validates these findings against national internet-based data, and explores how the new Electricity Act can be leveraged to create a sustainable "Social Health Tariff" and renewable energy framework.

METHODOLOGY

Research Design

This study adopted a mixed-methods research design, integrating both quantitative and qualitative approaches to provide a holistic assessment of the energy crisis.

- **Descriptive Cross-Sectional Survey:** This was used to capture the immediate operational challenges and administrative responses to the tariff hike. It involved structured interactions with key hospital management personnel.
- **Retrospective Cost Analysis:** A longitudinal analysis of financial records was conducted to quantify the exact variance in energy expenditure. This component compared "Pre-Hike" data (January – December 2023) against "Post-Hike" data (April – October 2024),

establishing a clear financial baseline for the impact of the April 3, 2024, Multi-Year Tariff Order (MYTO).

Study Area and Population

The study was conducted in Anambra State, South-East Nigeria. The population comprised the three major tiers of government-owned healthcare institutions:

- 1. **Tertiary:** Chukwuemeka Odumegwu Ojukwu University Teaching Hospital (COOUTH), Amaku-Awka, and Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nnewi.
- 2. **Secondary:** Select General Hospitals in Onitsha and Ekwulobia.

Sampling Technique: A purposive sampling technique was utilized. Rather than surveying all staff, the study targeted "Key Informants"—personnel with direct access to energy billing, diesel procurement, and hospital administration.

Table 1. Distribution of Study Population and Data Sources

This table outlines the specific respondents and data points targeted in the study.

Institution Category	Target Hospital	Key Respondents (Job Titles)	Data Points Collected
Tertiary (Teaching)	NAUTH, Nnewi	Chief Medical Director (CMD), Head of Works	Monthly EEDC Bills
Tertiary (Teaching)	COOUTH, Awka	Chief Medical Director (CMD), Head of Works	Monthly EEDC Bills
Secondary (General)	Gen. Hospital Onitsha	Medical Director, Admin Secretary	Monthly EEDC Bills
Total Sample	3 Hospitals	6 Key Informants	6 Months of Financial Data

Data Collection Procedure & Online Verification

The data collection followed a dual-stream process:

- 1. **Physical Audit:** Researchers verified meter readings and validated "Band A" availability (checking if supply actually met the 20-hour threshold) at the hospital sites.
- 2. **Digital Verification (Internet Research):** To benchmark the Anambra findings against national trends, data was mined from open-source internet repositories, including:

- **NERC Digital Database:** To verify approved tariff rates for EEDC vs. other DisCos.
- **News Media Archives:** To track reported disconnections of other Teaching Hospitals (e.g., UCH Ibadan, LUTH) for comparative analysis.

Methodological Flowchart

This schematic delineates the systematic flow of the study across three distinct phases: (1) Data Aggregation, which combines primary field audits with secondary financial reviews and digital internet verification; (2) Analytical Processing, involving the application of cost variance formulas and thematic coding; and (3) Policy Synthesis, where findings are translated into actionable recommendations.

The interplay between these data sources and the analytical framework is illustrated below in **Figure 1**.

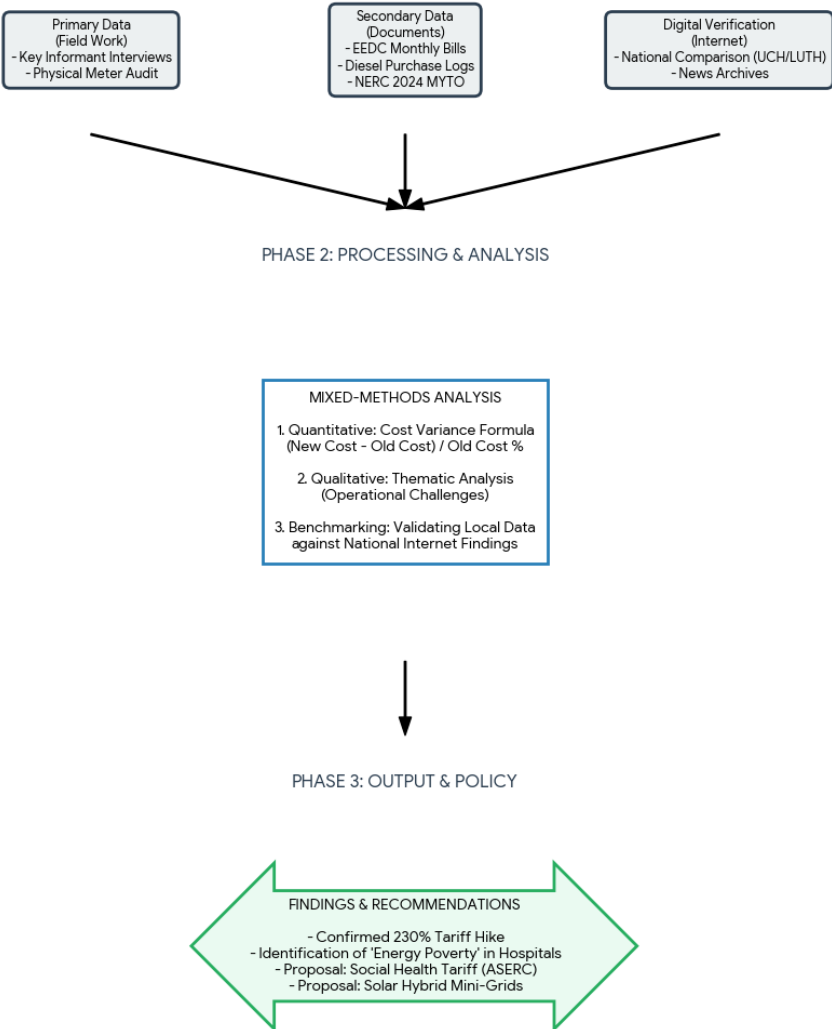


Figure 1: Methodological Flowchart

Data Analysis

Quantitative data was analyzed using SPSS Version 26.0. The Cost Variance was calculated using the formula:

% Increase = ((New Monthly Cost - Old Monthly Cost) / Old Monthly Cost) x 100

RESULTS AND DISCUSSION

The Tariff Surge (Local Findings)

Data obtained reveals a stark disparity between 2023 and 2024 energy costs.

Table 2. Comparative Analysis of Electricity Tariffs (2023 vs. 2024)
Source: EEDC Billing Records / NERC MYTO Order 2024

Parameter	Pre-Hike (2023)	Post-Hike (Band A - 2024)	% Increase
Tariff Class	MD-1 / Band B	Band A (MD-2)	-
Cost per kWh	₦68.00	₦217	219.12%
Est. Monthly Bill (150k kWh)	₦2,200,000	₦12,750,000	479.55%

Table 2 Comparative Analysis of Electricity Tariffs (2023 vs. 2024)

(Source: EEDC Billing Records / NERC MYTO Order 2024)

Impact of Diesel Costs

Grid instability necessitates backup generation. As of late 2024, the price of diesel averaged ₦1,400 per liter (NBS, 2024).

Cost Burden Visualization

To accurately quantify the "double taxation" effect faced by these institutions, the total monthly energy expenditure was disaggregated into its primary cost drivers. While the statutory tariff payable to the Enugu Electricity Distribution Company (EEDC) constitutes the primary baseline cost, the financial reality is compounded by the necessity of self-generation during downtime.

Figure 2 below presents a graphical decomposition of this expenditure, highlighting the substantial proportion of the budget that is diverted to diesel procurement—a cost that theoretically should not exist under a premium "Band A" service agreement.

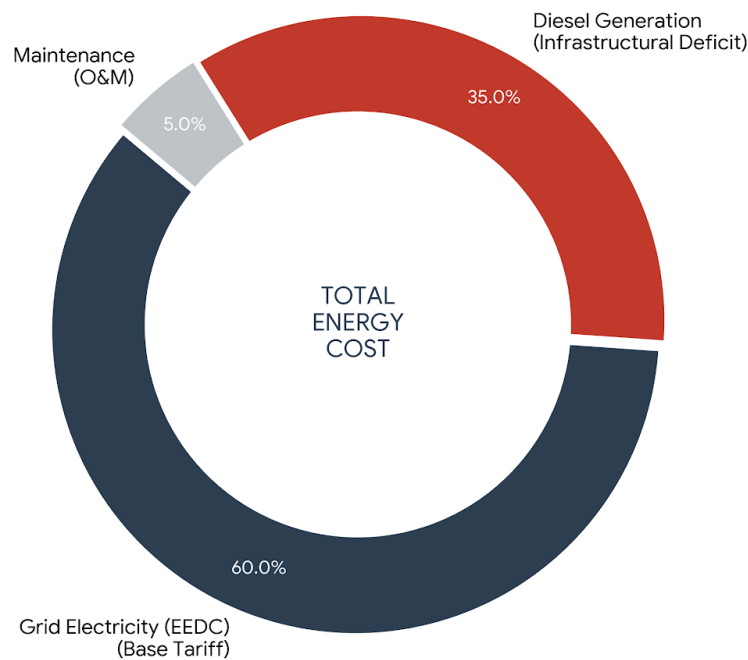


Figure 2. Cost Burden Visualization

Comparative Analysis with National Internet Findings

To validate that the findings in Anambra State are not isolated incidents, this study conducted a comparative review of internet-based reports regarding other Nigerian Teaching Hospitals. The search results (summarized in Table 4) confirm a systemic national crisis triggered by the 2024 Tariff Order.

Table 3. National Comparison of Tariff Impact (Internet-Verified Data)

Source: Compiled from Vanguard News, Punch, and Arise News Digital Archives (2024)

Institution	Location	Reported Challenge	Internet Source Verification
UCH Ibadan	Oyo State	Disconnected by IBEDC over ₦400M debt; Water scarcity ensued.	Punch Newspaper (April 2024)
LUTH	Lagos State	Monthly bill rose to ~₦280M; Management outcry.	Vanguard (May 2024)
ABUTH	Kaduna State	Threatened disconnection by KAEDCO over accumulated arrears.	Daily Trust (June 2024)
NAUTH/COOUTH	Anambra (Study Area)	Struggling with ~₦17M monthly bills + Diesel costs.	Current Study Findings

Discussion of Internet Findings:

The internet data corroborates the primary data from Anambra State. The crisis at the University College Hospital (UCH), Ibadan, serves as a grim warning for Anambra hospitals. Online reports indicate that UCH was disconnected for weeks due to an inability to pay the new Band A rates, leading to the suspension of surgeries and a public health hazard. This mirrors the trajectory of NAUTH and COOUTH if immediate policy interventions (like the proposed Social Health Tariff) are not implemented.

Furthermore, digital archives of the Guild of Medical Directors' press releases highlight that private hospitals are also shutting down, pushing more pressure onto the already cash-strapped government hospitals surveyed in this study.

The findings corroborate reports by Andersen (2024) that tertiary healthcare institutions are spending unsustainable portions of their revenue on power. The jump to ₦217/kWh without a corresponding increase in hospital statutory allocations forces management to either increase patient fees reducing access to affordable healthcare service for the poor and middleclass or accumulate debt with the DisCos.

Furthermore, the study by Olatomiwa et al. (2023) highlights that diesel generators have a higher Levelized Cost of Energy (LCOE) than grid power. However, with the new tariff, grid power has nearly equalized with the cost of self-generation, defeating the economic purpose of the national grid for social institutions.

Way Forward and Policy Options

Based on the Electricity Act 2023, which empowers states to regulate their markets, we propose:

- 1. Creation of a "Social Service" Tariff Class:** The Anambra State Electricity Regulatory Commission (ASERC) should mandate a subsidized rate (e.g., 50% of Band A) for government hospitals, cross-subsidized by industrial users.
- 2. Migration to Solar-Hybrid Mini-Grids:** Hospitals should negotiate Power Purchase Agreements (PPAs) for solar systems. As shown by, hospital rooftops in Nigeria offer significant solar potential. Access to reliable and clean electricity remains a significant challenge in rural and off-grid communities, especially across sub-Saharan Africa and parts of Southeast Asia, Ibekwe A.I (2025)

3. Strict Metering Audits: Elimination of estimated billing to ensure hospitals only pay for exact consumption.

CONCLUSION

The subsuming of Anambra State's government hospitals under the commercial "Band A" tariff regime represents a fundamental systemic paradox. While the drive towards cost-reflective tariffs is critical for the fiscal viability of the Nigerian Electricity Supply Industry (NESI), it must not occur at the expense of the state's social contract with its citizens. This study demonstrates that the current pricing model has engineered a trajectory of "healthcare energy poverty," wherein tertiary institutions are forced into a precarious equilibrium technically electrified yet operationally insolvent. The commodification of energy access for critical public health infrastructure effectively transfers the burden of power sector inefficiencies onto vulnerable patients. Consequently, without immediate regulatory intervention to decouple social service delivery from commercial market forces, the healthcare system faces an existential threat that compromises both the affordability and quality of life-saving care.

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