

INSIGHTS

TRANSMISSION UNDER THE ELECTRICITY ACT, 2023





INTRODUCTION

The Electricity Act 2023 (the "Act") repealed the Electric Power Sector Reform Act (the "Repealed Act"). The Repealed Act unbundled the power sector, which led to the formation of the Power Holding Company of Nigeria ("PHCN") to temporarily hold the assets and liabilities of the National Electric Power Authority ("NEPA"). PHCN would later transfer the assets and liabilities to successor companies in the generation, transmission, distribution, trading, and bulk supply and resale of electricity chains of the power sector. Thus, the Repealed Act heralded the advent of privatization of the Power Sector, which to a certain degree has improved access to services. Whilst not downplaying the impact of the Repealed Act, one would agree that 18 (eighteen) years, the distance of time between the Repealed Act and the Act, down the line, the Repealed Act has outlived its effectiveness. This is more so given the fact that the Repealed Act was at variance with the constitutional concurrent powers of the federating States and did not envision advancement in technology. Therefore, to deepen the Nigerian Electricity Supply Industry (NESI), the Act was passed with several modernized features. This much is captured in the preliminary provisions of the Act:

"The primary objective of this Act is to provide a comprehensive legal and institutional framework to guide the operation of a privatised, contract and rule-based competitive electricity market in Nigeria and attract ... private sector investments in the entire power value chain of the NESI...1"

The Repealed Act allowed private and sub-nationals to invest in the power sector, however, transmission, which included system operation, remained the exclusive preserve of the Federal Government through the Transmission Company of Nigeria (TCN). This exclusivity limited competition and hindered the realisation of a fully liberalised electricity market. Furthermore, the lack of private sector participation in transmission posed challenges in addressing the growing demand for electricity and ensuring a reliable and resilient transmission network.

Therefore, it could be said that the lack of competition and the dearth of private sector involvement in this crucial aspect of the power value chain, impeded the sector's overall dynamism and growth, inhibiting Nigeria's ability to fully harness its vast energy potential. In addressing these challenges, the Electricity Act ushers in a transformative era in electricity transmission as seen below.

UNBUNDLING OF TRANSMISSION COMPANY OF NIGERIA

The Transmission Company of Nigeria ('TCN") is the successor company incorporated to carry on transmission services, market, and system operation functions in the NESI. Given the enormity of these functions and to unburden the TCN while further liberalising the NESI, the Act mandates the TCN to incorporate the Independent System Operator (ISO) under the Companies and Allied Matters Act (CAMA) to take over the market and system operation functions of the TCN. The Act does not provide a timeframe for this incorporation, rather, the Nigerian Regulatory Commission Electricity "Commission") is given the discretion to determine when the ISO is to be incorporated. Upon incorporation, the ISO will apply to be licensed as an ISO by the Commission, after which, the TCN will transfer to the ISO, all assets and liabilities held by the TCN pertaining to market and system operations while the TCN will continue as the transmission service provider².

¹ Section 1 of the Act.





The ISO will amongst other things be responsible for; generation scheduling, commitment and dispatch, transmission scheduling and generation outage coordination, transmission congestion management, and procurement and scheduling of ancillary services and system planning for long-term capacity³. The TCN will focus on the development and maintenance of the power transmission infrastructure.

In light of the unbundling, the Act provides for disruption in the transmission value chain of the NESI as follows:

DEMARCATION OF TRANSMISSION

The Act gives TCN or other transmission licensees the discretion to structure and demarcate system operation in the country into the National Control Centre, Supplementary Control Centre, and Regional Control Centres depending on the location and spread of the transmission infrastructure⁴. This suggests the emergence of regional transmission licensees, which depending on the terms of their licence would develop regional infrastructure to aid the transmission of electricity in their region and the optimal performance of the national grid.

Again, it is believed that the best route for countries without universal energy access will be the segmentation of such countries into areas covered by a national grid, mini-grids, and off-grid facilities⁵. Apart from the fact that this will allow for load sharing, it will encourage investments where they are needed most. Therefore, it is recommended that sub-nationals in their electricity framework should go further to map out their respective territories to determine areas that will be better served by mini/microgrid and off-grid infrastructure.

INVESTMENT IN TRANSMISSION NETWORK

Given the frequent failure of the national grid, the Act gives the Commission the discretion to coordinate investment in the transmission network. This could be by either TCN expanding or integrating technology into the existing transmission infrastructure or TCN having an agreement with a non-licensee to invest in the infrastructure⁶.

²Section 15 of the Act.

³Section 67 of the Act.

⁴Section 108 of the Act.

⁵See the Electricity Regulatory Index for Africa, 2022 accessed via

https://africa-energy-portal.org/reports/electricity-regulatory-index-africa-2022-eri on 18 July 2023 at 7:56 am



Under the Act, a non-licensee could also invest through:

- Long-term concession arrangements for old or new transmission lines with the Transmission Service Provider ("TSP," the entity that would retain the transmission functions after the unbundling of the TCN).
- Concession arrangements with TCN/TSP for the expansion of the transmission network.
- Project finance arrangements to finance, build, own, and maintain parts of the transmission network⁷

The Act also encourages the Federal or State Governments to enter much-needed Public Private Partnership ("PPP") arrangements with private entities for investment in the transmission network.

The above investment framework will encourage investment in last-mile infrastructure, especially at the subnational levels.

However, to ensure an even spread of investment, the Act mandates the Commission to ensure the investments are not concentrated in one section or region of the country. The Act did not state how this would be achieved. This implies that the Commission may give directives to investors on the regions to invest in, this could prove problematic and a disincentive.

The argument would be that the Commission wants to ensure no part of the country is left behind in the quest for energy sufficiency. But this could be anti-segmentation and anti-privatisation, contrary to the intent of the Act. A subnational with a pro-investor framework may attract more investments than others. Again, the availability of resources and the potential for an electricity market within a State may be key indicators for investors rather than the Commission's directives. Therefore, the Commission before issuing directives or policies in this regard should dialogue with the relevant stakeholders.

LICENSING OF INDEPENDENT ELECTRICITY TRANSMISSION NETWORK

The Act provides for Independent Electricity Transmission Network ("IETN") licence to operate where there is no existing transmission facility or the existing transmission facilities require reinforcement to connect new generating facilities⁹. The impact of this will be significant for the electricity market.

Under the Repealed Act and the regulations made further to it, an entity could apply for an embedded generation licence and have the power generated to be distributed by an Independent Electricity Distribution Network ("IEDN") licensee. This arrangement would obviate the need to connect to the national grid. However, there is a limitation on the IEDN licence given the definition of a distribution system in the NERC Regulations for Embedded Generation 2012 as:

"the system of facilities consisting wholly or mainly of low voltage of less than 132KV electric lines used for the distribution of electricity..."

This limitation meant that the generation of electricity to be conveyed by 132KV lines or above would be outside the mandate of an IEDN or distribution licence. Such would require a transmission licence, which is currently held by TCN, and thus, connection to the national grid.

To further lessen the load on the national grid, under the new Act, businesses can generate, transmit, and distribute electricity to eligible customers without reliance on the grid infrastructure of the TCN/TSP. Industrial hubs and commercial enclaves considering their power needs could build off-grid/stand-alone power facilities (encompassing generation, transmission, and distribution).

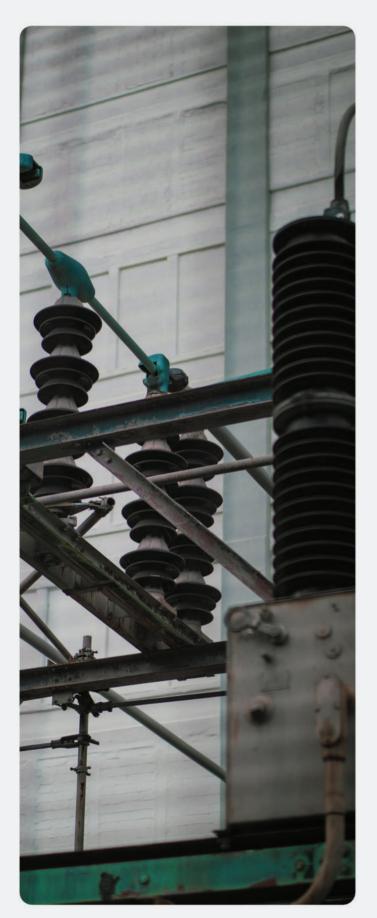
⁶ See Section 108 of the Act.

⁷Section 109 of the Act.

⁸ Section 112 of the Act.

⁹ Section 63 (2) of the Act.





Therefore, the introduction of this licence category signifies the start of an era in the NESI where the private sector could be responsible for the entire electricity value chain. This may lead to an increase in cost in the short term, it is believed that in the long term, competition and efficiency will lead to an increase in supply and a reduction in cost.

CONCLUSION

The transformative measures introduced by the Electricity Act of 2023 in electricity transmission are set to revolutionize Nigeria's power sector. By dismantling the exclusive control of transmission under the Repealed Act, the new Act unleashes a wave of opportunities for increased electricity supply and enhanced investment prospects within the market. This disruption in the transmission chain paves the way for a more dynamic and efficient electricity market, significantly reducing reliance on the federal government and stimulating optimal performance.

In addition, the Act's forward-thinking approach encourages the adoption of Public-Private Partnerships (PPPs) and concessionary arrangements as powerful tools to bolster the country's transmission network¹0. As a result, we can expect improved efficiency and heightened reliability, as well as a more resilient power grid that can cater to the growing energy demands of Nigeria.

While the Act opens new horizons for private entities and sub-national governments to actively participate in electricity transmission, it also presents them with an opportunity to chart their course and implement tailor-made policies. Sub-nationals can seize this moment to shape localized strategies that align with their unique needs and objectives, contributing to the overall progress of the nation's power sector.

¹⁰ See Section 109 and 112 of the Act.



AUTHORS

Olasupo Shasore SAN Partner

Commercial Litigation & Dispute Resolution Energy; Natural Resources & Infrastructure

T: +23417002572

E: oshasore@alp.company



Atinuke Odofin Partner

Corporate, Commercial and Energy & Resources

T: +234 807 286 4289

E: aodofin@alp.company



Gideon Bassey Associate

Corporate, Commercial & Business Advisory

T: +234 1700 257 2 Ext 122 E: gbassey@alp.company

