The Implications of Legal Reform in the Nigeria Power Sector

Onyi-Ogelle, Helen Obioma
Faculty of Law
Nnamdi Azikiwe University
Awka, Anambra State, Nigeria

Abstract

The power sector in Nigeria through the years have been a tortuous, difficult, painful, devastating and herculean task for both the governments and the populace. A population of about 170 million people with more than half of them living without electric power supply, certainly presents a catastrophic situation for economic and social development of the nation and the people. Consequently, this paper tries to analyze the implications of the reforms propounded by law and policy, the extent to which the said reforms have improved or otherwise aided the power sector in supplying of electricity, the challenges with generation, distribution and transmission, the capacity which the sector can produce to serve the entire Nigerians etc. This paper furthermore made recommendations on how the Nigerian power sector can be reformed through the application of law and its overall benefits to the economic, social and national development of the country and the populace.

Key Words: reform, power, sector, electricity, supply, policy, Nigeria, generation, transmission

Introduction

The Nigeria Power Sector appears to have an impressive history of electricity governance, but the development of the sector has been quite largely stunted. This
could be attributed to its inability or failure to carry out the legal policies and institutional frameworks and more still the proactive measures to bring about effective administration through sustainable socially, economically viable and proactive management of the power sector in Nigeria.

Energy or power is indeed an indispensable component of economic growth and development as increase in supply of stable electricity enhances National productivity and economic development. Its major importance creates an indispensable need for reforms. The technical requirements of the power sector have led to a wave of new regulatory regimes across the globe. A good number of developed countries have unbundled their electricity industries by separating generation from transmission. In consonance with the global trends in the electricity sector, the Nigerian government enacted the Electric Power Sector Reform Act 2005 (The Act) of which under the new regime the Nigerian Electricity Regulatory Commission (NERC) is to serve as the main regulatory body of the electricity power sector, the existence of the (NERC) is brought about by the Act which repealed the NEPA and Electricity Act. By the reforms the monopoly enjoyed by the National Electric Power Authority (NEPA) for several decades was terminated, as the new regime aims to liberalize the sector. Despite the change of name from NEPA to Power Holding Company of Nigeria (PHCN) the problem of declining electricity generation from domestic power plants still continues. While the Nigerian electricity sector is agreeably liberalized, the sector has witnessed some divestment from the private sector and collapse of contract talks with some potential private/Independent Power Producers (IPP’s), the consumers as the end users of the current trends in electricity generation, transmission and distribution in Nigeria have remained hopeful for a new dawn, notwithstanding the generic problems that has become recurrent decimals.

**Brief History of Power Sector**

The history of electric power in Nigeria is importance because it enables us see the emergence of the sector and how it got to this present level. Thus it dates back to 1896 under the British colonial rule. Electric power was first produced in Ijora, Lagos by the British colonial government. They created the Nigeria Electricity Supply Company (NESCO) which started operations as an electricity utility company owing to the construction of hydroelectricity power station at Kuru, near Jos. NESCO was a hydroelectric power station because its major source of energy was water through dams. The output of NESCO served some locations majorly in the Northern States. The colonial administration in 1946 took over and transferred electricity supply and development to a central body known as the Electricity Corporation of Nigeria (ECN).
The parliaments set up the Niger Dams Authority (NDA) with the responsibility of construction and maintenance of dams and other works on the River Niger and elsewhere.

The energy produced by the NDA was sold to ECN for distribution to consumers as utility voltages. This actually introduced the now sought after separation of power generation from distribution. This is now being promoted as a more proactive and beneficial approach.

The fusion of power generation and transmission commenced formally in Nigeria on the 1st of April, 1972 when amalgamation of the two existing organization ECN and NDA was effected by a military decree - National Electric Power Authority Decree No 4 - setup an organization known as the National Electric Power Authority (NEPA). It further replaced the ECN and the NDA and solely and exclusively became responsible for power generation and distribution of electricity in Nigeria.

The reason offered for the merger was that “it would result in the vesting of the production and the distribution of electricity power supply throughout the country in one organization which will assume responsibility for the financial duties, the integration of the ECN and NDA should result in a more effective utilization of the human financial and other available resources for the electricity supply and industry throughout the country”.

After about four decades, NEPA unsuccessfully managed electricity generation, transmission and distribution in Nigeria. Consumer apathy was at its peak. The organization also got itself entangled in institutional corruption, bureaucratic inconsistencies, administrative ineptitude. The organization went through series of transformations and reforms which proved to be futile, this resulted in the emergence of the Power Holding Company of Nigeria (PHCN), which was setup prior to the privatization of the sector.

NEPA was unbundled and divided into eighteen new companies and semi-autonomous business units. NEPA was divested of its wholly government interests, with a view to ensuring adequate generation, distribution and utilization of efficient and stable electricity nationwide. Indeed, the journey from ECN through NEPA to PHCN has been tortuous and bumpy for Nigerians.

The Nigerian power sector industry has experienced negative growth for over forty years. Part of the problems NEPA faced were limited access to infrastructure, low connection rates, inadequate power generation capacity, lack of capital investment, vandalism, ineffective regulation, inefficient usage of capacity, insufficient use of electricity by consumers, inappropriate industry and market structure, unclear delineation of roles and lastly competition being the crown of it all. The Nigerian power
sector accesses less than 50% of its installed generation capacity of about 7,228 MW, as less than 5,000 MW is generated and transmitted.

Legal Frameworks and Policies

Nigeria like other nations in the world adopted certain reforms which include unbundling of the electricity industry by separating generation from transmission/distribution, and the dominance of the private sector of the industry. The current regime of power sector reform began in the year 2000 with the implementation of the Electric Power Implementation Committee (EPIC). The committee drafted the National Electric Power Policy (NEPP) in the year 2001 leading to the Electric Power Sector Reform Act 2005. The reform consists essentially of two main components: restructuring and privatization.

The general aims and objectives of the reform include:

1. Improvement in the performance and operation of the utility through increased private sector participation.
2. Private Sector Investments
3. Meeting current and future demand for electricity
4. Establishing new market structure/rules and trading arrangement
5. Setting up an independent regulator to oversee the affairs of the sector
6. Promoting competition transparency and efficiency

The Nigerian Electricity Regulatory Commission (NERC) is to serve as the main regulatory body of the reformed electric power sector under the new regime, the existence of NERC was brought about by the Electric Power Sector Reform Act (EPSR). It repealed the NEPA and Electricity Act. It removed the regulatory powers for the power sectors originally vested in NEPA by the Federal Government thus creating the legal basis for restricting NEPA and subsequent establishment of new regulatory structures and institutions. The strict tight control of the industry by NEPA for so many years was eventually tampered with and opened up for other players in the industry to participate in.

The Electric Power Sector Reform Act 2005

The Electric Power Sector Reform Act (EPSR) 2005 seeks to provide the general legal framework for the formation of several legal entities (corporation) to take over the assets and liabilities of the old regulatory body and to establish the NERC (Nigerian Electricity Regulatory Commission) as the new agency for generation,
transmission and distribution of electricity in Nigeria. The EPSR Act also seeks to provide for the formulation of companies to take over the functions, assets, liabilities and staff of the National Electric Power Authority; develop competitive electricity markets, establish the Nigerian Electricity Regulatory Commission and regulation of the generation, transmission, distribution and supply of electricity; enforce such matters as performance standards, consumer rights and obligations; and to provide for matters connected with or incidental to the foregoing. The Act brought the existence of a regulatory agency known as the Nigerian Electricity Regulatory Commission (NERC) as a body corporate with perpetual succession and power to sue and be sued in its corporate name and to as well perform all acts that bodies corporate perform by law.

The Act has some achievements to its credit amongst which include the following:

- NEPA was transferred into PHCN as a holding company for the assets, liabilities, employees’ rights and obligations of NEPA. The process of incorporation of PHCN was conducted on 5th May 2005.
- NCP by an order published in a Federal gazette gave 1st July 2005 as the initial transfer date of assets, liabilities and staff of NEPA to PHCN
- NERC was inaugurated in October, 2005 as the sector regulator
- In November 2005, 18 new successor companies comprising of 6 generation companies, 1 transmission company and 11 distribution companies were incorporated.
- The market rules to guide the operations in the electricity industry were approved in 2008 (NERC)
- Liquidation committee established on April 12 2011 to seamlessly wind down the operations of PHCN
- Issued relevant market codes (grid distribution, performance metering)
- Rural electrification policy developed by the Bureau in 2006 and the agency established, but operation was suspended in 2009.
- On July 1st 2006, the assets, liabilities and staff of PHCN were transferred to the successor companies thereby granting the later greater operational economy etc.

The Nigerian Electricity Regulatory Commission (NERC)

NERC was established under part III of the Act as a body corporate with perpetual succession which can sue and be sued in its own corporate name and pursuant to the provisions of the Act, perform all acts that corporate bodies perform, also saddled with the responsibility for licensing and regulation of generation, transmission, distribution and supply of electricity in the country. The Act also vests the enforcement of such matters as performance standards, consumer rights and obligation including the determination of tariffs in the NERC, with additional power to provide for matter
connected with or incidental to its mandate. It has as one of its objectives the reform of the power sector which crystallized in the enactment of the Act as it brings into existence a regulator for the Nigerian power sector, a regulator is the engine room for effective operationalism of the power sector laws, regulation, rules and objectives.

The sector regulator oversees the affairs and activities of the sector as the official watch dog of the industry. The Act also provides legal frameworks for the formation of several legal entities (corporations) to take over the assets and liabilities of the old electricity body, among these being the establishment of the NERC as the new regulatory agency for generation, transmission and distribution of electricity in Nigeria.

The Act provides for Application for licenses (Generation, Transmission, System Operations, Distribution and Trading regulation 2010) which provides for the procedures for making application to it for all kinds of electricity licenses. Under the regulation, interested parties or entities, could make application to the commission for various categories of licenses including the generation, transmission, system operations, distribution and trading licenses. It repealed the 2006 regulations on the same subject as well as the Electricity (Private Licenses) regulation 1965 etc.

In 2012, the Nigerian Electricity Regulation issued two regulations to enable communities, states and local governments to generate and distribute electricity within their domains in line with the yearnings of the stakeholders and industry experts for decentralization of electricity generation and distribution in Nigeria. The first regulation is the Nigerian Electricity Regulations 2012. It aims at enabling issuance of license to construct, own, operate and maintain or to procure the construction operation and maintenance of an independent electricity distribution network subject to some conditions as provided for by the section. There are various regulations provided by the NERC to enhance efficiency and productivity.

Renewable Electricity

NERC has as one of its mandate to facilitate electricity generation in Nigeria through conventional and renewable sources. Conventional energy sources are not sustainable in the long run being perishable and non-renewable.

Renewable energy constitutes one of the means of attaining the objectives of decentralized energy options. This trend had taken deep roots in Kenya, which has made it a national priority, no similar policy exists in Nigeria, although the National Energy Policy advocates and encourages renewable energy sources but this is yet to translate into a national priority. The availability of renewable energy or alternatives is vital to the provision of low cost, affordable and regular electricity for industrial development, employment generation and poverty alleviation in Nigeria.
Renewable Electricity Policy of Nigeria

Renewable electricity came to the limelight in Nigeria due to challenges in the country occasioned largely by epileptic supply of electricity to consumers and partly the global trend of reducing the emission of carbondioxide and the increasing devastating effect of the use of fossil energy resources which occasions climate change. The aim of the National Energy Policy includes guaranteeing of adequate sustainable and reliable power supply of energy at appropriate costs and in an environmentally friendly manner, and also alternative energy sources. The policy frame work also covers initiatives aimed at encouraging the use of sustainable and safe energy. One of the strategies devised by Federal Government for promoting renewable electricity is the grid connected operations. Grid based renewable electricity is crucial in promoting development and utilization of electricity, diversifying the sources of electricity supplies, strengthening energy, security, expanding electricity access. The NERC shall promote the generation of electricity through renewable sources by providing suitable commercial and technical measures for connectivity to the grid and sale of electricity to any person. The renewable energy sources captured in the policy guidelines on renewable electricity in Nigeria are solar biomass and wind.

Biomass is biological in nature and derived from living or recently living organizers, despite its relativity and abundance, there is no enabling legislation on biomass as a renewable energy. Biofuels are not sources of electricity but are renewable energy sources from which electricity may be indirectly produced.

Other Reforms

The current reforms target gas utilization for electricity supply in Nigeria. Nigeria has relied significantly and almost exclusively on hydropower which is also the case in countries like Benin, Ghana, Togo, Guinea and mali etc.

There are currently two main types of power plants operating in Nigeria viz

1. Hydro-electric
2. Thermal or fossil fuel

As of December, 2013, the total installed capacity of power plants was 6,953mw, available capacity was 4,598mw, actual average generation was 3,800mw.

As of December, 2014, the total installed capacity the power plants was 4,949mw. The ownership of these power plants are either fully owned by the Federal Government of Nigeria (in which there is a plan to privatize the power plants) or owned by the Niger Delta Power Holding Company (NDPHC) and was being owned by the state governments or private companies/individuals, in which such power plants are referred to as being independent power producers (IPP)
Existing Capacity (PHCN Grid System) In Nigeria

The national control center Oshogbo coordinates the operations and activities of the generating stations, transmission sub stations and switching stations to maintain system stability and security. The existing transmission and distribution network is very fragile without adequate protection and control systems. This state of the grid system is characterized by the frequent overloading, system collapses and T and D losses of up to 40% (especially in the North Eastern part of Nigeria).

Without expansion and strengthening, the grid may only handle about 3,500mw.

Makeup of the Nigerian Power Sector

**Generation (Power)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed capacity (name plate)</td>
<td>8,227mw</td>
</tr>
<tr>
<td>Installed availability capability</td>
<td>4,058mw</td>
</tr>
<tr>
<td>Actual generation capability</td>
<td>3,716mw</td>
</tr>
<tr>
<td>Max peak generation</td>
<td>3,804.3mw</td>
</tr>
</tbody>
</table>

**Transmission**

<table>
<thead>
<tr>
<th>Class</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>330kv limes</td>
<td>5,00km</td>
</tr>
<tr>
<td>132kv limes</td>
<td>6,00km</td>
</tr>
</tbody>
</table>

**Distribution**

<table>
<thead>
<tr>
<th>Class</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>33kv, 11kv, 415kv, 220kv</td>
<td>60,000km</td>
</tr>
</tbody>
</table>

**National demand**

10,000mw

**National generation deficit**

5,750mw

Including PHCN and IPP’S installation

Recommendation and Conclusion

After reviewing the legal framework and policies put in place by the government to reform the power sector and ensure stable power supply for the nation, the following recommendations would be necessary for the effective implementation of the reform, which has been generally lauded.

1. The major recommendation to the problem of the power sector reforms in Nigeria is the implementation of the reform Act; the Act is not being fully and strictly implemented. It is therefore my opinion that there should be machinery put in place specifically for the strict enforcement of the Act and this machinery would ensure the proper transition from the holding company to the successor companies under a very fair and transparent process.
2. The National Assembly should check the excesses of the privatization process to ensure conformity with the Act and international minimum accepted standard.

3. An effective post privatization regulatory framework should be put in place. This scheme would be put in place to monitor post privatization exercise. Ownership and control should be reverted to the regulator once they fail to meet the agreed benchmarks within specific time limit:

4. The Minister in charge of the sector and his team as part of proactive measure should as a matter of responsibility bring a laid down working document which will spell out in detail how they will revolutionise the power sector in Nigeria. In line with this recommendation, the United Nations as one of their millennial development goals has a road map for its member nations. They had assessed nations and stated how many MW each nation requires in accordance with their population. That should serve as a guide towards ascertaining what Nigeria needs and then work to achieve them.

5. Nigerian Rural Electrification exploits both grid connection and off-grid connection is just like other nations’ rural electrification projects. Off-grid technologies offer affordable decentralized energy to homes, villages, dispersed settlements islets etc as solar home systems, wind systems, biogas digesters, biogas gasifiers, micro-hydro power plants, etc. Alliance for Rural Electrification (2013), opined that this technology is the most adaptable, flexible and easy to use technologies for isolated communities, especially rural areas. In the last decade, electrifying rural areas with off-grid plant using Renewable Energy Resources (RES) has become a common option for settlement where grid connection is neither available nor feasible in the near future. The off-grid technology has been found very relevant and appropriate for the rural electrification project.

6. Corruption has remained the obstacle that has ended the very essence of power sector reform exercise which is to provide efficient public service to the Nigerian public through the private sector at subsidized and competitive rates. It led to the Reform Act to be partially relegated or entirely discarded for expediency or self interest in the conduct of the exercise. Certainly enforcement of corporate regulations and ethics will enhance the quality of the electricity produced.

Conclusively, the infusion of the above recommendations will certainly galvanize and ensure optimal value of a transparent power sector reform process. With a new government and energy sector will be a brand new opportunity to inculcate best
global practices into the Nigerian power sector to achieve a maximum electricity output to satisfy the entire populace and to aid the development and growth of this country.

In the above appraisal, we have studied the evolution of the power sector, all the regulatory frameworks in lieu of developing the power sector, the policies taken out, we can see however that the Nigerian government seems to be taking concerted actions to reform the Nigerian Power sector, to drive expansion of capacity so as to enable the growth of the overall Nigerian Economy.

The implementation of the Act has been challenging for the Nigerian government and largely seems to have stalled in recent years considering the fact that more than six years after the enactment of the Act, the reform process is still dawdling. The process of implementing the Reform Act of 2005 was revitalized when former President Goodluck Jonathan established the presidential taskforce on power and published a road map for power sector reform in August 2010, potentially opening the door to significant private investment in the Nigerian power sector. The establishment of the presidential taskforce on power has led to the renewed governmental commitment to privatize the gas fired Gencos and Discos. Its commitment to enter into concession agreements for hydro Gencos and the regulatory and commercial framework that has been put in place to make Nigeria an attractive market in which to explore has the potential to open the door to significant private sector investment in the Nigerian power sector presenting opportunities and challenge to potential investment.

Finally, corruption has been the bane of this country. No significant achievement will be recorded until each and every Nigerian stands up against it. The President cannot fight it alone; it is the absolute responsibility of everyone including the stakeholders in the power sector.

References
Aderibigbe, D. A. ‘Power Supply to industry, Pros and cons of Available Options. A presentation at the one-day conference of Nigeria society of chemical engineers, held at the Ikeja Sheraton Hotel, Lagos.

Oragorua, B. ‘Nigerian Power Sector Reforms and Privatization’ Director General Bureau of Public enterprise.

ECN was created pursuant to the Electricity Coorporation Ordinance 1950

Electric Power Sector Reform (EPSR) Act 2005 Cap E7. (Revised Laws of the Federation of Nigeria (LFN) 2004


Oboh, M. Power Supply: ‘Nigerian Electricity Tariff lowest in Africa.


Olusola A. L. L. Democracy and computations. http://dspace.unijos.edu.ng/bitsstream/16485/553/1/democracyandcomuption.strange%2520bed%2520bed%2520fellow pdf>

Policy Guidelines on renewable electricity in Nigeria, December 2006,

Okoro, et al, O. I. Power Sector Reforms in Nigeria: Opportunities and challenges

P.M. News Nigeria: Jonathan’s Power Sector Reform Road Map http://pmnewsinigeria.com2010/9/01/Jonathan'spowersectorreformsroadmap/

Previously known as Distribution Companies.


Regulation 1 (4) of the NERC Application for Licenses Regulation 2010. The 2010 regulations substantially made similar provisions as the 2006 version.

Sections 31-61 of the Electric Power Sector Reform Act 2005

The National Electric Power Authority Decree No.4 signed on June 7, 1972.


They were previously known as Generation Companies.

*Vanguard Newspaper:* June 10, 2014

World Resources Institute, ‘Nigeria Power Sector Reform Act’ http://projects…..org/sd:pams.database/Nigeriapowersectorreformact

2013 year in review, Presidential taskforce on Power, p.16.

2014 year in review, Presidential taskforce on power, p. 53.