

Power Sector Reform: The Nigeria Experience

**ENGR.A. D. OKAFOR; B. ENG., M. ENG.,
MNSE, MNIEEE, MNIM, M.inst.AM**

*Electrical/Electronic Engineering Department,
Petroleum training Institute,
P.M.B. 20- Effurun, Delta state, Nigeria.*

Abstract

Regular electricity supply both in quantity and quality is central to the economic, social, technological and political development of any nation. Countries whose electricity is epileptic in supply can hardly develop and risk losing potential investors. Nigeria, a country of over 150 million people, has for over 35 years of establishment of the National Electric Power Authority (NEPA) which had hitherto held monopoly for the generation, transmission and distribution of electricity suffered frequent and persistence power outages. The present federal government has embarked on power sector reform with the intention of re-dressing the ugly state of affairs in the Nigeria electricity industry and in-turn remove the monopoly control in the sector. This paper therefore looks at the overall power sector reforms, highlights the Nigerian experiences so far and finally proffer suggestions for a successful reformed power sector.

1.0 Introduction

The ever increasing demand and meager supply of electric power in Nigeria had been a great challenge to her development. The situation has become critical with the nation's increasing population not balanced by an adequate energy development programme, and the incessant power generation failure has grossly affected the economy, seriously slowing down development across board.

In most parts of the country, inadequate power supply or outright lack of power has remained the order of the day, leaving in its trail perpetual darkness across the divid. The manufacturing sector is ailing, the informal sector where artesian hold is creeping and several businesses getting crippled. Electricity supply in Nigeria has remained painfully erratic.

In a bid to effectively tackle various problems bedeviling the Nigerian power sector, including shortage of power generation capacity and severe constraints in the

transmission and distribution networks, the federal government of Nigeria (FGN) launched a Roadmap for power sector reform in August, 2010. The roadmap outlined specific goals of a comprehensive reform programme anchored on the electric power sector reform act 2005.

The ongoing reform has led to the unbundling of the Power Holding Company of Nigeria (PHCN) into eighteen (18) successor companies with six generation, one transmission and eleven distribution companies.

1.1 Electricity in Nigeria

Electricity production in Nigeria dates back to 1896 when electricity was first produced in Lagos, fifteen years after its introduction in England (Okoro, 2007, Niger Power Review, 1985). The total generators' capacity used then was 60KW for a maximum demand of less than 60KW. To oversee the development of electricity in Nigeria, two important bodies; Electricity Corporation of Nigeria (ECN) and Niger Dams Authority (NDA) were established in 1950 and 1961 respectively. The NDA was responsible for the construction and maintenance of dams and other works on the River Niger and elsewhere, generating electricity by means of water power, improving navigation and promoting fish brines and irrigation (Okoro, 2007, Manafa, 1995). The electrical energy produced by NDA was sold to ECN for distribution and sales at utility voltages.

In April 1972, both the operations of ECN and NDA were combined to produce the National Electric Power Authority (NEPA). The new authority was given the monopoly to generate, transmit and distribute electricity throughout Nigeria. Since the inception of NEPA, the organization expands annually in order to meet the ever-increasing energy hungry population. Unfortunately, the current status of power supply shows that only 40% of the nation's population has access to electricity supply, and the current average growth rate of the distribution and transmission network per annum is less than 1% against the expected 16% for 13000MW targeted by 2013 (Nnaji B., 2011). Probably, this is due to limited investment and the available investments are used for the replacement of damaged equipment instead of using them for new projects (i.e. constructions for expansion and upgrades).

1.2 Electrical Energy Sources in Nigeria

Electricity production in Nigeria over the last 45 years has varied from gas-fired, oil-fired, hydroelectric power stations to coal-fired stations. Hydro electric power system and gas-fired system are more popular. This is because the primary fuel sources coal, oil, water and gas for these power stations are readily available.

Nigeria's coal reserves are large and estimated at 2 billion metric tones. Most of the Nigerian coal product has consumed locally, mainly for railway transportation, electricity generation and industrial heating in cement production. Nigeria has abundant reserves of natural gas. In energy terms the quantity of natural gas is at least twice as much as the oil. The known reserves of natural gas have been estimated at about 2.4×10^{12} cubic meters. This significant quantity is expected to last for more than a century as a domestic fuel and a major export (Okoro, 2007, Bustros, 1983).

Oil is the third main source of energy, and it is Nigeria's major sources of revenue. As at 2005, Nigeria proven crude oil reserve stands at 35.2 billion barrels. The majority of reserves are found along the country's costal Niger Delta.

1.3 Underlying Issues to Power Sector Reform

Electricity exhibits certain characteristics that make it different from a regular commodity. It cannot be easily stored. Its industry is highly capital intensive with the feature that the set up costs are a significant proportion of total costs. Hence, in the early stage of the electricity industry in Nigeria, it was generally believed that the most efficient supply structure be an integrated monopoly. However, for the monopoly not to abuse its power by charging excessive price, the sector was subject to regulatory control by the government, which eventually assumed its ownership. This ownership and the absence of competition brought about serious challenges to the survival of the electricity sector in Nigeria. Investment in generations, transmission and distribution was irregular and insufficient for the expansion needed to meet growing demand. Theft of electricity, inefficiency of operators and deliberate policy of low traffic affected the operation of the electricity utility as an organization. Public utilities routinely priced electricity below the cost reflective prices and as a result the sector is heavily subsidized and overused by consumers (Adenikinju, 2011).

1.4 The Need for Reform

The need to reform power sector became imperative for the following reasons:

- Limited access to infrastructure, low connection rate as many towns and cities were not linked to the grid.
- Inadequate power generation capacity, the combined generation capacity for all the stations in Nigeria put together was 5924.7MW.
- Inefficient usage of capacity: Many of the stations operate for below installed capacity.
- Lack of capital investment: The industry was solely funded by government.
- High technical losses and vandalization of infrastructure: Loss of supplies because of failure of power supply infrastructure and willful damage to her facilities by hoodlums.
- Insufficient transmission and distribution facilities to strengthen and expand electricity coverage.
- Inefficient use of electricity by consumers who often indulge in wasteful use of electricity.
- Inefficient regulation as exemplified by lack of strict enforcement of nominal supply voltages of 240Vac for single phase and 415Vac for 3-phase.

1.5 The Aims of the Reform

Electricity reform in Nigeria is aimed at, and not limited to the followings:

- i. Improving efficiency and performance in the sector
- ii. Ensuring transparent and responsible management
- iii. Limiting political interference in order words elimination of government involvement in utility management.

- iv. Promoting of private sector participation in the areas of management and technical operations; encouragement of private investments in generation to address inadequate supply and ensure level playing field for all investors.
- v. Releasing government funds to finance core government activities e.g. road construction, health care, education etc.

2.0 Power Sector Reform

2.1 Enactment of Electricity Power Sector Reform Act

The performance of NEPA pre-1986 was poor (Adenikinju, 2011), and the evident poor performance led the government to embark on the deregulation of the sector as part of the Structural Adjustment Programme (SAP) introduced in 1986. By Decree 25 of 1988, NEPA was partially commercialized and renamed National Electric Power (NEP) Plc. With this plan, NEPA was expected to cover its operating and maintenance costs, but not its capital costs.

Undeniably, the process of a comprehensive reform of the Nigeria power sector began in 1999 with the inception of civilian administration under president Obasanjo. Federal Executive Council (FEC) approved a draft electricity reform policy in 2001 which was passed by the national assembly in 2003. However, the president only assented to the passed bill in 2005, after which the Electric Power Sector Reform Act was promulgated.

2.2 Key Activities in the Reform

The reform of the Nigerian power industry comprises of the restructuring and privatization. Three core sets of activities involved in the reform of the sector include:

- Unbundling of NEPA: This involved the establishment of the Power Holding Company of Nigeria (PHCN) in 2005 to manage the assets, liabilities and staff of the defunct NEPA and transfer them to the successor companies upon privatization.
- Development of a wholesale electricity market. That is, establishment of Nigeria Bulk Electricity Trading Company and Nigerian Electricity Liability Management Company (NELMCO) to carry out Bulk trading in transition and liability management respectively.
- Establishment of the Nigerian Electricity Regulatory Commission as an Independent regulatory agency (NERC).

2.3 Division of Power Holding Company of Nigeria (PHCN)

Undoubtedly, key early milestones have been achieved in the implementation of the Electric Power Sector Reform (EPSR) Act of 2005. The creation and unbundling of the Power Holding Company of Nigeria (PHCN) have been vital first steps. In November 2005, the monolithic Power Holding Company of Nigeria (PHCN) was divided into eighteen (18) successor companies (6 successor generation, 1 transmission and 11 competitive distribution companies), creating a new structure for the electricity industry as provided by the EPSR Act 2005. This structural adjustment saw the emergence of a Nigeria electricity market that is divided into five (5) core

areas: generation, transmission, system operation, distribution, and trading. One primary objective of the EPSR Act is to break NEPA monopoly and pave way for the entry of independent power producers (IPPs) that would create a strong electricity supply industry that can meet the needs of the Nigeria citizens in the 21st century. The industry would involve the trading of electricity between successor companies and other market participants under the overall regulation of the Nigerian Electricity Regulation Commission (NERC), also established in EPSR Act 2005. Figure 3.0 illustrates the unbundled PHCN successor companies.

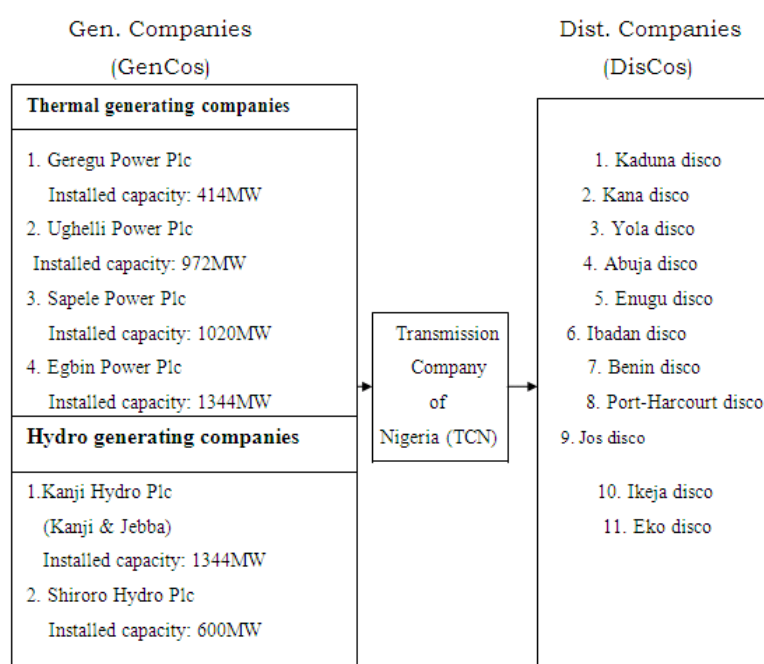


Fig. 3.0: Unbundled PHCN successor companies and their respective (Onagoruwa, 2011).

2.4 Generation

The six (6) generation companies (GenCos) would be separated into two; the thermal and the hydro stations. The strategy employed by the Bureau of Public Enterprises (BPE) is to grant concessions for the operation of Kainji (Kainji & Jebba) and Shiroro. This approach is primarily predicated on the magnitude of the capital requirements and water rights issues associated with these plants. River Niger flows across different countries in the West African sub-region and was dammed to provide electricity for Nigeria. To prevent these other countries from using their water rights to dam the water up stream, Nigeria currently provides electricity to such countries. Government cannot fully privatize water because it is used for other importance purposes (Maigida, 2008).

The PHCN successor thermal generating plants will be privatized through the sale of a minimum of 51% equity to key investors that clearly demonstrate the technical and financial ability to operate and expand each plant. The government should be very

careful in working closely with the Nigeria Electricity Regulatory Commission (NERC) to ensure that a monopoly or oligopoly of market power in the generation sector is not acquired through these divestitures. Table 1 shows five generation companies and their preferred bidders.

Table1: Five preferred bidders and generation companies

S/N	Core investor	GENCOS
1.	Amperion power distribution co. ltd	Geregu power plc
2.	Mainstream energy solution ltd	Kainji hydro power plc
3.	North-South power ltd	Shiroro hydro power
4.	Transcorp/woodrock/sumbion/medea/PSL/Thomassen	Ughelli Power Plc
5.	CMEC/EURAFRIC/energy JV Consortium	Sapele power Plc

2.5 Transmission

In line with the Bureau of Public Enterprises (BPE) privatization plan, the transmission company of Nigeria (TCN) would remain under the control of the government. Unlike the power generation and power distribution sectors, the national grid maintained by TCN is not one that can be readily opened up to competition. On the contrary it forms a natural monopoly and moreover, which is of crucial importance to the country's national security. However, a management contractor by name MANITOBA HYDRO INTERNATIONAL (MHI) has secured bid to manage the company since April 12, 2012 for the first three years. An Indian company had earlier been hired to serve as the management consultant before the suspension of the reform in 2007.

In order to ensure that the planned increase in generating capacity is not left stranded for lack of evacuation capacity, there would be a need for a 30% increase in the "true deliverable" transformation capacity of the country's 330KV network between July 2010 and April 2011 above its current limit of circa 4,500MW equivalent (Roadmap for Power Sector Reform, 2010). Consequently, the TCN management contractor will be responsible for significant investments in the expansion, reliability and stability of the network infrastructure. Additionally, the Federal Government plans to build a new super transmission network of 700KV, which amongst other things will help to evacuate power from the proposed Mambilla hydro power plant. The government plans to recover substantial portion of these capital investments through the revenues generated by the electricity market itself i.e. by the transmission use of system charges paid to the TCN.

Notably, the Federal Government is planning an increase in the average monthly revenue collection capability of the Nigerian Electricity Market. Obviously, one key to this improvement in revenue collection is the targeted increases in power generation.

2.6 Distribution

The eleven (11) distribution companies are to be particularly privatized. Majority shares of 51 percent in each of the companies would be concessioned to a core

investor and remaining 49 percent of the shares are to be retained by the federal government. It is proposed that the federal government would allocate 10-15 percent of its stake to state government for them to be represented on the board of the companies and help the companies to solve related problems like right of ways, payment of compensations etc. It is expected that the shares of the federal government would be sold to the general public.

Meanwhile, ten (10) different consortia which offered the highest percentage of proposals in the reduction of distribution energy loss have emerged new core investors in ten (10) out of the eleven (11) DisCos. But their final emergence would be dependent upon their proposal surviving the model test developed by the National Council on Privatization (NCP) and consequent ratification by the technical committee of NCP (Roadmap for Power Sector Reform, 2010). Table 2 shows the investors and the distribution companies bidden for. There has been no bid for Kaduna Distribution Company.

Table 2.0: Investors and Distribution companies

S/N	Core investor	Distribution company
1.	KANN consortium utility company ltd	Abjua Disco
2.	Vigeo power consortium	Benin Disco
3.	New electricity distribution consortium	Eko Disco
4.	Interstate Electric ltd	Enugu Disco
5.	Integrated Energy Distribution & marketing Ltd	Ibadan Disco
6.	New Electricity Distribution Company (NEDC)/KEPCO	Ikeja Disco
7.	AURA Energy Ltd	Jos Disco
8.	SSAHELIAN SPV Ltd	Kano Disco
9.	4 power Consortium	P/Harcorut Disco
10.	Integrated Energy Distribution & Marketing Ltd	Yola Disco

2.7 Power Sector Reform Roadmap

Privatization of PHCN successor companies suffered a set back in 2007 when it was suspended by Yar Adua administration. The sector reform regained momentum under President Goodluck Jonathan who on 26th August, 2012 launched a new power sector Roadmap. The Roadmap outlines government's plan to accelerate the pace of the reform and improve on short term service delivery. The president also established a Presidential Action Committee on Power (PACP) to remove "red-tape"; achieve policy consistency and cut-through bureaucracy in decision making involving stakeholders in power. Also, the day-to-day implementation of the Reform plan for the Nigerian Power Sector was left with the Presidential Task Force on Power (PTFP).

2.8 The Mandate of Nigeria Electricity Regulatory Commission (NERC)

Nigerian Electricity Regulatory Commission (NERC) plays a crucial part in operating licenses and regulating the sector. More importantly, it gives confidence that a level playing field will subsist and that rules will be followed and enforced. In recognition

thereof, the Federal Government has taken decisive action to resolve the leadership vacuum at NERC and establish a credible leadership therein. The commission is to have overall oversight functions in order to:

- Ensure an orderly transformation of the sector by setting and monitoring standards, entry requirement, etc
- Ensure efficient, safe and adequate production of electricity
- Encourage competition, price/rate determination and efficient/safe service delivery.
- Set and enhance comprehensive market roles and operating codes.
- Manage sustainable tariffs etc.

2.9 Electricity Trading Arrangement in Transition Period

A new transitory entity ‘the Nigerian Bulk Electricity Trading Company (NBETCO) Plc’ has also been established, to play a mediatorial role between the generation and distribution companies. The company’s role would involve the bulk purchase of power from the successor generation companies, Independent Power Producers (IPPs) as well as new entrants into the upstream power space and then resell these to the distribution companies. Under this arrangement all trading are through contracts. NBETCO (i.e. bulk trader) is expected to play this function up until, the individual distribution companies can enter into direct Power Purchase Agreements (PPA) having been adjudged credit worthy by the counter party or generating company, a status which they currently lack (Roadmap for Power Sector Reform, 2010). When the market has stabilized, Discos and Gencos would enter into bilateral agreement. Figure 3 illustrates the electricity trading arrangement during the transition of PHCN to successor generation and distribution companies.

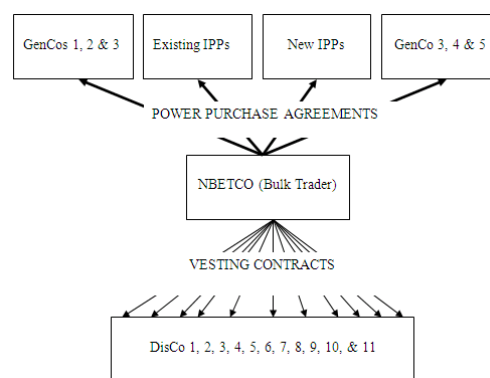


Figure 3: Bulk trader as an interim central purchase

3.0 Government Short and Middle Term Strategic Plan for Improving Electricity Supply in Nigeria

According to the Roadmap for Power Sector Reform (RPSR) 2010, the Federal Government short term plan is committed to rehabilitating circa 1,000MW of generating capacity at existing PHCN power stations and adding an additional 1,

266MW of generating capacity from new National Integrated Power Projects (NIPP) stations. Also, in the medium term (up to December 2013), a modest increase in the total power generation capacity of the existing PHCN power stations is expected (which would bring the total to just under 4,500MW); the addition of 4,775MW from the NIPP plants; and a substantial (3,300MW) increase in power generation capacity from Independent Power Producers (IPPs) all by December 2013. As a result, the medium term expectation is that about 14,000MW of power generation capacity will be available by December 2013. Ultimately, the ambition of the Federal Government is to achieve the vision 2020 target of 40,000MW which requires an investment in power generating capacity alone of at least US \$3.5 billion per annum for the next Ten (10) years (Onagoruwa, 2011).

Government appreciates that to achieve stable power supply in Nigeria, demand putting in place stable sustainable gas supply infrastructures to serve the power station. As a result, the Federal Government released the National Gas Masterplan whose provisions will encourage private sector investment in gas infrastructure so that gas can be used throughout the nation for power generation as well as other industrial processes. Since the role out of the plan, Federal Government of Nigeria has achieved major milestones in the expansion of the Escravos-Lagos Pipeline System (ELPS), the major gas supply artery to the power plants. The plan would provide enough gas ready for supply to power producers (circa 1,636mmscfd) to support the targeted increase in actual generation capacity. Notably, the gas supply plan, had achieved tangible goals, which invariably led to the attainment of 4,200MW of electricity in the country.

The completed gas pipeline project in the critical pipeline segment include the 27km x 24inch permanent gas supply pipeline from Itoki to Olorunsogo via Ewekoro all in Ogun state, the 56km x 24 inch Escravos-Warri gas pipeline, doubling the pipeline capacity and enhancing gas evacuation from Escravos as well as the 130km x 36inches open to Geregu pipeline. The net impact of these is the addition of 120 million cubic feet of gas per day (mmcf/d) to the grid and the permanent elimination of the challenges of low gas pressure that has plagued the Olorunsogo Power Holding Company of Nigeria (PHCN) and the National Integrated Power Plant (NIPP) facilities.

4.0 Nigeria Experience

Nigeria has gone and still going through a lot of experiences in its journey to reform the power sector. Some of these experiences as should be expected in a developing nation like ours are discussed.

- **Improved supply of electricity**

Nigerians all over the country acknowledged improvement of electricity supply within a period sometime last year. The steady supply of electricity within this period was attributable to increase in generation capacity following the commissioning of some Nigerian Integrated Power Projects, (NIPP) and enhanced gas supply to the plants. Available power capacity reached on all high 4,422MW (Onuorah, 2012). This was

unprecedented in the history of power generation in Nigeria and Nigerians were happy for it.

- **Heavy deployment of resources to power sector**

Federal government have injected heavy amount of money both for the rehabilitation of existing ailing generating plants and building of new ones. The government at the centre provided the sum of N1.2trillion for building ten new power projects scattered across the country with the expectation to deliver additional 4,770MW of electricity to the national grid (Salau, 2012). Also various sums of monies have been invested in the rehabilitation of Egbin, Ughelli, Sapele and Kainji hydro power stations. It expected that this investment would raise the generation capacities of the plants.

- **Commendable roles by BPE and NPC**

The Bureau of Public Enterprise (BPE) and National Council on Privatization (NPC) have demonstrated uncommon commitment and determination, as part of government agencies driving privatization, to take the process to its logical conclusion. This is evidence by the stout denials and clarifications of some alleged cases of lack of credibility in the sales of distribution companies. Besides they have transparently and professionally conducted the privatization process in a manner that has inspired confidence in the investors and the public alike.

- **NEPA unbundled**

The National Electric Power Authority which had hitherto enjoyed the monopoly in Nigeria electricity industry has successfully been unbundled into separate generation, transmission and distribution companies. The monopoly has given way to private sector participation in the business of electricity supply to consumers in Nigeria. Undeniably, the unavoidable competition that would rise between the various private companies would definitely result to improvement in electricity supply in Nigeria, and a strong, efficient and viable electricity industry.

- **Introduction of new tariff regime**

There is new tariff regime in place in the country for consumers of electricity. It is considered to be cost reflective in nature and was designed to attract private investors into the industry. However, the public including Lagos chamber of commerce and industry (LCCI) have accused the NERC of issuing outrageous bills to consumers under the new electricity tariff. The bill which NERC has increased with over 500 percent was not in accordance with the agency billing template. This observation was made by LCCI.

- **Power sector reform timetable are not followed**

The completion dates for critical power projects are not being kept. For example, if the timetable had been followed, Manitoba Hydro International (MHI) which won the transmission company of Nigeria (TCN) management contract would have taken over by September 1, 2012. This would have kicked off the stabilization and security of the national grid, reduction of electricity losses during transmission and staff re-

orientation as some of the key objectives of the contract. Again, the non-completion of 330KV Gombe-Maiduguri transmission line project. This has stalled supply of 30MW of electricity to Borno state from national grid.

- **Strong opposition to the reform by the labour unions in the electricity sector.**

Labour unions in the sector have never pretended about their opposition to the reform. This is because of the uncertainty surrounding the settlement of the entitlements of their members who work in the PHCN. The workers had insisted that government must resolve all outstanding labour issues before the final sale of PHCN to the private sector.

- **Low private sector participation**

The anticipated private sector involvement in the electricity production/generation is still low, even with about 40 licenses issued to independent power producers (IPP) by Nigeria Electricity Regulatory Commission (NERC) over four years ago. In fact, except for few captive generating companies, state government like Akwa Ibom (Ibom Power), Rivers state (Omoku) and Delta, private sectors have been reluctant to set up power plants in spite of the licenses they got. However, there are several challenges to private sector response to electricity reform in Nigeria (Adenikinju, 2011).

- **The reform appears to focus more on the provision of higher generation**

There is more focus on generation capacity without commensurate attention paid to the improvement of transmission and distribution infrastructure. There is the fear that the targeted plant capacities may be stranded due to the inadequate facilities for evacuation. The government should speedily response to their construction plan of the super transmission network of 700KV. Moreover, the Transmission Company of Nigeria (NCT) management contractor ready for significant investments in the expansion, reliability and stability of the network infrastructure.

5.1 Provision of free meters

The Nigeria Electricity Regulatory Commission (NERC) promise of free supply of pre-paid meters to all electricity consumers in the country appeared to have run into heaches. This fear is reinforced by the fact that six months after the pronouncement, many consumers are yet to get the meters and still contend with estimated bills.

- **Setbacks**

The reform suffered some setback in 2007 when it was suspended by Yar Adua government and in, August 2012, following the resignation of Minister of Power, Prof. Berth Nnaji.

- **Fear of government commitment to the reform.**

This fear is informed by the government inability to execute a takeover of the transmission company of Nigeria by Manitoba Hydro International (MHI) that won the 3-year management contract, over one month after the scheduled takeover of

September 1, 2012. The government has up till now not named a supervisory board of seven persons that will work alongside the incoming TCN expatriate firm's management.

5.0 Conclusion and Recommendations

This paper has highlighted the on-going federal government of Nigeria power sector reform programme. The experiences in such a reform programme have been discussed and it is hoped that the reform will usher in competitive energy market, break the monopoly enjoyed by PHCN and positively stimulate the Nigeria economy.

However, for the programme to achieve the aforementioned, the following recommendations should be considered:

- Provision of level playing ground for all stakeholder. Government must at all times and in all circumstances conduct its affairs in a transparent manner to dispel any shadow of doubt/credibility question regarding its commitment and sincerity to full implementation of the reform process. This is to inspire confidence in the Nigeria public, stakeholders and prospective local and foreign private sector investors which are expected to actively participate in all processes leading to the sales of unbundled PHCN companies.
- NERC must be firm and just in its regulatory functions to ensure full compliance to the rules of the game. This is because it will be absolutely impossible to get the desired results in the whole process when the regulatory institution is weak and cannot discharge its functions dispassionately.
- National Power Training Institute of Nigeria (NAPTIN), established for human capital development in the emerging reformed power sector should be of world standard in the true sense of the word to be able to offer sound training to Nigerians who are expected to run these companies in the post privatization era.
- The old-time estimated billing method should be discouraged. An accurate billing system should be introduced.
- The consumers of energy must come to terms with the fact that the rules have changed. They must be ready to pay for any amount of energy consumed since the utility companies are purely driven to make profit as well as to render quality service.

The government should by now have handed over everything about power generation, distribution and transmission to the private sector, as contained in the Electricity Power Reform Act of 2005. Furthermore, the government should note that the available capacity of 4,422MW is hardly anything to flaunt in a demand from a country that boasts a population of over 150 million people. Importantly, the government should ensure that all the private companies have a complete understanding of the investment participation expected from them, and they have the capital ability and are very willing to invest in the power sector reform. The Federal Government should do all that needed to be done for a speedy completion of the power sector reform process and ensure that it comes out successful. This is because Nigerians would not be happy if poorly performing, public-owned utilities become

poorly managed by privately-owned companies. Neither will it be desirable that a few years down the line, these successor private sector companies run into financial bad weather or need to fleece power consumers through higher charge-out rates beyond the Multiple-Year Tariff Order (MYTO).

References

- [1] Adenikinju, A. (2011), “Energy Sector Reform; Prices and Private Sector Response”. Ibadan.
- [2] Bustros, A. O. (1983), “Petroleum in Nigeria”, Oxford University Press, Ibadan, 1983, pp. 3-6.
- [3] Madu, O. (2012), “Jonathan Raises Panels on Steady Power Supply”. Guardian Newspaper, September 6, 2012, pp 7, Vol. 29, No.12, 306.
- [4] Maigida, S. (2008), “Power Sector Infrastructural Development by 2020: Issues and Challenges”. Paper Presented at the 1st International Conference of NAEI/IAEE at the Transcorp Hilton Hotel, 29th – 30th of April.
- [5] Manafa, N. (1995), “Electricity Development in Nigeria”, Rasheen Publisher, Lagos, pp. 37-51.
- [6] Niger Power Review: Development of the Electricity Industry in Nigeria (1960-1985), 1989, pp. 10-15.
- [7] Nnaji, B. 2011, “POWER SECTOR OUTLOOK IN NIGERIA: Governments Renewed Priorities”.
- [8] Okoro, O. I., (2007) “Power sector reforms in Nigeria: opportunities and challenges”, Journal of Energy in Southern Africa, Vo18 No 3.
- [9] Onagoruwa B. (2011), “Nigerian Power Sector reform and Privatization”, Bureau of Public Enterprises, Abuja.
- [10] Roadmap for Power Sector Reform (RPSR): A Customer-Driven Sector-Wide Plan to Achieve Stable Power Supply, 2010.
- [11] Salau, S. (2012), “Nigeria to Generate 7000MW by 2013 as National Integrated Power Projects Boost Capacity”. Guardian Newspaper, October 17, 2012, pp. 45.

