



## Electricity Distribution in Nigeria: Problems and Solutions

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### Abstract

Sufficient electricity supply is a necessity for every society. No society can develop well in the absence of regular power supply. The power sector specifically the distribution arm right from time up to now that it is privatized, has been faced with many problems. This article examined the problems facing power distribution in Nigeria and the solutions to the problems. It was revealed from the research that non-correlation of the amount that electricity consumers pay for electricity consumption with the cost of generating, transmitting and distributing electricity; the refusal of electricity consumers to pay electricity bills; and the perpetration of electricity theft are the main problems confronting electricity distribution or supply in Nigeria. It was discovered that insufficient funding; and shortage of electricity pre-paid meters also constituted the problems facing power supply in Nigeria. These problems which are stated in the article can be solved by the government critically examining and subsequently reviewing the current method of collecting electricity tariff by making it in such a way that it will correlate with the cost of generating, transmitting and distributing electricity; by electricity distribution companies working in partnership with the Nigerian Police to disconnect electricity consumers who refuse to pay their bills; by Nigerians engaging in attitudinal change in the area of deviating from the negative attitude of committing and encouraging the crime of electricity theft; and by the government reducing excise duties levied on local production of pre-paid meters.

**Keywords:** Problems, Challenges, Power Sector, Electricity Distribution

### Introduction

Adequate, regular, affordable and efficient supply of electricity is crucial for the growth and development of any society. Electricity is an important input to production, without it, mass production of goods will be affected negatively. Erratic supply of power disrupts production of goods. The absence of electricity for long period causes discomfort to an individual and hampers his productivity. In fact, electricity consumption has become a parameter by which the standard of living as well as the level of industrialization of nations is measured (Mohammed, 2005). Erratic power supply is the main problem facing the Nigerian power sector right from the existence of National Electric Power Authority (NEPA) to date. Presently, only a 40% of Nigeria's population is connected to the National power grid whilst power supply difficulties are experienced around 60% of the time (Aliyu, Ramli and Saleh,





2013). Record also has it that at best, average daily power supply is estimated at four hours, although several days can go by without any power at all (PwC Report, 2016). The energy supply crisis in Nigeria is very complex; it stems from a variety of issues and has been ongoing for decades. Most Nigerian businesses and households that can afford to use power run one or more diesel-fueled generators to supplement the intermittent power supply. The Manufacturers Association of Nigeria (MAN) and the National Association of Small Scale Industries (NASSI) estimated that their members spend an average of about ₦2billion (about \$12 million) per week on self-power generation (Anyanroh, 2013).

In an effort to resuscitate the power sector and make it more efficient and effective, the Federal Government under former President Olusegun Obasanjo embarked on aggressive power sector reforms by constituting the Electric Power Implementation Committee (EPIC) in 2000. The Committee in 2001 drafted the National Electric Power Policy (NEPP) which led to the March 2005 Electric Power Sector Reform Act (EPSRA) No.6. According to Alohan (2012), the problems that characterized the power sector which led to the various reforms that are carried out in the sector include: limited access to infrastructure; inadequate power generating capacity; inefficient usage capacity; lack of capital for investment; ineffective regulation; high technical losses; insufficient transmission and distribution facilities; inappropriate industries and market structure; and inefficient use of electricity by consumers. Other problems that confronted the power sector before it was privatized were low tariff and revenue shortfall due to electricity fraud; obsolete equipment; transformer overload problem; poor meter maintenance, problem of large operational areas; and lack of adequate funding (Odion, 2016).

After the privatization of the power sector, a reasonable number of the problems such as poor power supply, lack of skilled electricity personnel, etc. were still occurring. Eze (2016) noted that, years after the privatization of the power sector, Nigerians are yet to witness any significant improvement in electricity supply in the country. Ayodeji (cited in Aminu et al., 2014) on his part stated that the privatization of public corporation like electricity enterprise resulted in its demise. It has made electricity enterprise to be plague with inefficiency and corruption. It's against this backdrop that this paper seeks to examine the problems and challenges inherent in electricity distribution in Nigeria in an attempt to find lasting solutions to the problems. To discuss the main concern of the paper in an orderly manner, a description of the historical development of the power sector in Nigeria will be made, followed by an explanation of the problems and challenges confronting electricity distribution in Nigeria, the solutions to the problems, and finally the conclusion.

### **Historical Development of the Power Sector in Nigeria**

The history of electricity development in Nigeria dates back to 1896 when the first electricity generating power plant was installed by the British Colonial Government to supply electricity to the Colony of Lagos. After the amalgamation of the Northern and Southern Protectorates in 1914 to form modern Nigeria, electric power supply system was developed by other towns in the country apart from Lagos on an individual scale until 1946. In this year, the Public Works Department ceased to have control over the operation of the electricity generating plants and distribution system in Lagos, and the Nigerian Government Electricity



Undertaking (NGEU) was immediately established to take over the assets and liabilities of electricity supply in Lagos. In 1950, a central body known as the Electricity Corporation of Nigeria (ECN) was established under the ordinance No.15 of 1950. ECN became fully operational in April, 1951 when all the generating power plants and distribution system in the country as at then were integrated and put under its management. After the discovery of the innumerable benefits of dams to electricity supply in Nigeria, the Niger Dams Authority (NDA) was also created in 1962 by an Act of Parliament to mainly construct and maintain dams as well generate electricity by water pressure. NDA sold the electricity that it produces to ECN for distribution and sales at utility voltages.

On the 1st of April 1972, ECN and NDA were to be merged together to form one single body known as the National Electric Power Authority (NEPA) but the actual merger did not take place until the 6<sup>th</sup> of January 1973. One of the main reasons for the merger according to (Niger Power Review, 1985) is to vest the production/generation and the distribution of electricity throughout the country in one organization which would assume responsibility for its financial obligations. The electricity system under NEPA continues to grow and between 1978 and 1983, the Federal Government had sponsored two panels of enquiry to fashion out models for restructuring NEPA into an independent unit or toward privatizing it out of its monolithic nature. This led to the establishment of the electrification boards whose duty was to take power supply to the rural areas and new cities. In 1988, NEPA was restructured. It was partially commercialized supported by an upward review of the electricity tariffs that it charges customers (Okoro and Chikuni, 2007). Still in a bid to restructure and resuscitate NEPA which later became inefficient and ineffective as a result of the ever-increasing demand for electricity in the country, the Federal Government under former President Olusegun Obasanjo carried out reforms in the power sector. The Government in the year 2000 constituted the Electric Power Implementation Committee (EPIC). The Committee drafted the National Electric Power Policy (NEPP) in the year 2001 which led to the Electric Power Sector Reform Act (EPSRA) No.6 that became operational in March 2005. The EPSRA consists essentially of two main components: restructuring and privatization of the power sector. Some of what the Act mainly seeks to provide for includes:

1. The formation of the initial and successors companies that will take over the functions, assets and staff of NEPA. In other words, to unbundle NEPA along its functional lines into competing successor companies.
2. The establishment of the Nigerian Electricity Regulatory Commission (NERC) to among other functions license and regulate persons and organizations engaged in the generation, transmission and distribution of electricity, ensure that they deliver standard service, and establish appropriate consumer electricity service rights and obligations.
3. Development of competitive market for electricity generation, distribution, and sale mainly during the post – privatization stage (EPSRA, 2005).

The Electric Power Sector Reform Act (EPSRA) 2005 provided for the development of the Nigeria electricity market. It broke NEPA's monopoly and paved way for the entry of Independent Power Producers (IPPs). Prior to March 2005 when the Act came into effect, Nigeria had only the now defunct NEPA which has the responsibility of generating, transmitting and distributing electricity, in addition to the responsibility of regulating itself.



After the introduction of the Act, in July 2005, NEPA was renamed Power Holding Company of Nigeria (PHCN) Plc. and subsequently unbundled into 18 separate companies. The 18 separate companies include: 6 electricity generation companies, 1 transmission company known as Transmission Company of Nigeria (TCN), and 11 electricity distribution companies.

### Generation Company

**Table 2.1: Electricity Generation Companies (GenCos)**

S/No.	Generation Company	Plant Type
1.	Afam Power Plc. (I-V)	Thermal/gas powered
2.	Egbin Power Plc.	Thermal/ gas powered
3.	Kainji and Jebba Hydro Electric Plc.	Hydro
4.	Sapele Power Plc.	Thermal/gas powered
5.	Shiroro Hydro Electric Power Plc.	Hydro
6	Ughelli Power Plc.	Thermal/gas powered

**Source:** Nigerian Electricity Regulatory Commission (NERC) (2012).

**Figure 2.1: A Picture of Ughelli Electric Power Station; One of the above Six Electricity Generation Companies in Nigeria**



**Source:** United Capital Plc. Nigerian Power Sector Report, 2017



Generating companies are those companies that are owned and operated by the government, a private organization or both the government and private organization which generates electricity in Nigeria. Other generating companies are Geregu I Power Station, Omotosho I Power Station (which are now privatized companies) and the National Integrated Power Project (NIPP) which is jointly owned and operated by the Federal, State and Local Governments through the Niger Delta Power Holding Company Limited (NDPHC). Some of the completed and operational NIPP power station companies include: Geregu II, Omotosho II, Benin or Ihovbor, Sapele, Olorunsogo or Papalanto, Alaoji, Calaber, Egbema, Gbarain and Omuku power stations. Some of the NIPP power stations have already been privatized while plans are under way to sell the rest to some interested investors in order to increase private sector participation in the sector.

Also included in the category of other generating companies is the Independent Power Producers (IPP) which are mainly owned and managed by private organizations. The IPP power stations currently connected to the national grid are Afam IV Power station operated by Shell, Okpai station managed by Agip and Aes Barges station operated by AES Corporation. State Governments also own IPP Power station an example is the Ibom IPP Power station owned by Akwalbom State Government. NERC gives license to qualified generation companies to construct, own and manage power generation stations for the purpose of electricity generation and supply. The license also empowers them to sell power or ancillary/support services to distribution companies and the Nigerian Bulk Electricity Trading Plc. (NBET) who purchases power and auxiliary services in bulk.

### **Transmission Company**

Transmission company is a company that is either managed by the government or operated by both the government and a private organization which transmit generated electricity. The Transmission Company of Nigeria (TCN) has the license to carry on national grid construction, operation, and maintenance of transmission system within Nigeria, or that connects Nigeria with a neighbouring jurisdiction.

### **Distribution Company**

**Table 2:2 Distribution Companies (DisCos)**



S/No.	Distribution Company	Coverage Areas of Electricity Distribution
1	Abuja Electricity Distribution Company (AEDC)	F.C.T, Niger, Kogi and Nassarawa States
2	Benin Electricity Distribution Company (BEDC)	Delta, Edo, part of Ekiti and part of Ondo States
3	Eko Electricity Distribution Company (EKEDC)	Southern part of Lagos and Agbara in Ogun State
4	Enugu Electricity Distribution Company (EEDC)	Abia, Anambra, Ebonyi, Enugu and Imo States
5	Ibadan Electricity Distribution Company (IBEDC)	Oyo, Osun, Kwara, most part of Ogun, part of Ekiti and part of Kogi States
6	Ikeja Electricity Distribution Company (IKEDC)	Ebute Egba, Ikeja, Ikorodu, Shomolu, Akowonjo and Oshodi all in Lagos
7	Jos Electricity Distribution Company (JEDC)	Plateau, Gombe, Bauchi and Benue States
8	Kaduna Electricity Distribution Company (KEDC)	Kaduna, Kebbi, Sokoto and Zamfara States
9	Kano Electricity Distribution Company (KEDCO)	Kano, Jigawa and Katsina States
10	Port Harcourt Electricity Distribution Company (PHECO)	Rivers, Cross River, Akwa-Ibom and Bayelsa States
11	Yola Electricity Distribution Company (YEDC)	Adamawa, Taraba, Borno and Yobe States

**Source:** *Nigerian Electricity Regulatory Commission (NERC) (2012).*

Distribution companies are companies that distribute electricity in Nigeria. These companies are given license by NERC to construct, operate and maintain distribution systems and facilities, including, but not limited to the connection of customers for the purpose of receiving supply of electricity; the installation, maintenance and reading of meters; electricity bill collection; and other distribution services. A distribution company is also given trading license – a license that authorizes it to purchase electric power and resale to another distribution company. A temporary bulk purchase and resale license is given to the Nigerian Bulk Electricity Trading Plc. (NBET) to purchase electric power in bulk at agreed prices as stated in Power Purchase Agreements (PPA) from IPPs and successor generation companies for the purpose of resale to distribution companies or to an eligible customer.

The 18 separate successor companies took over the assets, liabilities and employees of PHCN. Their coming into existence made Nigeria to have different successor companies to PHCN who now generate, transmit and distributes electricity, as well as an independent Commission called NERC established in 2005 who is charged with the responsibility of regulating the power sector. In August 2010, a new Power Sector Reform Roadmap was launched by former President Goodluck Jonathan to accelerate the privatization of the power sector (Nnaji, 2011). The implementation of the Roadmap led to the privatization of the



power sector on November 1 2013 with the formal handover of the government owned 18 separate successor companies to private companies or investors. Federal Government ownership of the six privatized generating companies is 20% while private investors' ownership is 80%. For the distribution companies, the Federal Government owns 40% equity while the private investors own 60%. The transmission company known as the Transmission Company of Nigeria (TCN) is currently completely, that is, 100% owned by the Federal Government.

In Nigeria, the operation of the power generation sector is driven by the privatized generation companies, Independent Power Producers (IPP) and the generation stations under the National Integrated Power Project (NIPP). Currently, the total available capacity of electricity in Nigeria is 8,100 MW while the actual electricity generation capacity is 4,898.2MW (Economic Confidential, 2019). In other words, the current total amount of electricity that the Transmission Company of Nigeria (TCN) transported to and made available for the distribution companies (Discos) to distribute to electricity consumers is 8,100MW but the electricity that they have the ability to actually supply to electricity consumers is 4,898.2MW.

### **Problems and Challenges of Electricity Distribution in Nigeria**

Despite the privatization of the power sector, coupled with the huge sum of money that have been spent by the Federal Government on power projects, the power sector in Nigeria is still confronted with problems and challenges. These problems and challenges include:

1. ***Non-Cost Reflective Electricity End-User Tariff:*** The electricity tariffs/bills that electricity consumers or end-users pay is usually still not based on the true cost of electricity generation, transmission and distribution. Before the privatization of NEPA/PHCN, the transfer/shadow pricing method of collecting electricity tariff was used. The method of collecting tariff was highly non-cost reflective, that is, it does not reflect or correlate with the cost of electricity that is being generated, supplied, and the amount of electricity consumed by electricity consumers. After privatization, the Multi-Year Tariff Order (MYTO) method of tariff collection was introduced. The main aim of introducing the MYTO method was to ensure that a very high amount of correlation exists between electricity tariff or charges and the cost of electricity production, transmission and distribution as well the amount of electricity that consumers consume. Under the MYTO method, electricity tariffs are meant to be adjusted frequently in line with the rising cost of electricity production, transmission and supply which is caused by inflation, foreign exchange rate or currency devaluation, gas prices, etc. Some years after the introduction of the MYTO method, an evaluation was carried out on the method and it was discovered that there was no reasonable correlation or commensuration between the prices fixed for electricity consumption and the cost of electricity production, transmission and distribution. The non-commensuration of the MYTO method, led to its review and subsequent introduction of MYTO-2 method in 2011 which still didn't lead to a reasonable correlation. The MYTO-2 was reviewed and another method



known as the Amended MYTO-2.1 method which is still the current tariff collection method was introduced in 2015 (Nigeria Power Sector Report, 2017). The rate of correlation under the current Amended MYTO-2.1 so far according to Nigeria Power Sector Report is still on the low side. This low rate of correlation often times make distribution companies to run at a loss when there is inflation, currency devaluation, high price of gas, etc.

2. ***The Problem of Non-payment of Electricity Bill:*** One other problem encountered by distribution companies in Nigeria is the challenge of the refusal and reluctance of Nigerians to pay electricity tariff. Many electricity consumers such as governments' MDAs, military units, private organizations, residential houses occupants, etc. like evading the payment of electricity bills; they don't like paying bills. For instance, Salau (2016) reported that available statistics from the DISCOs showed that the government Ministries, Departments and Agencies (MDAs) incurred the highest debt profile to the electricity firms to the tune of N45billion.
3. ***Electricity Fraud:*** Electricity fraud or theft committed by some electricity consumers is also another problem facing Discos. Electricity pre-paid consumers cheat distribution companies by doing bypass of their pre-paid meters while non-prepaid meter electricity consumers do illegal connections mainly after they have been disconnected for not paying their electricity bills.
4. ***Fraudulent Practices of Some Distribution Company Staff:*** The utility officials of some distribution companies in connivance with some electricity consumers engage in the fraudulent practice of illegally bypassing the high electricity consuming appliances of consumers (Iseolorunkanmi, 2014). In addition, these fraudulent utility officials conspire with some electricity consumers to adjust their pre-paid meters in such a way that they pay less than the actually consume.
5. ***The Problem of Huge Revenue Collection Losses:*** The distribution companies in Nigeria are also faced with the challenge of the huge losses that they witnessed in the collection of revenue. The revenue collected by the distribution companies in the power sector ranges from 40% to 60% of the electricity that is distributed to consumers. This poor level of revenue collection is as a result of some electricity consumers such as government organizations, private organizations and individuals refusing to pay their bills. The poor level of revenue collection is also aggravated by electricity fraud like the bypass of prepaid meters and illegal connections perpetrated by some electricity consumers. Another cause of the low revenue collection is the inability of distribution companies to collect the electricity bill of a reasonable number of unmetered customers who are resident in hilly areas. These customers enjoy free power.
6. ***Lack of Adequate Funding:*** Insufficient funding in the area of power transmission and distribution is one serious problem area of the power sector





in Nigeria. There is the lack of Government funds needed for the expansion, upgrade, and maintenance of national transmission grid lines or network. The national transmission grid network in Nigeria is obsolete. In other words, the grid network is no longer widely used in the world. The connection of the current national grid network which is in a radial form, is not good, as it makes the grid network to be vulnerable and weak that whenever a fault or a collapse occurs in the grid network, it can lead to a situation where the whole nation will be without electricity (Oluseyi, Akinbulire and Awosope, 2007). The national grid network is also poorly maintained. If more electricity is to be generated again by the generation companies, the transmission company would not be able to transport it to the distribution companies.

The distribution companies owing to the non-cost reflective electricity tariff, that is, low electricity tariff that they charge electricity consumers, and the huge losses that they witnessed in the collection of revenue, are not financially buoyant to invest in the purchase of sufficient and standard equipment like feeders/power distribution lines, operational vehicles, spare-parts and transformers. Even the few available equipment that the distribution companies have, needs replacement as most of them are outdated/obsolete. The insufficiency of distribution facilities like transformers causes transformer overload. The sub-standard nature of power distribution network or lines tends to make the distribution companies in Nigeria not to be able to use all the amount of electricity that the Transmission Company of Nigeria (TCN) transports and made available to them. Statistics have shown that out of the total available electricity generation capacity of 7,141MW transported by the Transmission Company of Nigeria (TCN) to distribution companies to distribute/supply to electricity consumers, the distribution companies (Discos) were only able to actually supply 3,879MW to electricity consumers thereby leaving 3,262MW of electricity unused or to waste (Nigeria Power Sector Report, 2017).

7. ***Insufficient Electricity Pre-paid Meters:*** The lack of financial buoyance of the distribution companies make them not to have the financial capacity to purchase sufficient meters for electricity consumers. The Federal Government also does not have all the financial muscle that it need to provide financial support that will lead to the provision of meters to over 90% of electricity consumers. The challenge of insufficient meters has continued to make Discos to witness revenue collection losses. A reasonable number of organizations and individuals don't have meters so the chance of Discos collecting the revenue that is required of them to collect from these organizations and persons is low. The problem of inadequate meters has also made the issue of outrageous or exorbitant and unreasonable electricity billing of electricity customers by DisCos to continue.
8. ***Vandalization of Electricity Equipment:*** The power sector in Nigeria is confronted with the problem of incessant vandalization of electricity



distribution equipment like electricity distribution lines, electric poles, electric cables, transformers, gas lines, transmission facilities, etc. These equipments are often sold out by the vandals for a fee.

9. ***Inadequate Gas Supply Limitation:*** One of the greatest challenges facing the power sector in Nigeria is inadequate supply of gas to power or fire the various electricity generating thermal power plants in the country. Gas is the most prominent source of electricity generation in Nigeria. It is estimated that gas powered thermal power plants account for 74% of Nigeria's total installed generating capacity when compared to the non-gas powered hydro power plants of 26%. This made the availability and constant supply of gas thermal powered plants key to the realization of increased electricity generation and supply in Nigeria. The inadequate supply of gas is caused by a number of factors which include: regular vandalism of gas pipelines as a result of low level of surveillance and security on all gas and oil infrastructures, government-owned electricity generating power stations' limited funds to purchase gas and the factor of continuous gas flaring by major oil and gas producers owing to their refusal to want to really invest in gas production, processing and supply infrastructures. One reason given for the unwillingness of these major oil and gas producers to invest in gas production and supply infrastructures is the reason of the price of gas sale which is fixed by the government. The price fixed by the government when compared to the price of selling gas in the international market is too low given the high cost of investing in gas production.
10. ***Increasing Demand for Electricity Consumption:*** Another problem facing the power sector is the problem of how to provide the quantity of electricity that will meet the ever growing population of Nigeria. According to the statistics provided by Worldometer 2020 Nigeria presently has a population that is estimated to be about 207,600,423 million. It is also known to be the country that attracts more direct foreign investments than any other in Africa. An estimate for developing countries to meet their electricity demand is about 1000MW per million people. The implication of this is that Nigeria will require above 200, 000 MW of electricity to meet up with the electricity demand of her current population. This is a far margin from the country's present status of 12,522MW total installed capacity of electricity generation not to talk of her actual generation capacity.
11. ***Poor Water Management:*** Another problem facing electricity supply in Nigeria is the problem of poor and inconsistent treatment of the water reserved in the hydro-electric power plants in Nigeria. This reduces the amount of electricity generation and distribution in the country.
12. ***Inadequate Rainfall:*** Insufficiency of rainfall mainly in the dry season in parts of the country where the various hydro-electric power plants or stations



are situated reduces the level of water in the dams. This negatively affects the amount of power generation and distribution in Nigeria.

### **Suggested Solutions to the Problems and Challenges of Power Supply**

Based on the above problems and challenges confronting power distribution or supply in Nigeria, the following solutions are suggested or recommended:

- i. Government through the Ministry of Power and NERC should work in partnership with other stakeholders in the power sector to critically examine the current 2015 Amended 2.1 MYTO method collecting electricity tariff and review it in such a way that it will reflect the cost of electricity generation, transmission and distribution.
- ii. Distribution companies (disCos) in partnership with the Police should embark on massive disconnection of non-prepaid electricity consumers who refuse to pay their electricity bills. In addition, laws prohibiting organizations and individuals from evading the payment of electricity bills; and which stipulate the punishments for refusal to pay electricity bills should be enacted.
- iii. The best way to resolve the problem of fraud displayed by some electricity consumers and some officials of distribution companies is by Nigerians and other nationals resident in the country engaging in attitudinal change. In other words, examining themselves to find out whether they are displaying a positive or a negative character. If after the self-examination, they discover that they are displaying the good/positive attitude of not engaging in electricity fraud, they should display more of such good character for other people to see and emulate while if they find out that they are displaying the negative attitude of engaging in electricity fraud, they should change from such attitude and do the right thing.
- iv. DisCos with the full support of the government in particular the Nigerian Police should carry out adequate and regular check of electricity consumers' pre-paid meters in order to fish out those consumers who by-pass their meters. DisCos should also check consumers without pre-paid meters in order to fish out those ones that are engaged in the negative practice of illegal connections. In addition, stiffer penalty should be given to persons found guilty of committing the crime of meter by-pass and illegal connections.
- v. Government in collaboration with Nigeria's development partners should still invest more funds into the purchase of sufficient additional modern and standard national transmission grid network, and maintenance of the existing transmission grid network. In addition, it should still support disCos with more funds to purchase enough modern and high quality electricity distribution facilities like electricity distribution lines or network, transformers, etc.
- vi. The Government should encourage massive local production of pre-paid meters by reducing excise duties levied on them. This is necessary in order to give room for the availability of adequate number of meters for Nigerians to buy. When government provides sufficient pre-paid meters to people, the price of meter will reduce, people



will have no choice than to pay for the electricity that they consume, there will be judicious use of electricity, and the incidence of illegal connections will reduce to the barest minimum.

- vii. Government should give stiff and severe punishments to persons found guilty of vandalizing power installations.
- viii. Government should carry out an upward review of the low price of gas which is discouraging investments in the area of gas production. This is necessary in order to create way for massive private sector investment in gas production or establishment of many gas plants that will make adequate gas which will be used to power the existing thermal power stations available.
- ix. Government through the National Population Commission (NPC) in collaboration with other relevant stakeholders should carry out massive sensitization and enlightenment of all parents in Nigeria on the need for them to embrace family planning so as to cut down on the rate at which children are being given birth to in the country.
- x. Proper and regular treatment of hydro-electric power stations in Nigeria should be undertaken so as to pave way for increase electricity generation and distribution.

## Conclusion

Fixing of the problems and challenges inherent in the Nigerian power sector requires strong government will and commitment with the full support of all Nigerians as it relates to them playing their role well. It is when we all sincerely join hands together with the government that the power sector in Nigeria can work.

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