

## **ERRATIC POWER SUPPLY IN LAGOS**

**Thesis:** An erratic power supply accompanied by constant power cuts reduce the standard of life of residents of Lagos, Nigeria as businesses, hospitals and schools struggle to survive without a constant source of power supply.

**I. Problem Exists: The erratic supply of electricity in Lagos Nigeria, makes the government electricity board unreliable. Not everyone in Lagos has access to the government power grid, and even those who have access to the grid face frequent and erratic disruptions of services. People often have to buy generators for themselves to provide power for their families or businesses when service has been disrupted from the government grid.**

**A.** Only 40% of Nigeria's population is connected to the grid; and this population faces power problems 60% of the time. (Aliyu, Abubakar). According to other sources only 40% of the country's urban population is connected to the power grid, while only 10% of the rural population is connected to the grid

**B.** Power provided by the government is usually not sufficient to meet the needs of the businesses

1. While I was in boarding school in Nigeria, my high school had to use a generator to power the school premises most times, as the transmission from the government wasn't sufficient to meet the school's energy needs

**C.** There are many Initiatives to fix the inconsistent power supply in African communities. A very good example in the Akon Lighting Africa Initiative, that focuses on providing solar panels to rural communities in Africa. (Akon Lighting Up Africa)

1. Because the Akon Initiative focuses on lighting rural communities, urban areas are neglected by the initiative. This may ignore the fact that most of the businesses who contribute more to the economy (creating jobs, paying taxes) are left to deal with their own.

2. The problem of constant power cuts in Nigeria has been going on as far back as the 1980's when the military government of Nigeria took over power (Oluwaseyi Edu)

**II. Harms: Businesses, schools, hospitals and all other operating entities cannot maximize their operating capabilities without power. Power for a**

**business is almost as important as water for a human being. In the 21st century, all activities of a business revolve around the use of electrical devices. From computers to manufacturing equipment or other informational sharing equipment such as satellite, businesses need power to operate.**

- A. Loss of FDI (Foreign Direct Investments):** Lack of constant power supply makes the cost of doing business expensive and discourages Investments in the country from foreigners.
1. According to the World Bank Data Bank, Nigeria ranks 169 out of 190 under the ease of doing business classification. The country further ranks 180 out of 190 in the ease of gaining electricity. This puts the country in the lowest 5th percentile of countries with access to electricity. (World Bank)
    - a) Foreign Investors who stimulate Economies by Investing in public and private Investments, pay attention to countries relative capacity to meet their business needs. This is evident by the fact that though Nigeria has the 23rd highest GDP of any country in the world, it ranked 46th with the amount of Foreign Direct Investments received (World Bank)
- B. Threat to Security:** Lack of constant power creates a threat to security. The lack of constant power makes street lights useless in many areas as they do not function at night. This creates an environment for criminals (thieves and armed robbers) to thrive in.
1. A resident of one of the Agungi Environs, Mr. Moses indicated that people of his community do not go out or roam about once it gets dark, as it is easy to get robbed or kidnapped without people noticing. (Olatunji, Moses)
- C. Lack of constant power creates a **lack of proper healthcare** that affects mostly the poor.**
1. Power is needed for X-ray and scanning facilities, life-saving machines, oxygen masks and the theatre where emergency and unscheduled surgeries are performed. It is also needed for lighting, heat management (cooling and heating), electronic diagnostic tools, medical equipment, communication, computing and to refrigerate medical supplies and vaccines. (Sunday, Simon)
    - a) A threat of access to some of the facilities listed above adds to the pains of patients in hospitals in Nigeria.

- D. Unstable Electrical Provisions negatively affects learning process at educational institutions.** Power supply is very vital in carrying out daily academic routines. With the help of electricity, it is easier for students to prepare for school in good time, especially for those in the hostels, who need electricity to carry out chores. Students also need power supply at night, to do their study and take home assignments. Electricity supply is very important in keeping laboratories and computer centers running
1. According to Dr Olabisi Obadofin, an Associate Professor of Counselling Psychology at the Lagos State University (LASU). “Psychologists believe that children learn better by seeing what is being taught to them. A child who has never seen an object will find it difficult to understand it with ordinary description. Without electricity supply, it will not be possible to demonstrate the necessary teaching equipment/ aids which are supposed to come in the form of practical’s, through film strips, film shows, use of computers etc (Eno-Abasi, Sunday)
- E. Opportunity Cost of Economic Opportunities:** Since businesses spend a lot of money on power, a lot of business have shut down while a lot of existing businesses spend most of their budget on providing electricity.
1. It is reported that MTN, a South African telecommunications company with over 60 million subscribers in in Nigeria, spends 70% of its operational expenses on diesel, consuming more than 10 million liters of fuel per month. (Egbejule, 2016)
  2. According to the Pastor of Daystar Christian Center, a church in Lagos Nigeria spent 80 million naira (over \$500,000 in 2013 on diesel). This cost accounts for a huge part of the Church’s budget. (Oluwaseyi Edu, Interviewed)
  3. In Romay Gardens Estate, a residential estate in Lagos Nigeria. The community spent 2,316,114 Naira on average for the months it uses government power. It spent 8,750,000 Naira on average for months it used only diesel. This means the residential area spent 3.77 more to utilize the same amount of electricity. So the residential area could be saving over 5 million naira every month if it received all its power from the government. (Bertha, Odinka)
- F. Generators create Pollution:** With government generated power, greenhouse gas emissions are concentrated to one area, however with

every individual owning their own generator, pollution and greenhouse gas emissions take place over the city. Not only does the use of generators lead to air pollution, the use of generators also leads to noise pollution, which affects people and wildlife.

1. Noise pollution has been said to result in hearing loss for some 7.2 million Nigerians representing 17.9 per cent of the population aside other health implications, prolonged exposure to intense noise leads to permanent hearing loss, hinder mental efforts, induce stress, cause inefficiency at work, prevent sleep, cause irritability and generally degrades the quality of life (Odueme, 2009)

### **III. Causes: Insufficient power generation and distribution from the power grids is the major cause behind the unstable power supply in Nigeria, thus Lagos.**

**A. Inefficiency of Power Generation & distribution:** The Egbin Power plant is a thermal station in Egbin Lagos, which is the primary source of power generation in Lagos does not generate enough electricity to meet the needs of the population of Lagos.

The three steps for electricity to be distributed to consumers include Power generation, transmission and distribution. In Nigeria over 50% of power is lost in the generation stages (Ohajianya et al, 2014)

1. A study of four power plants in Delta State Nigeria revealed a total average power generation of 30.5% of the installed capacity. This means 69.5% of the power plant's generation capacity was lost just in the process of generating power (Oyem, 2013).

Although a 69.5% loss of power seems rather high when we compare the figures to the loss of power in generation in US, the figures are not too different. In the US, approximately 65% of power is lost in the generation stages (Wirfs-Brock, 2015). Most of the inefficiency occurs with transmission and distribution.

In the US, the median amount of electricity from generation lost during transmission and distribution by state was 6.5% ((Wirfs-Brock, 2015), whereas in Nigeria over 17% of energy was lost in transmission and distribution in 2010. This figure was as high as 49.27% in 1971(Ohajianya et al, 2014). There are no direct figures to find out the loss of energy in generation and production specifically. But being that Egbin Thermal station and the thermal stations in Delta are all managed by the same government body, it

is okay to assume the efficiency levels will be very similar.

**B. Government Policy/ Monopoly:** Constantly changing governments also contributes to Nigeria's Energy crisis. The government policies have favored monopoly in the power sector, and kept the government energy generation company a monopoly since the ECN was formed in 1950. (Ohajianya et al, 2014)

1. Lack of competition causes service to be poor and could somewhat lead to consumer exploitation and low quality of goods and services. Companies are not pushed to do more as alternatives to their services may not be replaced. The government has always rebranded the power corporation, changing it from ECN to NEPA (Nigerian Electrical Ports Authority) to PHCN (Power Holding Company of Nigeria), but the management and resources of the companies have made no change. However, in 2013, the government of Nigeria Privatized the power sector, handing over management of the Generation to local authorities and power companies. The Power Holding Company of Nigeria, however still owns 50% of the power generation industry.

Although the government has privatized part of the power sector of Nigeria, no significant progress in power generation has been made. The prospectus is that, as time goes on, changing government policies would have less of an effect on the power sector and the power sector would be allowed to progress better than before.

**C. Mismanagement of Funds/ improper funding**

**D. Incompetent Staff of Energy Companies:** It is common in Nigeria for government agencies to employ people based on favoritism and tribalism but not merit. Corruption and lack of payment of salaries on time are factors that can affect how motivated workers are (Ohajianya et al, 2014)

1. An unnamed employee of the Federal Ministry of Information in Nigeria, did take an exam that would have seen him promoted from a Deputy Director to a Director for the Ministry of Communications. Before the examination, he was approached by a Senior Director, who requested for a bribe in the sum of 500,000 Naira (about \$2,000 at the time), so that he would automatically pass the exams. Though Mr Soetan passed the exams, because he was unable to provide the funds/ bribe requested his examination results were switched with that of a person who provided a sum of 1,500,000

Naira (almost \$7,000).

The employee would have loved to pursue Justice, but by doing this, he would be taking a government agency to court, he believed by doing this he could have ended up at a much worse off position, losing the case, losing his job and possibly being accused of things he didn't do, so as a result, he never pursued justice.

**E. Special Interest groups (mostly private individuals in the Oil & Gas business) bribe government officials to keep power supply unstable**

1. Big companies in Nigeria have been occasionally found bribing top government officials. This creates a big conflict of interest as the government officials are supposed to have the best interest of the people of Nigeria. But they are highly endorsed by the parties who singlehandedly benefit from people not having access to government power. People who lack access to government power have to buy generators to provide power for themselves. These generators are powered mostly by Fuel and Diesel.

a) Oil Marketers are people who distribute petroleum to the final consumers. These include mostly downstream oil companies, operating from gas stations. The logical conclusion here is that Oil Marketers do better when people have lesser access to government power. They are no explicit sources showing that Oil companies are paying money to government officials, just because of the politics involved, however there are stints of corruption that show us that such corruption exists

(1) Fuel Subsidy Scam: In 2011, the Nigerian government came out with a list of over 21 oil companies that involves in an Forgery of documents regarding the amount of oil distributed. In Nigeria, a 50% subsidy existed on fuel. So for every dollar value of petroleum sold, the government paid 50 cents and the final consumer paid 50 cent. The oil companies were responsible for providing the documentation of the amount of oil sold to the Nigerians, to be compensated by the governments. The documents indicated that the oil companies were selling 59 million barrels of oil daily, however,

Nigerians were only consuming 35 million litres daily. The 21 oil firms indicted were responsible for a theft of \$6.8 billion, within 2 years. Till date, only one oil firm has been tried in court. That firm was responsible for about \$5million in theft, which is a miniscule amount of the total amount of theft (Cocks and Elgood, 2012)

- (2) Current laws in Nigeria set a limit to the donations made to political candidates to 1 million Naira (\$3,000), but no limits exist to the amounts donated to political parties.

In 2012 a video sufficed the internet of the owner of one of Nigeria's biggest downstream oil companies giving bribe to government officials. In the video, the Chairman of one of Nigeria's biggest oil companies can be seen giving a sum of \$100,000 which is supposed to be part of a \$3m bribe. Till date the oil tycoon has not been tried in court. It is okay to make the presumption that if this kind of corruption occurs on tape and no trial takes place, the beliefs of many Nigerians are true.

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