

Power to the people

Success to all

PwC's Annual Power & Utilities Roundtable





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Setting the Stage

Introduction

The 11th edition of the PwC annual power and utilities roundtable took place on 26 November 2020. The annual event brings together major stakeholders in the power sector to discuss key developments in the industry. The Roundtable has been an effective forum to drive important discussions and incubate progressive change. This year's virtual event, brought together stakeholders across the value chain to discuss this very important topic, **Power to the people, success to all**.

Overview

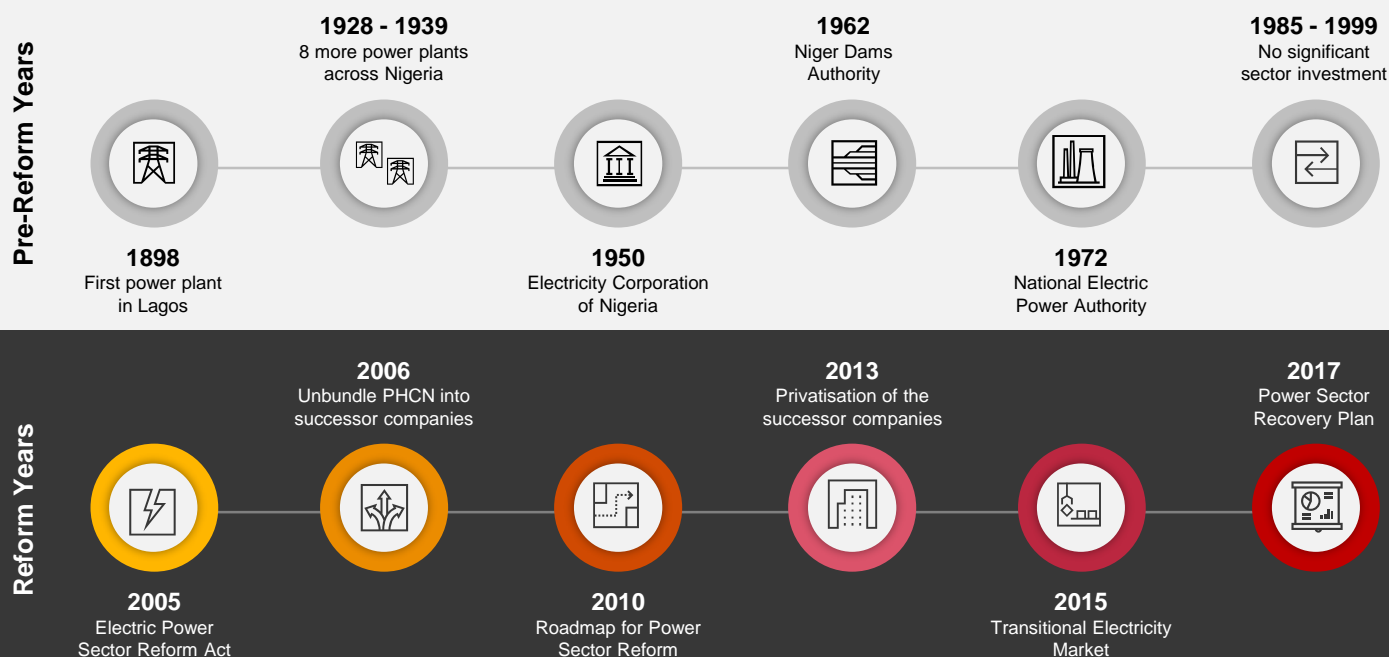
Nigeria is miles away from where it ought to be in terms of power generation and distribution. Since the privatisation of the power industry, the sector has experienced multiple financial interventions by the Federal Government. Several reforms have also been initiated by the regulators. These efforts have however not yielded the desired results, at the pace required to ensure the industry remains viable.

The recurring question after these years is; why is the sector not where it ought to be? Feedback from stakeholders across the value chain suggest that there is a gap. Despite the challenges faced, the desire and strong will to ensure that Nigerians enjoy adequate power supply and that the industry is sustainable, remains paramount. With deep reflection, the consensus is that there is a need to harmonise the divergent interests of various participants and stakeholders in the electricity value chain so that a common path is forged for the future of the power sector. This will be a mutually beneficial solution for all stakeholders.

Brief history and evolution of Nigeria's power sector

Electricity generation commenced in Nigeria in 1896 but the first electricity utility company known as the Nigerian Electricity Supply Company (NESC) was established in 1929. By the year 2000, a state-owned monopoly, the National Electric Power Authority (NEPA), was in charge of the generation, transmission and distribution of electric power in Nigeria. It operated as a vertical integrated utility company. Under NEPA's monopolistic structure, about half of Nigeria's population were not connected to the grid.

There was an urgent need to turn around the fortunes of the Nigerian electricity industry. This commenced with the enactment of the National Electric Power Policy (2001) and subsequently, the Electric Power Sector Reform Act, 2005 (EPSRA). They constituted the frameworks under which the power reforms in Nigeria were mandated. The process included: the dissolution of the National Electric Power Authority (NEPA); the creation of the Power Holding Company of Nigeria (PHCN) as an initial holding company; and the further creation of eighteen (18) Successor Companies, (6 generation companies, 11 distribution companies and 1 transmission company) created from NEPA. The notable timelines in the evolution of the sector are shown below:



This report highlights the reactions of seasoned industry experts to critical questions raised around the harmonisation of these divergent interests amongst stakeholders and provides responses to questions raised by the participants.



Keynote Speaker, Panelists and Facilitators



Keynote Speaker

Professor Bart Nnaji

CEO, Geometric Power Limited; Former Federal Minister of Power| FAS, FA Eng. CON, NNOM



Dafe Akpeneye

Commissioner, Legal, Licensing & Compliance, Nigerian Electricity Regulatory Commission



Alex Okoh

DG, Bureau of Public Enterprises



Eyo Ekpo

Executive Director, New Frontiers Development Limited



Chantelle Abdul

Group Managing Director and CEO, MOJEC Group of Companies



Sean Manley

Project Director, Nigerian Presidential Power Initiative (Siemens)



Uket Obonga

National Secretary, Nigeria Electricity Consumers Advocacy Network (NECAN)



Moderator

Akinyemi Akingbade

Partner, Energy, Utilities & Resources, PwC

Highlights from the Keynote Address



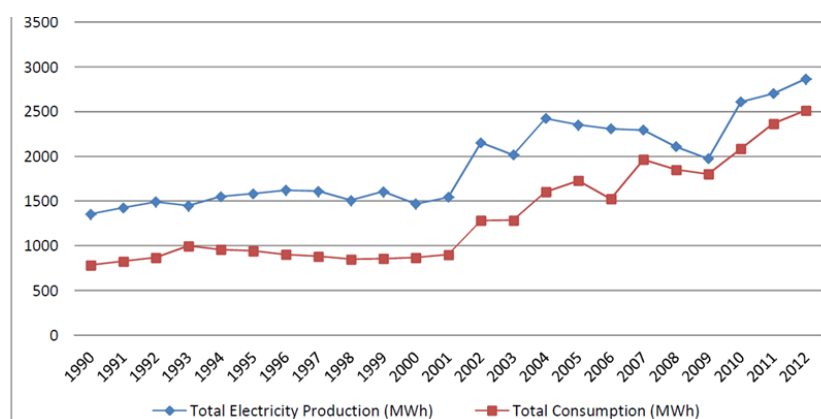
Prof. Bart Nnaji.
Chief Executive Officer,
Geometric Power Limited

Status of the Power sector (Pre-privatisation era)

Progress has been made since the privatisation of the sector. However due to the enormity of the power needs of a country as massive as Nigeria, the interventions have not been able to address the gaping electricity needs of the country. At privatisation, the federal government controlled every aspect of the power value chain except gas production which was controlled by both the federal government and International Oil Companies (IOCs), but mainly under the control of the IOCs.

This structure was managed by the now defunct Power Holding Company of Nigeria (PHCN), formerly the National Electric Power Authority (NEPA). Like most state run corporations which performed poorly, the PHCN and NEPA's efforts at achieving steady electricity supply was hampered by bureaucratic bottlenecks, inefficiency and corruption, power theft, poor collection etc. The graph below illustrates the performance of the Nigerian power sector. It shows the total electricity generated and consumed from 1990 – 2012 which marked the end of the pre-privatisation era leading to the unbundling of PHCN. Between 1990 – 2000 (pre-reform years), there was no significant investment in the sector. A marginal increase in power production and consumption is however evident. This marked the beginning of the recovery of the power sector in Nigeria.

Electricity production and consumption in Nigeria



Source: Worldbank

To move the industry forward, there was a need to commence the implementation of the power reforms which eventually resulted in gas production remaining at status quo, power generation and distribution controlled and run largely by the private sector and power transmission controlled and run by the federal government. While this model set the electricity industry on the path of recovery, it also brought about challenges which needed critical interventions.

Evolution of issues that necessitated Power Sector Reforms

The urgent question demanding answers then, was; what could be done by government to enable private sector investment and ensure power delivery remained sustainable? The key issues to be resolved included;

Highlights from the Keynote Address

- Addressing labour issues and tariffs. The labour issues have been largely resolved now.
- Electricity tariff at that point was N6/kWh and unattractive to investors. A Bulk trader needed to be established as the middle man and several initiatives needed to be put in place. The Bulk trader is still operating today.
- Transmission of gas was also an issue which needed urgent attention. The OB3, Calabar - Ajaokuta - Kaduna - Kano links all needed to be revamped. In 2020, the government commenced the AKK part of the pipeline. This is commendable.
- Key parts of the execution of the reform was the conception of management contract for the transmission company to address the issue of transmission of power and steady gas supply which were identified as major hurdles for private sector participation. This is yet to be executed by the government.

Key Federal Government Initiatives (Post-privatisation era)

The establishment of the Bulk Trader

A key initiative was the establishment of the Bulk trader. Investors needed an independent counterparty with which they could contract with, before they signed the Sales and Purchase Agreements. The Bulk trader was saddled with the responsibility of purchasing electricity from power producers (GenCos) and selling the power to DisCos through vesting contracts. This was an interim arrangement which should be scrapped as soon as the DisCos become credit worthy and are able to have bilateral agreements directly with the GenCos. This is yet to happen.

Contingent Liabilities - Partial Risk Guarantees (PRG) to Independent Power Producers (IPPs)

A very vital point in the Bulk trader arrangement, which had previously commenced but was eventually suspended, is how the bulk trader purchases power. The Bulk trader was envisioned to purchase power with the federal government providing PRGs to the IPPs. This would have encouraged investments in independent power projects. The PRG led to a graduated contingent exposure to the federal government based on the megawatts of power generated and supplied and the ability of the DisCos to pay.

At the point of conceptualisation in 2015, while a few DisCos were able to pay their obligations, quite a number still struggled to pay. The figure speculated at that point was at a wholesale tariff of N12/kWh. In current terms, at an extreme conservative figure, the current wholesale tariff is 7.5 cents/kWh (N28.5/kWh) which largely exceeds the amount earlier envisaged.

While the PRGs may create contingent liabilities, they do not become actual liability (if at all) for at least three years, until the completion of the project. The opportunity cost of not incurring the liability is the loss suffered by the country resulting from delayed investment decisions. The cumulative cost of delayed investments in terms of GDP will be more than ten times higher than the cost of incurring the actual liability, if and when they crystallize. It is important to note that the challenge with transmission persists in the subsector. Even if more power plants are commissioned, there is a need to solve the transmission challenges so that power generated does not become redundant.

Status of the Power sector today and recent developments

Siemens AG – FGN Electrification Road Map

The road map is a welcome development in the sector. The concept was to plug some deficient areas; however, this effort was not wide-reaching. Urgent deficiencies needed to be addressed by the Siemens investment include substations that need to be revamped, improvement of transmission infrastructures etc. The perceived constraint with the deal is the total production capacity on completion of the project and the expected timeline to execute the project. On completion, the production capacity will be 25,000 MW and this will take 9 years. 25,000 MW is very low compared to the power needs of a country such as Nigeria. This is a further indication that private sector investment remains pivotal to the sector and should be encouraged and supported by the federal government.

Sustaining institutions

The regulatory institutions need to be strengthened and given leeway to independently perform their roles effectively. The Nigeria Rural Electrification Agency (NREA) for instance, was inactive in the past, but is now working effectively. This agency supports distributed Power initiatives in the sector.

Highlights from the Keynote Address

Investment enablers

The investment enablers include incentives by the government to encourage investments in the sector via private sector participation. These include the ongoing tariff review to ensure tariffs are cost reflective as well as the provision of PRGs by the government.

Value chain alignment and incentivization

The entire value chain needs to be incentivised. Incentivization of the value chain will eventually ensure that consumers pay for power consumed. Consumers also need to be adequately metered. The meter is a trustworthy contract between the DisCos and the customers. The DisCos will be able to collect more and this will ensure liquidity in the value chain. Significant investments still need to occur in the system. DisCos for instance, need to invest to improve their distribution networks and collection systems thus leading to reduction in the Aggregate Technical, Commercial, and Collections Loss (ATC&C) losses.

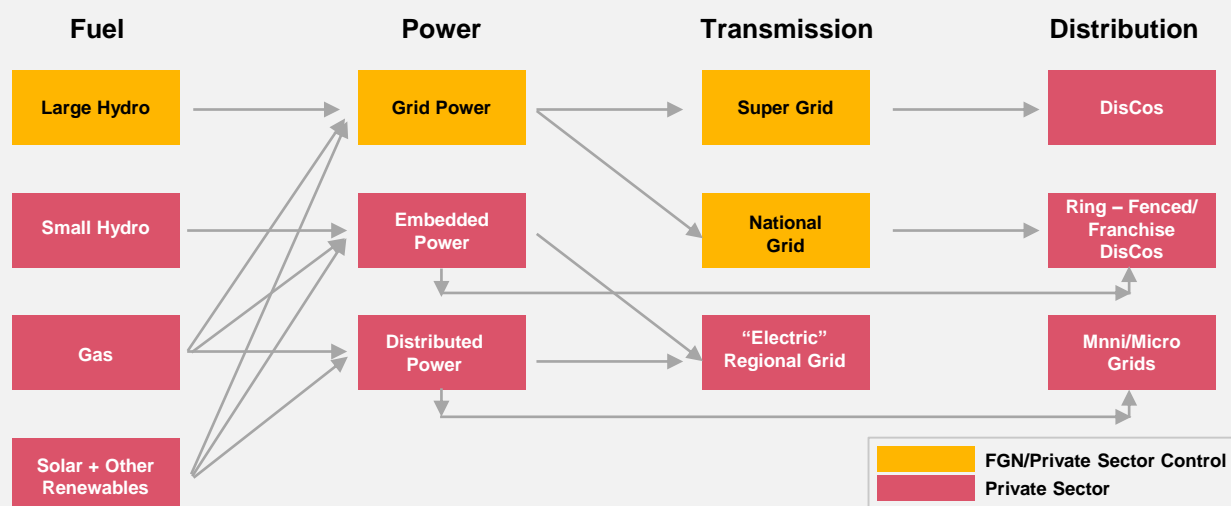
The Future of Power in Nigeria

It is imperative to enable and enhance what already exists in the industry today. For instance, the fuel sources (large and small hydros, gas, solar and other renewables)

need to be effectively energised for power production. When this occurs, we would have effective grid power, embedded power and distributed power. Transmission of power remains an area of concern. A viable proposal would be to build super grids via public-private-partnerships, which is a looping network of about 765kV network that supports the existing national grid of 330kV and 132kV circuits and substations.

Another viable proposal would be the carving of electric regional grids, which are not geopolitically zoned. The objective is to control and have semi-autonomy within a grid which is also connected to the national grid. The regional configuration will help reduce system collapses and increase investment facilitated by the private sector to support the government's efforts in dealing with the national grid.

Distribution of electricity is spearheaded by DisCos. Other forms of distribution are ring-fenced & franchising for DisCos and mini and micro grids for other players. The multiple systems of power delivery will take away pressure from the national grid and would immensely benefit the country.



Highlights from the Keynote Address

Challenges and Mitigation

The current challenges in the sector include:

- respect of contracts,
- predictability and transparency of the regulator,
- cost-reflective tariff; this has largely been achieved,
- denomination of the value chain cost in Naira,
- credit worthiness of power off-takers,
- robust transmission and distribution network,
- private sector participation in the control transmission,
- value chain alignment,
- delegation of cost to private sector.

Mitigating factors include the federal government's ability to ease the risk of investors and very strong political will on the part of the government to achieve success.

Recent Success Representing the Future of the Nigerian Power Industry

The Aba integrated power project, which is an embedded power generation asset is a prototype of what is being proposed to the government. The asset effectively bypasses the transmission infrastructure of the national grid and would only be needed in the case of an emergency. The system is self-autonomous. It obviates the need for sovereign guarantee because the system is a credit worthy entity. All the customers within the ring-fenced area will be metered and have reliable electricity.



Panel Discussion



Alex Okoh,
Director General, Bureau
of Public Enterprise

The power privatisation in Nigeria was a beacon of hope with a lot of expectations. What is your view about the successes of the power sector privatisation?

There is a direct correlation between power availability and economic growth and development. To put this in perspective, in evaluating the per capita electricity for developing and developed economies, Nigeria is struggling relative to other peer countries. For instance, according to Wikipedia, in 2019 the average electricity energy per capita consumed for South Africa was 3,591kWh/Capita while Nigeria was 144kWh/Capita. This says a lot about the country with the biggest economy in Africa.

In 2005, the EPSRA was enacted to dismantle the monopoly of the defunct NEPA which led to the dismantling of the power value chain with the partial privatisation of the 11 DISCOs, concession of the Hydro GenCos and full or partial privatisation of the thermal plants. Post-privatisation, the sector has witnessed significant improvement moving from 1GW to where the country is, currently, which is around 4GW. The perspective is not to look at what has not happened but rather to focus on the suite of ongoing interventions to correct the shortcomings and gaps of the privatisation exercise.

The power sector reform in Nigeria is arguably the biggest privatisation program run on the continent of Africa. A more modulated approach could probably have been beneficial, however the decision was bold and sought to address the lack of investment that was apparent in the sector. Overall, it was important that the reform was done.



Mr. Eyo Ekpo,
Executive Director, New
Frontier Limited

The government claims that over N1.7tn has been spent on power subsidy. How will the industry thrive and reposition itself with the withdrawal of subsidy?

The federal government is already addressing this situation. Subsidies were never meant to be a part of the industry. They are not applied across board but only charged to R2 customers (customers with consumption above 50Kw). A cross subsidization model currently obtains in Nigeria, where commercial customers are charged a tariff that contains an additional element used to offset the less than cost-reflective tariff of other individual consumers. This is not ideal and was designed to be a transitional process. The service-based tariff (SBT), a system where those who enjoy more hours of service pay more is designed to transit consumers out of the cross subsidization framework into one which consumers will pay for what they consume.

There is a consensus that people will pay for better quality of electricity service if it is supplied, since people pay more for alternative sources of power generation. The expectation is that the SBT framework will trend in 2021 to a situation where more people can get more power supply at economic rates.

Panel Discussion



Ms. Chantelle Abdul,
MD/CEO Mojec Holdings
International

What have been the successes of the Meter Asset Providers (MAP) programme and what were the challenges experienced?

The MAP programme for the most part has been set aside by a new program set up by the Central Bank of Nigeria called the National Mass Metering Program. The MAP programme was created to attract investors to partner with DisCos to close the metering gap which could not be met due to funding challenges. With the intervention of the MAP program, the metering gap has decreased from 80% to 60% since privatisation. Other successes include customer and asset enumeration which has significantly improved.

This was not the case prior to the MAP programme. During the period of the MAP programme which was flagged off in the second quarter of 2019, Mojec Holdings installed over 300,000 meters to customers representing over 50% of the installed meters during the programme. While the programme had its merits, some people are of the opinion that the inability to quickly close the metering gap was one of the drawbacks of the MAP programme.



Mr. Sean Manley,
Project Director of the
Nigeria Presidential Power
Initiative (Siemens)

There has been a lot of discussions about the Siemens deal with federal government. Could you please enlighten us on what the deal is and what is the current status?

Siemens signed an MOU with the German and Nigerian governments to improve the power supply in the Nigerian power sector. The project was divided into three phases. The main objective of Phase 1 is to decongest the current grid to allow existing capacity to get to customers. There is currently a lot of available generated capacity that is not getting to customers. Phase 2 will allow the expansion of the grid and additional capacity will be added to the grid bringing it up to 11 GW. This phase will fast track the revamping of existing projects which were stalled due to numerous challenges. Phase 3 will be to ramp up generation to 25 GW and beyond.

The current status of the project is that the Federal of Nigeria and Siemens have signed the contract to commence the pre-engineering studies which will define the scope of the phase 1 works. Progress was hampered due to the COVID-19 pandemic. The pre-engineering studies include engineering design works, commissioning works for the transmission and distribution systems, specifications for onshore installation, network development studies, power simulation, training, and other support services.

Panel Discussion



Dafe Akpeneye,
Commissioner, Nigeria
Electricity Regulatory
Commission

There have been several regulations issued on estimated billings. One of which is the recent cap on the estimated billings by the DisCos. There have been questions around how the DisCos should treat the difference between what the real cost of Power is to them and the cap placed. Please shed more light on this.

The issue of estimated billing came into force to manage the interests of the utilities and the consumers of power. The meter is a revenue assurance tool that ensures that the DisCos pay for power generated and consumers pay for the power utilised. During the pre-privatisation era, the government could not keep up with the metering of customers due to rapidly changing demographics.

One of the key requirements undertaken by investors in the performance agreements at the point of transfer of power assets was the bridging of the metering gap. The inability of the DisCos to bridge the gap on time led to the need for Nigeria Electricity Regulatory Commission (NERC) to balance the interest of the customers such that they still received power without having a meter. The estimated billing methodology was thus introduced.

Certain parameters needed to be in place to ensure that customers have reasonable estimated bills. One of the measures introduced to close the metering gap was the MAP program. Shortly after estimated billing came in-force, it quickly became the top complaint received from customers. The capping order was then released by NERC to address the situation. The objective was to create parity and fairness between tariffs paid by both the metered and unmetered customers.



Alex Okoh,
Director General, Bureau of
Public Enterprise

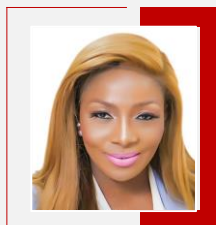
In your opinion, what are the incentives for putting up more generation companies for privatisation considering the performance of the sector since privatisation?

The narrative should be that the privatisation is a work in progress rather than say it has under-achieved. There have been challenges which have emanated so far and they provide opportunities for us to be creative on how to correct the gaps.

The government cannot fund the requisite needs of the sector alone. Hence the need to ensure the sector remains bankable to attract investor funds. Investment capital is not sentimental but goes in the direction where it will be appreciated and compensated.

The recent privatisation of Afam power plant, which was valued and sold for N105bn, is a strong signal that the private sector is confident in the sector. The sale achieves the aim of the EPSRA 2005 which was meant to make the industry private-sector-driven. The government still has intentions to privatise more power assets. The role the government intends playing in the long-term in the power sector is policy formulation and regulation.

Panel Discussion



Ms. Chantelle Abdul,
MD/CEO Mojec Holdings
International

What have been the challenges experienced in deploying meters under the MAP program?

One of the major challenges had to do with the constraints experienced at the ports. The MAP program was designed to be 70% imported meters and 30% manufactured locally. The issue of the levy introduced became a major hindrance to large scale roll out of meters. This led to increase in price by about 45%. This has however been resolved now. Prior to the MAP program, the government ought to have performed a holistic review to ensure that all stakeholders were carried along.

The COVID-19 pandemic affected production capacity offshore. The ability to fund the roll out became a major impediment. Devaluation of the Naira led to forex issues. Customers also preferred to bypass the survey and enumeration processes. These were just a few of the issues experienced by the MAPs.

The national mass meter roll out is a federal government and CBN initiative to further close the metering gap by providing meters to about 6 – 10 million customers. A Service-Based Tariff cannot be successfully deployed without ensuring that meters are provided to customers. Meters serve as a contract between the utility company and the end user. The program is divided into two phases; the first phase is to mop up in-country volumes and the second phase enables manufacturers participate in the procurement process to deploy meters, with funding from the CBN.

The closure of the metering gap under the scheme will provide an opportunity for those who were MAPs to become producers. Manufacturers will in turn be able to create jobs and empower people, This will create lasting value for us as a nation.



Mr. Uket Obonga,
National Secretary, Network
of Electricity Advocacy of
Nigeria

Please comment on the service reflective tariff and the behavioral changes expected to be made by consumers

The mantra at the point of privatisation was to make power available, affordable and improve on service delivery. Over the years, this has not been achieved. A review of the privatisation model is strongly recommended as it is long overdue and needs to be done urgently. The privatisation objectives have not been met across the value chain. Most consumers have not been carried along by DisCos. During a recent survey conducted on one of the DisCos for instance, consumers placed on bands B and C did not receive up to four hours power supply daily. This highlights the challenges currently experienced in the sector.

Panel Discussion



Mr. Eyo Ekpo,
Executive Director, New
Frontier Limited

How would you describe success to all in your opinion?

The key stakeholders in the industry are the government, regulators, operators and the consumers. They all have different definitions of success. The customer who is the most important in the sector would measure success in terms of quality of service and quantity of power received. The quality of service has to do with customer care, timeliness of complaints resolution and constant voltage, etc. On the other hand, the quantity of power speaks to the duration of service. Power supply to the consumers which exceeds minimum of 16 hours daily will be considered a measure of success. It is expected that quality of power output improves over time and year on year without any glitches.



Question & Answer Session



What is the possibility of having Micro Discos from the government's standpoint?



Dafe Akpeneye,
Commissioner, Nigeria
Electricity Regulatory
Commission

The existing network initially held by PHCN was carved into 11 network areas covered by the 11 DISCOs. Sequel to this, NERC came up with various interventions to address the needs of people not being served or underserved. These interventions includes mini grids, Independent Electricity Network Distribution, guidelines on franchising mechanisms on the DisCo's network areas. The government cannot carve out other areas other than the interventions that have been put in place by the law.



Mr. Eyo Ekpo,
Executive Director, New
Frontier Limited

Innovation and technology will overtake the DisCos if they do not change their current operating models. Most Nigerians have alternative power solutions; if aggregated together, power generated would exceed 15 times the current public supply. DisCos should not seek to protect their monopolies but rather acknowledge and embrace this changing dynamics in power distribution. NERC's strategic objective should be to harness the opportunities in this alternative market, and by so doing, serve an enabler and not a clog in the wheel by protecting monopolies. Decentralised distribution is the way of the future.

Anything that is critical to life must be localised/decentralised. As an industry, we must find viable ways to decentralise the current model as much as possible. NERC needs to urgently address the issue of micro grids.



Alex Okoh,
Director General, Bureau of
Public Enterprise

While it would not be ideal to replace a defunct NEPA monopoly with a private sector monopoly, such a process however needs to be an organised, managed and regulated approach such that it does not create confusion in the system. A framework could be introduced through which those who want to operate below the franchised DisCo operators would go through a process that is regulated by NERC to enable them provide electricity services. This is a more organised approach and it will ensure that the DisCos do not assume a monopoly that compromises service delivery.

Question & Answer Session



What kind of behavioral changes would you like to see in the DisCos?



Alex Okoh,
Director General, Bureau of
Public Enterprise

Service delivery from DisCos is still sub-optimal and a lot still needs to be done. There is a perceived notion that DisCos focus on areas where collection and revenue is more assured to the detriment of other areas. There needs to be some level of reorientation in terms of service delivery. DisCos will be challenged to improve their service delivery if a managed and regulated approach to accommodate other participants can be executed in franchised areas as monopoly breeds complacency.



How do you reconcile the suspension of the Partial Risk Guarantee to the fact that the Qua Iboe power plant is currently pursuing and seeking approval of Partial Risk Guarantee?



Professor Bart Nnaji,
CEO, Geometric Power
Limited; Former Federal
Minister of Power| FAS,
FA Eng. CON, NNOM

The suspension of the PRG led to the non-approval of sale of any power plants in the last 5 – 6 years as the government's support is needed for purchase of large-scale power. The government and private sector would need to continue to do more to change the dynamics of power production in the country. There is an important need for the regulators to remain open and transparent to changes to enable the industry to move forward. The idea of independent electricity network distribution licensees is necessary as there are other means of distributing power through various other sources. The PRG was suspended because it needed to be understood better and is under review by the government. It however remains essential as an instrument to enable people buy bulk power from power producers.

PwC point of view

Electricity generation, transmission and distribution is capital-intensive. Players in the industry need to develop creative and innovative solutions which will lead to investments within the sector. The distribution network, for instance, has continued to record high losses. In Q1 2020 that the ATC&C losses were at 51.93% (*NERC Quarterly Report, Q1 2020*). High levels of Losses are not sustainable, and unless corrected, it could make the whole power sector unviable.

Other issues such as low remittances by market participants, network infrastructure challenges, non-cost reflective tariff, metering challenges, energy theft & low collection efficiency, funding challenges, policy and regulatory uncertainty, absence of reliable data and information across the electricity value chain, etc., are still pertinent in the sector.

In recent times, the regulators have issued orders, regulations, and initiatives to attempt to resolve some of these structural issues and to create an enabling environment which includes:

- Franchising
- Capping of estimated billing
- Service-based tariff
- National Mass metering

Franchising

On 24 June 2020, NERC issued the guidelines on distribution franchising in the Nigerian electricity supply industry (NESI) to enable the Distribution companies to improve investments in the distribution networks, facilitate the adoption of advanced technologies, bridge the power supply deficit, and ultimately increase customer satisfaction.

Under the guideline, DisCos may now enter into franchise arrangements for the following activities within the electricity distribution sphere of influence:

1. metering, billing, and collection;
2. total management of electricity distribution function in a ring-fenced area;
3. total management of distribution feeders including billing and collection;
4. loss reduction and provision of embedded generation; and
5. any other innovative franchise models developed by the Disco

In our view while the Franchising Guideline is commendable, DisCos need to ensure that the selected franchisee design option chosen aims at delivering value for shareholders and consumers without compromising the obligations of the DisCos to the market and the regulators. More importantly, the franchise selected area is crucial for the success of the franchise and should depend on the objectives and design of the DisCos.

Capping of estimated billing

The estimated billing methodology was introduced as a means of ensuring that unmetered customers were not issued arbitrary bills. The non-provision of meters and unrealistic billing of unmetered customers accounted for over **23%** of complaints lodged at customer care centers of Discos in Q1 2020 (*NERC Quarterly Report, Q1 2020*).

On 20 February 2020, the commission issued the order on the capping of estimated bills in the Nigerian Electricity Supply Industry. The energy cap prescribed by the Commission shall only apply to R2 and C1 customers which account for a significant portion of the DisCo customers. As of **Q1 2020, 60%** of electricity users were estimated (*NERC Quarterly Report, Q1 2020*). One of the objectives of the order is to steer the DisCos toward fast tracking meter deployment under the Meter Asset Providers (MAP) regulations and any other financing plan approved by the Commission.

Effective 1 November 2020, the order on the capping of estimated bills was amended. The amended order capping methodology was based on the methodology proposed by the DisCos that incorporate, among other variables, an incremental factor on the energy caps based on the actual feeder and distribution transformer energy. Essentially, the focus of the new amendment order is to strike a balance between the unmetered customers and the metered and to also move the DisCos further towards full revenue recovery.

We believe the amended order is a laudable move by the NERC to ensure the capping is more equitable and just, to both the customers and the DisCos. In other words, the amended order tries to balance the unmetered customer protection from arbitrary estimated bills and also to reduce the burden of unrecovered revenue due to capping on the DisCos.

Service-Based Tariff (SBT)

Before the issuance of the NERC order on SBT, electricity end-users of the same tariff class and under the same license area are billed on a uniform tariff under the Multi-Year Tariff Order (MYTO) model. NERC approved the Service-Based tariffs, effective from 1 September 2020. Under these service-based principles, Discos are only able to review tariff rates for customers when they consult with customers, commit to increasing the number of hours of supply per day, and quality of service.

Discos can only review tariffs for customers under the following conditions:

- Customers are consulted and communicated a guaranteed level of electricity service by the Discos based on hours of supply;
- Customers are metered;
- No estimated billing through the strict enforcement of the capping regulation.

Also, tariffs of customers receiving less than 12 hours of supply and those consuming 50kW remain frozen.

The SBT framework introduces five (5) tariff "Service Bands" representing the relative quality of service experience as measured by the committed minimum average hours of supply.

In our view, on the part of the customers, the Service based tariffs would result in increased hours of power supply, provision of pre-paid meters, and faster response to faults clearing due to the preconditions of the SBT. Also, The SBT is consistent with the goal of the transition to a cost-reflective tariff regime, which eliminates the need for the government to keep funding the tariff shortfall. We would also expect an increase in minimum remittance by the DisCos to market operators thus reducing the market shortfall.

PwC point of view

National Mass Metering Programme

To put a stop to estimated billing and cushion the effect of the SBT on the end users, the federal government approved a nationwide mass metering programme under the CBN Framework for the financing of the National Mass Metering Programme.

The CBN Framework envisages two phases: Phase 0 and Phase 1.

- Phase 0: This covers meters ordered under the MAP programme. The Commission is expected to send to the CBN the verified stock allocated to the DisCos, invoice for the meters to be bought, agreement with the MAPs, and local procurement evidence.
- Phase 1: This phase deals with bulk procurement from local meter manufacturers/assemblers.

In our view, the National Mass metering programme is a welcome development. Metering effectively represents the foundation for sustainable revenue generation and commercial viability of the electricity sector. This critical role is only successfully enabled by an effective and comprehensive metering programme that offers accountability and transparency.

The following initiatives need to be implemented going forward:

- Create a rigorous monitoring and evaluation framework to continuously follow through on the various initiatives, orders, and regulations.
- Ensuring compliance amongst the large and diverse group of decision-makers and stakeholders in the power sector is paramount to ensure a favorable outcome.
- Continuous engagement between stakeholders to retain collective buy-in on the different initiatives. It is on this basis that the key stakeholders will align, be monitored, and measured in line with clearly articulated performance targets.
- Data analytics-driven decision making must be at the core of the power industry. All technical, operational, commercial, customer service and financial data need to be aggregated and effectively analyzed on an asset and sector basis for the sector to improve its decision making and evolve.

Tax law changes

In what is becoming an annual tradition, the Finance Act 2020 ("FA 2020") was signed into law by the President on 31 December 2020. The FA 2020 came into effect from 1 January 2021, and introduced a few tax changes that impact the Power Sector, as follows:

1. Gas utilisation incentives can now only be obtained in respect of the relevant operations of a company, rather than for the company as a whole. Also, companies can no longer enjoy gas utilisation incentives and other special tax incentives, in respect of the same assets. For example a company that has enjoyed tax holidays under the "pioneer status" rules, cannot transfer the same assets to another company or Special Purpose Vehicle (SPV) and claim gas utilisation incentives.

Gas Utilisation incentives are available for companies that use Nigerian gas in producing power. The incentives grant income tax holiday of up to 5 years, and accelerated as well as increased tax deductions for the cost of the gas infrastructure.

2. Minimum tax is the least amount of tax that companies must pay in any year where they have little or no taxable profits. The Minimum Tax is generally 0.5% of gross turnover less franked investment income. However, this rate has been temporarily reduced to 0.25% for tax returns due by 31 December 2021.

Power companies that are eligible for the gas utilisation incentives need to properly analyse the various incentives options available to them before deciding which to apply for. Also, the minimum tax rate reduction is a welcome reprieve for the affected Companies, as it would help reduce their tax burden, even if temporarily.



Conclusion



The following are some of the key takeaways from the forum:

- Consumers incur exorbitant costs to meet their power needs. This is achieved through alternative sources of power generation. The cost of power generated and distributed from public utility still remains a cheaper option. There is therefore an urgent need for the regulator to decentralise/localise the distribution network. The regulator needs to come to terms with the fact that this is the future of power delivery. Regulations need to be put in place to manage the actualisation of this process.
- An alternate super grid and electric regional grid system should be considered by the regulator. This involves pooling generation and distribution into smaller/ mini grids isolated in a location but smart enough to interact with the wider national grid.
- The “Estimated billing methodology” which introduced a capping order, sought to create parity between metered and unmetered customers. The long-term objective however would be an urgent need for the government to fast track the bridging of the metering gap as meters represents the major tool towards building trust in the sector thus leading to increased revenue for investors and liquidity in the value chain.
- As the industry continues to evolve, meter manufacturers would be at the heart of meter supplies. This will in turn build local capacity, create jobs and ultimately reduce the over reliance on importation.
- Significant investments still need to occur in the power industry to unlock its full potentials. The government should continue to enact policies and regulations that would make the sector more bankable to attract investor funds and encourage private sector participation. One of the ways of actualising this is the provision of PRGs to IPPs.

It is obvious that the realisation of a viable power industry in Nigeria is a marathon and not a sprint, all stakeholders however agree that the privatisation, though ambitious, has achieved some of its key objectives. The country is on the right trajectory and this is evidenced by the significant increased involvement and participation of the private sector via multiple government and regulatory interventions.

Power to the people, success to all, is not just a necessity, it is an imperative.



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