

QUEST FOR COST-REFLECTIVE ELECTRICITY TARIFFS IN NIGERIA: MANAGING THE CONFLICT BETWEEN POLITICS AND ECONOMICS*

Abstract

In order to increase efficiency and attract private sector investment in the electric power sector, most countries, including Nigeria, have liberalized and in some instances unbundled their electric power sector. However, despite the involvement of the private sector in the operation of electric sector assets, governments have found it difficult to transition into a cost-reflective tariff driven electricity industry, resorting instead to a subsidy propelled regime. This has created severe liquidity in the often nascent and evolving electric power sectors with governments unable to afford these subsidies. This paper reflects on the reason for this state of affairs in Nigeria despite a legal framework that demands the institution of a cost reflective market. This paper concludes that the problem before the government has been finding ways of managing the competing interests of politics and economics in dealing with a social infrastructure like electric power. Finally, the paper suggests ways of balancing this conflict and charting a path to a sustainable electric power sector in Nigeria.

Keywords: *Electricity Tariffs in Nigeria, Cost, Politics, Economics*

1. Introduction

In ordinary parlance, electricity tariff would be the price which the consumer or final customer in the electricity supply chain pays for the use of electricity. However, there are different components that make up the tariff that is paid by the end users. These are the cost of generation, distribution, transmission and all other ancillary costs required to bring electricity to the final consumers. In effect, tariff is generally a function of the cost of construction and financing as well as the cost of operations and maintenance of the entire assets and services in the value chain that make up the grid. The difference between the tariff charged to consumers in an electricity market operated by a publicly run utility and that operated by the private sector is that the public sector run utility will typically not factor in any return on investment in computing the final tariff to end users. However, the private sector will have to build in a return for any such investment for it to make commercial sense to its shareholders. In summary, it is the sum of these costs, when properly priced, that is cumulatively referred to as a cost reflective tariff. It is also the case that the tariff paid in a publicly operated electricity market is sometimes subsidized by the government. Whilst the case is made that these subsidized tariffs are usually not sustainable in the long run, it is even more of an anomaly where such subsidies exist in a liberalized market.

The unbundling and liberalization of the electric power sector in a number of developing countries across the world has led to private sector operators taking over the ownership and operation of power assets which were hitherto operated by the government. These new waves of private sector involvements have in turn created their own problems and dilemmas. This is because prior to the liberalization of the sector, government had mostly subsidized operations by charging very low tariffs that barely covered its operational costs. Thus upon taking over operations, it has become difficult for the private sector to review tariffs to meet its cost and run commercially-viable operations. These states of affairs exist despite the fact that most of the countries which operate this liberalized electricity market have institutionalized independent economic and technical sector regulators charged with the responsibility of fixing tariffs. In a lot of cases, these tariffs are by law supposed to be cost reflective.¹ However, it is generally the case that these regulators are only independent in name as they are still tied to the apron strings of governments who constitute their boards and who therefore by extension, dictate how the tariffs are fixed. Overwhelmingly therefore, most of

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¹ See for instance SS.32 and 76 of the Electric Power Sector Reform Act, 2005

the so called independent regulators have been unable to fix cost reflective tariffs despite the express provisions of their enabling laws.

2. The State of Electricity Markets in Developing Economies and the Justification for Cost-Reflective Tariffs

The wave of reforms of the electricity industry in developing countries was principally due to the market-oriented restructuring that had hitherto occurred in developed countries.² Prior to these reforms, governments in developing countries typically owned and operated bundled and vertically integrated electric utilities. Economic efficiency was often not a priority for governments as they were more concerned with catalysing economic development and expanding access to electricity to a larger share of the population.³ Tariffs were set by government departments and subsidized with the national budgets. Therefore, revenues of many of the utilities were inadequate to cover their costs which left the utilities dependent on the national budget to cover their operating expenses and the cost of new expansions.⁴ The result of all these was that many of the utilities suffered from supply shortfalls, deteriorating equipment and high system losses.⁵ Reform of the sector in most of these countries became inevitable.

The motivation for electric sector reform has been classified as dependent on either the ‘push’ or the ‘pull’ factor.⁶ Some of the conditions that fall within the ambit of the push factor include the poor performance of the state-run electricity operators due to high costs, inadequate expansion of access to electricity services and unreliable supply of electricity; the inability of state run utilities to meet the investment and maintenance costs of the electricity industry associated with the increasing demands for power; the need to remove electricity subsidies so as to release resources for other areas of public expenditure and the desire to raise immediate revenues for the government through the sale of state assets.⁷ The pull factors include the demonstration effects of pioneering reforms of the power sectors in certain countries like Chile, United Kingdom and Norway in the 1980s and the early 1990s; advocacy for reform by the multilateral institutions and other donor agencies such as the International Monetary Fund (IMF) and the World Bank, and rapid changes in technology in the generation and distribution of electricity.⁸

The reform of the sector in Nigeria was as a consequence of both the push and pull factors. The reform was precipitated by the shortage of electric power supply and its attendant negative impact on the country and the social and economic wellbeing of the citizens. This situation arose in the first place due to the limited access to infrastructure, low connection rate, inadequate power generation capacity, insufficient usage of capacity, lack of capital investment, ineffective regulation, high technical losses and vandalism, insufficient transmission and distribution facilities, inefficient use of electricity by consumers, inappropriate industry and market structure and unclear delineation of roles and responsibilities.⁹ It was also helpful that the

² N. Leeprechanon. ‘Transition to an Electricity Market: A Model for Developing Countries’, *IEEE Transactions on Power Systems* (Vol.17, Issue 3, August 2002) pp. 885-894.

³ J. H. Williams and R. Ghanadan. ‘Electricity Reform in Developing and Transition Countries: A Reappraisal’ *Energy* 31 (2006) 815-844

⁴ *ibid*

⁵ *ibid*

⁶ T. Jamasb. and M. Pollitt (2000) ‘Benchmarking and Regulation of Electricity Transmission and Distribution Utilities: Lessons from International Experience’, Working Paper, Cambridge Working Papers in Economics, 0101, Faculty of Economics, University of Cambridge.

⁷ Y. F. Zhang *et al* ‘Electricity Sector Reform in Developing Countries: An Economic Assessment of the Effects of Privatisation, Competition and Regulation’ *Journal of Regulatory Economics*. Vol. 33, No.2, 2008, pp. 159-178

⁸ *ibid*

⁹ Article 1 of the National Electric Power Reform Policy 2001 and S. 32 of the Electric Power Sector Reform Act, 2004. See also D. A. Aderibigbe, (2010) ‘Power Supply to Industries- Pros and Cons of Available Options’ A presentation made at the one-day conference of the Nigerian Society of Chemical Engineers, held at the Sheraton

country was going through a phase of liberalization and reform of its economy and institutions. These reforms were championed and funded by its different multilateral and donor partners.

The reform programmes adopted by most developing countries have tended to include four basic elements:

- a) Restructuring of the electricity industry towards a more market oriented model by making it more complete. Typically, the erstwhile vertically integrated monopoly is unbundled into separate generation, transmission and distribution components.
- b) Liberalization of the sector to allow private sector players into the electricity sector. This allows both private sector investors and public sector owners of the utility to participate in the market.
- c) The development of a regulatory framework. Therefore, instead of direct regulation by a government ministry or department, an independent regulator is instituted to perform both technical and financial regulation.
- d) Subsequent privatization of the unbundled elements by selling the assets to private sector operators:¹⁰

These four steps were also adopted in Nigeria, even though there was a slight reversal of a part of the reform process. For instance, the transmission company was initially privatized through a management contract model but has since reverted to government operation. Also some of the gas fired NIPP plants that were put in the market for privatization have not yet been sold due to market related issues.

The advent of private sector participation in the electricity industry has challenged old ideas on how utilities should be organized and regulated.¹¹ Case studies have shown that one of the major reasons why the path of reform has been difficult in developing countries is the institutional weaknesses in these countries. The effect is that the reforms are unlikely to yield the desired results.¹² Therefore, in Nigeria, as in most developing economies, the near collapse of power sector reforms may be attributable to the inefficient regulatory framework. The effectiveness of the regulator, the Nigeria Electricity Regulatory Commission (NERC) has been grossly limited due to political influences. One of the major fallouts of political interference is the inability of the regulator to fix cost-reflective tariffs for the sector.

There are of course arguments for subsidizing the price of electricity. These are centred on the fact that it is the role of the state to provide infrastructure for its citizens. A corollary to this is that electricity is a social infrastructure and ought to be provided by the government to its citizens as a matter of right.¹³ Secondly, that most of the citizens of developing countries are poor and therefore governments ought to provide for them since they are not able to pay the high cost of electricity. Finally, that even developed capitalist countries still subsidize some forms of electricity like renewable energy. Unfortunately, these arguments fail to take economics and affordability into consideration. Most of the governments in countries that continue to subsidise electricity tariffs are simply not able to afford these subsidies. Their budgets are already strained and there are other social services like education and healthcare that are of higher priority than electric power. The only option available to these countries to raise money for subsidizing the sector would be to impose taxes on its citizens to raise the funds. Tariffs themselves are taxes, albeit, consumption taxes; they are more appropriate for services like electricity as people only pay for what they actually consume. It

Hotel Lagos on the 7th of October, 2010. Cited in M. T. Ladan, M.T. *Electricity Law, Policy and Reform Implementation in Nigeria* Ahmadu Bello University Press, Kaduna Nigeria, pg. 127.

¹⁰ Y. F. Zhang *et al* propose three elements instead of four.

¹¹ J. Gomez-Ibanez *Regulating Infrastructure: Monopoly, Contracts and Discretion*. Harvard University Press, 2006, Pg. 298

¹² D. Parker, 'Economic Regulation: A Review of Issues' *Annals of Public and Cooperative Economics*, (2002) 73 (4), pp. 493-519

¹³ For instance, Chapter 2 of the 1999 Constitution provides for the Fundamental Objectives and Derivate Principles of State Policy.

is essential that the cost of electricity is paid in full. Otherwise, illiquidity in the electricity market may eventually lead to the collapse of the entire system.

It is however the case that governments might decide that having weighed the political and economic consequences of any tariff increase, it would be more expedient to continue to provide subsidies. In that case, it might be better to provide the subsidies at the construction phase of the power assets as opposed to the operational phase. This is because the methodology for setting electricity tariffs takes into consideration both the capital and operational costs. Therefore, if it is possible to reduce the capital costs, the amount of costs recoverable through tariffs during operations would also reduce. A potential new operator may be subsidized at the point of construction through cheap loans or grants. The advantage of this is that it is cheaper, more transparent and contained to a particular timeframe.

3. Methodology for Setting Cost-Reflective Tariffs in Nigeria

The Electric Power Sector Reform Act (EPSRA) identifies the activities that are subject to tariff regulation to include generation, trading, transmission and distribution.¹⁴ According to S. 76(2) of the EPSRA, the tariff methodology adopted by NERC should:

- a) allow a licensee that operates efficiently to recover the full cost of its business activities, including a reasonable return on the capital invested in the business;
- b) provide incentive for the continued improvement of the technical and economic efficiency with which the services are provided;
- c) provide incentives for the continued improvement of quality of services;
- d) give consumers economically efficient signals regarding the costs that their consumption imposes on the licensee's business;
- e) avoid undue discrimination between consumer and consumer categories; and
- f) Phase out or sustainably reduce cross subsidies.

The provisions of the EPSRA also empower NERC to set cost reflective tariffs. S.32 (d) of the EPSRA mandates NERC to ensure that prices charged by operators are fair to customers and sufficient to allow the operators finance their activities and obtain reasonable profit for efficient operations. In achieving these objectives, NERC has adopted the Multi Year Tariff Order (MYTO).

The MYTO itself is essentially a tariff model that seeks to ensure that operators within the Nigerian electric power sector recover their reasonable costs incurred in the delivery of electricity to the final consumers. The MYTO therefore performs two functions: Firstly, it ensures that all the players in the Nigeria Electricity Supply Industry (NESI) recover their investments and secondly, that consumers are charged fair prices for the electricity supplied to them. The MYTO attempts to achieve this through a transparent mechanism that adjusts tariffs periodically in relation to generation capacity, interest rates, inflation, cost of fuel and even foreign exchange fluctuations amongst other variables. The MYTO is used to set both the wholesale and retail tariffs for electricity. Under the MYTO, the wholesale tariff to be paid to generation companies is pegged at a level estimated to cover the life cycle costs of new entrants into the market.

The MYTO was designed to run for a period of 15 years. However, due to the fact that its regime depends on a number of macro-economic variables, it is subject to periodic reviews by NERC. Minor reviews and major reviews are conducted bi-annually and five-yearly respectively. In conducting the major reviews, NERC is mandated to conduct stakeholder consultations. This is understandable, since it is important that stakeholders buy into the review process and understand why they are being asked to pay a particular price for power. For a country like Nigeria that had subsidized the price of power for years, the stakeholder

¹⁴ S, 76(1) EPSRA

engagement process takes an added significance as the process of weaning consumers off subsidies is not an easy one.

The stated objectives of the MYTO are:

- a) Cost recovery/financial viability- entities operating in the NESI should recover their (efficient) costs including a reasonable return of capital.
- b) Certainty and stability of pricing framework which encourages an efficient level of investment.
- c) Incentive for improving performance. It provides incentives to reduce costs, improve quality of service and encourage the efficient use of the network.
- d) Allocation of risk- it promote the efficient allocation of risks
- e) Simplicity and cost effectiveness- it is easy to understand and implement.¹⁵

The MYTO methodology sets generation tariff by using a benchmark Long Run Marginal Cost (LRMC) of the most economically efficient new entrant. The LRMC builds on the graduated assessments of the infrastructural value of the plant. The LRMC is applied in two ways: a) Bench mark costing- this allows NERC create a proxy for the market price which an efficient power generation company is to operate below; b) Individual long run marginal cost for each generation company. This sets prices for each generation company according to the plant and site specific costs.

For brownfield plants, the long run marginal costs are determined specifically by NERC, however a Greenfield plant that requires a tariff beyond the MYTO benchmark is required to apply to NERC to set a tariff using a site specific LRMC model. If such an application is considered, then such a greenfield Independent Power Plant (IPP) will have to be very transparent by opening its plants, accounts and financial model for scrutiny by NERC which would apply prudence and relevance tests to determine whether such plant and site specific costs should be incorporated when building the tariff.

The policy is also to allow feed-in tariffs specifically for investors wishing to invest in renewable energy. This is in line with the objective of the Nigerian government to encourage the generation of at least 2000 MW through renewables by the year 2020.¹⁶ Whether this policy is being pursued in practice is another matter entirely as it appears that the government has jettisoned this policy.¹⁷

For setting transmission and end user/distribution tariffs, it uses a building block approach to ensure that it reflects the cost of the entire NESI value chain. For transmission, NERC established the Transmission Use of System (TUOS) charge to be paid to the Transmission Company of Nigeria (TCN). This TUOS is levied on distribution companies and is charged per unit of electricity delivered to them. The end-user/distribution tariff includes the cost of wholesale generation, transmission, distribution, metering and billing. In arriving at the end user tariff, MYTO builds in the cost of generation (energy and capacity charge), transmission use of system cost, regulatory and market administration charges, the Distribution Company's charges and costs associated with metering, billing, marketing and revenue collection.¹⁸ The three building blocks are: a) The allowed return on capital- fair (market based) rate of return on capital invested; b) The allowed return on capital- recoup capital over the useful lives of the assets (depreciation); c) Efficient operating costs and overheads. According to the MYTO methodology: 'the main objective of setting bulk electricity prices in

¹⁵ NERC (2012) Multi-Year Tariff Order for the Determination of the Cost of Electricity Generation for the Period of 1st June 2012 to 31 May 2017. Nigerian Energy Regulatory Commission, pp 7-11

¹⁶ Nigerian Electricity Regulation Commission 'Regulations on Feed-In Tariff for Renewable Energy Sourced Electricity in Nigeria' 8th of December, 2015.

¹⁷ The last round of PPAs for a number of solar power projects have not been signed to date despite initial agreement on tariff.

¹⁸ S.4 of the Nigerian Electricity Commission's Notice of Proposed Establishment of a Methodology for Multi Year Tariff Order 2007.

vesting contracts are to cover costs of existing plants and to allow for the efficient maintenance and ongoing investment programmes while ensuring that an appropriate price for bulk electricity supplied by generators under vesting contracts is the unit price an efficient new plant would require in the Nigerian Electricity Supply Industry (NESI)' ¹⁹

Another important agency in the tariff setting value chain is the Nigeria Bulk Electricity Trading Company (NBET). At the very beginning of the privatisation process it became obvious that the nascent distribution companies were not in the position to meet their financial commitments to the generation companies in the new electricity market. Since actual installed generation capacity was insufficient to generate sufficient cash flows and the collection rate (which was dependent on the reduction of Average Technical and Commercial (AT&C) losses was low and insufficient to fund the market, it was obvious to all market participants that a stopgap measure was needed. Therefore, prospective investors in the power sector required a level of comfort that ensured that generated power would be bought and paid for promptly. This led to the creation of NBET a fully government owned entity and issued it an electricity trading license. The entity was also capitalized with a mandate to negotiate Power Purchase Agreements and purchase electricity on behalf of the distribution companies. NBET is therefore a key incentive for the private sector to invest in the Nigerian electric power sector. NBET was further capitalised by the government which provided comfort to investors that the institution would be able to meet whatever shortfalls arising from electricity trading in the interim and transitional market periods. However, NBET has unable to meet its mandate as significant debts from energy trading have since piled up.²⁰ NBET itself is designed as a temporary fix as it is assumed that it would only be required during the interim and transitional periods of the market. In other words, the institution will be gradually eased out as generation capacity in the country grows, the distribution companies reduce their technical and commercial losses, and the market generally becomes more competitive leading to the entrance of bilateral contracts between the distribution companies and the generation companies. Upon the maturing of the market, the PPAs negotiated by NBET will be novated to the distribution companies and NBET wound down. It appears that since the technical and commercial losses experienced by the distribution companies are still high, new debts will continue to accrue and the bulk trader would still be unable to meet these obligations unless it is further capitalized or additional subsidies provided. There have already been two major interventions by way of subsidies by the Central Bank of Nigeria.²¹

4. Case Studies: Experience from Different Countries

Since electricity is an essential product, it is not uncommon for citizens to protest at the slightest sign of increase in its price. It is found that these protests are more intense in developing countries, where income levels are low and where the capitalist concept of liberalization has not fully taken root irrespective of whether such developing countries are in Africa or Europe. For instance, there were street protests in Bulgaria in 2013 over electricity tariff increases despite the country enjoying one of the lowest electricity costs in Europe.²² In 2015, thousands of protesters stormed some of the major streets in Armenia protesting for several days the about 17 per cent hike in electricity prices, which arose as a result of the depreciation in the country's currency.²³ In Ghana, there were protests in 2016 against a 67% increase in electricity tariffs.

¹⁹ S. 3 .5 of the Nigerian Electricity Commission's Notice of Proposed Establishment of a Methodology for Multi Year Tariff Order 2007.

²⁰ See the Power Sector Recovery Implementation Program 2017-2021, January 2018

²¹ Initially through the N213bn Nigerian Electricity Market Stabilization Facility and the N701bn Payment Assurance Guarantees.

²² The Economist Newspaper 'Bulgaria's Electricity Prices: Protesting Against Power Prices' February 15th 2013

²³ BBC News 'Armenia Protests: Electricity Price Hike Suspended' found online at: <https://www.bbc.com/news/world-europe-33301689> Last accessed on September 7, 2018

Organized labour called for the withdrawal of the Energy Sector Levy Act 899; the government conceded, effectively withdrawing the increase.²⁴

In Nigeria, in early 2015, NERC came out with the MYTO 2.1 increasing electricity tariff by about 80%. However, by February of the same year, just before the general elections, the tariff was reduced by 25% due to petitions by various consumer groups some of which sued the government.²⁵ It is also instructive that the decision to reduce prices was taken just before the general elections. This worsened the liquidity challenges in the sector. In fact, the World Bank estimates that even with zero collection, losses in the sector, shortfall is inevitable at the present tariff levels.²⁶ It is also their case that the longer it takes to increase tariffs, the larger the market shortfall grows. The PSPR acknowledges that the power sector has accumulated huge deficits and advocates for the implementation of an end user tariff trajectory ensuring that cost-reflective tariffs are achieved within 5 years to save the electricity sector in Nigeria.²⁷

The above cases reveal that it has been a big struggle for countries to withdraw subsidies. However, unsustainable subsidy regimes must not be allowed to continue as they will ultimately lead to the collapse of the entire electricity market. There must be a conscious effort to secure the buy-in of stakeholders. The first step in this process is to design and execute an effective stakeholder engagement strategy that will ensure the buy-in of consumers in particular.

5. Designing a Stakeholder Engagement Strategy Based on the Different Thresholds of Availability

The countries that subsidize their electricity market can be divided into two broad categories: countries with sufficient supply of electricity to their citizens and those with inadequate supply of electricity to its citizens. It is important to note that regardless of the category, the current state of affairs is unsustainable as countries which currently enjoy adequate supply run the risk of a collapse in the system when the funding for these subsidies dry up. Eventually, they might also start to encounter outages.

Nevertheless, the theory espoused in this paper is that it will be easier to introduce cost-reflective tariffs in countries with limited supply of electricity than in countries experiencing an abundance of it. The reason is that in those countries experiencing shortages in electricity supply, the citizens supplement the little power they receive with more expensive sources like diesel-fuelled generators. It is therefore easier to make a case or justification for any increase in cost of electricity, provided that such increases will lead to improved power supply. In contrast, it should be more difficult to introduce tariff increases in countries that are experiencing an abundant supply of electric power. This is because not only is there not a worst case scenario with which to compare prices, citizens are also accustomed to a comfortable state of 'normal' and it would be very hard to wean them from such subsidy supported status quo. In this case, it is far more difficult to justify any increase in the cost of electricity. Therefore, whenever a decision is taken to introduce cost-reflective tariffs in different jurisdictions, this important distinction should be taken into consideration in designing the stakeholder engagement strategy. Therefore, in countries like Nigeria experiencing severe shortages, the best stakeholder engagement strategy is to compare the proposed cost-reflective tariff with other alternative methods being employed by citizens in supplementing their electricity supply. This alternative method is usually the operation of diesel or petrol operated generator sets. It is a good strategy to compare the prices and assure the citizens of any expected improvement in power supply.

²⁴ DW News 'Ghanaians Protest Rising Fuel and Electricity Tariffs. Found Online at: <https://www.dw.com/en/ghanaians-protest-rising-fuel-and-electricity-tariffs/a-18994432> Last accessed on September 7, 2018

²⁵ *Barrister Toluwani Yemi Adebisi v Nigerian Electricity Regulatory Commission (NERC) & 12 others Reported in Nigeria Business Law Journal* Vol1. No. 1 March 2017. Pg. 60

²⁶ Power Sector Recovery Programme (PSRP) *Supra*

²⁷ *ibid*

The removal of subsidies should be a gradual process and a timetable for such staggered tariff increases should be agreed and communicated to citizens in advance.²⁸ Tariff increases should also be matched with a concomitant improvement in the quality of electricity provided. This assures the citizens that they are getting something in return for accepting any increases. This will involve entering into a social contract with citizens to the effect that any subsequent increase in tariff would result in a corresponding improvement in the quality of electric supply. These improvements in electricity supply should be quantifiable and measurable and easily verifiable. An example of this would be measuring the improvement in terms of the additional megawatts of electricity added to the grid since the preceding improvement. Where these agreed milestones are met, there would be minimal resistance from citizens to any future increases. Care must however be taken to ensure that the government does not over promise as any default would completely derail the stakeholder engagement process.

6. Conclusion

The provisions of the EPSRA and the MYTO legislation are all clear on the need for a cost-reflective tariff, and even mandate NERC to pursue its adoption. However, after 5 years of private sector entrance into the Nigerian electric power industry, the present tariff regime does not meet this requirement. The paper concludes that the reason for this is the lack of a truly independent sector regulator in the true sense as NERC is still tied to the apron strings of government. This problem is not unique to Nigeria as studies show that in most developing economies, the process of establishing truly regulatory institutions have been slow, often lagging behind the entry of the private sector operators.²⁹

Due to the dependent status of the regulatory agency, the decision to increase tariff unwittingly falls into the hands of government. This stalls the adoption of cost reflective tariffs as, governments are usually conflicted due to other considerations that are not economic in nature but rather political. The government is wary of supporting any rise in tariff that increases the economic burden of its citizens for purely political reasons. Also, citizens are known to protest any such increase and the political future of governments might be tied to a decision to increase or continue to subsidize tariff. Nevertheless, it is clearly the case that governments in most developing countries are unable to fund huge subsidies. This paper suggests that the only viable solution would be to transfer the cost to electricity consumers in the form of a consumption tax. Where however it becomes more politically expedient for governments to continue with a subsidy regime, then it is better for these subsidies to be provided at the point of construction rather than during the operational phase. This approach is definitely more contained and can therefore be better managed. It will also certainly lead to less opacity in the manner in which such subsidies are disbursed.

The process of any cost transfer will be difficult and therefore, a stakeholder engagement process is advocated. This paper is of the view that stakeholder engagement is easier in countries like Nigeria with limited availability of electric power. The citizens tend to be more accepting of such increases as they compare any increases with the cost of running their more expensive alternative means of electricity which is usually their diesel or petrol generators. It is also advocated that the removal of subsidies should be a gradual process that reduces the shock to electricity consumers. The time table for removal should be communicated in advance.

²⁸ The PSPP suggests a 5-year plan

²⁹ World Bank (2003) Power for Development: A Review of World Bank Group's Experience with Private Participation in the Electricity Sector. The World Bank International Finance Corporation, Multilateral Investment Guarantee Agency: Washington DC; Y.F. Zhang *et al*, 'Competition, Regulation and Privatisation of Electricity Generation in Developing Countries: Does Sequencing of the Reforms Matter?' *Quarterly Review of Economics and Finance*, 54(2-3), 358-379