A review of the Nigerian Gas Pricing and Supply Framework

Introduction

This article reviews the recently formulated and issued National Domestic Gas Supply and Pricing Policy and the National Domestic Gas Supply and Pricing Regulations and also attempts suggestions on additional measures which may be further employed to complement them in order to achieve the best possible gas pricing and supply framework that will meet the peculiar needs of the Nigerian nation.

Nigeria's gas reserve and its potentials for the Nigerian economy

Nigeria is blessed with an abundant gas reserve which in fact exceeds its oil reserves, and is the seventh largest in the world, thus providing Nigeria with a substantial alternative source of fuel and national income. In addition to the potential revenue to be derived from gas, it is recognised that the nascent gas sector presents Nigeria with the solution to the revival of its comatose power sector and the opportunity to accelerate its industrial development and economic recovery. To this end, the present federal government of Nigeria (“Government”) has identified the accelerated development and a strategic repositioning of the domestic gas sector as a focal strategy for achieving the national aspiration to meet its projected 10,000 megawatts of electricity generation by 2010 and to achieve an aggressive Gross Domestic Production growth of ten per cent (10%) per annum.

Indeed, tremendous progress has been made in the Nigerian gas sector in the last few years. Nigeria is producing liquefied natural gas (“LNG”), and its LNG industry is the 2nd largest growing in the world, on course to having about thirty per cent (30%) of total Atlantic LNG capacity by 2010. The LNG projects in Nigeria include the Nigerian LNG as well as the Olokola (OK) and Brass LNG projects. Furthermore, on the regional level, the Nigerian gas sector is progressing on at least, three key gas projects, which are the West African Gas Pipeline project, the Trans-Sahara Gas Project to Europe via Algeria and the Gas Supply project to Equatorial Guinea. However, as gas continues to grow in importance in industrialized nations and gas reserves continue to decline in those nations, the phenomenon of rising gas prices in the key international markets continues to create a preferential pull for export LNG, resulting in a disproportionate focus by gas suppliers in the country for LNG projects. Although LNG exports provide high returns to government through tax receipts and dividends for its equity stakes, it is recognised that the disproportionate LNG export orientation is creating an anomaly in Nigeria where there is now a significant shortfall in the availability of gas for domestic utilization which directly threatens the economic aspirations of the nation, especially the growth of its power sector and other gas based industries. In addition, gas demand is also forecast to grow rapidly in the coming years.

In order to fully align the gas sector with the economic growth aspiration of the nation, it became imperative for the Government to intervene in the gas supply market to remedy the shortfall in the availability of gas for domestic utilization by issuing a domestic gas supply obligation for Nigerian gas producing companies.

Related to the challenges in meeting the supply requirements of the growing domestic demand is the challenge of price affordability and hence the...
concept of gas pricing. Government is of the view that linkage of the domestic price of gas to the international and relatively high market price will only encourage a preferential flow of gas to export projects, and therefore recognizes a need for a sector-based pricing strategy that would make gas affordable for the various domestic demand sectors as well as ensure the delivery of a fair rate of return on investments to both the producer and supplier of gas.

The Gas Pricing and Supply Framework

To ensure the availability and affordability of gas for domestic utilization, the Government recently formulated and issued the National Domestic Gas Supply and Pricing Regulations (“the Regulation”) and the National Domestic Gas Supply and Pricing Policy (“the Policy”), both of which define the policy of the Government in respect of the supply of gas and the pricing of the gas to be supplied to customers in the downstream gas sector.

The Regulation and Policy aim at ensuring domestic gas affordability, availability and long-term supply security in a manner that delicately balances the need for domestic economic growth, revenue generation from gas exports, and ensures the delivery of a fair rate of return on investments to both the user and supplier of gas. It is also expected that the Policy and the Regulation will also ensure a balanced export and domestic sector growth and, where appropriate, enable the maximization of net revenues for Nigerian gas as a commodity.

Summaries of the Policy and the Regulation

On the issue of domestic supply, the Policy compels all gas (Associated Gas and Non-Associated Gas) asset holders (companies involved in the production of gas) to dedicate a specific proportion of their gas reserves and production for supply to the domestic market (“Domestic Gas Reserve and Production Obligation”) in a manner that ensures sustained gas supply to the domestic market, to which end the quota of gas to be reserved for the domestic market will be stipulated periodically by the Minister of Energy.

The Policy establishes a Strategic Gas Aggregator (“Aggregator”) that will act as an intermediary between gas producers and suppliers and ensure the supply of gas to the Strategic Demand Sectors in accordance with the approved national gas pricing framework. The Aggregator will also manage the implementation of the domestic reserves and production obligation and the aggregate price (Aggregate Domestic Gas Price).

On the issue of pricing, the Policy provides for the establishment of a Gas Regulatory Agency, the Gas Regulatory Commission, through the proposed Downstream Gas Act, to regulate the price of gas supplied and utilized in the downstream gas sector and to promote reliable and efficient use of gas throughout Nigeria. It will also have the power to monitor and impose pricing restrictions on licensees to such an extent as to protect the interest of consumers. The relevant pricing principles in this regard are cost reflectivity, price disaggregation and the earning of a reasonable return on investment by licensees.

In recognising that the various domestic demand sectors such as electric power, Fertilizer, methanol and industrial manufacturing have varying capacity to bear gas prices, the Government has designed a gas pricing framework which carefully balances the requirements of the various stakeholder groups and comprises 3 sections, namely a regulated regime, a pseudo-regulated and a market led regime. It has also grouped the entire country demand (including both domestic and export) into three broad groupings (“Strategic Demand Sector Groups”), being the:

1. **Strategic Domestic Sector**: which refers to a very limited set of sectors that have a significant direct multiplier effect on the economy, namely, the Power Sector (residential and light commercial users), who will be under a regulated pricing regime which will be on cost-of-supply basis;
2. **Strategic Industrial Sector**: which refers to industries that utilize gas as feedstock in the production of value-added products that are primarily destined for export or in some cases, consumed locally, such as Methanol, GTLs (Gas-to-liquids) and Fertilizer, who will partake in a pseudo regulated pricing regime on product net-back prices; and
3. **Commercial Sectors**: which refers to sectors that use gas as fuel (instead of LPFO or coal), as opposed to feedstock, and would include manufacturers of cement or steel, domestic manufacturers and industrial power, who will be on the alternative fuel basis which will be indexed to alternative fuel prices. These sectors have the capacity to bear high gas prices as the alternative fuel is LPFO, and will be under a market-led regime.

The concept of strategic demand sector grouping is introduced to capture the economic benefit inherent in these various sectors by adequately pricing gas to enable their respective growths.

The Regulations establish a sector-based
pricing mechanism that provides an implementation approach for gas pricing that enables the full participation of all gas suppliers in the country in a manner that ensures sustained gas supply to the domestic market. It also creates a Department of Gas Resources in the Ministry of Energy to regulate activities in the gas sector and, among other things, stipulate and announce the annual Domestic Gas Demand Requirement, allocate a Domestic Gas Supply Obligation to every person licensed to produce petroleum at the beginning of every year and establish an Aggregate Price for domestic gas supply.

Similar to the Policy, the Regulations also establish a ‘Domestic Gas Aggregator’ under the Department of Gas in the Ministry of Energy in consultation with suppliers of gas, to act as an intermediary between suppliers and purchasers of gas, ensure gas supply to strategic sectors and act as market portfolio manager.

**Striking the balance…**

A review of the background to the Policy and the Regulation reveals that the formulation of Nigeria’s gas pricing and supply obligation was largely dictated by the need of the Government to meet and align the diverse supply requirements and price bearing capacities of the growing domestic demand of sectors such as electric power, fertilizer, methanol, industrial manufacturing, cement, domestic manufacturing, as well as the need to sustain its revenue generation from gas exports. Consequently, the Government sought to delicately balance these parallel ends of achieving domestic economic growth and sustaining its export revenue generation and relevance in the international gas market.

**Further measures that can be adopted…**

In view of the issues sought to be addressed by the Policy and Regulations, there are further measures that the Government may consider to complement the Policy and Regulations to better address the peculiar needs of the Nigerian gas market:

In setting gas supply quotas and prices for gas supplied to the different Strategic Demand Sector Groups, the Government must be cautious to set realistic quotas and prices that will meet its domestic needs without jeopardising its exports, or discouraging investment in the gas chain. For this reason, the Government may also consider the indirect involvement of all players in the gas production-to-distribution chain in the fixing of price and volume of gas for the domestic market through the establishment of a Gas-Operators’ Consultative Forum, which will act in an advisory capacity to and be in constant liaison with the Domestic Gas Aggregator, the Department of Gas in the Ministry of Petroleum Resources, and other relevant regulatory bodies as may be necessary. This Forum may be charged with the responsibility of advising the Domestic Gas Aggregator on the gas market and production structure from time-to-time and on factors to be considered in setting the (realistic) domestic gas supply quotas and gas prices, from time-to-time.

The growing demand for gas in the Nigerian domestic sector and in the international market translates to a significant reserves and production capacity development requirement. Capacity development is being addressed through a multi-pronged approach of legislative reforms, fiscal reforms and promotion of private investments in the gas sector. Increased production capacity would undoubtedly translate into an abundant reserve, but, further measures may be taken by the Government to further secure gas reserves, and consequently, further secure domestic gas supply.

In this regard, further to the periodic allocation of domestic gas supply quotas to the gas producing companies to meet the domestic gas needs as assessed for the relevant periods, the Government may also consider the allocation of gas storage quotas (“Storage Quotas”) to the gas-producing companies, as a temporary measure to further secure domestic gas supply. This would involve the stipulation of a percentage of the gas produced by IOCs which must be set aside for storage and the development of relevant gas storage facilities (“Storage Facilities”), preferably also through public-private partnerships.

This measure is considered relevant in a developing economy like Nigeria, whose gas production activities is still at its budding stage. The Storage Quotas and Storage Facilities can play an important role to provide increased security of gas supply to the domestic market. Gas storage can also provide important operational functions allowing gas network operators to balance seasonal gas demand and supply (as well as imbalances over short time periods), to utilize trading and contractual opportunities and thereby optimize the utilization of the transportation system.

This may involve the development of such Storage Facilities in Nigeria and/or contracting storage facilities in a neighbouring country, such as the existing bilateral agreements between Slovakia and Austria, Poland and Ukraine and Switzerland and France.
In its bid to achieve the parallel ends of meeting the gas supply needs of the domestic sector, boosting its gas export and revenues, promoting private investments in the gas chain, as well as taking its place in the international gas market, it is anticipated that the Government would certainly be faced with the constant struggle to balance out the diverse interests and practical constraints.

One anticipated area of practical constraint would be the issue relating to the creditworthiness of the major consumers or end-users of gas typically the national electricity company, and other large industrial customers on which the financial viability of gas projects largely rely, considering that one of the greatest challenges currently facing the domestic market of the NLNG is the huge debt by its major customer, the Power Holding Company of Nigeria. Although the Government has sought to forestall the future reoccurrence of this issue by introducing the Strategic Demand Sector groupings and a varied gas pricing mechanism to meet the respective credit capacities of these sectors, the Government would have to ensure that the pricing mechanism is administered in such a way as to create an environment that offers investors access to ‘anchor’ such strategic major consumer customers, and as well, tariffs that allow for cost recovery and fair returns on investments.

Furthermore, the Government would have to design and operate an effective framework for ensuring compliance with the gas supply and pricing obligations by the IOCs. This is because the stipulations of the gas supply quotas and gas prices, would not, in themselves, achieve the aims of the government. For example, notwithstanding that the Policy and Regulations were approved by the Government since the first quarter of 2008, the IOCs apparently disregarded same, leading to the Government having to subsequently issue a specific directive to the IOCs to submit a detailed plan for domestic gas supply before the end of October 2008. An effective enforcement regime is therefore, crucial.

**Conclusion**

The above review of the Policy and the Regulations reveals that the current Government has linked the growth of the nation’s power sector and the overall rapid development of the nation’s economy to the availability and affordability of gas supply to the domestic sector and has consequently put in place the Policy and the Regulations for these purposes. The review also shows that the design of the nation’s pricing and supply Policy and Regulations required the consideration and balancing of a number of factors, options and approaches. It is our view that equally, the...