# An Assessment of the Legal Framework for the Implementation of the Domestic Reserves Obligations in Nigeria

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#### **Abstract:**

Nigeria as a gas rich but developing economy initially focused on the gas export market to earn high revenues. This trend if unchecked would leave her local economy wanting for gas to drive growth in the strategic sectors. It would also mean a subsidization of industrialized economies to which export is channeled. To encourage critical buildup of local volumes of gas for the domestic market, an intermediate entity, the Strategic Aggregator was established until recently to implement the domestic gas reserves obligations to achieve government goals. The aim of this paper is to assess the adequacy of extant law backing the drive for the buildup of gas volumes for domestic use. This paper addressed the question of importance of gas availability in the domestic market, a time frame for the operation of the obligations and the vehicle for the implementation of the domestic reserve obligations. The doctrinal methodology was adopted in the course of research. It was found that the Petroleum Industry Act 2021 has enhanced the chances of effective compliance by appropriately assigning implementation of the domestic reserves obligations with the Nigerian Upstream Regulatory Commission. It is recommended that the Federal Government, through the new Regulator for the upstream, manifest a firm will in ensuring compliance.

**Key Words:** Natural Gas, Gas Aggregator, Domestic Supply Obligations, Gas Sale and Aggregation Agreement.

#### 1.0 Introduction:

Nigeria, in order to monetize her natural gas reserves initially vied into the international natural gas market to earn foreign exchange with very little attention paid to the domestic gas market. As a developing country, it cannot afford to support the economy of the industrialized countries at the expense of her local economy. To attend to the need for gas to drive economic growth, the need to intervene in the market through an intermediate entity the Gas Aggregator became imperative, to stimulate demand, aggregate supply and ensure sustainable availability of gas, particularly for power generation. The challenge however is that despite the establishment of this intermediate entity, there are shortfalls in full compliance with the domestic reserves obligations

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intended to ensure availability of critical volumes for the domestic gas market. It is against this background that this paper attempts to address questions as to the importance of the domestic gas reserves obligations for the domestic market, the nature of the framework for the operation of the obligations and the suitability of the vehicle for the implementation of the reserves obligations under the Petroleum Industry Act 2021 as against what prevailed before the 2021 Act.

#### 2.0 Domestic Gas Reserves Obligations in the Nigerian Gas Industry

Domestic gas reserves obligation also referred to as the gas supply obligation<sup>1</sup>/domestic gas supply obligation<sup>2</sup>/domestic market obligations,<sup>3</sup>domestic gas delivery obligations<sup>4</sup>suggests implementation of a policy making strategy of a government of a duly appointed authority in the face of a pressing need to cater to the sustainability of the domestic front while striking a delicate balance with other international commitments.<sup>5</sup> According to Theresa Okenabirhie it is 'the policy of the government that compels all producers of gas to set aside a certain percentage of their gas for the strategic domestic projects like power, in a bid to arrest the erratic power supply situation in the country. '6Chukwuemeka Okorie describes the domestic supply obligations as 'the legal duty imposed on a gas producer to supply a stipulated quantity of gas to the domestic market at a given period. This could be imposed either by the basic law, regulation or contract'.<sup>7</sup> Similarly Blessing James Laburta presents the domestic gas reserves obligations as obligations imposed on all companies licensed to produce petroleum in Nigeria to dedicate a specific amount of gas for use in the domestic market.<sup>8</sup> In like vein Janet Shodipo describes the concept of domestic supply obligation as implementing a policy making strategy in the face of a pressing need to cater to the domestic front.<sup>9</sup>The obligation creates an imposition on certain product

<sup>&</sup>lt;sup>1</sup>NGSPR 2008, s 6.

<sup>&</sup>lt;sup>2</sup>Tomas Lanardonne, 'Domestic Gas Supply Obligation Schemes and Gas Exports: A Catch-22 Situation? <a href="https://www.cepmlp\_Car17\_49\_622534002.pdf">www.cepmlp\_Car17\_49\_622534002.pdf</a>> accessed 20 August 2021.

<sup>&</sup>lt;sup>3</sup> C Duval, *International Petroleum Exploration and Exploitation Agreements: Legal, Economic &Policy Issues*, (2<sup>nd</sup> Ed, USA: Barrows Company Inc. 2007) 422.

<sup>&</sup>lt;sup>4</sup>PIA 2021, s 110.

<sup>&</sup>lt;sup>5</sup>Janet O Shodipo, 'Gas to Power: Enhancing and Optimizing the Domestic Supply Obligation For Improved Power Generation and Supply in Nigeria', <a href="https://mspace.lib.umanitoba.ca/bitstream/handle/1993/30743/\_Janet.pdf?sequence=1">https://mspace.lib.umanitoba.ca/bitstream/handle/1993/30743/\_Janet.pdf?sequence=1</a> accessed 20 August 2021.

<sup>&</sup>lt;sup>6</sup> Theresa Okenabirhie, 'The Domestic Gas Supply Obligation: Is This The Final Solution To Power Failure In Nigeria>How Can The Government Make The Obligation Work?' < <a href="https://www.cepmlp.car.65.266090310.pdf">www.cepmlp.car.65.266090310.pdf</a> accessed 20 August 2021.

<sup>&</sup>lt;sup>7</sup>Chukwuemeka Okorie, 'Have the Energy Laws in Nigeria Promoted and Preserved Competition in the Downstream Gas Market Since 1956?' <www.cepmlp\_car14\_54\_317860524.pdf> accessed 20 August 2021.

<sup>&</sup>lt;sup>8</sup>Blesing James Laburta, 'Can the Vessel of Domestic Gas Supply Obligations Under the Nigerian Gas Master Plain Sail Nigeria Safely to the Shores of Sufficient Electricity Supply? < <a href="https://www.cepmlp\_Car15\_20\_129769901.pdf">www.cepmlp\_Car15\_20\_129769901.pdf</a> accessed 20 August 2021.

<sup>&</sup>lt;sup>9</sup>Janet O Shodipo, 'Gas to Power: Enhancing and Optimizing the Domestic Supply Obligation For Improved Power Generation and Supply in Nigeria',

<sup>&</sup>lt; https://mspace.lib.umanitoba.ca/bitstream/handle/1993/30743/ Janet.pdf?sequence=1> accessed 20 August 2021.

producers to provide their products in definite or calculated quantities for the consumption and utilization of persons and industries within a state. 10

As a developing economy, Nigeria vied into the gas industry through export liquefied natural gas principally to earn high revenues. However it became imperative to develop the local market for natural gas as gas continued to gain prominence in Nigeria's energy mix, particularly in its use for electricity generation. To focus only on the export market would wreak havoc on the local economy and impede economic growth and development. With the different sectors of the Nigerian economy possessing varying degrees of capability to pay for natural gas at export parity rates, the Federal government of Nigeria under the Nigerian Gas Master Plan of 2008 proposed and split the economy into three strategic sectors along the lines of capacity to pay for domestic gas.

The Nigerian Gas Master Plan is essentially a guide for the commercial exploitation and management of the natural gas sector.<sup>11</sup> It represents an active and live plan of the Federal Government of Nigeria that is occasionally updated to effectively address changing market conditions and remain aligned with the ultimate growth vision of government for the gas industry to become a major international player in the international gas market as well as to lay a solid framework for gas infrastructure expansion within the domestic market.<sup>12</sup> The Nigerian Gas Master Plan was conceived as a major document to kick-start the gas sector whilst simultaneously ensuring concurrent presence in the domestic market, high value export markets and in industrial applications.<sup>13</sup> The National Gas Supply and Pricing Regulations of 2008 made pursuant to the now obsolete Petroleum Act 1969 also adopted the three-sector split of the master plan and by virtue of regulation 3 of the 2008 Regulations, established the Gas Aggregation Company of Nigeria, also known as the Strategic Gas Aggregator, to *inter alia*, implement the domestic supply obligations created under the provisions of regulation 5 of the National Gas Supply and Pricing Regulations of 2008.

As a regulated entity, the Aggregator have not been very successful in fully ensuring compliance with the obligations on all asset holders/ gas producers despite the provisions of regulation 7 which prescribed a penalty of \$3.50 per Mscf of gas not supplied to the domestic market or the take or pay price of gas whichever is higher. Reasons for this failure may stem from the constitution of the board of the Aggregator in which combination of the international oil companies which are the gas producers comprise a majority of the board. More so, inadequate

 $<sup>^{10}</sup>Ibid.$ 

<sup>&</sup>lt;sup>11</sup>Abubakar Yar'Adua,'The Nigerian Gas Master Plan' [2007] < <u>www.ppra.gov.ng</u>> accessed 20 August 2021

<sup>&</sup>lt;sup>12</sup>Nigerian National Petroleum Corporation, 'Nigerian Gas Master Plan' <<a href="https://nnpcgroup.com/NNPC-Business/Midstream-Ventures/Pages/Nigerian-Gas-Master-Plan.aspx">https://nnpcgroup.com/NNPC-Business/Midstream-Ventures/Pages/Nigerian-Gas-Master-Plan.aspx</a> accessed 4 June 2021.
<sup>13</sup>Ibid.

<sup>&</sup>lt;sup>14</sup>NGSPR 2008, r 7.

<sup>&</sup>lt;sup>15</sup>The NNPC has 30% while Chevron, Exxon Mobil, Total, Pan Ocean and Shell has 14% each in the ownership structure of the Gas Aggregation Company of Nigeria. The cumulative percentage of the ownership of the international oil companies far outweighs that of the FGN and these companies, with deep pockets, have been known to leverage on this. See Editorial, 'Ministry of Petroleum Resources Engages Stakeholders to Review Mandate and Structure of Gas Aggregation Company' *The Nigerian Voice* (Nigeria, 10 March 2020) <a href="https://www.thenigerianvoice.com/news/285897/ministry-of-petroleum-resources-engages-stakeholders-to-">https://www.thenigerianvoice.com/news/285897/ministry-of-petroleum-resources-engages-stakeholders-to-</a>

gas infrastructure, vandalism, corruption and lack of firm will on the part of government are also contributory factors to the shortfall on compliance with the domestic supply obligations.

#### 3.0 Natural gas availability in the domestic market

Natural gas is a fossil fuel which is fungible and can be used in place of other fuel products. With the increased move by the power sector, which represent a major part of the gas consuming economy, having recourse to gas fired turbine engines for power generation it is imperative that its availability is sustainable to drive economic growth. Natural gas is also used by the different sectors of the economy for different purposes. These sectors also having varying degrees of capability to withstand high gas prices. To reinvigorate the domestic gas market in Nigeria, a three sector split of the economy was proposed under the Nigerian Gas Master Plan of 2008 and adopted in the National Gas Supply and Pricing Regulations of 2008, along the lines of capacity to pay for gas. While there are no explicit split in the Petroleum Industry Act 2021, the language of the law it is believed presupposes the adoption of the three-sector-split under previous plan and legislation.

The Nigerian Gas Master Plan presents a transitional pricing format that will gradually propel the market from typical low domestic gas prices towards the export parity price, ensure competitiveness of gas pricing in the domestic market and provide economic support for gas development. To effectively implement the pricing policy, the domestic market is grouped into three with stratified gas pricing arrangements that determine the floor price of gas for the respective sectors. The sectors are: the strategic demand sector, the strategic industrial sector and other commercial sectors. The strategic demand sector includes mainly the power sector consumers both residential and light commercial consumers. This sector has significant multiplier effect on the economy and as noted earlier are typically characterized by non-payment for gas. As such the pricing arrangement for this sector is on cost of supply basis or cost plus pricing arrangement which is a regulated pricing regime which ensures a 15% rate of return to the gas supplier.

The strategic industrial sector include industries that use gas as feedstock in the production of value added products that may be destined for export or consumed locally, for instance fertilizer,

<sup>&</sup>lt;u>revi.html</u>> accessed 7 June 2021. See also Editorial, 'Ministry, Stakeholders review mandate, structure of Gas Aggregation Company' *Blueprint* (Nigeria, 4 March 2020) < <a href="https://www.blueprint.ng/ministry-stakeholders-review-mandate-structure of-gas-aggregation-company/">https://www.blueprint.ng/ministry-stakeholders-review-mandate-structure of-gas-aggregation-company/</a>> accessed 7 June 2021.

<sup>&</sup>lt;sup>16</sup>Yar'Adua (n 11).

<sup>&</sup>lt;sup>17</sup>Excel Theophilus OUkpohor, 'Nigerian Gas Master Plan: Strengthening the Nigeria Gas Infrastructure Blueprint As A Base For Expanding Regional Gas Market' < <a href="https://www.nairametrics.com/wp-content/uploads/2013/03/nigerian-gas-master-plan.pdf">www.nairametrics.com/wp-content/uploads/2013/03/nigerian-gas-master-plan.pdf</a> accessed 24 August 2021.

 $<sup>^{18}</sup>Ibid.$ 

<sup>&</sup>lt;sup>19</sup>TadeOyewumi and Akin Iwayemi,' Gas-to-Power Market Regulation in Nigeria' <<u>www.researchgate.com</u>> accessed 19 August 2021.

<sup>&</sup>lt;sup>20</sup>Ibid.

 $<sup>^{21}</sup>$ *Ibid*.

<sup>&</sup>lt;sup>22</sup>Ukpohor (n 17).

petrochemical and methanol industries.<sup>23</sup> These industries ensure that value is added to Nigerian gas before export. This process of value addition ensures job creation. For these industries, it is important that feed gas price is predictable and affordable in order to ensure competitiveness of the product in international markets.<sup>24</sup> Prices are determined based on a pseudo-regulated netback pricing principle.<sup>25</sup>This pricing formula recognises the different international market conditions for exports from different industries and is therefore adapted to ensure competitiveness.<sup>26</sup> Other commercial industries include the LNG industry and other industries that use gas as fuel such as cement manufacturers. These have a higher tolerance for a higher price and thus prices are adapted to a market led regime and set to reflect the cost of alternative fuels.<sup>27</sup>

It is interesting to note that Nigerian gas is rich in liquids so the pricing policy also factors in the prices of natural gas liquids extracted from rich gas which will be priced at market rates. This potential higher revenue from the natural gas liquids in addition to the aggregate price for dry gas will provide adequate return on investment for gas development.<sup>28</sup>The gas pricing policy only applies to the domestic supply obligation volumes and for the transition period wherein the market is still evolving and have not fully developed into a market-led scenario. Once a supplier meets his domestic supply volumes, he can progress into a willing buyer willing seller arrangements and sell at export parity price.<sup>29</sup>

The gas pricing frame work discussed above only specifies the floor price of gas. Actual prices will factor in an escalation for inflation and an indexation to real time product price and/or any other indices that the parties may negotiate.<sup>30</sup> Thus with the application of the pricing mechanisms across the sectors, gas availability is maintained while investor/producers also realize returns which sustain investment interests in the domestic market.

<sup>&</sup>lt;sup>23</sup>Africa Oil and Gas Report, 'Nigeria's National Domestic Gas Supply and Pricing Policy' <a href="http://africaoilgasreport.com/2008/04/gas-monetization/nigerias-national-domestic-gas-supply-and-pricing-policy/">http://africaoilgasreport.com/2008/04/gas-monetization/nigerias-national-domestic-gas-supply-and-pricing-policy/</a>> accessed 24 August 2021.

 $<sup>^{24}</sup>Ibid$ 

<sup>&</sup>lt;sup>25</sup>*Ibid.* The net back pricing is used in oil and gas to reflect the revenue of one barrel of oil equivalent. Netback is the revenue after all the costs associated with bringing one unit of oil to the market. These costs include importing, transporting, marketing, production and refining costs, royalties and other fees. See Investopedia, 'Netback' <<u>www.investopedia.com>terms>netback</u>> accessed 24 August 2021. Similarly MA Mian describes netback pricing as a contractual arrangement in which the price of gas at the well head is based upon the price of processed gas or products. Using netback, the produce-processor starts with the sales price of processed gas or products and then subtracts certain costs such as capital, operating, processing, taxes and transportation to determine the value of gas when production is complete. In essence it is backward calculation of price starting from consumer to the well head. See MA Mian, 'Comparison of Methods Used To Calculate Netback Value' <<u>www.ogfl.com</u>> accessed 25 August 2021.

 $<sup>^{26}</sup>Ibid.$ 

 $<sup>^{27}</sup>Ibid.$ 

<sup>&</sup>lt;sup>28</sup>Ibid. The Gas Infrastructure Blue-Print under the NGMP factors in this necessity and thus construction of Central Processing Facilities [CPFs] form a central aspect of the intended infrastructure proposed under the plan.
<sup>29</sup>Ibid.

<sup>&</sup>lt;sup>30</sup>CSL Stock Brokers, 'Nigerian Power Sector' < http: <u>www.cslstockbrokers.com/csl/images/stories/downloads/Economics/Power Sector IN DEPTH Report part2.pdf</u> > accessed 25 May 2021.

### 4.0 Time Frame for the Operation of the Domestic Reserves Obligations

The domestic gas reserves obligations are geared primarily to sustain a healthy build-up of gas volumes for use in the domestic economy, particularly the power sector which has huge multiplier effects on the wider economy. To guide the market to maturity, wherein forces of demand and supply interplay to determine price of domestic gas, there exists an interim/transitory period whereby through government intervention, price of gas for the domestic market is regulated to encourage development of the sectors of the economy until local capacity is formed.

Under the National Gas Policy of 2017, certain triggers must be in place to herald the maturity of the domestic gas market. Thus until the Minister makes certain declarations, it is believed that the market remains in a transition period. The triggers which must be in place to pre-empt the Minister's declarations under the 2017 Policy include:

- a. When sufficient parts of the planned national infrastructure are completed, in particular the OB3 pipeline which will act as a connection system between the eastern and western parts of Nigeria;<sup>31</sup>
- b. Sufficient gas volumes passing through the OB3, which is a potential physical point gas hub (where gas from the East can be transported to the Western or Northern parts of Nigeria. Sufficient volumes are considered to be 2 bcf/d which represents the capacity of the OB3 pipeline;<sup>32</sup>
- c. When Oben develops as a physical point gas hub with sufficient volumes and hub pricing can replace regulated pricing;<sup>33</sup>
- d. When domestic gas volumes exceed export gas volumes;<sup>34</sup>
- e. When there are sufficient numbers of wholesale traders (sellers) and consumers (buyers).<sup>35</sup>

The Petroleum Industry Act 2021 however makes some adjustments to what obtained previously. The Act envisages a situation under section 167(3) where;

price control and the corresponding role of the domestic gas aggregator shall not be required, where the domestic market for natural gas is largely characterized by free market based contracting for natural gas between willing

<sup>&</sup>lt;sup>31</sup>Federal Republic of Nigeria: Ministry of Petroleum Resources, 'National Gas Policy: Nigerian Government Policy and Actions 2017' < <a href="https://www.petroleumresources.gov.ng">https://www.petroleumresources.gov.ng</a> accessed 23 August 2021. The OB3 pipeline [Obiafu-Obrikom to Oben] with 2 billion standard cubic capacity is a critical component of the NGMP Infrastructure blueprint meant to deliver gas from rich reservoirs in the Eastern Niger Delta to the established demand centres in the west of Nigeria. It also aims to meet the Nigeria gas demand for power generation and industrial concerns with emphasis on operational safety, efficiency and flexibility with a view to providing industry standard, remote supervision and control. Construction stated in 2013 however completion date for this project has however been pushed to 2021 due to delay caused by a change in contractors. See Emmalogo, 'Completion Date of OB3 Pipeline Project in Nigeria Pushed to 2021' < <a href="https://constructionreviewonline.com">https://constructionreviewonline.com</a> accessed 24 August 2021.

 $<sup>^{32}</sup>$ Ibid.

 $<sup>^{33}</sup>Ibid.$ 

 $<sup>^{34}</sup>Ibid.$ 

 $<sup>^{35}</sup>Ibid.$ 

buyers and willing sellers and the transactions of producer clients and consumer clients represent less than 20% of total transactions.<sup>36</sup>

Furthermore, by virtue of section 110 (11) of the Petroleum Industry Act, the Minister no longer needs to any declarations on the market status of the domestic gas market. Under the new legal framework, 'the Commission shall discontinue the imposition of the domestic supply obligations, where the Authority has determined that the natural gas market has attained full market status.' 37

Therefore the domestic supply obligations will remain in operation until the Nigerian Midstream and Downstream Regulatory Authority exercises its authority under section 110 (11) of the Petroleum Industry Act 2021 in determining the market status of the domestic market. Until this determination is made, it can safely be said that the domestic gas market remains in the transition period. It is however important to note that even while in the transition period, where a producer has complied with its domestic supply obligations, it may deliver further supplies of gas to the domestic market on a willing buyer and willing seller basis.<sup>38</sup>

## 5.0 Vehicle for the Implementation of the Domestic Gas Reserves Obligations in Nigeria

The Domestic Gas Aggregator also known as the Gas Aggregation Company of Nigeria was established under the National Gas Supply and Pricing Regulations of 2008 as a critical intervention in the domestic gas market to *inter alia* implement the domestic supply obligations under the previous legal regime. As a regulated entity itself, the Aggregator recorded shortfalls in domestic reserves obligations compliance. Without the power to penalize, it interfaced with the Regulator and typical bureaucracy of government, the ownership structure of the Aggregator itself, politics and corruption as well as inadequate gas delivery infrastructure all add to the clogs in the wheels of full compliance.

Under the Petroleum Industry Act 2021, implementation of the domestic supply obligations is properly placed on the upstream regulator- the Nigerian Upstream Regulatory Commission. Section 110 (1)(a) and (b) of the Act;

Subject to subsection (2) of this section, the Commission shall, by a Regulation or guideline made under this Act,-

- a) prescribe and allocate the domestic gas delivery obligation on a lessee before 1<sup>st</sup> March of each year based on the domestic gas demand requirements determined or updated pursuant to section 173 of this Act; and
- b) ensure compliance by every Lessee with a domestic gas delivery obligation.<sup>39</sup>

The Gas Aggregator is presently, under the new legal framework, to inter alia play a supportive role in the implementation of the obligations.<sup>40</sup>

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<sup>&</sup>lt;sup>36</sup>PIA 2021, s. 167(3).

<sup>&</sup>lt;sup>37</sup>PIA 2021, s.110(11).

<sup>&</sup>lt;sup>38</sup>*Ibid.* s 110 (3).

<sup>&</sup>lt;sup>39</sup>PIA 2021, s. 110 (1)(a) and (b).

<sup>&</sup>lt;sup>40</sup>*Ibid.*, s.154(a).

#### 6.0 Domestic Supply Obligations in other Jurisdictions

The domestic supply obligation often arise in gas exporting countries which have realized the need to prioritize availability of their hydrocarbon reserves for the growth and development of their respective domestic gas market and their wider economies while tapping into the highly lucrative export market without necessarily subsidizing other economies at the detriment of their home economy. This obligation becomes even more critical in developing economies like Nigeria, where the domestic gas market is not full-fledged such that the obligations if not implemented will impede projected growth of the gas sector and the wider economy. Other countries also implement the domestic supply obligations to drive economic growth and develop the sector.

a) Indonesia: Indonesia is endowed with copious reserves of natural gas. She ranks thirteenth in the world with 98 trillion cubic feet of proven gas reserves as at 2017 and thus accounting for about 1% of the world's total natural gas reserves. <sup>41</sup>Like Nigeria, domestic gas price was low as such Indonesia flared most of her associated gas. <sup>42</sup> According to Machmud, it took the electricity crisis in the country coupled with the discovery of a large gas field in the Kangean block to propel the government of Indonesia to facilitate a commercially viable domestic gas market. <sup>43</sup>

The Indonesian Constitution vests ownership of all natural resources in the State until the point of delivery to the customer.<sup>44</sup> Thus article 22(1) of the Indonesia Oil and Gas Law<sup>45</sup> mandates all gas producers to dedicate up to 25% of their production for the domestic gas market. The article states thus: 'business entities or permanent establishments shall give up maximally 25% of their portion resulting from production of petroleum and natural gas to meet the domestic need'.<sup>46</sup>

Due to the pull of the export market as a result of the rising trend in preference for natural gas across the globe, the Government of Indonesia in order to safeguard its domestic market created the domestic market obligations to ensure economic growth. Thus making it mandatory for suppliers across board to supply a definite percentage to the domestic market.

b) Egypt: Egypt reserves of natural gas was placed at about 63 trillion cubic feet of gas as at 2020<sup>47</sup> and it is ranked third largest proven gas reserves in Africa after Nigeria and

<sup>&</sup>lt;sup>41</sup>Worldmeter,' Indonesia Natural Gas' < <u>www.worldmeters.info/gas/indonesia-natural-gas/</u>> accessed 24 August 2021.

<sup>&</sup>lt;sup>42</sup>US Energy Information Administration, 'EIA Country Report: Indonesia' <www.eia.gov/beta/international/analysis.cfm?iso=IDN> accessed 24 August 2021.

<sup>&</sup>lt;sup>43</sup>TN Machmud, 'Production Sharing Contracts in Indonesia: 25 Years' History Notes and Comments' (1993) (11) (3) *Journal of Energy and Natural Resources Law*, 179 at 183-184.

<sup>&</sup>lt;sup>44</sup>Constitution of Indonesia 1945, art. 33(3) cited in Shodipo (n 5).

<sup>&</sup>lt;sup>45</sup>No. 22, 2001.

 $<sup>^{46}</sup>Ibid.$ 

<sup>&</sup>lt;sup>47</sup>Knoema, 'Egypt Reserves of Natural Gas, 1949-2020'

<sup>&</sup>lt;a href="https://knoema.com/.../Egypt/topics/Energy/Gas/Reserves">https://knoema.com/.../Egypt/topics/Energy/Gas/Reserves</a> accessed 24 August 2021.

Algeria.<sup>48</sup> As with Nigeria and Indonesia, associated gas was initially flared for want of adequate infrastructure to connect the gas fields to the market. To meet growing demand for gas within her economy, the Egyptian Government implemented the Integrated Gas Strategy which *inter alia* includes export ceiling being set at 25% of production and no foreign or domestic gas operator is allowed to export gas without first investing in the domestic gas market.<sup>49</sup> To strengthen the domestic reserves obligation the government in 2008 implemented a two-year moratorium on gas exports to address growing demand for gas in the domestic market.<sup>50</sup>

Domestic gas pricing which is a critical component of the domestic reserves obligations was also addressed by the Egyptian government. Egypt introduced a sector based pricing mechanism which assigns sector appropriate pricing to the different sectors and producers receive an aggregate price for gas supplied to the domestic market.<sup>51</sup> The Egyptian Natural Gas Holding Company [EGAS], which is charged with overseeing her natural gas development, production and marketing, operates as a single buyer of gas from the suppliers.<sup>52</sup> Thus with the introduction of this intermediate entity, EGAS, availability and commerciality challenges were addressed in the domestic gas sector.

c) Unites States of America, Canada and Western Australia: The United States has in place a domestic reservation policy and monitoring policy overseen by the United States Energy Department which keeps a close eye on the impact of LNG exports on the domestic gas market and is vested with necessary powers to revoke future export licenses where domestic gas availability is threatened.<sup>53</sup>

Canada, in like vein apply export permits and price testing as a system to protect the domestic market.<sup>54</sup> In fact the export market is served as a secondary option to the domestic market.<sup>55</sup>

Western Australia has a Domestic Gas Policy made in 2006 which made up to 15% of liquefied natural gas produced for export readily accessible to domestic consumers. A unique feature of the policy is the provision for a deferral of the domestic supplies obligations if it is not commercially viable for the gas producers at certain periods. Thus with this policy in place a balanced toggle is created between the export market, gas producers as well as the gas dependent consumers.

<sup>&</sup>lt;sup>48</sup>GawdatBahgat, 'The Impact of the Arab Spring on the Oil and Gas Industry in North Africa: A Preliminary Assessment' (2012) (17) (3) *Journal of North African Studies* 503 at 505 cited in Shodipo (n 5).

<sup>&</sup>lt;sup>49</sup>Shodipo (n.5)

<sup>&</sup>lt;sup>50</sup>US Energy Information Administration (n 42).

<sup>&</sup>lt;sup>51</sup>The Nigerian sector pricing mechanism is in fact an adaptation of the Egyptian model.

<sup>&</sup>lt;sup>52</sup>Shodipo (n 5).

<sup>&</sup>lt;sup>53</sup>Shodipo (5).

<sup>&</sup>lt;sup>54</sup>Ibid.

<sup>&</sup>lt;sup>55</sup>Ibid.

<sup>&</sup>lt;sup>56</sup>Theresa O Okenabirhie, 'The Domestic Gas Supply Obligation: Is this the Final Solution to Power Failure in Nigeria? How Can the Government make the Obligation Work?'

<sup>&</sup>lt;a href="http://www.dundee.ac.uk/cepmlp/gateway/index.php?news=30880">http://www.dundee.ac.uk/cepmlp/gateway/index.php?news=30880</a>> accessed 24 August 2021.

<sup>&</sup>lt;sup>57</sup>Ibid.

#### 7.0 Conclusion

The domestic reserves obligations hinges on the Federal Government's ownership and control of petroleum as vested by the Constitution<sup>58</sup> and reaffirmed by the Petroleum Industry Act 2021<sup>59</sup>. An important obligation of the kind ought to be the charge of a regulating authority imbued with necessary powers to compel compliance. Before the Petroleum Industry Act 2021, implementation of the domestic supply obligations was the preserve of a regulated entity, the Aggregator, which itself is comprised largely of the international oil companies which produce gas. This may have been a contributory factor in the dismal levels of compliance with the obligations.

The Petroleum Act of 2021 which was recently signed into law by President Mohammadu Buhari creates a Regulatory Authority for the upstream which oversees the implementation of the obligations. Therefore this charge is properly anchored in an appropriate authority with requisite powers as against the scenario before the Act came into force. It is therefore recommended that the Regulator rise above board in ensuring full compliance with the domestic supply obligations which secures gas supply for the domestic market, particularly the power sector which has multiplier effects on the Nigerian economy.

<sup>&</sup>lt;sup>58</sup>CFRN 1999(as amended), s.44, item 39 Schedule II.

<sup>&</sup>lt;sup>59</sup>PIA 2021, s. 1.