

## **GAS FLARING – IS THERE AN END IN SIGHT?**

With a daily crude oil output in excess of two million barrels, Nigeria has about 100 gas flaring sites, some of which have been continuously burning for 20 years. While 2.2 billion standard cubic feet (scf) of Associated Gas is produced everyday, about 75% of that quantity is being flared. The consistent release of harmful gases has had a devastating effect on the surrounding environment in the Niger-Delta basin. Aside from incidences of acid rain, these gas-flaring activities are generally viewed as undermining agricultural/fishing activities and by extension disrupting the lives of the local communities, which communities have traditionally been predominantly agricultural societies and fishing communities.

Successive Nigerian Governments have continued to seek for a solution to the gas-flaring issue, either in fulfillment of electoral promises in the case of civilian governments or in pursuit of national development policies, in the case of military regimes.

Government has, over time, adopted a two-prolonged approach to this problem. On the one hand, E&P companies involved in the flaring of associated gas are compelled by law to pay a specific penalty, based upon the quantity of gas flared. The Associated Gas Re-injunction Act (AGRA), introduced in 1979, prohibited the flaring of associated gas after 1<sup>st</sup> of January 1984, except with the permission in writing of the Minister of Petroleum. Defaulting companies were given the option to pay a penalty of 20 kobo (about \$0.04) per 1000 standard cubic feet (scf). The penalty rose to 50 kobo (about \$0.08)/1000 scf in April 1992 and further to N10 (about \$0.12)/1000 scf in January 1998.

Due to the prohibitive cost of the gas development projects, the E&P companies found it convenient to simply pay the penalty. However each increase in penalty rate has eaten deeper into the budget of producing companies, thereby compelling them to look more seriously into the feasibility of establishing projects designed to reduce flaring through utilization or monetisation of Associated Gas.

On the other hand, Government has introduced incentives designed to encourage E&P companies to discontinue te flaring of Associated Gas at wellhead. These incentives basically take the form of tax (Petroleum Profits Tax) reduction.

However, recent statements by Government officials indicate that Government is not particularly satisfied at the pace at which the producing companies are taking steps to curtail gas-flaring activities. Of recent, the Minister of State for the Environment, Dr. Imeh Okopido was quoted as saying:

***“All forms of gas flaring on Nigerian soil must stop by year 2004. And that is final. Any oil company that defaults in this regard risks forfeiting its operating license.***

***If a company defaults, its license is taken away, and we can call in some other companies that are able to produce oil and gas without flaring. We have gas in other countries that are not flared.”***

The severity of this statement has been whittled down by subsequent pronouncements by other Government officials who advised that the flare discontinuance date has been shifted to the year 2008.

Notwithstanding the above pronouncements, Nigeria is yet to witness a marked reduction in the quantity of gas being

utilization facilities to the fact (amongst other things) that Associated Gas, which is produced at low pressure, must be compressed and heated in facilities specifically built for the purpose. It is therefore one of the most difficult and expensive gas sources to harness. In Nigeria in particular, they would require an extensive network of gathering facilities, compression facilities and pipelines to link scattered fields that individually do not produce sufficient quantities of gas to be commercially viable. The issue therefore revolves around who is prepared to fund these structural requirements – Government or the producing companies themselves? Both parties claim to lack the necessary resources to undertake such a Herculean task. A further constraint to gas utilization and development in Nigeria is the lack of a ready local market. The high cost of transporting the commodity over vast distances to the markets of Europe, Asia and the Americas together with the fact of international competition from other producing nations has made the exportation of Associated Gas an unattractive proposition. The availability of cheap petroleum products and the absence of a developed distribution system including technological expertise at grassroots level have meant that gas is still largely confined to usage as an industrial fuel throughout Nigeria. Domestic usage of gas is restricted to cylinders, as opposed to the more efficient but inherent costlier (at least at the initial stage) pipeline system.

Multi-national E&P companies producing in Nigeria have consistently stated their resolve to reduce gas flaring. Methods to be adopted to achieve this objective in the short term include re-injecting increased volumes of Associated Gas into oil reservoirs, reducing production from wells with high ratios of gas to oil, and fitting more efficient flare-tips.

Government has established the Nigerian Liquefied Natural Gas Project (NLNG) which commenced production in the 3<sup>rd</sup> quarter of 1999, as a Joint Venture between the NNPC (Nigeria's State owned oil company) – 49%; Shell Gas B.V 25.6%; Elf (Cleag) – 15%; and Agip – 10.4%. The NLNG plant is designed to reduce gas flaring at the nation's oil fields by 50% when it fully takes off. Nigeria is also trying to develop a regional market for its gas by the construction of a 600-kilometre pipeline to carry gas to Benin, Togo and Ghana. This project got a boost in October 1998 when Chevron and NNPC signed an agreement with a consortium led by KML power to supply Nigeria gas for a Ghanaian Power plant in Tema. Nigeria is acknowledged as potentially capable of fuelling the power needs of the whole of West Africa. The pipeline will not only provide markets for Nigeria's gas contributing to the country's economic and social development but will also directly contribute to a reduction in gas flaring within the Niger- Delta basin.

### **MARGINAL FIELDS – THE KEY TO INDIGENOUS PARTICIPATION IN THE NIGERIAN OIL SECTOR.**

The Federal Government of Nigeria recently identified a total of 116 Oilfields situate within existing acreages in the country as "Marginal Fields". Indigenous E&P companies have been invited to bid for 24 of these fields in connection with the Government's Marginal Fields Scheme. The Guidelines and other information relevant to the 2001 bid rounds are available on the Internet at [www.nigeria-marginalfields.com](http://www.nigeria-marginalfields.com).

crude oil, the holder of the concession or acreage deems it uneconomical to produce or recover such reserves.

Prior to 1996, the determination of whether a Nigerian field was “marginal” in nature was the business of the concession holder itself. In 1996, the Federal Government of Nigeria promulgated the Petroleum (Amendment) Decree No. 23 of 1996, which is customarily referred as to the “Marginal Fields Decree”.

### **THE PETROLEUM (AMENDMENT) DECREE NO. 23 OF 1996**

This law amended the Petroleum Act by inserting a new Section 16A. The new section provides that:

- A concession holder may farm out a Marginal Field situate upon its concession, with the approval of the Head of State as to the farm out terms and conditions;
- The Head of State is empowered to farm out a Marginal Field if the field has been left unattended for a period of not less than 10 years from the date of its discovery;
- The Head of State alone may classify fields as Marginal for the purposes of the Decree; and
- The Head of State should not approve of a Farm out arrangement or cause a Marginal Field to be farmed out unless it is in the public interest to do so and the parties to the arrangement are agreeable to the Federal Government.

Despite the currency of Decree No. 23 of 1996, the Federal Government has been unable to put in place a substantive Marginal Fields allocation or licensing scheme. The reasons for this state of affairs may vary, but it is widely understood that the E&P companies who were (and still remain) the holders of the concessions, which contain the identified Marginal Fields, have passively resisted the imposition of a

Marginal Fields Scheme upon them because they perceive this to be an attempt by Government to unilaterally encroach upon their interests. The existing concession holders argued that almost invariably (and particularly under the PSC arrangement), the primary obligation to fund exploration and development activities upon concessions rested upon them. Therefore the concession holders alone should be entitled to decide whether or not to produce these fields for economic reasons. Any contribution by the other persons, including the Nigerian Government towards these exploration and development costs, was minimal. This sole funding obligation also means that seismic data and other information needed to enable the classification of a field as marginal or otherwise was (and still remains) essentially within their competence. Finally, the concession holders insist that Decree No. 24, which was promulgated without their knowledge and more, importantly their input, fails to protect their own financial and/or commercial interest in any way.

Given the above circumstances, it is not surprising that the 1996 Decree has not produced a substantive Marginal Fields Programme thus far. Intermittent reports found in the local media since 1996 on negotiations between concession holders and would-be farminees to Marginal Fields, have contained no indication that the Federal Government of Nigeria or the Head of State has played any role, supervisory or otherwise, in such negotiations. Nevertheless, Government seems to have taken stock of the constraints facing the implementation of the original (1996) Decree, and tried to forge ahead in the development of the nation's reserves through a workable arrangement to tap crude oil resources situate in Nigerian Marginal Fields. As indicated above, earlier this year, Government announced that it would invite bids from interested indigenous companies for a total of 24 out of 120 Marginal Fields identified by the Federal Government.

## **GUIDELINES ON INVITATION OF BIDS FOR MARGINAL FIELDS, 2001**

The Guidelines issued by the Federal Government in connection with the 2001 bid rounds lack detailed information as to the legal arrangements surrounding the scheme or the level and regulatory compliance(s) that successful bidders will encounter in the process of realizing their respective objectives.

However, the Guidelines do provide that:

- Only companies incorporated in Nigeria that are at least 51% Nigerian owned are eligible to bid; and
- Applicants should not bid for more than a single field.

Government however maintains that the 2001 bid round should be regarded as one of the building blocks of its Marginal Fields programme, which is aimed at increasing the level of direct participation by Nigerians in the Nigerian oil industry, encouraging the development of Nigeria's reserves and building indigenous technological capacity to conduct upstream activities in Nigeria generally.

Given the fact that the level of financial involvement necessary for meaningful investment or participation in Nigeria's offshore PSC programme is beyond the means of all but a few Nigerians, the Marginal Fields Programme, with its reliance upon proven and producible reserves, offers a truly practical means of achieving a higher degree of Nigerianisation of the upstream industry than has been achieved to date, despite the prosecution of the Indigenous Programme for a number years. Substantive opportunities should also present themselves within the programme for mid-sized foreign investors willing to act as co-ventures or

technical partners to Nigerians involved in the development of the nation's Marginal Fields.

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