

## **CURRENT STATUS OF THE PETROLEUM INDUSTRY IN NIGERIA**

### **Sedimentary Basins**

Table 1, lists Nigeria's 7 main sedimentary basins with some information on size and prospectively, main reservoirs, exploration status etc. The core producing areas cover some 60% of the total acreage of about 31,105 sq. km. The outlying areas remain a significant asset yet to be exploited.

### **Oil and Gas Reserves**

A 2003 estimate showed recoverable crude oil reserves at 34 billion barrels. The reserve base is expected to increase due to additional exploration and appraisal drilling. Already, over 900 million barrels of crude oil of recoverable reserves have been identified. The government has also set a target to achieve a reserve of 40 billion barrels by 2010.

Nigeria has an estimated 159 trillion cubic feet (Tcf) of proven natural gas reserves, giving the country one of the top ten natural gas endowments in the world. Due to a lack of utilization infrastructure, Nigeria still flares about 40% of the natural gas it produces and re-injects 12% to enhance oil recovery. Official Nigerian policy is to end gas flaring completely by 2008. The World Bank estimates that Nigeria accounts for 12.5% of the world's total gas flaring. Shell estimates that about half of the 2 Bcf/d of associated gas -- gaseous by-products of oil extraction -- is flared in Nigeria annually. The new industry strategy is to collect the associated gas and process it into liquefied natural gas (LNG), greatly enhancing Nigerian natural gas revenues while simultaneously reducing carbon dioxide emissions

### **Oil Fields**

Of the 606 oil fields in the Niger Delta area, 355 are on-shore while the remaining 251 are offshore. Of these, 193 are currently operational while 23 have been shut in or abandoned as a result of poor prospectivity or total drying up of the wells. Outside the Niger Delta, a total of 28 exploratory oil wells have been drilled all showing various levels of prospectivity. These wells include two (2) discovery wells in Anambra State, one (1) discovery well each in Edo State and Benue State each and Twenty-four (24) wells in the Chad Basin. However, production is yet to commence from any of the wells.

### **Nigerian Liquefied Natural Gas**

The Nigerian LNG project is being implemented in phases with an initial production from two trains. The plant is situated at Bonny Island. NLNG has successfully secured market for its moderate production volume from its base project and train three.

### **Sources of Gas:**

The bulk of the gas for base project is mainly NAG supplied from the following gas supplier fields:

SPDC - SOKU;

NAOC - OBIAFU OBIKROM;

EPNL - OBITE;

The bulk of gas for train three will contain more of associated gas from which both LNG and LPG will be produced.

### **Gas Supply Contract:**

The NLNG had signed Gas Supply Agreements (GSAs) with three upstream gas producers in 1992. This is aimed at securing adequate and regular supply of gas for the project. These gas producers are:

The Shell Petroleum Development Company of Nigeria Limited (SPDC) -

NNPC/SPDC/NAOC/EPNL JV: operator & sellers' representative - SPDC (Shell affiliate);

Nigerian Agip Oil Company limited (NAOC) - NNPC/NAOC/POCNL JV: operator & sellers' representative - NAOC (Agip affiliate);

ELF Petroleum Nigerian limited (ELF), (then Elf Nigerian Limited) - NNPC/EPNL JV: operator & sellers' representative - EPNL (Elf affiliate).

These three joint ventures are expected to supply the gas requirement for the project for the next 221/2 years.

### **Gas Supply Contract Quantities:**

The joint venture will supply a total of 302.17 billion standard cubic metres (BSCM) of feed-gas required for the NLNG's three trains. The feed-gas for the three trains will be a combination of associated and non-associated gas. When NLNG's train three becomes fully operational, a total of about 41.83 million standard cubic metres will be required by the plant daily.

### **Licenses and Leases.**

There are two types of licenses issued to oil producers in Nigeria namely: the Oil Prospecting License (OPL) and the Oil Mining License (OML) with validity periods ranging from 5 to 20 years respectively.

As at February 1999, there were a total of 48 OML's and OPL's issued mainly to Joint Ventures with government participation.