

### **Reactivation Program for Marginal Fields**

The second round of bidding for service contracts to manage inactive fields was completed in 1993 with five companies and four consortiums awarded contracts for nine of the 13 reactivated units. One of the contracts was awarded to a Canadian led consortium made up of Norcen International, Perez Companac of Argentina and Corod of Venezuela for the Oritupano-Leona unit in northeast Venezuela. Another round of bidding has just started for two more units that were not successfully contracted in the second round. Strong interest has already been shown by several Canadian firms for the Colon and Falcon West units. Bidding for these units is restricted only to those companies or groups that pre-qualified during the second round. Contracts are expected by March or April 1994.

### **Refining and Environmental Expenditures**

In refining, PDVSA will complete upgrading projects at the Amuay, Cardon and El Palito refineries, raising processing capacity in Venezuela and Curacao (Isla Refinery) from 1.1 million b/d in 1992 to 1.2 million b/d by 2002. Although this increase is small in volume terms, the upgraded and modernized refineries will have notably higher quality and higher-value product slates than today and be able to handle more heavy crudes. PSVSA is also seeking joint-venture partners for a planned new refinery for eastern Venezuela at Jose, which would handle heavy and extra heavy crudes. In December, Venezuela was hit badly by a decision of the U.S. EPA requiring foreign refiners to use the 1990 U.S. industry average for pollutants in reformulated gasoline between 1995 and 1997 which will cost Venezuela U.S.\$150 million over the next three years.

Significant expenditure is being planned for environmental associated improvements (over \$800 million over 5 years) including oil spill cleanup technology, pollution control equipment and services, preventative maintenance programs and treatment and disposal of effluent in refineries and petrochemical plants etc.

### **Liquified Natural Gas Project**

Another major international strategic partnership approved by the Venezuelan Congress last year is for the development of a huge \$5.6 billion project to produce natural gas from offshore fields in northeastern Venezuela, build a liquefaction plant on the Paria Peninsula, acquire a tanker fleet and market around 6 million metric tons per year of LNG to clients in the U.S. and Europe. International partners in the Cristobal Colon project are Lagoven, Royal Dutch Shell, Exxon and Mitsubishi. The project is still in the feasibility stage and major developments which are still pending depend to a large degree on gas supply, secure markets and firm natural gas pricing.