

Growth platform

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I envisage that, sometime in the next decade, visitors to the observation deck of an offshore platform will have a view vastly different from what it is today. In the distance, other platforms, extracting both natural gas and oil from more recently developed fields, will dot the horizon.

Further toward land, unseen pipelines fork across the sea floor, reaching towards all areas of the Philippines. On land, power plants, fuelled by natural gas, spin out electricity to an ever-hungrier grid. Fleets of buses and trucks will also be fuelled by natural gas. In other areas of the country, smaller land-based fields, as well as LNG terminals that receive shipments of local and imported gas products, will feed an extensive pipeline system that brings their product further inland, to smaller power plants, fuelling stations, industrial parks, office buildings and even residential subdivisions.

Today, the Malampaya platform stands alone, and the first of many cubic feet of gas begins seeping towards the Tabangao landing, this vision seems far away.

The birth of an industry

On 16 October 2001 the Malampaya natural gas reservoir, located offshore Palawan Province (Western Philippines), was officially inaugurated, making it one of the most significant dates in Philippine history.

The Malampaya project is considered the single largest investment in the Philippines to date, with a total direct investment amounting to over \$4.5 billion, vividly illustrating the Philippine Government's commitment to actively encouraging and supporting private sector activities.

The Malampaya natural gas reservoir will transport about 145 billion cubic feet (BCF) of gas annually from Palawan to Luzon through a 504-kilometer, 24-inch gas pipeline. Initially, this gas will fuel three base-load power plants with a total capacity of 2,700MW located in the Batangas province.

Two of these power plants ? the 1,000MW Sta. Rita and the 500MW San Lorenzo ? will be owned and operated by the Philippine's First Gas Power Corp., a private firm. Sta. Rita is expected to commence commercial operations by 1 January 2001 while the San Lorenzo facility will come on-stream by 2003.

The state-owned National Power Corp. (NAPOCOR) owns the third, the 1,200MW Ilijan Plant that was commissioned under a build-operate-transfer (BOT) scheme. A consortium led by Korea Power Corp., Mirant Philippines, Kyushu Electric Corp. and Mitsubishi Corp will operate the plant. Ilijan is currently undergoing testing and is expected to begin supplying power to the grid early next year.

By 2004, through these three plants, Malampaya natural gas is expected to provide about 16% of the Philippine electricity requirements, displacing about 26 billion barrels of fuel oil currently imported for the purpose of power generation.

Securitization of Malampaya cashflows

The Philippine government expects to earn approximately \$8.1 billion in royalties from the Malampaya project over the

next 20 years. In order to realize some of this value upfront, the government is considering securitizing up to \$500 million of this cashflow sometime next year.

A joint committee formed by the Department of Energy (DoE) and the Department of Finance (DoF) is currently evaluating the best means to achieve this and which financial institutions are best placed to conduct this exercise.

Opportunities in oil and natural gas exploration

The benefits gained from the discovery of commercial qualities of natural gas, however, do not end there. The Philippines has often been unfairly perceived as lacking hydrocarbon potential. The Malampaya project – with its 4 trillion cubic feet (TCF) reservoir – through its successful commercial development will change this perception for good.

With the discovery and development of further potential reservoirs (see below), the Philippines is now poised to join its neighbors as a significant hydrocarbon producing country.

Studies conducted by the DoE have shown that the country has 13 major tertiary sedimentary basins of varying oil and/or gas potential, hydrocarbon types and exploration maturity. This testifies to the country's vast hydrocarbon resources that are as yet untapped.

For example, a Philippine-led consortium is currently drilling for natural gas in the Victoria Tarlac basin (North of Metro Manila). As of press time, the rig has drilled through 3,000 feet and they are conducting bore hole logging to delineate possible zones for well testing.

In order to encourage further exploration and development, the Philippine government, through the DoE, has initiated what is known as the "Window of Opportunity". This program offers the most beneficial exploration and development service contract terms in the ASEAN region. This incentive package, which covers a three-year period beginning June 2000, aims to conserve and re-direct exploration efforts to identified high potential areas – the "corridor of focus".

This corridor comprises more prospective fields near the Malampaya gas infrastructure, as well as other identified high-potential areas in the country. The Philippine government also recognizes that exploration activities are capital intensive and inherently high-risk. Through this program the service fee has been limited to only 40% of net proceeds.

Further, exploration cost reimbursement will be allowed (up to 70% of the gross proceeds per year) and will be taken out of the government's share of the proceeds. The developer is also exempted from payments of all forms of taxes and duties for importation of material and equipment for petroleum operations.

Opportunities to participate in downstream natural gas development

Concurrent to further exploration and development of the gas fields, the blueprint for the downstream market is also being set in place. The President herself, Gloria Macapagal-Arroyo, has made it clear that her administration is fully committed to the development of the natural gas industry.

She has done so by laying down a specific agenda:

- 1) Fast-track an open bidding for the construction of a land-based gas pipeline to complement the Malampaya gas project. This land-based gas pipeline will run from Tabangao, Batangas to a gas-fired power plant in Metro Manila. This will develop further downstream use of natural gas along the route of the pipeline. This also opens up access to the Metro Manila market (the largest in the Philippines), allowing access to natural gas for residential, industrial and commercial use.

The DoE has been instructed to encourage investors, both local and international, to create a consortium that will jointly undertake the construction of the onshore pipeline and the gas-fired power plant in Metro Manila. The total cost of the pipeline project is estimated to be \$60-80 million.

- 2) The development of an LNG receiving terminal in Bataan province, north of Metro Manila, is also a priority. This terminal will be used as a receiving site for imported natural gas, initially supplying power plants in the area and

eventually extending its own pipeline south to link up with the Bataan pipeline, bolstering the security of supply of Natural Gas.

This will allow for the simultaneous development of the retail market for the North of Metro Manila as well. As an anchor for this, the DOE is currently studying gas conversion of various plants in the Bataan peninsula and adjacent areas.

3) With the development of the delivery infrastructure, the Government is aggressive in its initiatives for the use of compressed natural gas (CNG) for transportation to reduce air pollution. This initiative will result in new business opportunities, as fleet, public utility and government service vehicles will be converted into CNG vehicles.

On January 10 the first 100% CNG-fueled bus was tested by DoE and the Philippine National Oil Co.-Energy Development Corp.

4) Development of the industrial and commercial market for Natural Gas will also be encouraged. Again, as the pipelines wind their way toward Metro Manila, numerous opportunities exist for energy service companies to offer chilling, air-conditioning, gas, and other related services to industrial parks, businesses and other built-up areas.

Oil still a major energy source

Natural Gas is not the only indigenous hydrocarbon product that has been found recently in the Philippines. The discovery of significant oil reserves along the Malampaya rim should help alleviate our growing demand for oil as well as encourage further exploratory drillings in the country.

The oil find is expected to be the biggest oil reservoir developed since the 1970s. Current yield has increased from 8,000 to 23,000 barrels per day. The find is timely since, despite the development of a reliable Natural Gas supply system, oil will continue to play a significant role in meeting the Philippines total energy requirements. This is mainly due to its versatility as an energy source.

The current Philippine Energy Plan foresees oil continuing to account for about 40% of the total energy mix. The demand for oil products is expected to grow at an annual rate of 5.9% from 123 million barrels (MB) in 2002 to 206.8 MB in 2010.

The bulk of this demand is expected to come from the transportation sector and other non-power related areas. Growing industrial usage as well as a robust transportation industry is expected to drive the growing demand for oil products in the coming years.

Developments in the downstream oil industry

Following the deregulation of downstream oil industry in 1998 (through the promulgation of Republic Act 8479) the industry has evolved into a truly open and competitive area here the consumers benefit from lower prices and improved service.

Prior to deregulation, only three oil companies (Petron, Shell, and Caltex) were present in the Philippines. At present, four short years after liberalization, over 62 new oil firms have emerged, competing directly, and often successfully, against the big oil companies.

These new players have managed to capture over 10% of the local oil market and more than a 25% market share in the liquefied petroleum gas (LPG) market alone. These include such companies as Totalfina-ELF, Liquigaz, PTT Thailand, and Coastal. Still, the sector remains open for investment and new suppliers are keenly encouraged to enter into the market.

Investor incentives in the downstream oil industry

A clear set of guidelines has been outlined for investors and to ensure their smooth entry into the Philippine market. The Philippine Board of Investments (BoI) has extended a five-year income tax holiday, exemption from taxes and duties on imported spare parts as well as exemption from real property tax, to the domestic and foreign oil companies interested in engaging in the wholesale and retail of petroleum products.

Additional exemptions on payments of contractor's tax and wharfage dues and export tax are also given. Furthermore, the BoI also grants tax credits on domestic capital equipment and allows unrestricted use of imported capital equipment.

The future of the Philippine natural gas industry

The developments in the Philippine oil and gas sector discussed above are only the beginning of a long road. There is much work to be done and, for investors, profits to be made. We are optimistic, though, that we can achieve all these one by one.

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