

Guangdong LNG project

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The Guangdong LNG project is a China National Offshore Oil Corporation (CNOOC) joint venture with BP, and will cost around US\$850 million to build. It consists of a re-gasification terminal and should come into operation in 2005. The company recently signed a supply contract with ALNG for gas supply from the North West Shelf LNG project, which will supply 3 million tonnes of LNG per year to the Guangdong terminal over 20 years.

The project will be constructed in two phases. Phase 1 will cost US\$600 million, with a 3 million tonne per annum (mtpa) capacity is scheduled for completion in May 2006. The plant capacity will rise to 5 mtpa when the US\$250 million phase 2 development comes online in 2008.

Partners in the project include CNOOC (33 per cent shareholding), BP (30 per cent), local Guangdong companies- Shenzhen Investment Holding (14 per cent), Guangdong Electric Power Holding (6 per cent), Guangzhou Gas Company (6 per cent), Dongguan Fuel Industrial General Company (2.5 per cent), Foshan Municipal Gas general company (2.5 per cent), and Hong Kong electricity companies Hong Kong Gas and Hong Kong Electric Holdings hold a 3 per cent share- have a 33 per cent shareholding.

Guangdong: an ever-expanding province

Guangdong is a large, energy-consuming province on the coast of the South China Sea, has a low energy self-supply rate. With a population of 84.62 million in 2000, and a high GDP- US\$141 at the turn of the year- and steadily rising, the dependency on energy is increasing year-on year. With the dependency on a coal-dominant energy structure causing environmental protection issues, Guangdong's government decided to solve this problem by importing LNG to solve its energy needs. The LNG would then be used to power gas-to-power plants in the Guangdong region.

The Chinese government has built or is in the process of building a sequence of large-scale projects aimed at modernizing the area. For the power industry, the No.3 Generator Set of the Zhianjiang Power plant was built, as well as the Second stage engineering of Guangzhou Pumping Storage power station. Changes to infrastructure were also made, with Guangdong's electricity structure constructed and the Rural Electricity Network restructured.

Earlier this year, it approved a proposal to build another LNG-based power plant in Guangdong, which covers two 350MW generating units, in addition to the four already getting built. The combined capacity of the four totals 3500MW by 2005, and can expand to 6650MW by 2010.

Approval for the fifth plant will mean that LNG consumption could rise to 3.7 million tones by 2005.

Planning Guangdong LNG

In 1993, the State Planning Commission started the planning and preliminary feasibility studies for an LNG terminal at Shenzhen. It handed over planning reigns to current owners and operators CNOOC who took the lead and organized the planning and studies at the end of 1995. The subsequent planning report in 1996 named the Pearl River Delta (PRD) as being ideal for the first pilot program. The Government and CNOOC then looked at the siting and pre-feasibility study. By

May 1998, they jointly submitted the Proposal for Guangdong LNG Terminal and Trunkline Project. The Terminal would be constructed at Chengtoujiao on the eastern shore of Dapeng Bay in the east wing of Shenzhen. Plans were put in place for two storage tanks with a 130,000-m3 capacity in Phase 1 and another storage tank of about 100,000 capacity in Stage 2. With regards to the harbour, there is a berth in the harbour to accommodate a LNG carrier of 135,000m3.

A trunkline would run from Shenzhen to Dongguan, Guangzhou, Foshan in Phase 1 that extends to Huizhou, Zhaoqing, Jiangmen, Zhongshan and Zhuhai in Phase 2.

The project would supply gas to power plants in Guangdong, and supply gas directly to Meishi Power Plant (Phase 1) and Desheng and Shakou Power plants (phase 2).

By the end of 1998, the State had agreed to the proposal (after re-edits for reintegrated planning). In April 1999, the Guangdong Provincial Department Planning Commission and CNOOC co-submitted a proposal for the Overall Guangdong LNG Pilot Project. At the end of 1999, the State finally gave Phase 1 the go-ahead.

After a long vetting process, BP was selected as foreign partner for the project in a Joint Venture. A HoA was agreed on 18 April 2001 by BP, Chinese sponsors (including local Guangdong companies Shenzhen Investment Holding, Guangdong Electric Power Holding, Guangzhou Gas Company, Dongguan Fuel Industrial General Company, Foshan Municipal Gas general company, and Hong Kong electricity companies Hong Kong Gas and Hong Kong Electric Holdings).

It was decided that CNOOC would have a 33 per cent shareholding, BP 30 per cent, Shenzhen Investment Holding have 14 per cent, Guangdong Electric Power Holding 6 per cent, Guangzhou Gas Company 6 per cent, Dongguan Fuel Industrial General Company 2.5 per cent, Foshan Municipal Gas general company 2.5 per cent, and Hong Kong electricity companies Hong Kong Gas and Hong Kong Electric Holdings hold a 3 per cent share- have a 33 per cent shareholding in GLNG.

Guangdong LNG Shareholders

CNOOC	33 per cent
BP	30 per cent
Shenzhen Investment Holding	14 per cent
Guangdong Electric Power Holding	6 per cent
Guangzhou Gas	6 per cent
Dongguan Fuel Industrial	6 per cent
Foshan Municipal Gas general company	2.5 per cent
Hong Kong Gas	3 per cent
Hong Kong Electric Holdings	3 per cent

Commercial outlook

Guangdong LNG will supply the extra gas needed to fuel Guangdong’s new power plants: the Meishi Power Plant (Phase 1) and Desheng and Shakou Power plants (phase 2).

With China’s increasing population and demand, a contract with Guangdong LNG would be worth as much politically and economically to any company who could get the contract.

Early on, potential suppliers from Australia, Indonesia, Iran, Malaysia, Qatar, Russia and Yemen threw their hats into the ring for the project.

By January 2002 the list was cut to three by CNOOC, the winner with a lucrative US\$10 billion supply contract for China's first liquefied natural gas (LNG) project.

The three firms included Australia-based LNG, who would get its gas from the North West Shelf, BP, whose gas would come from projects in Indonesia and ExxonMobil-Qatar Petroleum joint venture Ras Laffan in Qatar.

In August 2002 it was the Australians who were celebrating when CNOOC made its decision to award ALNG’s North West

Shelf project as the gas supplier for phase 1 of Guangdong LNG. In the deal, ALNG will supply Guangdong LNG with three mpta of LNG to the Chinese terminal. As part of the agreement, ALNG would give CNOOC support when LNG transportation and tanker building related to the GLNG project. On the reverse side, CNOOC was given the chance to develop natural gas from Australia's North West Shelf, once it comes online in 2005. The estimations are that the first LNG is due to be delivered in 2006. Partners in the North West Shelf gas project include BP, Woodside, Chevron Texaco, Billiton, Japan, and Shell.

In March 2003, the Guangdong partners signed contracts for gas sales with key customers, along with MoUs for LNG shipping arrangements.

EPC Contracts

In June 2003, French/Italian STTS Group was awarded with the new project's EPC contract. Because Guangdong wanted to ensure gas was delivered by the deadline of 1 June 2006, the consortium, in the contract, was required to complete the construction of the receiving terminal and port within 37 months from the date of EPC award.

In the same month, a joint venture comprising of ENI-owned Saipem, together with its fully owned subsidiary Technigaz, and the engineering companies Tecnimont and Sofregaz were given the lump sum turnkey contracts in a deal worth US\$240 million. The joint venture is to work on the overall terminal facilities, site preparation, two LNG storage tanks, the associated marine works and regasification facilities.

Financing

In an effort to seek financing for the project, the project's financial advisor will send a Memorandum of Information to a number of banks in a few weeks (Autumn 2003). In feeders put out earlier this year, interest in the project is said to have been heavy.

No further financial details have been released into the public domain as yet.

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