



PERITUS PERTH KICKS OFF METHANE HYDRATE PRODUCTION TEST DESIGN

Peritus' Perth office was recently awarded the contract for the conceptual design of the 2nd production test of methane hydrates from the Nankai Trough, a project being run by the Japan Oil, Gas and Metals National Corporation, JOGMEC.

The work is a conceptual design for an offshore production test of methane hydrate gas from a deepwater location in the Nankai Trough, off Japan's main island, Honshu. The contract value is over 1 million US Dollars. Peritus was one of five bidders for the study and was successful through the demonstration of its understanding of the business needs and was able to cover the full technology scope with a single integrated team.

JOGMEC is a government-funded entity charged with securing a stable supply of oil and natural gas for Japan, as well as ensuring a stable supply of nonferrous metal and mineral resources. JOGMEC took over the oil and gas role from the former Japan National Oil Corporation in 2004.

The scope of work is for Peritus to prepare a conceptual design and cost estimate for the subsea system, dynamic riser(s) and floating facility to perform the offshore production test over a period from 1-3 months. The objective is for the system to be more operable and more cost-effective than using a drilling rig and drill stem test (DST) type of set up as would typically be used for a short well test period of a number of days.

In 2008 JOGMEC achieved a significant step forward in developing suitable technology for methane gas production from the enormous quantities of buried methane hydrates in the world. In conjunction with researchers from Canada they produced gas over ca. 6 days from an 1100 m well drilled into a methane hydrate reservoir under the permafrost onshore Canada. This was achieved by drawing down the bottomhole pressure by means of an electric submersible pump removing water from the well, allowing the methane hydrate to dissociate to liberate the gas.

The next phase is to prove the production technology on a practical scale, and to acquire additional data by producing methane from a hydrate reservoir under moderately deep water offshore Japan. A DST-type test using a drilling rig is planned for 2013/14, followed by the longer offshore production test in 2014/15. Peritus is performing the engineering for the longer offshore production test. The water depth is in the region of 1000m, and the reservoir depths below the seabed are quite shallow, up to ca. 300 m.

The Peritus team consists of specialists in floating systems, risers, and subsea production. The team leader is Henry Sheil, with Neda Jansepar and Jeremy Gordonnat doing the floating facility and riser systems engineering, respectively, David Kennare, Operations Director is coordinating the topsides and flow assurance work, Henry Sheil is also the lead subsea engineer, and Advanced Well Technologies of Perth are advising on well-engineering matters, in particular sand control. Project sponsor is Thyl Kint, Global Director Floating Systems & Field Development.

The project represents a unique and exciting opportunity for Peritus to be involved from a very early stage in the exploitation of unconventional resources that has the potential to significantly extend the world's sources of gas supplies.

The project commenced in late September 2010 and is due to finish in March 2011