

Feasibility Study for the Gendalo Field – Deepwater (FEED)

Unocal and Eni

Unocal and its partner, Eni, have selected a development concept for the first phase of the Gendalo Field development project, part of the giant deepwater Gendalo-Gandang gas field complex offshore East Kalimantan Indonesia. This is part of the Ganal production sharing contract (PSC) in which Unocal Ganal is the operator. It holds an 80 percent working interest, while Lasmo Ganal Limited, a subsidiary of Eni, holds the remaining 20 percent working interest. Unocal estimates the gross resource potential for the Gendalo-Gandang complex is at least 2.0 to 2.5 trillion cubic feet of gas, plus an associated 50 to 150 million barrels of condensate. The first phase will be designed to produce 250-300 Million Standard Cubic Feet per day (MMscfd) and is targeted for a (Q3) 2007 start up depending on government approvals.

It is proposed that the Gendalo field will be developed utilising, initially, three drill centres with subsea wells in up to 5500 feet sea water (fsw) tied back to a statically moored Floating, Production, Storage and Offloading (FPSO) vessel in 3700 fsw. Processed gas will be exported to the beach.

Penspen scope of work:

Established the overall technical and commercial feasibility of using threaded connectors to joint Steel Catenary Risers (SCRs), flowlines and export pipelines and to install them from a drill rig in up to 6000 feet water depth in the Gendalo field. This is made up of the following activities:

- Compare drill rig based installation with conventional lay methods
- Describe alternative installation methods
- Provide a list of main connector vendors
- Provide a basic list of technical and risk issues (materials, welding and inspections)
- Vessel positioning systems
- Use installation costs to develop usability criteria.

