Consents given under the Petroleum Act 1998 and Reviews under the Assessment of Environmental Effects Regulations 1999

Talisman

South Varg Pipeline Development 22/5b

UK/Norway Median Line (15/12) to the Armada platform in Block 22/5b

Background

The Varg South field is located in Block 15/12 of the Norwegian Continental Shelf (NCS), 4km from the UK boundary. Talisman Energy intend to develop the field for gas and condensate production by means of a double well tie-back to the Armada platform located in Block 22/5b of the UKCS. Subsea infrastructure to be installed includes two subsea production wells and manifold (on the NCS), a single 12” x 9.2km flowline tie-back to Armada, a control umbilical and riser system to Armada. Approximately 5 km of the pipeline will be laid in UK waters. The subsea infrastructure installation is expected to commence in June 2007 and will take place over a two month period.

Varg South reservoir production capacity is estimated to be 4.1 billion m³ gas and 680,000 m³ condensate. The estimated annual average daily production rate for gas is 3.4 million m³ day and 986 m³/day condensate.

Production from the Varg South reservoir is scheduled to begin in October 2007 until 2013.

As the well re-entry and development programme will take place on the NCS, the detailed descriptions of operations and the associated environmental impacts are addressed within the Norwegian EIA which is being reviewed by the Norwegian authorities.

Flowline and umbilical line installation will include trenching and backfill operations (for pipeline only: the trenched umbilical will become naturally covered by sediment over time). Spot rock dumping (maximum 15,000 tonnes) will be carried out as mitigation against potential upheaval buckling.
and interaction with fishing equipment. Dynamic positioning (DP) will be used by installation vessels to minimise the requirement for seabed anchoring operations.

A seabed survey incorporating a survey for any active pockmarks will be carried out along the pipeline route before any subsea infrastructure is installed. The pipeline would then be placed to avoid any active pockmarks that were found.

Produced gas will be exported from Armada and non-exported produced gas will be optimised for use on board Armada as fuel gas. Excess gas will be flared only when this is not possible. There will be minimal additional power supply requirements until 2011, when there will be a need for an additional booster compressor. Until then, existing gas compression/power generation operational efficiencies will be optimised and as such, there will be no significant change under the Offshore Combustion Installation (Prevention & Control of Pollution) Regulations 2001 as a result of Varg South operations.

Armada's existing Produced Water (PW) system capacity can accommodate the additional 50 m3/day from the tie-back to be able to process both condensate and PW at least until late in Varg South's field life. Compliance with OPPC regulations meeting 30mg/kg overboard PW hydrocarbon discharge limits will continue to be met.

**Sensitivities**

The original environmental statement identified a range of potential environmental hazards and outlines proposed mitigation measures, including:

- Physical presence of pipelay vessels
- Pipeline and umbilical installation
- Physical presence of the pipeline and subsea structures
- Pipeline chemicals
- Seabed disturbance
- Atmospheric emissions
- Marine discharges
- Noise emissions
- Accidental oil spills
- Unplanned gas/condensate/chemicals release
- Solid Waste
- Transboundary impacts

Mitigation measures are in place to ensure that impacts are kept to a minimum.

**Recommendation**

The JNCC are content that information regarding the pipeline route, rock dumping volumes and the area of impact along the pipeline be included in the PON15C. Overall the
environmental statement is satisfactory and adequately assesses the potential environmental impacts of the proposed operation. It is recommended that consent is given to the project.