Home Field Index

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

Burlington Resources (Irish Sea) Ltd

RIVERS FIELD DEVELOPMENT

Pursuant to Regulation 5(8) of the above Regulations, the Secretary of State for Trade and Industry gives notice that she is content that the requirements of the above Regulations have been satisfied. Pursuant to Licence P99, consent has been granted to Burlington Resources (Irish Sea) Ltd to the getting of petroleum and the construction of installations in relation to the development of the Rivers field, in accordance with the environmental statement. The consent for the Rivers field took effect from 14/06/02 and shall last until 31/12/14.

Background

Burlington Resources (Irish Sea) Ltd (BRIS) proposes to develop the dry sour gas reserves of the Calder, Crossans and Darwen Fields (collectively known as the Rivers Fields Development) in the eastern Irish Sea. The development will comprise a minimum facilities platform in the Calder Field and subsea facilities in the Crossans and Darwen Fields tied back to the Calder platform.

Gas will be exported by new 50 km pipeline to processing and terminal facilities at Barrow-on-Furness. All pipelines, cable and umbilicals will be trenched. This environmental statement (ES) addresses the offshore development including the pipeline to low water level (47 km), on the west coast of Walney Island. A separate EA is being submitted, as part of a planning application, for the intertidal, Walney Channel and onshore sections of the pipeline and the gas processing facility at Barrow-on-Furnace (Rivers Terminal).

The processed gas will then be routed from the Rivers Terminal to the existing North Morecambe Terminal for further processing and national network distribution. Field life is anticipated to be 15 years, with a peak gas production of 4.124 million cubic metres per day. Three production wells will be drilled at Calder during 2003, and one each at Crossans and Darwen (expected to be in 2007 and 2008, respectively). Selection of drilling rig and exact timing will depend on availability, but will be similar to the ENSCO 85 used by BRIS over the past 18 months in the east Irish Sea.

At Calder, one well will be vertical (914 metres) and the other two highly deviated with a vertical depth of 914 metres and measured length 2,012 metres. The top sections (813 and 600mm) will be drilled conductor-less using seawater with viscous sweeps, with cuttings deposited around the well (114 tonnes per well). The lower hole section with be drilled with WBM (salt saturated polymer mud), with cuttings discharged from the rig (245 tonnes from the vertical well and 559 tonnes from each deviated well); i.e. giving a total of 342 tonnes around the wells and 1363 tonnes from the rig.

Well Testing

Following completion, wells will be tested with flaring over approximately 24 hours of a total of 2.8 million cubic metres of gas with no condensate expected; (see editorial comment 3).

Calder Platform

The 'normally unattended' platform function is primarily to provide surface access for well control, productions operations and maintenance; also providing support and protection for the Calder wellheads and pipeline risers. No process facilities are on the platform. Power will be imported from the neighbouring gas field (CPP1).

Gas Export Pipeline

The sour gas and associated fluids (co-mingled from the 3 fields) will be exported from the Calder Platform to shore via a new 610mm (24 inch) carbon steel gas pipeline, with outer asphalt and concrete coating. The offshore length is 43 kilometres, avoiding existing and proposed infrastructure at South Morecambe and Bains gas Fields, running to the south of the existing 36" CPP1 pipeline, and crossing a single live power cable (interconnector). A methanol carrying line (89 mm) will be piggybacked on the gas pipeline.

Future development of the Crossans and Darwen fields, will involve flowline and umbilical links to the Calder Platform.

All pipelines, cable and umbilicals will be trenched.

Processing at Rivers Terminal

Sour gas with associated liquids will be processed at the Rivers Terminal. Hydrogen sulphide and mercaptans will be removed prior to exporting 'across the fence' to the existing North Morecambe Terminal.

Sensitivities

The ES gives a good overview of environmental conditions, including well referenced descriptions of both offshore and coastal environments, the latter giving good attention to nature conservation issues. The ES identifies no currently protected environmental sites within the immediate area of offshore drilling and the platform. It identifies two potential candidate SACs under the Habitats Regulations, in waters of less than 20 metres but believes these, including the Shell Flat, to be sufficiently distant from the proposed development.

The west coast of England bordering the Irish Sea has innumerable sites and species of conservation interest, including SACs, SPAs, Ramsar sites. The ES gives special attention to such coastal sites. The nearshore zone of the proposed pipeline route, along the west coast of Walney Island has several sensitive features, particularly the possible reefs produced by *Sabellaria spinulosa*.

Potential Environmental Impacts

The ES identifies a wide range of potential environmental hazards, and following a well documented assessment procedure, attempts to focus on key sensitivities, and outline proposed mitigation measures; including:

trenching of the export pipeline (and of lesser significance, flowlines and power cable); discharge of drilling cuttings and spent drilling mud (WBM); footprints of drilling rig and other anchors, and presence of anchor mounds; wider issue of temporary and permanent presence with restrictions on fishing and other shipping; gas flaring during well testing; discharges of hydrotest chemicals from pipeline/flowline commissioning; risk of diesel spillage from the drilling rig or other vessels.

Although the ES indicated that there would be some adverse impact during each phase of the development, long-term impacts were considered negligible. The key issues focus on the pipeline route and installation, especially nearshore. Potential cumulative impacts were also assessed and considered minimal; whilst no transboundary effects were identified.

Recommendation

Overall the environmental statement is satisfactory and adequately assesses the potential environmental impacts of the proposed development. It is recommended that consent is given to the project.