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

Tranche I Lyell Phase II Field Development

Pursuant to Regulation 5(8) of the above Regulations, the Secretary of State for Trade and Industry gives notice that, being content that the requirements of the above Regulations have been satisfied, he has granted a Consent to CNR International (UK) Ltd to the Tranche I Lyell Phase II Field Development in Block 3/2 (hereafter referred to as "the project") subject to CNR International (UK) Ltd conducting operations in respect of the project in accordance with the relevant environmental statement.

Background

The Lyell Field is located in the Northern North Sea in Block 3/2, approximately 150km north-east of the Shetland Islands, in water depths of 143m. The Lyell Field has been in production since 1993 and currently consists of a number of production and water injection wells clustered around a subsea manifold and tied back to the Ninian Southern Platform (NSP). The proposed Lyell Field Phase II Development will upgrade and expand the existing production in two Phases, Tranche I and Tranche II.

Tranche I of the re-development involves the drilling of three new development wells, the sidetracking of an existing well to become a water injection well and the workover of two existing production wells. Production from the new and workover wells will be through the installation of new flowlines to a new subsea manifold, which will be tied back to the original manifold and subsequently produced at the NSP.

A diesel run Power Buoy will be installed to provide power to Electric Submersible Pumps (ESPs) to aid production. The Power Buoy will be secured in place by a cellular reinforced concrete structure approximately 20m x 20m x 7.5m, weighing 2,700 tonnes and designed to resist uplift and lateral forces on the Power Buoy. Diesel will be supplied to the power generators on the Buoy by an 8.6km umbilical from the Ninian North Platform to the Lyell multiphase Booster pump,
a 100m jumper to the new manifold and a further 2km umbilical to the buoy. The diesel supply lines will be trenchled and allowed to naturally backfill.

The high voltage ESP power umbilical will connect to the new manifold for distribution to the five new ESP-aided wells. The umbilical will have a compliant wave type configuration, supported by external buoyancy, to accommodate Power Buoy excursions in heavy weather. On the seabed the line will be conventionally laid, trenched and backfilled for protection.

Sensitivities

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

Installation of the Power Buoy, associated Under-water noise from the Power buoy, Atmospheric emissions, Hydrocarbon spills, Drilling discharges The ES considered these points in detail and CNR provided additional information to clarify certain detail. CNR indicated that the Power buoy would be removed from the Lyell field once the ESPs have failed and production is boosted by gas lift.

Recommendation

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.

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