## Chestnut Field Development 22/2a ES Web Comments

ES Title: Operator: ES Report No:	Development of Chestnut Field Venture Production (North Sea) Limited D/2645/2005
ES Dale.	
Block Nos:	22/2a
Development Type:	Proposal is to use an existing appraisal well & drill a new water injection well to produce oil & gas back to a novel designed cylindrical floating production, storage and offloading facility (SSP300), with oil export via shuttle tanker. A 2km water injection supply pipeline will also be installed.

## Synopsis:

The Chestnut field is situated in UKCS block 22/2a, approximately 220Km north east of Aberdeen in a water depth of 122m at the production well and 118m at the water injection well (situated 2km to the south). Venture proposes to use an existing appraisal well to produce oil & gas but intend to drill a water injection well (WI) to supply reservoir pressure maintenance. It is proposed to drill the WI well in June 2006 using both water based mud (WBM) and oil based mud (OBM) and the operation is expected to last approximately 70 days. An estimated 1270 tonnes of WBM cuttings will be discharged to sea, with OBM cuttings contained & either skipped and shipped ashore or treated offshore using the hammer mill technology.

The SSP 300 will be located over the production well and a 6" production riser, an 8" water injection riser, 4" gas lift riser & a 4.5" umbilical will be installed. The 2Km 8" WI line will be surface laid.

The maximum production of the field is expected to peak at 2,544 m3 oil per day and 266,699 m3 gas per day. Oil will be exported by shuttle tanker and produced gas will be used as fuel gas for power generation, however surplus gas will be flared as the short term life of field and the quanities of gas (peak flaring rate of 182,000 m3/day maximum of 146 million m3 over field of life based on P10) means that provision of gas export is not viable.

The impacts of the proposed operations were assessed and the following potential impacts were identified:- physical presence and seabed disturbance, emissions to air, use of materials and discharges to sea, disposal of solid waste, vibration, noise & light, potential impact from accidental events. However it is concluded that there are sufficient mitigation measures in place to ensure there are no residual significant environmental impacts and there is unlikely to be a significant impact on the receiving environment, and in particular on any potential Annex 1 habitat.

Venture have confirmed that the thermal input of the combustion plant on the SSP300 is below the 50Mw (th) threshold and therefore will not require a permit under the Offshore Combustion Installations (Prevention and Control of Pollution) Regulations 2001(PPC Regulations)

Further information was requested in relation to the gas export, extrapolation of data, produced water re-injection (PWRI) and the implications of the PPC Regulations.

However following the submission of an ES Supplement in August 2005 (ref; CHES-REP-0141) and the provision of additional information on 27 September 2005, we are satisfied that the ES addresses the impacts of the proposed development and overall no significant environmental impacts have been identified.

**Consultees**: The statutory consultees for the ES were the JNCC and FRS.

**JNCC:** JNCC requested further information in relation to gas export, however following the provision of additional information they are content for the project to proceed.

**FRS**: FRS commented that the short field life and the low predicted overall discharges, means impacts will be acceptably localized and therefore had no objections to consent being granted for the proposal.

Public Consultation - No comments were received as a result of public consultation.

Recommendation: The project should be granted consent.