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WEB COMMENTS: Rita Field Development 44/22 - E

ES Title:	Rita Field Development
Operator:	E.ON Ruhrgas UK North Sea Limited
Consultants:	Rudall Blanchard Associates Limited
Field Group (BERR):	London
ES Report No:	D/3981/2008
ES Date:	February 2008
Block No's:	44/22c and 44/21b
Development Type:	Single development well and subsea tied-back.

Project Description

The proposed development is located in Blocks 44/22c and 44/21b in the Southern North Sea, approximately 149 km northeast from Flamborough Head.

The project comprises of:

- The drilling of a single deviated well, using a jack-up rig. Water Based Mud (WBM) will be used wherever possible throughout the operations however it is likely the 12.23" section will use Low Toxicity Oil Based Mud (LTOBM). Rig stabilisation may be required.
- Operations are estimated to last up to 140 days.
- Well clean-up and well testing are planned which is estimated to last approximately 7.2 days. The well test is estimated to last no more than 24 hours with a flow rate of between 75 and 100 MMscfd.
- The well will be connected to Hunter via a 14km, 8" pipeline and umbilical. Pipelay operations are likely to take 14 days, where the pipeline and umbilical will be trenched. Crossing and pipeline protection will be through matting and spot rock dumping.
- Reservoir fluids will be exported via Hunter to Murdoch. Gas will be processed onshore at Theddlethorpe via the CMS pipeline system from Murdoch. The peak gas production rate from Rita is

anticipated to be 75 MMscf/d.

Key Project Activities

The EIA identified the following activities as having the potential to cause an environmental impact:

- Physical presence of rig, including rig stabilisation material of up to 1,500 tonnes.
- Drilling phase, including drilling discharges, chemical discharges, atmospheric emissions, drilling noise;
- Well test emissions;
- The installation of the 14km, 8" subsea tie-back and umbilical and associated pipeline protection.
- Increased production; and
- Accidental hydrocarbon and chemical events.

Key Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- High shipping activity (13-14 vessels per day);
- Low to moderate fishing activity;
- Fish spawning area for mackerel (peak May and July), plaice (peak January and February), sole (peak August), sprat (peak May and June) and Nephrops (peak April and June);
- Nursery area for sprat, Nephrops and whiting;
- Seabird vulnerability is very high to high throughout the year, except for June where vulnerability is moderate;
- White-beaked dolphin and harbour porpoise numbers are moderate, however most sightings occur during the summer months. Harbour porpoise has peak sightings in March;
- **Annex I Habitats:** project is located on the southern edge of the Dogger Bank dSAC. No evidence was found in the vicinity of any other habitats that could be potentially designated for Offshore Natura 2000 habitat;
- **Annex II Species:** Harbour porpoise has been sited in moderate numbers, with peak sightings in March in the proposed development area. No sites have been designated due to the presence of the harbour porpoise in the vicinity of the Rita development.

Key Potential Environmental Impacts

The following potential impacts and mitigation were addressed in the EIA:

- Obstacles to other marine activities during operations - the shortest practical drilling and pipeline installation schedule is proposed. Appropriate communication with shipping and fishing vessels has been planned.
- Seabed disturbance – drilling will directly disturb the seabed as a result of jacking down of the rig. Estimated

area of impact for the spud cans is approximately 0.0003km². Approximately 1,500 of stone may be required for rig stabilisation. This would create 3 small cobble reefs approximately 30m in diameter at the location of each spud can. The spud cans will give an impact area of 0.00138km². Re-colonisation is expected and therefore any impacts are considered to be negligible.

The worst case scenario with respect to drill cuttings is a discharge of 524 tonnes of cuttings discharged at the surface and 171 tonnes discharged directly at the seabed. Modelling indicated that cuttings deposition would reach a maximum of 750m from the wellhead. The overall area affected was calculated to be 0.379km². Drill cuttings are likely to be dispersed and given the small area of deposition compared to the overall % of the Dogger Bank (0.0026%), the disturbance of key sand bank species and the overall sandbank habitat is thought to be minimal.

The total impact area from the pipelay is estimated to 0.28km². In total, a worse case of 70,000 tonnes of rock may be required, covering an area of 0.0224km² for pipeline protection and 4 pipeline crossings. This represents 0.00167% of the total area of the Dogger Bank dSAC.

- Noise – Drilling noise and the noise generated from the pipelay vessels will be the main contributors to increased noise levels. To minimise noise, drilling operations will be kept to the shortest duration possible. In addition, given the transitory nature and low frequency of the noise source, it is unlikely that any significant environmental impact will occur.
- Atmospheric emissions – these will be produced during drilling and pipeline installation operations as a result of power generation onboard the rig, as well as from standby and supply vessels. Modelling shows that emissions will disperse rapidly, however through minimisation of operation time and good maintenance of equipment emissions will be kept to a minimum and any local or transboundary impacts will be negligible. During the well test E.ON will ensure that high combustion efficiency burners are used and that the volume flared is kept to a minimum. Flaring emissions will therefore have negligible impact.

The impact of power generation at the Murdoch platform as a result of Rita will be negligible. No increased flaring will occur at Murdoch as the reservoir fluids will not be processed at Murdoch.

- Marine discharges – the only foreseeable discharges are associated with the proposed drilling and pipeline

testing chemicals. All are CEFAS registered and are not considered to be significantly harmful to the environment.

- Accidental events – The highest risk of a hydrocarbon spill is during bunkering operations, therefore all bunkering operations will only take place in suitable weather conditions, in daylight hours, with a continuous watch present. A number of other control measures are also in place to minimise the risk of spill. E.ON have an approved Oil Spill Contingency Plan (OSCP) and Environmental Procedures Plan (EPP) in place.
- Cumulative Impacts – The cumulative impacts from the proposed drilling and pipelay operations and increased production at Murdoch are negligible due to the extent of existing infrastructure in the area.
- Biodiversity and Protected Habitats – The location of the project is in the vicinity of the Dogger Bank dSAC, but the proposed development is not considered to have an impact on the integrity of the site.
- Protected Species – The Harbour porpoise listed in Annex II to the EU Habitats Directive occur in the area of the proposed project. Operations associated with the project are not considered to have an impact on the Harbour porpoise which may be in the vicinity of the proposed development.

Consultee(s):

The statutory consultees for this project were JNCC and CEFAS. The following comments were made:

JNCC: JNCC asked E.ON to finalise the method of pipelay installation, which was satisfactorily provided by E.ON. On the basis of the information provided they did not believe that the proposed development would significantly affect the marine environment or potential future Natura 2000 sites. Recommendation for approval was issued.

FRS: There are no fisheries related restrictions covering this Block during the proposed works period and overall it was concluded that with the implementation of the proposed mitigation and risk reduction measures, the proposed development would not have a significant impact on the marine environment. Recommendation for approval was issued.

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

Further Information: BERR requested further information regarding quantification of pipeline, rig and rock dumping impacts. In addition confirmation rock dumping quantities

were also requested due to a discrepancy of quantities within the ES and the PWA/Depcon submitted to LED.

E.ON Ruhrgas UK North Sea Limited provided all the additional information requested. All issues were considered satisfactorily amended and clarified.

Conclusion(s): Following consultation and the provision of the additional information, BERR are satisfied that this project is not likely to have a significant impact on the receiving environment, including any sites or species protected under the Habitats Regulations.

Recommendation(s):

On the basis of the information presented within the ES and advice from consultees it is recommended that the ES should be approved.

Webmaster: [Danny Stocker](#)

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