TOTAL EXPLORATION AND PRODUCTION UK LIMITED
ELGIN FIELD INCREASE IN PRODUCTION

Environmental Statement Summary

To: Jonathan Ward
From: Julie Cook
Date: 13 June 2017

<table>
<thead>
<tr>
<th>ES Title:</th>
<th>Elgin Field Production Increase</th>
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<tbody>
<tr>
<td>Operator:</td>
<td>TOTAL Exploration and Production UK Ltd (Total)</td>
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<td>Consultants:</td>
<td>TOTAL Exploration and Production UK Ltd (Total)</td>
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<td>Field Group ():</td>
<td>OGA, Central North Sea</td>
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<tr>
<td>ES Report No:</td>
<td>D/4192/2016</td>
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<tr>
<td>ES Date:</td>
<td>December 2016</td>
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<tr>
<td>Block Nos:</td>
<td>22/30b, 22/30c</td>
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<td>Development Type:</td>
<td>Increase in Production</td>
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**Project Description**

TOTAL Exploration and Production UK Ltd (Total) has submitted an Environmental Statement (ES) to the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) to support an application for an increase in production from the Elgin field during 2017. Following the G4 gas leak at Elgin in 2012, production has gradually been brought back online. An increase in the consented level of production is therefore required, to enable Total to recover the lost production.

The Elgin field is located in Blocks 22/30b and 22/30c, in the Central North Sea, approximately 224 km east of the Scottish mainland and 33 km west of the UK / Norway median line, and in a water depth of approximately 93 metres. The Elgin field is exploited by central processing facilities located on the Elgin Process, Utilities and Quarters (PUQ) platform, which is bridge-linked to two Well Head Platforms (WHPs), Elgin WHP A and Elgin WHP B. The Elgin WHP A produces fluids from both the Elgin and Glenelg reservoirs and the Elgin WHP B currently receives fluids from the West Franklin field. The production from both WHPs is transferred to Elgin PUQ for processing, which also receives production from the Franklin Normally Unattended Installation (NUI).

Production is high pressure high temperature (HPHT) gas and condensate and following processing, the gas is exported via the Shearwater / Elgin Area Line (SEAL) Pipeline System to the Bacton Terminal, and the condensate is exported via the Graben Area Export Line (GAEL) to the Forties Pipeline System and then to the Cruden Bay terminal.

The proposed increase in production exceeds the EIA Directive Annex I thresholds of 500,000 m³ of gas and 500 tonnes of condensate per day, and the new production levels will equate to the maximum processing capacity of the installation. There have been no changes to the processing plant, and there will only be minor changes in chemical use and discharge and produced water discharge. The field is covered by an existing Oil Pollution Emergency Plan (OPEP).
Key Environmental Sensitivities

The Environmental Statement (ES) identified the following environmental sensitivities:

**Fish Stocks:** The Elgin field is located within spawning grounds for cod, lemon sole, Norway pout, mackerel, and sandeels, and within nursery areas for cod, haddock, whiting, ling, European hake, Norway pout, blue whiting, plaice, mackerel, herring, sandeels, anglerfish and spurdog.

**Seabirds:** Seabird vulnerability is very high in January and November, high in July, September, October and December, and moderate to low for the remainder of the year.

**Annex I Habitats:** No Annex I habitats have been identified in the vicinity of the Elgin field.

**Annex II Species:** Atlantic white-sided dolphin, white-beaked dolphins, killer whales and long-finned pilot whales have been recorded in the general area, with most frequent observations between May and September. Grey and harbour seals are unlikely to be present in large numbers because of the distance from their haul-out sites.

**Protected Sites:** The nearest Special Area of Conservation (SAC) is the Scanner Pockmarks located 150 km to the north. The nearest Marine Protected Area (MPA) is the East Gannet and Montrose Nature Conservation MPA which is located 14 km to the west of the Elgin field. The Fulmar recommended MCZ is located approximately 44 km to the south.

**Other Users of the Sea:** Fishing effort is low throughout the year. Landings are primarily demersal species, including haddock and Nephrops. The area is categorised as low shipping density.

Key Potential Environmental Impacts

The ES identified the following key potential environmental impacts:

**Atmospheric emissions:** The main sources of atmospheric emissions will be from the existing platform power generation and flaring activities, and from periodic supply vessel and helicopter traffic, and no significant increases in impacts are anticipated.

**Marine discharges:** Changes to production chemical use and discharge are expected to be limited. Produced water volumes are expected to increase in proportion to the increase in production. In both cases, no increases in impacts are anticipated.

**Physical presence:** No impacts have been identified as there are no changes to the existing installation.

**Physical disturbance:** No impacts have been identified as no new infrastructure is being installed.

**Noise:** No significant sound impacts have been identified.

**Cumulative effects:** There are no anticipated cumulative impacts that are determined to be significant in a regional context.
**Accidental events:** Control measures will be in place to minimise the risk of accidental event, and the procedures to respond to any hydrocarbon spills are detailed in the existing OPEP.

**Transboundary effects:** The increases in emissions and discharges are not anticipated to result in any significant transboundary effects. In the event of a significant spill that crosses the median line, Total would liaise directly with the Norwegian authorities and UK Government would be fully briefed so that it could decide whether the NORBRIT Agreement should be implemented.

**Consultation**

**Consultee(s):** The Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Health and Safety Executive (HSE), the Maritime and Coastguard Agency (MCA), the Ministry of Defence (MoD) and the Northern Lighthouse Board (NLB) were consulted on the proposals, and no objections were received.

**Public Consultation:** The ES was subject to Public Notice, but no comments were received.

**Further Information**

Issues identified by consultees and during the OPRED review were communicated to Total, and a response was received on 5th June 2017 that adequately addressed the issues.

**Conclusions**

Following consultation and the provision of additional information, OPRED is satisfied that the project is not likely to have a significant impact on the receiving environment, including any sites or species protected under the Habitats Regulations or on other users of the sea.

**Recommendation**

On the basis of the information presented within the ES, the advice received from consultees and the provision of further information by Total, it is recommended that the ES should be accepted and the OGA should be advised that there are no objections to issuing consent for the proposed production increase.

**Mitigation and Environmental Conditions**

There are no specific mitigation or environmental conditions directly related to the proposals that need to be attached to the OGA consent.

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**Jonathan Ward**

Date 30/06/2017

Director, Offshore Environment Unit

Offshore Petroleum Regulator for Environment and Decommissioning