

Environmental Statement (ES) Summary and Sign-Off

Title:	Elgin Franklin Further Development Environmental Statement
Operator:	Total E&P UK Limited (TEPUK)
Report No:	D/4111/2011
Submission Date:	April 2011
Block No:	29/30, 29/04 and 29/05
Development Type:	Amended Field Development
Reviewer:	Julie Cook
Date:	31 January 2012

A) Project Description

The Elgin Franklin Further Development Project involves the installation and commissioning of an additional wellhead platform (WHP B), adjacent to the Elgin production utilities and quarters platform (Elgin PUQ); increased production from the Elgin and Glenelg Fields; and modification of the West Franklin Phase 2 pipeline route from the existing Elgin WHP A platform to WHP B. The additional WHP B platform will be bridge linked to the WHP A platform, and will support a number of additional production wells (up to 9 slots will be available). The WHP B platform will also act as host for the West Franklin Phase 2 production when it comes on line.

The Elgin Complex is located in blocks 22/30c and 22/30b, approximately 225 km from the Scottish coast and 33 km from the UK/Norway median line, and approximately 6 km to the north west of the West Franklin Field located in block 29/05c.

Installation and commissioning of the new offshore facilities will begin in 2011 and continue until mid 2013, with first production via the WHP B platform, including West Franklin Phase 2 production, expected in Q4 2013. Gas production from the Elgin Field will increase from 3,880 thousand m³/d to a maximum of 4,616 thousand m³/d, but condensate production is anticipated to steadily decline. Gas production from the Glenelg Field will increase from 119 thousand m³/d to a maximum of 705 thousand m³/d, and condensate production is anticipated to increase from 0.098 thousand m³/d to a maximum of 0.57 thousand m³/d..

Whether the 6 km pipeline between West Franklin and the Elgin WHP B platform will be a bundle or a conventional pipeline system has still to be decided. A bundle option would be installed directly onto the seabed, without any requirement for additional protection. A conventional pipeline system would probably require two trenches for the production pipeline, umbilical and power cable, and some post-lay rock dumping. Tie in spools on the approaches to the Elgin WHP B and the West Franklin WHP will be matted for protection.

All of the proposed facilities and activities will be the subject of an approved Oil Pollution Emergency Plan (OPEP).

B) Key Environmental Sensitivities

The EIA identified the following key environmental sensitivities:

- Fishery stocks: The area is within spawning grounds for Mackerel (May to August), Lemon Sole (April to September) and Norway Pout (January to April), and nursery areas for Haddock and Norway Pout;
- Seabirds: Seabird vulnerability is high in January and November and moderate to low for the rest of the year;
- Annex I Habitats: There are no designated Annex I habitats within the area;
- Annex II Species: Harbour porpoise, bottlenose dolphin and grey seals (infrequently and in small numbers) are found in the area;
- Other users of the sea: The Elgin Franklin Development is located within ICES rectangles 42F1 and 43F1, where total fishing effort is comparatively low. Shipping traffic in the area is moderate.

C) Key Environmental Impacts

The EIA identified the following potential impacts and related mitigation measures:

Physical interference: The installation of the platform, the jack-up drilling rig and the proposed pipeline could interfere with other users of the sea. However, appropriate mitigation measures will be put in place to prevent any interference, including 500 m safety zones and the issue of Kingfisher Bulletins and Notices to Mariners. The area has relatively low fishing activity and moderate shipping activity, and any impact on other users of the sea is therefore expected to be negligible.

Seabed disturbance: A number of the proposed activities will impact the seabed, the most significant being the installation of the platform, the spud cans of the drilling rig, the cuttings discharges relating to the drilling activities, and the installation of the proposed pipeline (which could involve trenching and backfill operations). However, the area of seabed that will be directly impacted by these operations will be limited, and any impacts on the benthic communities are therefore anticipated to be very localised and insignificant.

Noise: Noise will be generated during various activities, including piling operations during platform installation, drilling operations, pipeline installation operations and vessel movements. With the exception of the piling operations, noise levels are not expected to significantly exceed normal background levels in the area, and the piling operations will be of short duration and undertaken in accordance with the JNCC guidelines. The noise is therefore unlikely to result in injury or significant disturbance of European Protected Species.

Atmospheric emissions: There will be additional emissions associated with the proposed operations, e.g. marine vessel activities during installation and commissioning, drilling rig operations and flaring of well-bore cleanup fluids. However, there will be no well testing, and flaring will be minimised as far as possible. There will also be no changes to the existing power generation equipment on the Elgin PUQ platform, and no new power generation facilities on the WHP B platform. Although the atmospheric emissions will contribute towards global greenhouse emissions, they are expected to disperse rapidly in the offshore environment and it is not anticipated that there will be any significant impact on local, regional or global air quality.

Marine discharges: Drilling discharges will be restricted to cuttings and associated Water

Based Mud (WBM) during the drilling of the top-hole sections of the wells; and effluent from the Rotomill[®] treatment of the cuttings and associated Low Toxicity Oil Based Mud (LTOBM) during the drilling of the lower sections of the wells. Operational discharges of produced water are anticipated to decrease as a result of the improved field performance, and will be treated to maintain the current dispersed oil in water content of 15 mg/l. The selection of chemicals for the drilling and production phases, and for the pipeline commissioning, will take account of the requirement to minimise the environmental impact, and chemical use will be monitored on a daily basis. Further chemical risk assessments will be undertaken in subsequent chemical permit applications.

Accidental events: All the proposed operations will be covered by an Oil Pollution Emergency Plan, and a number of control measures will be in place to minimise the risk of accidental events. Modelling of worst-case scenarios has been undertaken for a 216,471 m³ spill resulting from a well blow-out, a 500 m³ spill from the export pipeline, and a 1,400 m³ spill of diesel from the drilling rig.

Cumulative Impacts: The area of the proposed development includes a range of oil and gas operations, in addition to limited shipping and commercial fishing operations. However, it is considered unlikely that the development will have a significant effect in combination with other projects.

Transboundary Impacts: The UK / Norway median line is approximately 33 km from the development area. No transboundary impacts are likely as a result of operational activities, but in the event of a spill entering the waters of adjacent States, it may be necessary to implement the relevant bilateral contingency plan arrangements, e.g. the NORBRIT Agreement, the Norway-UK Joint Contingency Plan.

D) Consultation

Comments were received from the Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Maritime and Coastguard Agency (MCA), the Ministry of Defence (MoD) and the Northern Lighthouse Board (NLB). The Environmental Statement (ES) was also subject to public notice.

JNCC: JNCC requested additional information in relation to the spill modelling. Following the provision of additional information, JNCC confirmed that they were content for the ES to be accepted, but requested that Total should undertake the piling operations in compliance with the revised JNCC guidelines.

MS: MS requested additional information on seabed bathymetry and fish populations. Following the provision of additional information, MS confirmed that they were content for the ES to be accepted.

MCA: MCA confirmed that they had no objections.

MoD: MoD confirmed that they had no objections.

NLB: NLB advised that the permanent infrastructure must be communicated to the UK Hydrographic Office. to ensure that all relevant Admiralty Charts are updated.

Public Notice: No comments were received in response to the public notice.

E) Further Information

Further information was requested from Total to address the issues raised by JNCC and MS, and issues raised during the internal DECC review. The issues included clarifications relating to the seabed bathymetry, the fish populations, the spill modelling and the pipeline system. Additional information was provided by Total on 21 December 2011, which adequately addressed the outstanding issues.

F) Conclusion

Following consultation and the provision of further information, DECC OED is satisfied that this project will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected sites or species or other users of the sea.

G) Recommendation

On the basis of the information presented within the ES and advice received from consultees, DECC OED is content that there are no environmental or navigational objections to approval of the proposals, and has advised DECC LED that there are no objections to the grant of the relevant consents.

Approved : Jim Campbell - Director, DECC Energy Development Unit

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Date: 08 February 2012.....