# Harbour Energy comments in respect of Document Reference 9.59.4 Rev 02 – Volume 9 The Applicant's Response to Spirit Energy's Deadline 4 Submission Appendix D: Impact on Decommissioning of Gas Production Facilities (REP5a-054)

#### **Executive Summary**:

From Harbour Energy's perspective, the impact of the Morecambe Offshore Windfarm (MOWF) on the Calder decommissioning has been linked to a disruption of helicopter availability such that the decommissioning project is extended. The schedule extension results in a significant cost to Harbour Energy.

The Xodus report fails to adequately address and recognise the economic impact from the loss of flights and extension to the decommissioning of Calder due to the proximity of the windfarm. The Xodus report views the flight disruption as a "minor impact" that could be managed by the project and furthermore states that the cost impact of flight delays is "grossly exaggerated". Xodus relies on "norms" and does not consider the challenges of operating in the EIS. Harbour Energy does not agree with these assertions and furthermore emphasises that the cost impact associated with the windfarm proximity during decommissioning will add £3-8m to the cost of decommisioning Calder.

## Financial Impact on Harbour Energy's Decommissioning Project Costs:

As stated in Section 6.3 and summarised in the Executive Summary: "There is no basis to reason that the presence of the windfarm will have a significant impact on decommissioning costs, the cost impact figures put forward by Harbour Energy are grossly exaggerated."

The basis of the above statement is that delays in crew changes will not impact work, as work will continue until the crew change materialises (Section 5.3 Schedule Risks; Section 6.3.2 Well P&A). That personnel supporting the cleaning & flushing on the topsides are not schedule critical (Section 6.3.1 Post COP). Although there is recognition that specialist vendors will incur additional personnel costs with the vendor. That flight deferrals are to be managed, and should the windfarm cause the deferral, it is a "minor additional factor to be managed" (Section 5.3 Decommissioning Schedule Risks).

#### **Harbour Energy Response:**

Although the principles stated are correct, they are not valid in the East Irish Sea where there is significant constraint on the availability of vessels, helicopters and equipment. Helicopter availability is a key concern in the East Irish Sea and the current model for the operation is based on sharing a helicopter with other operations in the UKCS, which would significantly impact the ability to have unlimited access to helicopters. A delay on helicopter access in the area where there is tight availability, particularly in decommissioning project operations that rely on specialists and non-routine personnel, will extend the project. Extending the project, extends the vessel duration and thereby costs incurred by Harbour Energy. These are calculated to be in the region of  $\mathfrak{L}3$ -8m for Calder (not the  $\mathfrak{L}3$ -10m as mis-quoted by Xodus in Section 7.5). The range in cost reflects the uncertainty as to the time year at which the activities take place.

### EIS cost "norms" incorrect:

Xodus provided an indicative summary of costs and schedules based on "industry norms" in Section 7.4. Harbour Energy's recent experience in the EIS is significantly different to the quoted norms due to the logistical constraints, making vessel and aviation availability more challenging compared to the UKCS "norms". Additionally, the "norms" illustrated for Calder decommissioning costs are much lower than recent well P&A costs (approximately half). Since the cost and schedules used by Xodus are not reflective of actual activity, it is not clear how their assessment of the cost impact upon operations caused by the windfarm proximity would be accurate.

# **General Observation on the report**

The following statements have been noted as being Inaccurate:

- Emergency Evacuation of the Rig (jack-up) incorrectly characterised, although no impact on cost:
  - o In the Executive Summary it is stated that ("...The conclusions of the DNV report [9] that there will be no impact on emergency evacuation and escape from either CPC1 or any of the NUIs are applicable to people located on a platform during the decommissioning phase. In the event of an emergency when there is a jack-up rig or Heavy Lift Vessel in the field there is sea room to the North of CPC1 and the West of Calder to allow the vessel master to stand-off....."). Emergency Evacuation procedures for a jack-up are unlikely to involve moving the vessel but rather demanning through marine vessels and helicopters.
- Crew change methodology incorrectly assumed:
  - o In the Executive Summary it is stated that ("Jack-up rigs, heavy lift vessels and barges will have unrestricted access from the north CPC1 and the west of Calder providing an opportunity to under crew change and decommissioning activities with no impact from the windfarm..."), Whilst vessels will be able to access Calder to perform decommissioning activities (as stated), crew changes (particularly for the jack-up rig) will occur by helicopter and will be impacted by the proximity of the windfarm.
- Critical Maintenance does not cease on CoP:
  - o In the Executive Summary and in Section 6.3.1 "Post COP" it is stated that ("... After Cease of Production, production critical maintenance and flights to NUIs for production resets will no longer be required...."). Critical maintenance post CoP is stated as being no longer required after CoP. This is not the case, critical maintenance will be required until the hydrocarbons/ MAH are reduced by the elimination of hydrocarbons from the wells, topsides and pipelines. In the case of Calder, as stated by Xodus, the project execution to deliver hydrocarbon free status and including to plug and abandon the wells will likely occur soon after CoP, but this is heavily dependent on constrained vessel and logistics availability in the EIS.
- Cessation of Production is not agreed in the Decommissioning Programme:
  - Section 3.4 "Production Extension": The statement that cessation of production dates submitted in a Decommissioning Programme can be extended is incorrect.
    Cessation of Production dates may be indicated on a Decommissioning

Programme, but OPRED does not agree the date as part of the Decommissioning Programme approval. Furthermore, there is no link between the Environmental Impact Assessment (EIA) and the Cessation of Production date.