PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (APPLICATIONS: PRESCRIBED FORMS AND PROCEDURE) REGULATIONS 2009

The Morecambe Offshore Windfarm Generation Assets

Summary of Written Representation of Spirit Energy Production UK Limited

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EN010121
Unique Reference: 20049981

Date	26 November 2024

1. **Introduction**

1.1 'Spirit Energy' is the trading name used by Spirit Energy Limited and its subsidiaries, including Spirit Energy Production UK Limited, a group which collectively conducts European oil and gas operations.

1.2 We are instructed by Spirit Energy (**Spirit**) in relation to the proposed development consent order application (the **Application**) made by Morecambe Offshore Windfarm Ltd (the **Applicant**) for the proposed Morecambe Offshore Windfarm Generation Assets (the **Project**).

1.3 Further to Spirit's Relevant Representation [**RR-077**] (**RR**) which provided background to Spirit's assets and operations, the Written Representation comprises an update on the status of Spirit's objection and further information to inform the Examining Authority's understanding of Spirit's concerns.

1.4 This is a summary of the Written Representation by Spirit Energy. This document must be read in conjunction with the full details set out therein.

1.5 Spirit maintains its objection to the Application in its current form.

2. **Aviation**

2.1 Following submission of Spirit's RR, and as specified at paragraph 5.5 and 5.44 of the RR, AviateQ has now carried out an updated assessment that draws on input from NHV, the operator of the helicopters that fly to and from the Affected Assets, and assesses the impact on helicopter flying operations assuming turbine tip heights of up to 310 metres (the Updated AviateQ Report).

2.2 The Updated AviateQ Report is enclosed at Appendix A of the Written Representation.

Acceptable buffer (Visual Flight Rules (**VFR**))

2.3 The assessment work carried out by AviateQ, as summarised at paragraphs 5.7 and 5.8 of Spirit's RR [RR-077], has already demonstrated that a 1.5nm buffer proposed by the Applicant is inadequate.

2.4 The Updated AviateQ Report demonstrates that, for the AW169 helicopter, there must be at least 1.9nm of unobstructed airspace when operating in VFR between wind turbines and any part of the Affected Assets.

2.5 At least 1.9nm would be the minimum safe distance in order to:

2.5.1 For arrival: ensure the helicopter positioning into the wind onto the Final Approach Sector and thereafter performing a stabilised landing onto the helideck. See Figure 8 of the Updated AviateQ Report.

2.5.2 For departure: accommodate an engine failure on departure from a helideck, accommodate an OEI climb to 500 feet in VFR as well as the turn away from the turbine array. See Figure 7A of the Updated AviateQ Report.

2.6 There are no operational mitigations which overcome the requirement of buffers for safe helicopter access and egress whilst maintaining compliance with regulatory requirements. Accordingly physical mitigation is required by increasing the distance between the turbines and the Affected Assets.

Acceptable Buffer (Instrument Flying Rules (**IFR**))

2.7 The Updated AviateQ Report identifies that the One Engine Inoperative (OEI) take off profile previously considered had omitted to include the level of acceleration period required from take-off safety speed to achieve the best rate of climb speed required for the AW169

helicopter airframe. This has resulted in a change from the minimum distance of 3.3nm to an updated minimum distance of 3.9nm from existing infrastructure for IFR flying.

2.8 The Examining Authority is directed to Figure 14A and pages 26 to 28, and page 31 of the Updated AviateQ Report for further technical justification.

Analysis of Buffer Zones

2.9 The appropriate physical distance must be considered in the context of the wider implications of VFR only flying which materially compromises Spirit's operational efficiency with potentially severe safety implications. Consequently, Spirit must retain the ability to fly at night and in restricted weather conditions – which requires operating using IFR.

Impact Analysis

2.10 Spirit's RR stated that if a wind farm was introduced within the minimum 3.3nm distance, then VFR only flying would cause the delays and cancellations to Spirit's Central Processing Complex (CPC) and Normally Unmanned Installations (NUIs).

2.11 Spirit is in the process of preparing an updated impact analysis and is committed to sharing this with the Examining Authority (and the Applicant) as soon as it is available. Initial work indicates that the conclusions of the impact analysis would still differ from those identified by the Applicant, with much more severe implications for Spirit's operations.

2.12 The Applicant has applied assumptions that are not a true representation of Spirit's aviation operations in the East Irish Sea. A summary of the way Spirit operates is illustrated at Appendix B to the Written Representation.

2.13 The precise extent of impacts is the subject of further assessment and discussion between the parties, but it is clear that there will still be a material impact in terms of delays and cancellations to flights affecting transportation, emergency evacuation and non-emergency downmanning risks.

3. Shipping and navigation

3.1 Spirit maintains its shipping and navigation related concerns expressed in its RR.

3.2 A review of the effectiveness of Collision Risk Management and REWS system was undertaken together with site-specific inputs for the Morecambe Hub Installations, including the emergency response and rescue vehicle (ERRV) procedures. The rates disclosed in the Written Representation reflect the fact that a drifting collision is generally a low probability event. However, when considered as a risk to people, a small collision risk can translate into a significant increase to individual risk to an already highly exposed workforce. The Applicant has not provided a comparable annual collision frequency evaluation.

3.3 With the traffic patterns in the East Irish Sea expected to change as a direct result of the Project, Spirit requests that the Applicant conducts a similar Vessel Collision Risk Assessment with up-to-date data accounting for the introduction of the proposed wind farm with further periodical re-evaluations. As the changes are required as a consequence of the Project, the costs for the updated analysis must be borne by the Applicant.

3.4 Calder 110/7a platform, located 0.9km to the western boundary of the windfarm site has an Aids to Navigation (AtoNs) marking with a white light displaying morse 'U'. Spirit is the duty holder and is obliged to maintain the offshore AtoNs and provide collision guard cover during the AtoNs non-availability and servicing period.

3.5 New limitations being imposed on the REWS system as a consequence of the Project would mean Spirit could no longer use the ERRV as guard vessel cover. This will necessitate Spirit contracting an additional guard vessel. Costs for the contracting guard vessel must be borne by the Applicant.

4. Well Interventions

4.1 Spirit is obliged as part of its Monitoring Plan to monitor the area for potential leakage of CO_2 from the wells and secure mitigation arrangements in its Corrective Measures Plan to address any CO_2 leakage that may occur. It is not clear whether Spirit will be left with enough space between turbines for the exclusion zones to perform well survey and intervention activities.

5. Radar Early Warning Systems

5.1 The Applicant has attempted to assess the impact of the Project on REWS within Appendix 17.2 of its ES (PINS Document Reference: 5.2.17.2). Spirit's technical team has identified a number of incorrect assumptions which are considered to undermine the assessment and the extent of likely impacts on Spirit's REWS system, and consequently the safety of its installation.

6. MNZ

6.1 Spirit is obliged to carry out specific activities pursuant to its CS010 Licence issued by the North Sea Transition Authority (NSTA).

6.2 As the operator, Spirit is expected to ensure that the front end preparation will secure maximum value to the CCUS project. This includes studying the project options to identify the optimised development. The front end preparation has identified effects of the Project on the CS010 development options relating to pipeline routing, offshore facilities design, access to the offshore facilities and offshore survey work.

7. Decommissioning

7.1 Spirit retains serious concerns regarding the Project's implications on the ability to perform safe and efficient decommissioning activities throughout the East Irish Sea, in accordance with its Seaward Production Licences with references P.251 (6 July 1976), P.1483 (13 June 2007) and P.153 (10 July 1972) (SPLs) and the Petroleum Act 1998.

8. Supplementary Figures

8.1 Spirit has prepared Figures 1 and 2 of Appendix C to its Written Representation showing offshore infrastructure in proximation to Spirit's assets in the East Irish Sea, and a visual indication of the measures requested in its Written Representation.

9. Design Parameters

9.1 Spirit is concerned by differences between design parameters in the Applicant's submissions, detailed in Spirit's Written Representation.

10. Status of negotiations

10.1 Spirit is progressing negotiations with the Applicant on protective provisions for all non-aviation related matters including shipping and navigation, MNZ and decommissioning matters.

10.2 With respect to aviation, Spirit has particular concerns regarding the continued safe and efficient operation of helicopter flights to, from and between its offshore installations. Updated analysis from the Applicant is awaited following a meeting between the parties and its respective technical advisors on Thursday 31st October.

10.3 Spirit is engaging with the Applicant on Statements of Common Ground (SoCG).

11. Conclusion

11.1 For the foregoing reasons, Spirit maintains its objection to the Application.