SHEPHERD+WEDDERBURN

RESPONSE TO QUESTIONS OF THE EXAMINING AUTHORITY ON BEHALF OF

(1) BARROW OFFSHORE WIND LIMITED (REF: 20048546) (2) BURBO EXTENSION LTD (REF: 20048544) (3) WALNEY EXTENSION LIMITED (REF: 20048542) (4) MORECAMBE WIND LIMITED (REF: 20048547) (5) WALNEY (UK) OFFSHORE WINDFARMS LIMITED (REF: 20048545) (6) ØRSTED BURBO (UK) LIMITED (REF: 20048543) (THE "ØRSTED IPs")

IN CONNECTION WITH THE Application by Mona Offshore Wind Limited for an Order Granting Development Consent for the Mona Offshore Wind Farm

Introduction

1.1 This document, containing responses to questions of the examining authority [PD-018] ("**ExQ2**"), is provided in accordance with Deadline 5 of the examination timetable for the application by Mona Offshore Wind Farm Limited (the "**Applicant**") for an Order under the Planning Act 2008 (the "**Act**") granting Development Consent for the Mona Offshore Wind Farm (the **"Project**").

1.2 We represent six owners of operational offshore windfarms in the East Irish Sea (as set out relevant representations RR-004, RR-007, RR-047, RR-087, RR-088 and RR-090), who we refer to together as the "**Ørsted IPs**" for the purposes of this document.

1.3 The Ørsted IPs' responses to ExQ2 are set out in the table overleaf. The Ørsted IPs have responded to the following questions, which have been directed towards them:

1.3.1 Q2.6.8 (this response is on behalf of Burbo Extension Limited only);

1.3.2 Q2.19.4;

1.3.3 Q2.19.6;

1.3.4 Q2.19.7; and

1.3.5 Q2.19.8.

Q. No	Question	Response
Q2.6.8	**Land rights/property agreement** Do you agree with the Applicant's account of negotiations with you in its Land Rights Tracker [REP4- 091]. If not, please advise why not.	The interests identified in the Lands Rights Tracker, while formerly held by Burbo Extension Limited, have been transferred to the Offshore Transmission Owner ("**OFTO**"). We understand the Applicant is engaging with the OFTO in respect of these interests.
Q2.19.4	**Wake effects: NPS EN-3 para 2.8.347** Para 2.21 of your [REP4-129] states "we consider there is potential that the level of effect predicted has the potential to impact long term decisions on the future viability of the Ørsted IPs' developments". • For the avoidance of doubt, is it your case that the Proposed Development is likely to affect the future viability of one or more of your existing projects? • If so, provide further explanation as to how a reduction in annual energy production at the level predicted by your preliminary modelling is likely to adversely affect the future viability of the OWF(s).	The Ørsted IPs' do not consider that the Project will impact on the viability of their developments in the short term. However, medium to long term decisions regarding all of the developments must take into account a number of factors, including maintenance and other operational costs compared to energy yield and price. The Ørsted IPs' consider (based on preliminary modelling and other evidence regarding the potential for wake loss between windfarms at the distances at play) that the Proposed Development is likely to have a material impact on their existing projects. The Ørsted IPs consider that extending the lifetime of its existing projects would benefit the UK grid by providing additional green electricity. As no additional consent is required to extend the lifetimes, the decision will hinge on the financial viability of the projects beyond their expected earliest decommissioning date. A material increase of wake impacts as a result of the Applicant Proposed Development could be sufficient to make operations uneconomic post-subsidy for the most marginal assets, making a lifetime extension uneconomical. This would result in the decommissioning of the wind farms without maximising their potential technical life.
Q2.19.6	**Wake effects: submission of modelling**	The Ørsted IPs have submitted the finalised modelling undertaken for them by Wood Thilsted in their Deadline 5 submission. As the results of this modelling have only recently been finalised, the

	Any modelling or analysis, as referred to in para 2.31 of your [REP4-129], should be submitted in full at D5 at the latest in order to enable exploration at ISH6, if necessary. Given the short timescales between D5 and ISH6, the Ørsted IPs are encouraged to consider providing early sight of this analysis to the Applicant with a view to achieving the most productive use of time at ISH6.	Ørsted IPs were not in a position to share this report with the Applicant ahead of DL5. The Ørsted IPs reiterate that they consider it is the Applicant's responsibility to undertake this analysis. This approach is consistent with a recent submission that was made by the Crown Estate in its response to the Examining Authority's Written Questions ExQ1 OG 1.2 in respect of the Outer Dowsing Offshore Wind Farm (Generating Station). The Crown Estate was asked about the 7.5km distance between Round 4 projects and the Frazer-Nash report. The Crown Estate has acknowledged that the inter-farm wake effects can extend beyond the buffer distances and that other factors beyond distance, including prevailing wind direction and wind farm layout, may also be relevant. The Crown Estate went on to state that the location of a wind farm within the leased area is a matter for the developers to decide and design for. In relation to the Frazer-Nash study, the Crown Estate stated that *"The report summarises modelling applied to generic/hypothetical wind farms and does not replace the need for project-specific analysis."* We annex a copy of the whole of the Crown Estates response as Appendix 1 to this document. This does not support the approach that the Applicant has taken to wake loss during this examination.
Q2.19.7	**Wake effects: way forward** What outcome do you seek from this Examination in relation to wake effects? Could there be any role for Protective Provisions or a commercial side agreement to protect your interests?	The Ørsted IPs consider that a commercial side agreement would assist in ensuring their interest are adequately protected. However, such an agreement would require meaningful engagement from the Applicant, which has not been forthcoming to date. The Ørsted IPs consider that any parameters in terms of distance and other design requirements would be more appropriately placed as DCO requirements. However, the Ørsted IPs reiterate their position set out in their submission [REP4-129], that in order for the Secretary of State to be in a position to make its decision on the application in accordance with the NPS-EN3, an assessment of wake effects and how those have been addressed must be provided by the Applicant before the application is granted.

Q2.19.8	**Statement of Common Ground** Produce a Statement of Common Ground on all issues of relevance to the Ørsted IPs. For submission at Deadline 5, with final version at Deadline 7. Add the Ørsted IPs to the Statement of Commonality.	Mona and representatives of the Orsted IPs will work towards a SoCG being submitted into the Mona examination at Deadline 6 (20 December). Given the amount of time between the ExAs question and Deadline 5 it has not been possible to progress a SoCG to a suitable level for submission. The parties have agreed that the SoCG will include the following scope: • Proximity • Ornithology • Wake effects • Aviation and radar • Shipping and Navigation

Shepherd & Wedderburn LLP

03.12.2024

Appendix 1 - EN010130-001231 - The Crown Estate - Responses to ExQ1

Please see below The Crown Estate's response to Outer Dowsing Offshore Wind (Generating Station) Examination - Question ExQ1 OG 1.2 of the Examining Authority's written questions and requests for information, issued on 6th November 2024.

1. Can the Crown Estate clarify if the minimum 7.5km distance requirement between Leasing Round 4 projects takes the potential for wake effects into account?

- The buffer/stand-off between wind farms (unless developers consent to closer proximity) is a separation distance to enable developers to develop, operate and maintain wind farms by allowing for a range of factors including amongst other matters, wake effects, navigation, and safety.
- The 2019 Information Memorandum ahead of Offshore Wind Leasing Round 4 set out the requirement that "Projects may not be located within 7.5 km of an existing offshore wind farm (meaning a wind farm at any stage of development which has been awarded an agreement for lease or lease from The Crown Estate) unless the owner of the existing offshore wind farm has given its written consent".
- This 7.5km was used for the purpose of processing project proposals in the tender only, being higher than the 5km buffers that are specified within the seabed lease agreements (introduced in Round 3); this was for the purpose of de-risking the Round 4 tender by providing additional mitigation and assurance to participants through limiting proximity.
- The Crown Estate acknowledges that inter-farm wake effects can extend beyond these buffer distances. TCE also notes that the spatial and temporal variability of wind speed means that it is complex to accurately predict the wake impact on nearby wind farms, which may depend upon factors beyond distance – e.g. prevailing wind direction and wind farm layout.
- The location of a wind farm within an area of seabed leased from The Crown Estate is for developers to decide and design for, subject to obtaining the necessary consents and The Crown Estate's approval.

2. The Crown Estate is invited to comment on the purpose of the Offshore Wind Leasing Programme Array Layout Yield Study and any implications for the project.

- As outlined in the Introduction section of the Offshore Wind Leasing Programme Array Layout Yield Study by Frazer-Nash published on the Marine Data Exchange in November 2023: "The objective of this present study is to provide generic evidence to support TCE's design of future offshore wind leasing programmes from an aerodynamic loss perspective. Specifically, the influence of key PDA (project development area) design parameters on wind farm production are assessed using an updated engineering wake model with more realistic accounting of farm-to-farm wake and farm blockage effects"
- The report summarises modelling applied to generic/hypothetical wind farms and does not replace the need for project-specific analysis.

- The published report included findings on inter-farm wake effects for generic scenarios. As with any technical evidence, this can be beneficial to the sector to inform decision-making and analysis; appropriate selection and application of this or other studies and evidence to specific projects is for developers to determine.
- As this report was completed during 2023 it has no direct link to the buffer zones set out in the 2019 Information Memorandum for Offshore Wind Leasing Round 4.