SHEPHERD+WEDDERBURN

POST HEARING SUBMISSION ON BEHALF OF

(1) BARROW OFFSHORE WIND LIMITED (REF: 20049595) (2) BURBO EXTENSION LTD (REF: 20049590) (3) WALNEY EXTENSION LIMITED (REF: 20048542) (4) MORECAMBE WIND LIMITED (REF: 20049596) (5) WALNEY (UK) OFFSHORE WINDFARMS LIMITED (REF: 20049592) (6) ØRSTED BURBO (UK) LIMITED (REF: 20049589) (THE "ØRSTED IPs")

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

Introduction

1.1 This post-hearing submission is provided in accordance with Deadline 4 of the examination timetable for the application by Morgan Offshore Wind Farm Limited (the "**Applicant**") for an Order under the Planning Act 2008 (the "**Act**") granting Development Consent for the Morgan 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-005, RR-007, RR-023, RR-032, RR-043, RR-044), who we refer to together as the "**Ørsted IPs**".

1.3 The Ørsted IPs attended Issue Specific Hearing 2 ("**ISH2**") on 26 November 2024 and addressed agenda item 4a. 'Potential wake/energy yield effects for other offshore wind farms in the Irish Sea'.

1.4 The Ørsted IPs have made substantial submissions[1] outlining their position on the policy and regulatory basis for the Applicant to provide an assessment of the Project's wake effects, and the consequences of leaving this issue unassessed for decision-making. The Ørsted IPs have also provided extensive evidence indicating material wake effects are likely to be experienced at their development, including at this deadline, the finalised modelling of the Project's wake effects commissioned by the Ørsted IPs.[2]

1.5 Alongside this document, the Ørsted IPs have also submitted comments on the Applicant's responses to the examining authority's first written questions. We do not propose to repeat arguments set out in other submissions, however, wish to make some additional submissions regarding wake effects, following discussions at ISH2.

2. Additional submissions on wake effects

Requirement for an assessment under National Policy Statement EN3 ("**NPS-EN3**")

2.1 At ISH2, the Applicant outlined that it does not consider the Ørsted IPs' developments could be considered "*close*" to the Project in terms of NPS-EN3 paragraph 2.8.197, on the basis that the ordinary dictionary definition of close is "*proximate*" or *"not far from"*. The Ørsted IPs consider these terms are equally subjective in this context as the term "close". An important principle of legal interpretation is that where the meaning of a word is not defined, the meaning should be established in light of the purpose of the provision.

2.2 The purpose of this provision of the NPS-EN3 is to provide an understanding of the effects of a development on existing sea users, in order to allow the Secretary of State to undertake decision-making in accordance with paragraphs 2.8.341-2.8.348 (which includes satisfaction that site selection and site design has been made with a view to avoiding or minimising disruption or economic loss to other offshore industries). We consider the purpose of these policies is to ensure that new development understands and minimises adverse impacts on existing infrastructure, to ensure successful coexistence. Therefore, if a development has the potential to result in a material impact on existing infrastructure, it should be considered close to that infrastructure for the purposes of the NPS-EN3.

2.3 The Applicant also outlined a narrow interpretation of the second limb of 2.8.197 – "*the potential to affect activities for which a licence has been issued by government"*. The Applicant outlined their position that this policy does not capture the Ørsted IPs because marine licenses authorise the existence of infrastructure on the seabed, and prevent the generation of electricity from being unlawful. These licences do not guarantee the operation of a windfarm.

2.4 We consider the Applicant's interpretation of this provision is unduly narrow. Marine licenses are required to deposit a substance or object "*in the sea or on or under the sea bed"* (not only to structures secured to the seabed).[3] Additionally, we do not agree that a generating licence simply prevents the generation of electricity from being unlawful. Rather, it authorises the operation of, and therefore generation of electricity from, a generating station. Therefore, if a proposed

[1] In particular at [REP3-053], [REP3-070].

[2] [REP3-055]-[REP3-069].

[3] Section 66 of the Marine and Coastal Access Act 2009.

development has the potential to impact on the ability of a generating station to generate electricity (which is authorised by a generating licence), it is captured by paragraph 2.8.197.

2.5 The Ørsted IPs consider the intention behind the two limbs in 2.8.197 is intended to capture both existing development and consented but not yet built development. Our view is that the licence in this context merely means 'authorised' – it is a broad term intended to capture any activities which the Government has approved. We note that elsewhere in the NPS-EN3 the term 'marine licence' is used where policies specifically relate to marine licences.

2.6 The Applicant has taken an unduly narrow interpretation of the NPS-EN3 in respect of effects on sea-users, which the Ørsted IPs consider undermines the intent of the policy document.

Evidentiary basis for wake loss

2.7 At ISH2, there was discussion regarding the emergence of wake effects in recent applications for development consent orders ("**DCOs**") relating to offshore wind developments, and how wake loss should be treated in DCO applications.

2.8 The Ørsted IPs reiterate that industry understanding of wake effects has developed significantly in recent years, in particular in the years following the Crown Estate's Offshore Wind Leasing Round 4 ("**Round 4**"). Whilst it has always been acknowledged that wake effects can occur, recent modelling and research has been able to provide significantly more detailed information regarding actual effects which occur between windfarms. As a result, a more sophisticated understanding of the significance of likely and actual wake effects has been developed within the offshore wind industry. It is noted that the majority of the research provided by the Ørsted IPs at deadline 3 [REP3-057]-[REP3-069] is post-2020.

2.9 This contemporary research indicates that material wake effects can occur at distances greater than those at play in respect of the Project. This is borne out by the modelling commissioned by Ørsted IPs, which indicates the Project will result in a material impact on their developments.

Treatment of wake loss effect in the consenting process

2.10 Additionally, the Ørsted IPs note that research indicates (and it is well understood by industry) that distance is not the only factor relevant to the degree of wake impact. A focus of the Applicant's submissions at ISH2 and in written submissions has been that the only way to mitigate wake effects is to increase the distance between the Project's array area and other windfarms. However, this is only one relevant factor. One particularly important factor in the degree of wake effect experienced, is the location of a proposed development in relation to the prevailing wind direction of the wind resource utilised by an existing development. New developments can theoretically be located very close to existing development without substantial impacts on the incumbent development's access to wind resource. This underscores the importance of undertaking a robust assessment, and considering how a proposed development can be best designed to allow for long term coexistence with existing development.

2.11 At ISH2, the Applicant emphasised that due to design factors the Project would produce more energy per MW than Ørsted IPs' developments. For the purposes of the Project's environmental impact assessment ("**EIA**"), the Applicant argued that any reduction in the ability of existing developments to provide carbon savings would be outweighed by the savings offered by the Project. Therefore, the Applicant argues that any energy loss at the Project due to mitigating impacts on existing development would be "disproportionate".

2.12 In making this assessment, the Applicant has failed to appreciate the materiality of the impacts of the Project on existing development. As noted in the Ørsted IPs' response to the questions of the examining authority [REP3-053], the level of impact which will likely result from the Project is a factor which would be taken into account in long-term decision making in respect of those developments. Therefore, the potential loss of generation at stake is potentially much more significant than the yearly AEP loss (which is material in and of itself).

2.13 Again, this raises the question of whether the Project has employed principles of good design, in efforts to ensure that it can co-exist with existing development (as directed by NPS-EN3 at 2.8.48).

Responses to ISH2 Action Points

2.14 Two action points arising out of ISH2 have been directed to the Ørsted IPs.

2.15 In response to action point 11, the Ørsted IPs note that the Wood Thilsted report, commissioned by the Ørsted IPs to understand the potential wake effects of the Project has been finalised and submitted at DL4. The Annual Energy Production loss figures provided at DL3 were based on a preliminary version of this analysis. Regarding the examining authority's specific request of whether the figures represent a loss at front row receptor turbines only/how many of the existing turbines would suffer adverse wake effects, the Ørsted IPs are investigating this modelling scenario and will provide an update as soon as possible.

2.16 In response to action point 13, the Ørsted IPs reiterate that in order to understand what mitigation might be required in respect of wake effects, the Applicant must first assess the potential effect of the Project.

2.17 Notwithstanding the above the Ørsted IPs note that, generally speaking, a number of steps can be taken to mitigate the wake effects of a development. These steps could include design and operational changes such as installing a smaller number of larger turbines, reducing capacity, increasing the separation distance between the Project and the Ørsted IPs' developments, wind sector management and wake steering.

2.18 Additionally, the Ørsted IPs consider that a commercial side agreement would assist in ensuring their interests are adequately protected. However, such an agreement would require meaningful engagement from the Applicant, which has not been forthcoming to date.

2.19 The Ørsted IPs consider that any parameters in terms of distance and other design requirements would be more appropriately placed as DCO requirements rather than protective provisions. However, the Ørsted IPs reiterate 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.

Shepherd & Wedderburn LLP

10.12.2024