

OUR REF S6152.23/CBW/CWI YOUR REF 3 December 2024

Carl-Jonas Johansson National Infrastructure Planning Temple Quay House 2 The Square Bristol BS1 6PN

Dear Sir

Five Estuaries Offshore Windfarm Project (the "Project")
Application Ref: EN010115
East Anglia TWO Limited's Deadline 4 Submissions

1. Introduction

- 1.1 We refer to the above Examination and confirm we are instructed by East Anglia TWO Limited.
- 1.2 This submission is provided in accordance with Deadline 4 of the Examination timetable and responds to comments made by Five Estuaries Offshore Wind Farm Ltd (the "**Applicant**") at Deadline 3 [REP3-024] on East Anglia TWO Limited's written representation [REP2-079]. A separate submission covers East Anglia TWO Limited's replies to the Examining Authority's second written questions [PD-014].

2. Wake loss

Requirement for assessment

- 2.1 The Applicant asserts that the National Policy Statement for Renewable Energy Infrastructure ("EN-3") recognises that new offshore wind development will take place close to areas where there is other offshore infrastructure and that there is potential for adverse impact on those activities as a result but there is not a legal or policy basis for an assessment of wake effects to be carried out as part of offshore wind farm Environmental Impact Assessments ("EIA").
- 2.2 The Applicant has selectively quoted EN-3 and when read in full it is clear that the Applicant should assess all impacts on other sea users, including those with consent such as EA2 Ltd. In particular, the following provisions are relevant:
 - 2.2.1 Paragraph 2.8.197 requires that, where a potential offshore wind farm is proposed "close to existing operational infrastructure or has the potential to affect activities for which a licence

Octagon Point 9 Haymarket Square 1 West Regent Street 37 Albyn Place 5 Cheapside Edinburgh Glasgow Aberdeen London EC2V 6AA EH3 8FY G2 1RW AB10 1YN DX 98945 Cheapside 2 DX 551970 Edinburgh 53 DX GW409 Glasgow DX AB103 Aberdeen 1 T +44 (0)141 566 9900 T +44 (0)20 7429 4900 T +44 (0)131 228 9900 T +44 (0)1224 621 166 F +44 (0)20 7329 5939 F +44 (0)131 228 1222 F +44 (0)141 565 1222 F +44 (0)1224 623 103 shepwedd.com

has been issued by government" the Applicant should assess the potential effects on that development.

- 2.2.2 Paragraphs 2.8.344-2.8.345, which relate to SoS decision making, direct that where a project potentially affects other offshore infrastructure or activity, applicants should work with the relevant sector to minimise negative impacts¹, and that the SoS should be satisfied that "the site selection and site design of a proposed offshore wind farm and offshore transmission has been made with a view to avoiding or minimising disruption or economic loss... to other offshore industries."
- 2.3 The Project "has the potential to affect activities for which a licence has been issued by government", the activities having the potential to be affected by the Project here are the generation assets of the East Anglia TWO offshore windfarm. The question which needs to be answered is whether the Project has the potential to affect East Anglia TWO offshore windfarm. The simple answer to that question is yes. On that basis, there is an obligation to assess that effect.
- 2.4 Furthermore, it is not a requirement under EN-3 that an effect must be subject to Government level/singular guidance in order to be assessed. Projects of the scale contemplated by the NSIP consenting process are likely to result in a large variety of potential effects, some of which may not yet be subject to single industry guidance. The purpose of these policies is to ensure that the effects of a project on pre-existing/authorised infrastructure are understood and addressed. Applicants for developments of this significance should be prepared to respond to the potential for such effects, and as directed by the EN-3 should be working with the affected industries "with an aim to resolve as many issues as possible"².
- 2.5 Therefore, the Applicant is required to undertake an assessment to ensure that all effects of the Project are provided and until it does so, the Secretary of State will not be in a position to carry out its decision making in accordance with 2.8.344-2.8.345 of EN-3, as required by section 104 of the Planning Act 2008.
- 2.6 The Applicant asserts that the 5km buffer area which The Crown Estate applied at that time in the context of extension round projects is a basis for not justifying carrying out an assessment. A landlord's relationship with a tenant could never be the basis for an argument that an assessment should not be undertaken. Subsequent to the 5km standoff, The Crown Estate moved to a 7.5km standoff. This also does not preclude a need for an assessment. Such assessment should be required where it is likely that an effect will occur. The wake effect of this Project will be something that the Applicant is well aware of and is in a position to assess.
- 2.7 This approach was confirmed in The Crown Estate's responses to the Examining Authority's first written questions in respect of the Outer Dowsing Offshore Wind Examination (copy appended hereto). As The Crown Estate identified that whilst they had commissioned reports this did not in any way negate the need for individual project assessment:
 - "The report summarises modelling applied to generic/hypothetical wind farms and does not replace the need for project-specific analysis."

The Crown Estate went on to say:

"appropriate selection and application of this or other studies and evidence to specific projects is for developers to determine."

Octagon Point 5 Cheapside London EC2V 6AA DX 98945 Cheapside 2 T +44 (0)20 7429 4900 F +44 (0)20 7329 5939 shepwedd.com 9 Haymarket Square Edinburgh EH3 8FY DX 551970 Edinburgh 53 T +44 (0)131 228 9900 F +44 (0)131 228 1222 1 West Regent Street Glasgow G2 1RW DX GW409 Glasgow T +44 (0)141 566 9900 F +44 (0)141 565 1222 37 Albyn Place Aberdeen AB10 1YN DX AB103 Aberdeen 1 T +44 (0)1224 621 166 F +44 (0)1224 623 103

Paragraph 2.8.344 of EN-3.

Paragraph 2.8.200 of EN-3.

The conclusion in relation to these submissions fundamentally undermines the Applicant's approach to this topic.

- 2.8 East Anglia TWO has a seabed lease agreement with The Crown Estate that has a general clause obliging East Anglia TWO to cooperate with other developers. East Anglia TWO's seabed lease does not specifically reference the Five Estuaries development or contain any provisions in relation to wake losses.
- 2.9 We are aware that RWE (being the Applicant's parent company) has wind farms within its portfolio that are affected by wake loss from neighbouring wind farms. We also draw attention to East Anglia TWO's response to the Examining Authority's second written question GC.2.05 which references a wake loss article co-authored by RWE, which specifically analyses wake loss effects they are experiencing or are aware of from wind farms that are between 5km and 30km apart.
- 2.10 We would also like to draw attention to the fact that the predominant wind direction is from the Southwest. As such the Project is likely to have a materially greater effect on East Anglia TWO offshore windfarm, than East Anglia TWO offshore windfarm will have on the Project.

How assessment to be undertaken

- 2.11 The collective knowledge of the industry associated with wake effects arising from offshore wind farms has continued to develop. The Applicant is well aware of this.
- 2.12 The Applicant stated in their Deadline 3 submission that they are "not aware … how an assessment ought to be undertaken". The Applicant will have undertaken extensive analysis of wake effects in relation to the development of this Project. This will have included the assessment of other projects. It is simply not credible for the Applicant to claim that an assessment of wake effects could not be carried out. There are already in existence industry models used to assess such effects.

3. Lesser black-backed gull compensation

3.1 Recognising that representation upon the Offshore Ornithology Engagement Group would not be appropriate should the compensation site at Orford Ness not be selected, East Anglia ONE North Limited and East Anglia TWO Limited propose the establishment of a Statement of Comment Ground which formalises the duties of the parties to collaborate and share relevant information on works should the Orford Ness site be selected by the Applicant.

4. Mitigation of potential impact on red throated diver within the OTE SPA

- 4.1 The Applicant has to date not selected an Operations and Maintenance port, should a port be selected which leads to an increase in vessel traffic through the Special Protection Area ("SPA") then this has the potential to affect not only the SPA, but the outcomes of compensation measures designed to reduce disturbance of red throated divers by reducing vessel traffic through the SPA.
- 4.2 Paragraph 187 of the National Planning Policy Framework states:

"The following should be given the same protection as habitats sites:

- - -

c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites".

Octagon Point 5 Cheapside London EC2V 6AA DX 98945 Cheapside 2 T +44 (0)20 7429 4900 F +44 (0)20 7329 5939 shepwedd.com 9 Haymarket Square Edinburgh EH3 8FY DX 551970 Edinburgh 53 T +44 (0)131 228 9900 F +44 (0)131 228 1222 1 West Regent Street Glasgow G2 1RW DX GW409 Glasgow T +44 (0)141 566 9900 F +44 (0)141 565 1222

Aberdeen AB10 1YN DX AB103 Aberdeen 1 T +44 (0)1224 621 166 F +44 (0)1224 623 103

37 Albyn Place

4.3 Should a port be selected which leads to an increase in vessel traffic through the SPA, then an assessment should be made of the impact not only on the SPA but on the compensation measures which East Anglia ONE North Limited and East Anglia TWO Limited have been required to implement.

Yours faithfully



For and on behalf of Shepherd and Wedderburn LLP

Octagon Point 5 Cheapside London EC2V 6AA DX 98945 Cheapside 2 T +44 (0)20 7429 4900 F +44 (0)20 7329 5939 Shepwedd.com 9 Haymarket Square Edinburgh EH3 8FY DX 551970 Edinburgh 53 T +44 (0)131 228 9900 F +44 (0)131 228 1222 1 West Regent Street Glasgow G2 1RW DX GW409 Glasgow T +44 (0)141 566 9900 F +44 (0)141 565 1222 37 Albyn Place Aberdeen AB10 1YN DX AB103 Aberdeen 1 T +44 (0)1224 621 166 F +44 (0)1224 623 103

APPENDIX – THE CROWN ESTATE'S RESPONSE TO THE EXAMINING AUTHORITY'S FIRST WRITTEN QUESTIONS ON THE OUTER DOWSING OFFSHORE WINDFARM EXAMINATION

Octagon Point 5 Cheapside London EC2V 6AA DX 98945 Cheapside 2 T +44 (0)20 7429 4900 F +44 (0)20 7329 5939 shepwedd.com 9 Haymarket Square Edinburgh EH3 8FY DX 551970 Edinburgh 53 T +44 (0)131 228 9900 F +44 (0)131 228 1222 1 West Regent Street Glasgow G2 1RW DX GW409 Glasgow T +44 (0)141 566 9900 F +44 (0)141 565 1222 37 Albyn Place Aberdeen AB10 1YN DX AB103 Aberdeen 1

T +44 (0)1224 621 166 F +44 (0)1224 623 103

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.