

# Ørsted IPs' - Response to Rfl

## Introduction

This submission is made on behalf of Hornsea 1 Limited, the collective of Breesea Limited, Soundmark Wind Limited, Sonningmay Limited and Optimus Wind Limited (together, the "Hornsea 2 Companies"), Orsted Hornsea Project Three (UK) Limited, Orsted Hornsea Project Four Limited, Lincs Wind Farm Limited, Westermost Rough Limited and Race Bank Wind Farm Limited (together or in any combination, the "Ørsted IPs"). The Ørsted IPs note that only Hornsea 1 Limited, the Hornsea 2 Companies and Orsted Hornsea Project Three (UK) Limited continue to hold objections to the Dogger Bank South Offshore Wind Farm Project (the "DBS Project") relating to wake loss.

The Ørsted IPs note that the Secretary of State has issued a Request for Information dated 6 November 2025 (the "RfI"). The RfI, at paragraph 30, invites the Ørsted IPs to comment on the proposed wording of a requirement in relation to wake effects that may be inserted into the Development Consent Order ("DCO") for the DBS Project. This submission comprises the Ørsted IPs' response to the RfI.

The Ørsted IPs welcome the Secretary of State's ongoing consideration of wake effects. It is clear that early dialogue and transparency between developers, in relation to proposed mitigation measures, wake interactions, design optimisation and layout, is to be encouraged and is a necessary behaviour in a maturing market.

The Ørsted IPs reiterate that the protective provisions submitted by the Ørsted IPs in their Deadline 6 Submission [REP6-085]¹ represent a fair, proportionate, and policy-compliant solution to inter-project wake loss impacts – therefore, protective provisions remain the Ørsted IPs' strong preference for inclusion in the DCO, ahead of a requirement. This conclusion is not altered by the finalised text for the new National Policy Statement for Renewable Energy Infrastructure ("NPS EN-3") that will shortly come into force, and the Ørsted IPs note that the DBS Project is to be determined in accordance with the existing NPS EN-3 (though the new version can potentially be taken into consideration).

Without prejudice to the Ørsted IPs' position in this regard, this submission explains that some of the wording of the requirement proposed in the RfI is not fit for purpose, given that the wake effects plan under paragraphs 1(a) and 2(a) cannot be discharged from a practical or technical perspective in a manner that is in any way meaningful in respect of the waked projects (for the reasons explained later in this submission). Again, without prejudice to the Ørsted IPs' request for protective provisions to be included in the DCO instead, the Ørsted IPs have proposed some alternative wording for various limbs of the requirement that would make it workable in practice, if the Secretary of State is minded to include such a requirement in the DCO.

## **Protective Provisions**

The Ørsted IPs have explained throughout the examination of the DBS Project, particularly as summarised in the Ørsted IPs' Closing Statement [REP8-062] and the Ørsted IPs' Deadline 9 Submission [REP9-034] that the protective provisions submitted by the Ørsted IPs in their Deadline 6 Submission [REP6-085] should be included on the face of the DCO for the DBS Project in order to afford the Ørsted IPs' assets necessary and proportionate protection.

The Ørsted IPs maintain that protective provisions are the most appropriate solution for wake loss impacts on the face of the DCO for the DBS Project (i.e. ahead of a DCO requirement). They provide a proportionate and practical mechanism for addressing wake loss impacts through technical assessment and agreed mitigation. The Ørsted IPs do not propose to repeat their

<sup>&</sup>lt;sup>1</sup> The terms 'Wake Loss Agreement', 'Wake Loss Mitigation Scheme' and 'Wake Loss Assessment' are used in this submission – these terms have the same meaning as defined in the protective provisions submitted by the Ørsted IPs in [REP6-085].



previously-established rationale for the inclusion of these protective provisions in the DCO, which was set out throughout the examination of the DBS Project, particularly as summarised in the Ørsted IPs' Closing Statement [REP8-062] and the Ørsted IPs' Deadline 9 Submission [REP9-034].

The wording of the requirement proposed in the RfI, alongside similar requirements that are beginning to be seen in granted offshore wind DCOs (such as Requirement 29 of Schedule 2 of the Mona Offshore Wind Farm Order 2025 ("Mona DCO") and Requirement 13 of Schedule 2 of the Morecambe Offshore Windfarm Generation Assets Order 2025 ("Morecambe DCO")) merely obliges the undertaker to take reasonable steps to minimise wake effects. This approach is problematic, as it lacks the mitigation certainty required to maintain investor confidence and avoid inefficiencies across the wider system. By comparison, the protective provisions proposed by the Ørsted IPs provide a more robust and controllable framework, enabling both the undertaker and the Ørsted IPs to manage the process directly, either by entering into a Wake Loss Agreement or, alternatively, by agreeing to, or jointly appointing independent experts to determine, a Wake Loss Mitigation Scheme. This reflects established industry practice, whereby technical assessments and agreements are managed between the owners of offshore infrastructure and their experts rather than deferred to the Secretary of State.

As set out throughout the examination of the DBS Project, particularly as summarised in the Ørsted IPs' Closing Statement [REP8-062] (see pages 1-3) and the Ørsted IPs' Deadline 9 Submission [REP9-034] (see pages 1-2), the protective provisions submitted by the Ørsted IPs in their Deadline 6 Submission [REP6-085] are compliant with the existing NPS EN-3. The Ørsted IPs do not consider that this conclusion is changed by the wording of the new NPS EN-3 that will shortly come into force (though, as set out above, this new policy document is only a potential consideration in the determination of the DBS Project, which remains subject to the existing NPS EN-3). The new NPS EN-3 requires, at paragraph 2.8.176, that "applicants should consider the impact of their proposal on other activities and make reasonable endeavours to address these". Further, paragraph 2.8.232 requires that "applicants should demonstrate that they have made reasonable endeavours to mitigate the impact of wake effects on other offshore wind generating stations". This mitigation can be secured via protective provisions, with independent third-party experts determining the accuracy, or 'reasonableness', of the post-mitigation Wake Loss Assessment and of any Wake Loss Mitigation Scheme that may be required.

In addition, in the face of any argument relating to new paragraph 2.8.233, which states that "there is no expectation that wake effects can be wholly removed between developments", the Ørsted IPs note that the protective provisions proposed do not purport to "wholly remove" wake effects; rather, they allow for appropriate physical mitigation and/or compensation for wake effects. New paragraph 2.8.229 also states that "in some circumstances, the Secretary of State may wish to consider the potential to use requirements involving arbitration as a means of resolving how adverse impacts on other commercial activities will be addressed".2 The protective provisions proposed by the Ørsted IPs align favourably with this policy, as they provide for the appointment and use of jointly-appointed independent third party experts and, should those mechanisms fail, they provide a direct reference to any differences being determined by arbitration. This is preferable to the appeal mechanism set out in the DCO for the DBS Project (which the proposed requirement would be subject to), as that mechanism requires the undertaker to submit an appeal (should they wish to) if the requirement is not determined (or approval of the relevant document required to discharge the requirement is refused) which would be decided by a Planning Inspector who may not have the specialism required for such determination. This could lead to a lengthy, complex and expensive process that is avoided by including the protective provisions in the DCO instead.

Whilst the government's response document to the consultation responses for the new NPS states that "the planning system is not expected to adjudicate on compensation arrangements for wake effects", it is clearly the case that DCO requirements (such as Requirement 29 of the Mona DCO, Requirement 13 of the Morecambe DCO and the wording proposed in the Rfl) effectively

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<sup>&</sup>lt;sup>2</sup> This reflects the policy in paragraph 2.8.260 of the existing NPS EN-3.



leave the planning system (and, more specifically, the Secretary of State's discharge of wake requirements) as the adjudicator on compensation arrangements for wake. The Mona and Morecambe-style requirements do still demand some form of reasonable mitigation steps – therefore, compensation can be a factor in such mitigation, and there is no reason why this cannot be dealt with via protective provisions. In any event, decision-making in relation to the DBS Project at this stage must be in accordance with the existing NPS EN-3 wording, which (as the Ørsted IPs' have set out throughout the examination of the DBS Project) permits the Ørsted IPs to be compensated for the wake effects of the DBS Project on their assets.

The Ørsted IPs' proposed protective provisions therefore offer a balanced and proportionate mechanism for compliance with national policy, ensuring fairness, and importantly clarity, between operational generators and new entrants while reducing the administrative burden on the Secretary of State. By guaranteeing mitigation through these provisions, the Secretary of State would protect existing offshore wind assets as well as newly leased projects, including the DBS Project, from future wake losses that will arise as The Crown Estate progresses the future offshore wind leasing rounds that are required to secure Net Zero through the installation of approximately 100 GW of offshore wind capacity across UK waters by 2050.

The Ørsted IPs maintain that establishing a precedent of securing wake compensation through protective provisions is the responsible course of action for the Secretary of State to take as a solution to wake loss impacts, as it will ensure significant system-wide benefits. Accordingly, the Ørsted IPs invite the Secretary of State to include the set of protective provisions submitted by the Ørsted IPs in their Deadline 6 Submission [REP6-085] within the DCO for the DBS Project. This approach represents a fair, proportionate, and policy-compliant solution to inter-project wake loss impacts. The Ørsted IPs note that the Applicants for the DBS Project have not engaged on these protective provisions, and would encourage the Secretary of State to request that they do so, in the manner that has been seen in the post-examination period of the Outer Dowsing Offshore Wind Project (where protective provisions have been put forward by the Ørsted IPs and the Equinor IPs) and as is standard for any DCO examination where protective provisions are submitted by Interested Parties.

Further, the fact that protective provisions have not been included by the Secretary of State in the Mona DCO nor the Morecambe DCO (with a requirement instead being included in those DCOs as a solution to wake effects) should not be taken to set a precedent whereby a requirement is preferable to protective provisions. In the examinations of the Mona DCO and the Morecambe DCO, the Ørsted West Coast IPs³ did not submit protective provisions (as the facts and circumstances were different to those of the DBS Project) and therefore the Secretary of State was not required to consider these as an alternative solution to a requirement in those DCOs.

Lastly, the Ørsted IPs understand that Dogger Bank Offshore Wind Farm Project 1 Projco Limited, Dogger Bank Offshore Wind Farm Project 2 Projco Limited and Dogger Bank Offshore Wind Farm Project 3 Projco Limited (together, the "**Projco IPs**") have obtained a legal opinion from Richard Turney KC (the "**Legal Opinion**") in relation to this matter and will be including this as an appendix to their submission in response to the Rfl. The Projco IPs have shared a draft of the Legal Opinion with the Ørsted IPs, and the Ørsted IPs are fully supportive of the conclusions of the Legal Opinion. Most notably, the Ørsted IPs refer to:

- paragraph 21 of the Legal Opinion, which states that it is not the case that "proposed paragraph 2.8.233 of draft EN-3 should be read as precluding mitigation of economic loss through compensation";
- paragraph 24 of the Legal Opinion, in which it is confirmed that "there is a clear case for expressly addressing compensation for wake loss in the DCO"; and

<sup>&</sup>lt;sup>3</sup> The Ørsted West Coast IPs are a group of six owners of offshore windfarms on the West Coast of the UK, within the East Irish Sea, comprised of Barrow Offshore Wind Limited, Burbo Extension Ltd, Walney Extension Limited, Morecambe Wind Limited, Walney (UK) Offshore Windfarms Limited and Ørsted Burbo (UK).



• paragraphs 26-30 of the Legal Opinion, which confirm that "a protective provision secured by a DCO may require the payment of compensation" and reiterate, as the Ørsted IPs have done throughout this submission, the benefits of protective provisions over a requirement in the DCO in relation to the matters discussed.

# **Proposed Requirement in the RfI**

The following sections are entirely without prejudice to the Ørsted IPs' request for protective provisions to be included in the DCO instead of a requirement.

The Ørsted IPs submit that some of the wording of the requirement proposed in the Rfl is not fit for purpose, given that the wake effects plan under paragraphs 1(a) and 2(a) cannot be discharged from a practical or technical perspective in a manner that is in any way meaningful in respect of the waked projects. This is most notably explained and addressed in the Ørsted IPs' comments on paragraph 3(b) of the draft requirement set out below, but in summary the reference to the undertaker maximising capacity and energy output, while also taking meaningful steps to minimise wake effects, renders paragraphs 1(a) and 2(a) of the requirement incapable of providing the Ørsted IPs with any substantive comfort that their assets are protected. Any new wind farm will attempt to find the design and operating philosophy which will maximise its capacity and energy output. This design will cause a wake loss on neighbouring assets, as shown in the wake assessment submitted by the Applicants for the DBS Project [AS-179]. It is only through altering the design or operational strategy of the new wind farm that any physical mitigation of wake impacts will be possible - it is not possible for a wind farm's design and/or operation to both maximise the energy output for the new wind farm and to minimise or mitigate wakes on neighbouring wind farms; therefore, paragraphs 1(a) and 2(a) of the requirement are void of any meaningful impact.

Again, without prejudice to the Ørsted IPs' request that protective provisions are included in the DCO instead, the Ørsted IPs have proposed some alternative wording for various limbs of the requirement that would make it workable in practice, if the Secretary of State is minded to include such a requirement in the DCO. These suggestions are provided in the order that the relevant wording appears in the requirement, and the full requirement showing the amendments proposed by the Ørsted IPs is included at Appendix 1 to this submission.

The Ørsted IPs note that the majority of their proposed changes to the requirement reflect the wording agreed between the Ørsted West Coast IPs and the undertaker for the Morecambe DCO, which has been included by the Secretary of State in Requirement 13 of Schedule 2 of the granted Morecambe DCO. The Ørsted IPs consider that, although the requirement in the Morecambe DCO creates unnecessary uncertainty in comparison with the Ørsted IPs' proposed protective provisions, it does represent a more balanced approach to the issues and procedure addressed, in comparison with the requirement proposed in the RfI.

## Requirement Title

Alteration

"Wake effects plan"

# Reasoning

The Ørsted IPs propose to delete the word "plan" from the requirement title. Whilst a wake effects plan is referenced in the draft requirement, there is also an alternative mechanism to discharge the requirement and therefore the word "plan" in the requirement's title could be misleading. This approach also departs from the precedent in Requirement 29 of the Mona DCO and Requirement 13 of the Morecambe DCO, which both use "Wake effects" as the requirement's heading and ensure that there is no implication that a "plan" is preferable to alternative mitigation (i.e. an "agreement").



# Paragraphs 1(a), 1(b) and 2(b)

#### Alteration

- "(1) (a) A wake effects plan relating to that part of the authorised project has been submitted to and approved by the Secretary of State following consultation with each of the owners of the relevant offshore wind farm(s); or"
- "(1) (b) The undertaker has provided evidence to the Secretary of State that alternative mitigation for wake effects has been agreed with each of the owners of the relevant offshore wind farm(s); or"
- "(2) (b) The undertaker has provided evidence to the Secretary of State that alternative mitigation for wake effects has been agreed with each of the owners of the relevant offshore wind farm(s); or"

# Reasoning

This change is required for clarification and to ensure consistency in the drafting. Paragraph (2)(a) of the proposed requirement already includes this text but it has not been fully replicated throughout the requirement.

# Paragraphs 1(c) and 2(c)

#### Alteration

- "(1) (c) A combination of (1)(a) and (1)(b) is provided to and agreed by the Secretary of State to ensure that the wake effects of the authorised project on each of the relevant offshore wind farm(s) are mitigated is considered."
- "(2) (c) A combination of (2)(a) and (2)(b) is provided to and agreed by the Secretary of State to ensure that the wake effects of the authorised project on each of the relevant offshore wind farm(s) are mitigated is considered."

# Reasoning

As currently drafted, limb (c) of both paragraphs requires the Ørsted IPs' assets to be considered only and does not refer to mitigating or minimising wake effects. This limb is therefore not sufficiently precise and does not adequately protect the Ørsted IPs' assets. As currently drafted, the undertaker could simply "consider" the Ørsted IPs' assets in a procedural manner without addressing any impacts – effectively rendering this limb of the requirement meaningless. The Ørsted IPs have therefore altered the wording to ensure that the wake effects on the Ørsted IPs' assets are actually mitigated.

## Paragraph 3(a)

## Alteration

"(3) (a) the a wake effects assessment showing the modelling used to calculate the wake effect of the proposed final design from the approved development on the annual energy production of the relevant offshore wind farm(s);"

# Reasoning

As currently drafted, it is unclear as to what the undertaker must provide under this paragraph of the requirement to evidence the wake effects from the approved development, if anything. In theory, the undertaker could specify an annual energy production figure within the wake effects



plan without including the underlying modelling or assessment. The Ørsted IPs have, therefore, suggested updates to this text to clarify that the wake effects plan must include a wake effects assessment, backed up by underlying modelling, to ensure that the conclusions of such assessment can be reviewed and interrogated, as appropriate, by the waked projects.

This reflects the approach agreed between the Ørsted West Coast IPs and the undertaker for the Morecambe DCO (in the requirement that has subsequently been included by the Secretary of State in the made Morecambe DCO), although the wording has been amended slightly to provide additional clarity.

# Paragraph 3(b)

#### Alteration

"(3) (b) details of reasonable steps that have been taken in the final design of the authorised development or measures which will be applied during the operation of the authorised development (or a combination of both) or are proposed to be taken by the undertaker to minimise wake effects on the relevant offshore wind farm(s) whilst maximising without materially reducing the capacity and energy output of the authorised development within the identified technical, environmental and other constraints of the authorised development:"

# Reasoning

As currently drafted, the Ørsted IPs have several fundamental concerns with limb (b) of paragraph 3 of the requirement. Firstly, the reference to the undertaker maximising capacity and energy output, while also taking meaningful steps to minimise wake effects, renders paragraphs 1(a) and 2(a) of the requirement (to which paragraph 3(b) relates) incapable of providing the Ørsted IPs with any substantive comfort that their assets are protected. All else being equal, any new wind farm will attempt to find the design and operating philosophy which will maximise its capacity and energy output. This design will cause a wake loss on neighbouring assets, as shown in the wake assessment submitted by the Applicants for the DBS Project [AS-179]. It is only through altering the design or operational strategy of the new wind farm that any physical mitigation of wake impacts will be possible - it is not possible for a wind farm's design and/or operation to both maximise the energy output for the new wind farm and minimise or mitigate wakes on neighbouring wind farms; therefore, paragraphs 1(a) and 2(a) of the requirement (to which paragraph 3(b) relates) are void of any meaningful impact. The design of a new wind farm can either be 'selfish' (in which case it will maximise its own energy, as well as its wake effects on neighbours) or 'considerate' (in which case it will find a design or operating philosophy which does not materially reduce its capacity, but does result in mitigation of wake impacts on neighbours).

The Ørsted IPs have therefore suggested, per the amendments above, that the wording of limb(b) of paragraph 3 of the requirement instead reads "without materially reducing the capacity of the authorised development". This reflects the approach and wording agreed between the Ørsted West Coast IPs and the undertaker for the Morecambe DCO (in the requirement that has subsequently been included by the Secretary of State in the made Morecambe DCO).

Whilst the Ørsted IPs welcome the inclusion of wording that refers to actions to be taken by the undertaker, the use of the word "proposed" suggests that such measures may not be taken, which does not provide sufficient comfort nor protection to the Ørsted IPs' assets. Therefore, per the amendments above, the Ørsted IPs have suggested aligning with the approach and wording agreed between the Ørsted West Coast IPs and the undertaker for the Morecambe DCO (in the requirement that has subsequently been included by the Secretary of State in the made Morecambe DCO) by referring to measures "which will be applied".

The Ørsted IPs have also proposed the deletion of the word "reasonable" in relation to steps to be taken by the undertaker. This is suggested with similar reasoning to that which renders the requirement (as currently drafted) unworkable in practice – including "reasonable" as a qualifier for steps to be taken opens up a line of argument whereby the undertaker can state that all



currently available physical (i.e. design and/or operational) mitigation measures result in a net loss of generation (which, as currently drafted, the requirement seeks to maximise) which renders any steps to be taken as unreasonable. In this scenario, the undertaker could feasibly not take any steps (other than to evidence the above) and the Ørsted IPs' assets would, in effect, end up entirely unprotected.

The Ørsted IPs have also suggested deleting the wording "within the identified technical, environmental and other constraints of the authorised development" to align with the approach and wording agreed between the Ørsted West Coast IPs and the undertaker for the Morecambe DCO (in the requirement that has subsequently been included by the Secretary of State in the made Morecambe DCO). This is because it is not clear how the Secretary of State can ascertain the "technical, environmental and other constraints" of the authorised development and how capacity is impacted in this context. The undertaker is the only party able to ascertain the precise constraints and capacity of the DBS Project and, as such, it would be challenging for the Secretary of State to evaluate any constraints presented by the undertaker, when discharging this requirement. The framing of the requirement allows the undertaker to present its subjective view on constraints as absolute. Taking technical constraints as an example (which all developers would take a different view on), the undertaker could present a view on constraints relating to the placement of foundations, which may be primarily based on commercial interests. The undertaker's position could be that mitigation is not possible because of that constraint, and there would be no ability for the Secretary of State to determine whether that position was reasonable.

The Ørsted IPs also understand that the Projco IPs intend to submit, in their submission in response to the RfI, alternative drafting in relation to limb (b) of paragraph 3 of the requirement (including the introduction of a new limb (c)). The Ørsted IPs are fully supportive of the Projco IPs' position and consider that their drafting also addresses the fundamental concerns with limb (b) of paragraph 3 of the requirement as currently drafted in the RfI.

# New Paragraph 3(f)

Alteration (inserted after paragraph 3(e))

"(3)(f) details of consultation with each of the owners of the relevant offshore wind farms and the extent of any agreement or disagreement with them regarding:

- (i) whether any design changes or operational measures could further reduce the wake effect impacts; and
- (ii) the conclusions of the wake effects assessment under paragraphs (1)(a) and (2)(a)."

#### Reasonina

This proposed sub-paragraph, which reflects the approach and wording agreed between the Ørsted West Coast IPs and the undertaker for the Morecambe DCO (in the requirement that has subsequently been included by the Secretary of State in the made Morecambe DCO), ensures that the impacted offshore wind farms are given the opportunity to review and comment on the wake effects assessment at an appropriate time in the process to allow comments to be taken into account by the undertaker prior to submission of the wake effects plan to the Secretary of State for approval. This also ensures that when the Secretary of State receives the wake effects plan for approval, the Secretary of State can clearly see the extent of agreement or disagreement between the undertaker and the owners of the relevant offshore wind farms.

The wake effects assessment is a technical document, meaning it is important for this to be reviewed by technical specialists and for the Secretary of State to be aware of any concerns of a technical nature. The proposed amendments therefore ensure that the Secretary of State has the best possible information available to him for the purposes of discharging the requirement.



## Conclusion

In this submission, the Ørsted IPs have reiterated that the protective provisions submitted by the Ørsted IPs in their Deadline 6 Submission [REP6-085] represent a better solution to inter-project wake loss impacts that is fair, proportionate, and policy-compliant – therefore, this remains the Ørsted IPs' preference for inclusion in the DCO for the DBS Project, ahead of a requirement. The protective provisions provide a robust process which facilitates the agreement of mitigation and/or compensation for the significant impacts of the DBS Project on the Ørsted IPs' assets, including provision for the appointment of an independent third party expert. The Ørsted IPs note that the inclusion of the form of protective provisions submitted by the Ørsted IPs in their Deadline 6 Submission [REP6-085] in the DCO for the DBS Project would permit the Ørsted IPs to withdraw their objection from the DBS Project.

The Ørsted IPs also note that they are fully aligned with the Projco IPs on the need for, and specific wording of, protective provisions to be included in the DCO.

Without prejudice to the Ørsted IPs' position in this regard, this submission has explained that some of the wording of the requirement proposed in the Rfl is not fit for purpose, given that the wake effects plan under paragraphs 1(a) and 2(a) cannot be discharged from a practical or technical perspective in a manner that is in any way meaningful in respect of the waked projects. Again, without prejudice to the Ørsted IPs' request for protective provisions to be included in the DCO instead, the Ørsted IPs have proposed some alternative wording above for various limbs of the requirement that would make it workable in practice, if the Secretary of State is minded to include such a requirement in the DCO.

The UK is now entering a period of spatial compression in its offshore wind zones; establishing a precedent that fails to provide predictable mitigation would materially undermine future leasing and Contract For Difference bidding clarity.



## **APPENDIX 1**

#### **FULL REQUIREMENT WITH PROPOSED AMENDMENTS**

# Wake effects plan

- (1) Work No. 1A must not be commenced until either—
  - (a) A wake effects plan relating to that part of the authorised project has been submitted to and approved by the Secretary of State following consultation with each of the owners of the relevant offshore wind farm(s); or
  - (b) The undertaker has provided evidence to the Secretary of State that alternative mitigation for wake effects has been agreed with each of the owners of the relevant offshore wind farm(s); or
  - (c) A combination of (1)(a) and (1)(b) is provided to and agreed by the Secretary of State to ensure that the wake effects of the authorised project on each of the relevant offshore wind farm(s) are mitigated is considered.
- (2) Work No. 1B must not be commenced until either—
  - (a) A wake effects plan relating to that part of the authorised project has been submitted to and approved by the Secretary of State following consultation with each of the owners of the relevant offshore wind farm(s); or
  - (b) The undertaker has provided evidence to the Secretary of State that alternative mitigation for wake effects has been agreed with each of the owners of the relevant offshore wind farm(s); or
  - (c) A combination of (2)(a) and (2)(b) is provided to and agreed by the Secretary of State to ensure that the wake effects of the authorised project on each of the relevant offshore wind farm(s) are mitigated is considered.
- (3) Any wake effects plan(s) provided in accordance with paragraphs (1)(a), (1)(c), (2)(a) or (2)(c) must include:
  - (a) the a wake effects assessment showing the modelling used to calculate the wake effect of the proposed final design from the approved development on the annual energy production of the relevant offshore wind farm(s);
  - (b) details of reasonable-steps that have been taken in the final design of the authorised development or measures which will be applied during the operation of the authorised development (or a combination of both) or are proposed to be taken by the undertaker to minimise wake effects on the relevant offshore wind farm(s) whilst maximising without materially reducing the capacity and energy output of the authorised development within the identified technical, environmental and other constraints of the authorised development;
  - (c) the timescales for implementation of any wake effect mitigation measures;
  - (d) any time limits for wake effect mitigation measures;
  - (e) details of any necessary monitoring of the wake effect mitigation measures; and
  - (f) details of consultation with each of the owners of the relevant offshore wind farms and the extent of any agreement or disagreement with them regarding:



- (i) whether any design changes or operational measures could further reduce the wake effect impacts; and
- (ii) the conclusions of the wake effects assessment under paragraphs (1)(a) and (2)(a).
- (4) The layout plan submitted to the MMO under condition 15(1)(a) of schedule 10 of this Order must be in accordance with any approved wake effects plan submitted in accordance with subparagraph (1) above.
- (5) The layout plan submitted to the MMO under condition 15(1)(a) of schedule 11 of this Order must be in accordance with any approved wake effects plan submitted in accordance with subparagraph (2) above.
- (6) Each approved wake effects plan submitted under this requirement must be implemented as approved.
- (7) For the purposes of this requirement—

"relevant offshore wind farms" means the two offshore wind farms consented under the Dogger Bank Creyke Beck Offshore Wind Farm Order 2015 (SI2015/318) as amended at the date of this Order and known as Dogger Bank A and Dogger Bank B, the offshore wind farm consented under the Dogger Bank Teesside A and B Offshore Wind Farm Order 2015 (SI2015/1592) as amended at the date of this Order and known as Dogger Bank C, the offshore wind farm consented under the Hornsea One Offshore Wind Farm Order 2014 (SI2014/3334) as amended at the date of this Order, the offshore wind farm consented under the Hornsea Two Offshore Wind Farm Order 2016 (SI2016/844) as amended at the date of this Order and the offshore wind farm consented under the Hornsea Three Offshore Wind Farm Order 2020 as amended at the date of this Order.