The Planning Inspectorate

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To Orsted Hornsea Project Three (UK) Ltd
For information to all Interested Parties

Your Ref:

Our Ref: EN010080

Date: 19 March 2019

Dear Sir/Madam

Planning Act 2008 and the Infrastructure Planning (Examination Procedure) Rules 2010 – Rule 17

Application by Orsted Hornsea Project Three (UK) Ltd for an Order granting Development Consent for the Proposed Hornsea Project Three Offshore Wind Farm

Examining Authority's request for further information

The questions set out below are directed to Orsted Hornsea Project Three (UK) Ltd. However, this does not prevent an answer being provided to a question by a person to whom it is not directed, should the question be relevant to their interests.

Please respond by **Deadline 9 – Tuesday 26 March 2019**.

Ref	Questions/requests for further information from Orsted Hornsea Project Three (UK) Ltd
Ornithology	
F3.1	There are differing views before the Examination on the appropriate parameters to use in collision risk modelling (CRM). The Examining Authority (ExA) has not concluded on these matters and will continue to consider all points of view. The request to re-run the CRM set out below may assist the ExA. The ExA will take any results into account together with all other evidence on this topic. Please run the CRM using the digital aerial survey data with the following species-specific parameters: **Bird Length (m)** Gannet 0.94 (Robinson 2017) Kittiwake 0.39 (Robinson 2017) Lesser black-backed gull 0.58 (Robinson 2017)

	Great black-backed gull	0.71 (Robinson 2017)
	Herring gull	0.60 (Robinson 2017)
	Wing Span (m)	
	Gannet	1.72 (Robinson 2017)
	Kittiwake	1.08 (Robinson 2017)
	Lesser black-backed gull	1.42 (Robinson 2017)
	Great black-backed gull	1.58 (Robinson 2017)
	Herring gull	1.44 (Robinson 2017)
	Flight Type	
	Gannet	Flapping
	Kittiwake	Flapping
	Lesser black-backed gull	Flapping
	Great black-backed gull	Flapping
	Herring gull	Flapping
	Upwind Flights (%)	
	Gannet	50
	Kittiwake	50
	Lesser black-backed gull	50
	Great black-backed gull	50
	Herring gull	50
	Flight Height Proportions	
	Gannet	Option 1
	Kittiwake	Option 1
	Lesser black-backed gull	Option 3 (Johnston et al. 2014)
	Great black-backed gull	Option 3 (Johnston et al. 2014)
	Herring gull	Option 3 (Johnston et al. 2014)
	As in the original analysis [APP-109], the 35m band as well as the combined 35m and 30m band should be analysed from the boat-based surveys to provide a precautionary estimate.	
	Flight Speed	
	Gannet	14.9 m/sec (Pennycuick et al. 1987)
	Kittiwake	13.1 m/sec (Pennycuick et al. 1987)
	Lesser black-backed gull	13.1 m/sec (Alerstam et al. 2007)
	Great black-backed gull	13.7 m/sec (Alerstam et al. 2007)
	Herring gull	12.8 m/sec (Alerstam et al. 2007)
	Avoidance Rates	
	Gannet	0.995 (Bowgen and Cook 2018)
	Kittiwake	0.990 (Bowgen and Cook 2018)
	Lesser black-backed gull	0.993 (Bowgen and Cook 2018)
	Great black-backed gull	0.993 (Bowgen and Cook 2018)
	Herring gull	0.993 (Bowgen and Cook 2018)
	Nocturnal Activity Factors	
	Gannet	1-2 (Furness 2018/Garthe & Hüppop 2004)
	Kittiwake	2-3 (Furness 2018/Garthe & Hüppop 2004)
	Lesser black-backed gull	3 (Garthe and Hüppop 2004)

	Great black-backed gull 3 (Garthe and Hüppop 2004) Herring gull 3 (Garthe and Hüppop 2004) Please use the wind farm parameters, as defined in Table 1.4 of the ES [APP 109] for the initial analysis and then increase the rotor tip height to 37.5m and 40m above LAT for subsequent runs in order to evaluate the effect of the mitigation that was proposed at ISH7. Please use the results of the analyses to refine the population viability analysis for each species and conclude on whether the potential collision impacts would lead to an adverse effect on the integrity of the Flamborough and Filey Coast SPA either alone or in combination with other plans or projects for relevant species. This evaluation should be based on the following assumptions: **Apportioning** Gannet Post-breeding 4.8% Breeding 63.3% Pre-breeding 6.2% Kittiwake Post-breeding 5.4% Breeding 41.7% Pre-breeding 7.2% **Seasonality** Gannet – Breeding March-September (Furness 2015) Gannet – Non-breeding October-February (Furness 2015) Kittiwake – Breeding March-August (Furness 2015) Kittiwake – Non-breeding September-February (Furness 2015) Please set out whether the above parameterisation and assumptions alter the conclusions of the ES and the RIAA and to what extent the proposed increases in rotor tip height might mitigate any negative impacts. If the Secretary of State were to conclude that an increase in rotor tip height would represent appropriate mitigation, could that be secured by amending the dimension in Requirement 2(2)(c) and in the corresponding design parameters in the Deemed Marine Licences? Would any consequential amendments be required?
F3.2	You cite Wakefield et al. (2017), Coulson (2011) and Pearson (1968) in the RIAA [APP-054] to justify the kittiwake apportioning. Please provide copies of these publications.
F3.3	You cite Langston et al. (2013) in [ERP4-12] in an answer you gave to Q2.2.24 on breeding seasons. Please provide a copy of this publication.
Benthic ecology	
F3.4	The Examining Authority (ExA) understands that the assessments in the ES are on the basis that no more than 10% of the length of cables in any Marine Protected Area would require cable protection. However, this does

	not appear to be secured explicitly in the Deemed Marine Licences or in the Outline Cable Specification and Installation Plan. The drafting set out below may be one way of addressing this matter: In Schedule 11 Condition 3 insert new sub-paragraph: 3(3) No more than 10% of the length of the cables in Work No 1(c) falling within any European Site, European Protected Site or MCZ shall be subject to cable protection. (Equivalent wording could be included in Schedule 12). Please comment on the merits of this suggestion and on the suggested drafting.
F3.5	The Marine Management Organisation has submitted [REP7-104] that cable protection during the operational phase of the Proposed Development should be excluded from the Deemed Marine Licences. The drafting set out below may be one way of addressing this matter: In Schedule 11 Condition 5 insert new sub-paragraph: 5(4) Maintenance works do not include placement of cable protection on any section of cable that was not subject to cable protection before the commencement of use of that section of cable. [*Subsequent sub-paragraphs renumbered accordingly*] (Equivalent wording could be included in Schedule 12). Please comment on the merits of this suggestion and on the suggested drafting.
Navigation and other offshore impacts – effects on oil and gas operations	
F3.6	Spirit Energy has proposed protective provisions which may restrict the ability to construct wind turbine generators in parts of the Order limits [REP7-093]. Please provide plans showing the effect of the suggested provisions in relation to the proposed Order limits. Please comment on the likely effects on the number of wind turbine generators that could be constructed and on the generation capacity of the Proposed Development for each of the following scenarios. The scenarios are that the Secretary of State decides to impose: a) The suggested obstacle-free helicopter flight volume (but not the suggested vessel exclusion area) b) The suggested vessel exclusion area (but not the suggested obstacle-free helicopter flight volume)

	c) The suggested obstacle-free helicopter flight volume and the suggested vessel exclusion area
F3.7	You have suggested protective provisions for Spirit Energy [REP7-055]. Please comment on the likely effects on the number of wind turbine generators that could be constructed and on the generation capacity of the Proposed Development if your suggested protective provisions were adopted.
Transport and highway safety	
F3.8	Table 3.2 of Appendix 27 (Development of the Cawston Traffic Intervention Scheme) [REP7-047] states that alternative routing is being explored whereby vehicles returning to the main construction compound would turn north in the centre of Cawston, utilising Chapel Street. Please provide an update on this proposed alternative, including an assessment of the highway and environmental impacts that would result along the alternative route.
F3.9	Residents of Cawston have suggested alternative routes for HGV traffic. Table 3.2 of Appendix 27 (Development of the Cawston Traffic Intervention Scheme) [REP7-047] sets out why the Applicant does not consider Heydon Road to be a suitable alternative to the B1145 through Cawston. Please explain in more detail why you have come to this view. What highway intervention works and consequential impacts on trees and hedgerows do you consider would be necessary?
F3.10	Paragraph 9.2.1.3 of the Outline Construction Traffic Management Plan [REP6-015] states that there will be continued engagement between the Applicant and the Norfolk Vanguard project and that the two projects may commit to programme works so that each scheme's peak traffic on a given road does not overlap. Please explain how this would work in practice. How would the construction programme for each project be staggered to ensure that peak traffic flows do not overlap? How would any disagreement between Hornsea Project Three and Norfolk Vanguard be resolved? In relation to The Street and Cawston, what would be the threshold for the number of cumulative traffic movements, over which such measures would be introduced?

End of schedule

Yours faithfully

David Prentis

Lead Member of the Panel of Examining Inspectors