



TRINITY HOUSE

The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN

2 December 2019

Your Ref: EN010087
Identification No. 20022478

The Norfolk Boreas Offshore Wind Farm Project Draft Development Consent Order Written Response to the Examining Authority for Deadline 2

Dear Sir / Madam

We refer to the above application for development consent.

Trinity House (TH) requests to submit to the Examining Authority (ExA) its comments, as below, for Deadline 2 in response to the ExA's Written Questions and Requests for Information (ExQ1) issued on 19 November 2019.

Question Q11.01.

Radar interference effects on navigation deviated around the proposed OWF

Section 22.8 of the Navigation Risk Assessment (NRA) [APP-569] discusses potential impacts of the Proposed Development on ship-borne marine radar with specific effects discussed at paras 403 to 408, which the ExA understands to indicate that effects increase significantly within 1.5nm of the OWF WTG array. Figure 22.1 of the NRA shows the deviation of shipping around the proposed OWF that would be an effect of the Proposed Development and shows vessel routes deviating and turning around the north-eastern corner of the proposed OWF through an appreciable angle and within 1.5nm of the Red Line Boundary (RLB).

IPs to comment on the implications to navigational safety of vessels passing closer than 1.5nm to the proposed WTG array RLB at the north-eastern extent of the OWF array and whether specific risk mitigation should be considered in this location.

Trinity House Response

Trinity House recognise that there is an effect on maritime radar caused by navigating close to Offshore Wind Turbines as shown in the studies carried out in 2004 and 2005, highlighted by the applicant. These studies were carried out at an early windfarm and there have been no additional trials carried out as turbine sizes have dramatically increased in recent years.

During the Thanet Extension Offshore Windfarm hearings there was evidence presented by the London Pilots Council showing pictures of the effects to radar on a large vessel navigating close to the existing windfarm. This was quite severe but could only show the effect on that particular type, size and arrangement of vessel.

The applicant's submission in the NRA Sec 22.8 Impact on Maritime Radar Systems relies heavily on assumptions and we cannot realistically confirm or refute these. Page 158 (402) last bullet states "...mainly a problem during periods of reduced visibility.." We would recommend that if the "problem" does occur it is important in all visibilities as the responsibility for good lookout on the vessel does not change.


Page 159 (404). The applicant makes the assumption that vessels are "likely to pass over 1nm from the site". When analysing maritime traffic around existing windfarms it can be seen that some mariners will navigate closer than 1nm to turbines when passing them. Whether a mariner passing the windfarm would consider increasing the passing distance if they became aware of radar interference could be considered supposition and open a discussion which would not come to a final conclusion.

Page 160 (408) It should be noted that whilst MCA guidance is produced and made available publicly, only UK registered shipping is required to be in receipt of it. Foreign flag vessels and their crews may not, and need not, be aware of these documents.

In conclusion, if this development progresses it is unclear what size turbine would be used and to what level any interference will be experienced on marine radars. As such we cannot say what mitigation would be appropriate and must assume, as has the applicant, that mariners will identify any interference and navigate appropriately.

Please address all correspondence regarding this matter to myself at russell.dunham@trinityhouse.co.uk and to Mr Steve Vanstone at navigation.directorate@trinityhouse.co.uk

Yours faithfully,



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