



Maritime &  
Coastguard  
Agency

Department for  
Business, Energy  
& Industrial Strategy  
1 Victoria Street  
London  
SW1H 0ET

Bay 2/25  
Spring Place  
105 Commercial Road  
Southampton  
SO15 1EG  
UK

Tel: +44 (0)20 3817 2426  
Fax:  
E-mail: Helen.Croxson@mcga.gov.uk

Your ref:  
Our ref: Thanet Extension Offshore  
Windfarm Project (EN010084)

13<sup>th</sup> December 2019

Dear Sir/Madam

## **Thanet Extension Offshore Windfarm Project – EN010084**

### **Planning Act 2008 and the Infrastructure Planning (Examination Procedure) Rules 2010**

Thank you for your letter dated 21<sup>st</sup> November 2019 providing the opportunity for the Maritime Coastguard Agency (MCA) to comment on the additional information provided by the applicant in support of their Thanet Extension Offshore Windfarm project application.

The MCA's remit for offshore renewable energy development is to ensure that safety of navigation is preserved, and our search and rescue capability is maintained, whilst progress is made towards government targets for renewable energy. We would therefore like to respond to your request for information and comments as follows:

### **Marine Navigation, Shipping and Ports Infrastructure**

#### Navigational Risk Assessment

*The Secretary of State invites the views from the Maritime and Coastguard Agency on the further Collision Risk Assessment. In particular, the Secretary of State would be grateful for views as to whether the assessment addresses the concerns raised during the examination on navigation risks – in particular collision risks assessed after the introduction of the Structure Exclusion Zones and views on Anatec's interpretation in its assessment of incidents reported to the Marine Accident Investigation Branch.*



HM Coastguard

**MCA response:**

The MCA recognises that the purpose of the collision assessment of the proposed extension was to investigate relative change in likelihood scores between the baseline and inherent risk scores, not the relative change in risk as paragraph 3 of the document infers. To assess the relative change in risk would involve assessment of many other elements, of which this collision assessment is only one. The report recognises that one month's Automatic Identification System (AIS) data has been used in the assessment and notes that data on non-AIS vessels and near-miss incident data has not been included.

The MCA acknowledges that the COLLRISK model used by Anatec Ltd has been used for other offshore wind farm Navigation Risk Assessments (NRA), however when comparing the results against Hornsea One and Two sites (Appendix 42, paragraph 14), it should be noted that these two wind farms are more than 50 nautical miles offshore where there are different vessel types in the area, different traffic patterns and densities, including where pilot transfers and pilotage operations do not take place. Collision risk is normally higher closer inshore where there are greater traffic densities and more constricted traffic routes, and it can be expected therefore, that the relative increases in likelihood scores to be greater for wind farms closer inshore. The applicant claims that collision risk increases for Hornsea One and Two are "far in excess of those identified for TEOW" (Appendix 42, paragraph 14), however a degree of caution should be taken with this statement as the two sites are not suitable for comparing collision risk.

The MCA is content with the Marine Accident Investigation Branch (MAIB) data and that four examples of collisions have been highlighted including one in which action was taken to avoid a collision. Also worthy of mention is the Maersk Nottingham incident in 2009 where, although not a collision incident, the vessel suffered engine failure, and without the assistance of the Thanet wind farm construction tugs she would have drifted into the wind farm site. MCA notes that the report recognises that data for non-AIS equipped vessels is not included and, therefore, non-AIS equipped vessel traffic is underrepresented.

The MCA's concerns on navigation safety risk, as highlighted in our response to the Examining Authority for Deadline 6, have not changed. The collision assessment on likelihood scores would normally feed into the NRA along with other elements such as allisions, groundings, qualitative data from stakeholders and risk control measures. During examination, the figure used for projected increases in traffic densities was challenged by stakeholders as being somewhat arbitrary, which raises the question on whether the 10% figure is appropriate for this collision assessment. Overall, there are still too many outstanding elements of the NRA not agreed, for MCA to confirm that this assessment addresses and satisfactorily assuages our concerns.

**Further Navigation Simulation Report**

*The Secretary of State invites the views from the Maritime and Coastguard Agency on the report and in particular for comments on Annex 1 which contains the Applicant's summary of the responses to its consultation on the Report, and the Applicant's responses to those responses. In order to consider this matter fully the Secretary of*

*State invites comments from the Parties listed above on whether or not the findings in this Report addresses the concerns raised during the examination, and for any other views on the Report.*

### **MCA Response:**

The MCA does not stipulate simulation exercises as part of its guidance, however, the need for additional assessments should be adequately weighed and undertaken in order to address concerns raised by Interested Parties (IP). The MCA attended the simulation workshop as observer and witnessed multiple runs over three consecutive days' of exercises. It was noted that the trials utilised experienced pilots, although from different operational area. As noted above, MCA guidance does not explicitly require simulation studies, since, as well recognised by the maritime industry generally, there are limitations to simulation studies to achieve a holistic qualitative assessment compared to the real environment.

MCA observed that for most part of the simulation exercises, main and affected IPs were absent. So, the applicant's simulation exercises weren't quite subject to nuanced cross verification and validation by the directly affected parties involved in pilot transfers.

Our concerns remain that there has been a failure to obtain IP agreement regarding the risk to pilots, along with the other NRA related aspects, including the list of embedded and additional risk controls measures as detailed in MCA responses throughout the examination, and the acceptability of the final risk scores as ALARP. It is MCA's view that the simulation report is not an alternative to the NRA and just addresses one aspect of what is being validated – the pilot transfer operation, although professionally undertaken.

### Draft Development Consent Order (DCO)

*The Secretary of State invites comments from any Interested or Other Party on the draft development consent order which incorporates changes made late in the examination.*

The MCA has considered the DCO/DML and we would like to highlight the following aspects which are not in line with the MCA, Trinity House and the Marine Management Organisation's (MMO) agreed navigation safety conditions for offshore renewable energy installations (changes requested are shown in blue) :

### Part 4 Conditions

#### **Notifications and Inspection (page 100)**

*(8) A notice to mariners must be issued at least ten days prior to the commencement of the licensed activities or any part of them advising of the start date of Work No. 1 (wind turbine generators or other offshore construction activities including array cables) and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO and UKHO within five days.*

The MCA would expect *“A notice to mariners must be issued at least 14 days prior to the commencement of the licensed activities or any part of them advising of the start date.....”*

*(12) In case of exposure of cables on or above the seabed, the undertaker must within five days following the receipt by the undertaker of the final survey report from the periodic burial survey, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure.*

The MCA would expect *“In case of exposure of cables on or above the seabed, the undertaker must within three days following the receipt by the undertaker of the final survey report from the periodic burial survey, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO, MCA, Trinity House, and the UKHO within 5 days.”*

### **Pre-construction plans and documentation (Page 103)**

*13.—(1) The licensed activities or any part of those activities must not commence until the following (as relevant to that part) have been submitted to and approved in writing by the MMO—*

The MCA would expect *“The authorised project shall not commence until the following have been submitted to and approved by the MMO. Each programme, statement, plan, protocol, scheme or other detail required to be approved under this condition must be submitted to the MMO for approval at least 6 months prior to the commencement of the authorised project except where otherwise stated.”*

*15. (7) No part of the authorised scheme may commence until the MMO, in consultation with the MCA, has given written approval to an Emergency Response Co-operation Plan (ERCoP) which includes full details of the plan for emergency response and co-operation for the construction, operation and decommissioning phases of that part of the authorised scheme. This must be in accordance with the MCA recommendations contained within MGN543 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues”. In providing its approval, the MMO must confirm in writing that the undertaker has taken into account and, so far as is applicable to that part of the authorised scheme, adequately addressed all MCA recommendations contained within MGN543 and its annexes.*

The MCA would expect the following: *No part of the authorised project may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed all MCA recommendations as appropriate to the authorised project contained within MGN543 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.*

## **Pre-construction plans and documentation (page 124)**

- (h) *A cable specification, installation and monitoring plan, to include—*
- (i) technical specification of offshore cables (including fibre optic cables) below MHWS, including a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with industry good practice;*
  - (ii) a detailed cable (including fibre optic cables) laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques (including cable protection); and*
  - (iii) proposals for monitoring offshore cables (including fibre optic cables) including cable protection during the operational lifetime of the authorised scheme which includes a risk based approach to the management of unburied or shallow buried cables.*

The MCA would expect the following to be included in the condition:

- (h) *A cable specification, installation and monitoring plan, to include—*
- (i) technical specification of offshore cables (including fibre optic cables) below MHWS, including a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with industry good practice;*
  - (ii) a detailed cable laying plan for the Order limits, incorporating a burial risk assessment encompassing the identification of any cable protection that exceeds 5% of navigable depth referenced to chart datum and, in the event that any area of cable protection exceeding 5% of navigable depth is identified, details of any steps (to be determined following consultation with the MCA and Trinity House) to be taken to ensure existing and future safe navigation is not compromised or such similar assessment to ascertain suitable burial depths and cable laying techniques, including cable protection; and*
  - (iii) proposals for monitoring offshore cables (including fibre optic cables) including cable protection during the operational lifetime of the authorised scheme which includes a risk-based approach to the management of unburied or shallow buried cables.*

## **Pre Construction Monitoring and Surveys (page 106)**

16.b The MCA would expect the following to be included in the condition – in line with MCA published hydrographic survey guidelines:

*A swathe bathymetric survey to IHO Order 1a, of the area(s) within the Offshore Order limits in which it is proposed to carry out construction works and disposal activities, extending to a 500 metre buffer around the site of each work must be undertaken. The survey shall include all proposed cable routes.*

*This should fulfil the requirements of MGN 543 and its supporting 'Hydrographic Guidelines for Offshore Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications. This must be submitted as soon as possible, and no later than [three months] prior to construction. The Report of Survey must also be sent to the MMO.*

### **Post construction (page 107)**

The MCA would expect the following to be included in the conditions as per MGN 543 Hydrographic Survey Guidelines.

*The undertaker must conduct a swathe bathymetric survey to IHO Order 1a of the installed export cable route and provide the data and survey report(s) to the MCA and UKHO. The MMO should be notified once this has been done, with a copy of the Report of Survey also sent to the MMO.*

*On post decommissioning, the undertaker must conduct a swathe bathymetric survey to IHO Order 1a of the cable route and the area extending to 500m from the installed generating assets area and provide the data and survey report(s) to the MCA and UKHO.*

*This should fulfil the requirements of MGN 543 and its supporting 'Post Construction Hydrographic Guidelines for Offshore Developers, which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications.*

Thank you very much for the opportunity to comment on the additional documentation.

Yours faithfully,

Helen Croxson  
OREI Advisor  
Maritime and Coastguard Agency