



Department for  
Business, Energy  
& Industrial Strategy

Mr Adam Foster  
Lead Risk Analyst  
Anatec Limited  
Cain House  
10 Exchange Street  
Aberdeen  
AB11 6PH

**Department for Business, Energy &  
Industrial Strategy**  
1 Victoria Street,  
London SW1H 0ET  
T: +44 (0) 207 215 5000  
E: **BEISEIP@beis.gov.uk**  
**[www.gov.uk/beis](http://www.gov.uk/beis)**

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Dear Mr Foster,

**ENERGY ACT 2004: OFFSHORE WIND ELECTRICITY GENERATING STATION  
SAFETY ZONE APPLICATION - HORNSEA TWO OFFSHORE WIND FARM**

**1. The Application**

1.1 I am directed by the Secretary of State for Business, Energy and Industrial Strategy (“the Secretary of State”) to refer to a Safety Zone application (“the Application”) submitted on 8 April 2020 on behalf of Ørsted Power (UK) Limited (“the Applicant”) to consider a safety zone notice under section 95(2) of the Energy Act 2004 (“the 2004 Act”) declaring safety zones during the construction and operational phase and also during periods of major maintenance at the Hornsea Two Offshore Wind Farm. No permanent safety zones are applied for during normal operations (i.e. activities not classed under the definition of major maintenance).

1.2 The Applicant has requested the declaration of the following safety zones in the following terms:

Construction Phase

- ‘Rolling’ 500 metre safety zones established around each wind farm structure and/or their foundations whilst construction work is being performed as indicated by the presence of construction vessels; and
- pre-commissioning 50 metre safety zones established around any wind farm structure which is either partially completed or constructed but not yet commissioned where a construction vessel is not present; and



## Operation and Maintenance Phase – Major Maintenance

- during any periods of major maintenance a 500 metres safety zone around all ‘major maintenance works’<sup>1</sup> being undertaken around a wind farm structure as denoted by the presence of a major maintenance vessel. The Application also applies for major maintenance safety zones to be applied around the Reactive Compensation Substation (“RCS”) associated with Hornsea Project Two.

1.3 A Notice of the Application (“the Public Notice”) was published and served by the Applicant in accordance with the requirements of the 2004 Act and regulations 4 and 5 of the Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007 (“the 2007 Regulations”). The Secretary of State wrote to consultees on 19 May 2020 seeking comments on the Application by no later than 18 June 2020.

## **2. Representations**

2.1 A summary of the views of individual consultees and the Applicant are set out below:

- i) Trinity House supports the safety zone application and no comments to make;
- ii) the Chamber of Shipping has no comments and is content with the safety zone application.
- iii) The Maritime and Coastguard Agency (“MCA”) confirmed its support for the establishment of a safety zone during the construction phase – a 500 metre ‘rolling’ safety zone and a 50 metre pre-commissioning zone and in the operation and maintenance phase, around all “major maintenance” being undertaken around a wind farm structure, as denoted by the presence of a major maintenance vessel. However, their view remains that they do not consider Service Operations Vessels (“SOVs”) to be major maintenance vessels and therefore SOVs should not trigger a safety zone when alongside. The MCA consider the SOV is primarily a Walk to Work vessel, used for routine transfer of technicians to and from offshore renewable energy installations and while it is temporarily connected to a structure via the gangway during this period, it can be disengaged, as required, at short notice. The MCA see no additional benefit the safety zone brings to an SOV over existing practices and procedures of good seamanship and communication, and adherence to The International Regulations for Preventing Collisions at Sea 1972 (“COLREGs”). The MCA would be concerned that if a safety zone was in place for an SOV, the effective lookout arrangements could be reduced because there is a reliance on the effectiveness of that safety zone. The MCA are also of the opinion that a vessel must be carrying out construction activities (or

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<sup>1</sup> As defined in the Electricity (Offshore Generating Stations)(Safety Zones)(Application Procedures and Control of Access) Regulations 2007.



maintenance activities in the operational phase) for it to be classed as a maintenance vessel under the regulations, and consider the legislation was not written with the idea of a vessel such as an SOV in mind. In MCA's view, maintenance implies that the vessel (or installation) itself is undertaking maintenance of the installation. Good seamanship and COLREGs should be enough to bring risks down. Safety zones just provide an unnecessary layer which may reduce the effective lookout.

The MCA recommends to the Secretary of State the approval of safety zones for the construction phase – 500 metre 'rolling' safety zones around each wind farm structure and the pre-commissioning of 50 metre safety zones around any wind farm structure either partially completed or constructed but not yet commissioned where a construction vessel is not present. In respect to the operation and maintenance phase, the MMO supports 500 metre safety zones during major works being undertaken by large heavy lift or jack up barge construction vessels but in their view SOVs should not be classed as a maintenance vessel under current legislation.

iv) The Marine Management Organisation's ("MMO") main concerns were the Applicant's assessments of the impact on a significant number of smaller fishing vessels that do not use the Automatic Identification System ("AIS") had not been taken into consideration by the Applicant during the data assessment. AIS signals can be sent intermittently due to signal issues and the data gathered can, in their view, be very inaccurate and should not be solely used as a representative survey of vessels within the area. The MMO also considered there is a likely impact to fishing operations and to other legitimate users of the sea, as the temporary exclusion zones will be in force around the worksite for the duration of any proposed works which could result in temporary restrictions of access to fishing grounds or navigation routes. The MMO consider a Fisheries Liaison Office ("FLO") should be appointed by the Applicant to provide clear communications with other users of the sea. The MMO also considered that the works associated with the safety zone may have impacts on fish/shellfish stocks and possibly affect fisheries north and south of the Humber. They conclude that advice should be sought from the FLO when the timetable of works is known.

The MMO is satisfied that enough information has been provided with the application and supporting documents to understand the methodology and equipment that will be used.

v) The National Federation of Fishermen's Organisation ("NFFO") comments on this application are only regarding the 500 metre safety zone to be applied around SOV's when attached to structures falling under the definition of "major maintenance". They note the definition of "major maintenance works" under the 2007 regulations were drafted before the use of vessels used to attach themselves to wind farms installations via a walk to work gangway. The NFFO consider the COLREGs provide the basis for governing such operations and consider the Applicant's argument to be flawed. The NFFO consider that any



vessel approaching either engaged in fishing or navigating the vicinity of a SOV will need to navigate around its safety zone; a 500 metre safety zone in such circumstances will limit the navigable space for manoeuvring. Allision risk with neighbouring surface structures and contact between fishing gear and sub surface structures will therefore be increased. Collision risk is also increased in circumstances where two or more passing vessels are in the vicinity of a safety zone e.g. approaching one another from opposite directions.

The NFFO agree with the MCA's view around the application of safety zones for SOV operations and consider the application of 500 metre safety zones around SOV operations would not be proportionate and practical, when set against an objective to promote coexistence with fishing activities. The NFFO requests that the Applicant and Secretary of State consider the application of 150 metre safety zones for such purposes in line with the Secretary of State's decision on Race Bank Safety Zone (unless specific site circumstances justify an alternative) in order to meet the safety concerns of the offshore wind farm operators, whilst mitigating the disruptive effects and safety implications for other mariners.

2.2 Whilst also consulted by the Secretary of State, the British Marine Aggregate Producers Association, Cruising Association, Royal Yachting Association, Humber VTS and ABP Ports Humber offered no comments on the application. Further, no representations were received in response to the publication of the Public Notice.

### **The Applicant's response**

2.3 Whilst noting the MCA's support for safety zones triggered by a jack-up vessel, the Applicant considered that a distinction between a bridge-linked Walk to Work SOV and jack-up vessel should not be drawn. SOVs are required to provide a system of service to turbines during construction and operation and it is not only a crew transfer system. The Applicant is content with the MCA position that safety zones are not necessary for operations that only involve crew transfer, on the basis that alternative mitigation can be implemented. In the Applicant's view, given the nature of operations undertaken, offshore wind farm sites required mitigation beyond the standard law of the sea and safety zones had been demonstrated as a necessary measure.

2.4 Evidence on-site showed that third-party vessels were willing to navigate in close proximity to a SOV and safety zones are considered therefore necessary to provide such vessels with unambiguous information delineating the area that needed to be avoided.

2.5 The SOV would display Restricted in Ability to Manoeuvre ("RAM") status as necessary. There would always be a designated look-out when the safety zones were active, which would either be a dedicated guard vessel or another designated on-site vessel.

2.6 In the Applicant's view, the establishment of a SOV safety zone when walk to work transfer was in progress would offer a clear benefit over and above the degree



of risk mitigation provided by the COLREGs, good seamanship, and any preventative action available to the SOV's crew. Safety Zones would only be triggered where risk assessment has identified their use as necessary to ensure risk are as low as reasonably practicable ("ALARP").

2.7 Further, the Applicant considered that the question of whether a SOV safety zone is required had already been established in the relevant legislation and practice and is considered to be a logical extension of an existing and well-established tier of regulation rather than a further legislative requirement and another tier of regulation.

2.8 In regard to the MMO's concerns about the Applicant's assessments of the impact on fishing vessels that do not use the AIS during its data assessment, the Applicant considers that in terms of data quality, AIS data recorded from a vessel on site at Hornsea One has been supplemented with additional shore based data to ensure coverage is as comprehensive as possible. In terms of restrictions to access, the Applicant considers that given the safety zones represent areas which vessels should be avoiding to ensure safe operations, the safety zones in of themselves do not impact third party traffic over and beyond what the works themselves do. The Applicant has appointed a Company Fisheries Liaison Officer and Fishing Industry Representative to maintain effective communications with the fishing industry. In addition, Offshore Fisheries Liaison Officers will be utilised throughout construction and consultation will be ongoing with fishing stakeholders to ensure they are kept up to date with the works. This will include the usual promulgation means (Notice to Mariners, Kingfisher Bulletin) and through the Fisheries Liaison Officer.

### **Secretary of State's consideration of the Application and the Representations Received**

2.9 The Secretary of State notes that, while there was acceptance that safety zones were necessary during construction and major maintenance operations, the request for safety zones of 500 metre radius around SOVs while they were attached to turbines or substations was, as is noted above, a concern for a number of interested parties. The Secretary of State further notes that some of the parties did not agree with the Applicant's argument that the use of SOVs falls with the definition of 'major maintenance' (and, therefore, has the potential to receive the benefit of a safety zone) in accordance with the provisions of the Energy Act 2004).

2.10 In assessing the Application and the representations submitted in response to consultation on it, the Secretary of State notes that the question of whether the definition of 'major maintenance' in the Energy Act 2004 applies to SOVs has been previously considered in the decision taken on the application for safety zones to be put in place around such vessels when attached to the infrastructure in relation to the Race Bank offshore wind farm ("the Race Bank decision").

2.11 The Race Bank decision was issued on 17 April 2019. That decision states that the Secretary of State was "*satisfied that an SOV would constitute a "maintenance vessel" and therefore when attached to, or anchored next to, an operational "renewable energy installation" would fall within the definition of "major maintenance*



works” as defined in the 2007 Regulations [the Electricity (Offshore Generating Stations) (Safety Zones) (Applications Procedures and Control of Access) Regulations 2007]”.

2.12 In the Race Bank decision, the Secretary of State also stated that *“Whilst noting the views about other vessels carrying out similar activities relying only on the use of effective safety practices” she was “mindful of the safety risk associated with a vessel the size of the SOV and also the number of personnel it carries onboard”.*

2.13 In considering the current Application, the Secretary of State does not believe that there are any matters made known to him that would require him to take a different view to the one set out in the Race Bank decision. The safety zone benefits that flow from being defined as major maintenance should, therefore, apply to the use of SOVs within the Hornsea Two Offshore Wind Farm.

2.14 The next question for consideration, therefore, is whether the request for a 500 metres safety zone around the installations during major maintenance should be granted in respect of SOVs as well as other vessels undertaking major maintenance. The Secretary of State notes that in the Race Bank decision, safety zones with a radius of 150 metres around wind farm structures when works were being undertaken by an SOV, were requested and granted. In the decision on the Triton Knoll Safety Zone, the Secretary of State considered there was merit in granting safety zones of 500 metres for all types of vessels. In considering the current Application, the Secretary of State notes that there is an argument for consistency across the range of vessels that might be engaged in such activity so that 500 metres would apply to every vessel that is covered by the major maintenance provisions.

### **3. The Secretary of State’s Decision**

3.1 The Secretary of State has considered the representations and all other material considerations and does not consider it appropriate for a public inquiry to be held with respect to the Hornsea Two Application.

3.2 The Secretary of State is satisfied that an SOV would constitute a “maintenance vessel” and therefore when attached to an operational “renewable energy installation”, would fall within the definition of “major maintenance works” as defined in the Energy Act 2004 and the 2007 Regulations. In such circumstances, a standard safety zone of 500 metre radius measured from the outer edge at sea level of an existing wind turbine tower would normally apply.

3.3 Whilst noting the views expressed about other vessels carrying out similar activities relying only on the use of effective practice of good seamanship, the Secretary of State is mindful of the safety risk associated with a vessel the size of the SOV and also the number of personnel it carries onboard.



3.4 In light of the matters above, the Secretary of State considers that the declaration of safety zones of the type requested during the construction of and major maintenance to the Hornsea Two Offshore Wind Farm is necessary for the purpose of securing the safety of installations comprising the Hornsea Two Offshore Wind Farm and individuals working thereon because they will help reduce during its operation the inherent navigational risk of interference or collision by vessels.

3.5 In light of the matters above, the Secretary of State considers that the safety zones of the type requested during both construction and maintenance phases to the Hornsea Two Offshore Wind Farm is necessary for the purpose of securing the safety of installations comprising the Hornsea Two Offshore Wind Farm and individuals working thereon because they will help reduce during its operation the inherent navigational risk of interference or collision by vessels. However, given the potential for a SOV to be operating at multiple renewable energy installation locations throughout the day, to ensure enforceability of the safety zone under Section 95(6) of the Energy Act 2004<sup>2</sup>, the Secretary of State considers it is necessary to include notice conditions. The declaration is set out in paragraph 4 below.

#### 4. The Declaration

4.1 The Secretary of State hereby issues the notice declaring safety zones in the following terms:

##### *During the construction phase*

*(1) a 500 metre safety zone established around any wind turbine structure or offshore substation (including any associated or partially constructed infrastructure, e.g foundations) whilst work is underway at that structure, as indicated by the presence of construction vessels; and*

*(2) a 50 metre safety zone established around any partially completed or constructed wind turbine or offshore substation prior to final commissioning.*

##### *During Major Maintenance*

- 1) A safety zone with a radius of 500 metres measured from the outer edge at sea level of any wind turbine, offshore substation or the Reactive Compensation Substation (“RCS”), where works are being undertaken by major maintenance vessels including those undertaken by a Service Operation Vessel (“SOV”).*
- 2) Notice of the 500 metre radius major maintenance vessels including SOV safety zone and RCS safety zone as required, shall be given by the operator of the Hornsea Two Offshore Wind Farm through:*

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<sup>2</sup> <https://www.legislation.gov.uk/ukpga/2004/20/section/95>



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a) *Notices to Mariners and Kingfisher bulletins; and:*

b) *Notice to:*

- i) the harbour master of ports whose uses are in the opinion of the Applicant likely to be affected by the safety zone;*
- ii) the sector office of the Maritime and Coastguard Agency which is responsible for operations in the waters in which the safety zone is located; and*
- iii) the local office of the Marine Management Organisation which is responsible for operations in the waters in which the safety zone is located.*

*Further periodical notices in accordance with sub-paragraph a) and b) above shall be given as considered necessary by the operator of the Hornsea Two Offshore Wind Farm in order to maintain the safety of vessels and their personnel.*

*4) For day-to-day movements of a SOV within the Hornsea Two Offshore Wind Farm, any designated on-site monitoring vessel shall also be responsible for notifying vessels in the vicinity of the wind turbines or offshore substation or RCS that shall be worked on that day by radio warnings as designated by the United Kingdom Hydrographic Office (UKHO) that the 500m radius safety zone will be active when the SOV is attached to those installations. Safety zones will be implemented in tandem with a suite of other mitigation measures (e.g. dedicated onsite vessel(s), construction site marking and charting, monitoring and policing of safety zones) thus bringing the risk to within ALARP parameters.*

*4.1 This notice comes into force from the date of this letter.*

*4.2 For the purposes of this notice, the Hornsea Two Offshore Wind Farm comprises the offshore wind turbines and offshore sub-stations or RCS for which development consent was granted by the Secretary of State under the Planning Act 2008 on 16 August 2016.*

Yours sincerely

**G Leigh**

**Gareth Leigh**  
**Head of Energy Infrastructure Planning**

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Trinity House

Cruising Association

UK Chamber of Shipping

Marine Management Organisation

National Federation of Fishermen's Organisation

The Maritime and Coastguard Agency

British Marine Aggregate Producers Association

Inshore Fisheries and Conservation Authority (Eastern)

Royal Yachting Association