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Our ref:

17 April 2019

Ms Sophie Farenden
Ørsted Power (UK) Limited
5 Howick Place
Westminster
London SW1P 1WG

Dear Ms Farenden,

ENERGY ACT 2004: OFFSHORE WIND ELECTRICITY GENERATING STATION

SAFETY ZONE APPLICATION- RACE BANK OFFSHORE WIND FARM

I. 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 further Safety Zone application ("the Addendum Application") submitted on 20 September 2018 on behalf of Ørsted Power (UK) Limited ("the Applicant") to amend a safety zone notice issued on 13 April 2016 ("the 2016 Application") by the Secretary of State under section 95(2) of the Energy Act 2004 ("the Act") declaring safety zones during the construction phase and also during periods of major maintenance at the Race Bank Offshore Wind Farm.

1.2 The Applicant has requested the declaration that safety zones with a radius of 500 metres around any wind turbines and offshore substations where 'major maintenance works'[1] are undertaken, but specifically excluding use of a Service Operation Vessel ("SOV"). Further, the Applicant has also requested during normal operations safety zones with a radius of 150 metres around any wind turbines and offshore substations when a SOV is routinely stationed alongside.

1.3 A Notice of the Addendum Application ("the Public Notice") was published and served by the Applicant in accordance with the requirements of the 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").

[1] '*major maintenance works*' are defined in the 2007 Regulations as meaning '*works relating to any renewable energy installation which has become operational, requiring the attachment to, or anchoring next to, such an installation of a self-elevating platform, jack-up barge, crane barge or other maintenance vessel*'.

II. Representations

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

i) Trinity House had no objections to the safety zone application and no further comments to make;

ii) the Cruising Association agrees to the proposal for a 150m radius safety zone around any wind turbine tower at which the SOV is working. It considered the SOV should be flying restricted ability to manoeuvre ("RAM") signals when approaching or alongside a tower and that a dedicated look-out should be operative at all times when the SOV is within the area charged with monitoring other vessels and warning if necessary. A separate guard vessel should also be provided during hours of darkness. It also considered it would be useful to have an indication of the number of different turbines likely to be visited during a typical day's work. As the SOV and its operations were considered to be unique, and in view of the high proportion of visitor yachts in the area including many foreign-flagged craft, special care should be taken to promulgate descriptions of the operation, and timetabled if possible, to yachting harbours and marinas, pilot books and magazines.

iii) the UK Chamber of Shipping did not have any issue or concern relating to the 500m radius rolling safety zone during major maintenance. However, it queried the need for a 150m rolling safety zone around a RAM vessel as the International Regulations for Preventing Collisions at Sea 1972 ("COLREGS") published by the International Maritime Organisation clearly stated the actions that should be taken when encountering this type of vessel. It was unaware of any vessel collision incidents leading to the safety zone request in such locations and, from a commercial shipping point of view, would not expect vessels to interact with each other at such close range, particularly within a wind farm, and queried whether it more related to fishing vessels and recreational craft on which it was unable to provide further comment. It was also noted from the Addendum Application that there may only be one or two 500m radius safety zones at any one time in the wind farm. It believed this wording was loose and considered it might be prudent to determine that there will not be more than two safety zones at any time to provide greater clarity and reduce confusion to traffic navigating in near proximity to the wind farm;

iv) the Marine Management Organisation ("MMO") had no objection to the safety zone amendment. However, it asked whether consultation was undertaken with relevant fishing industry consultees and stated that any major maintenance that is not within the parameters consented under licence L/2018/00214 on 24 October 2018 would require an additional marine licence application.

v) the National Federation of Fishermen's Organisation ("NFFO") made two separate representations. It stated in the first representation that the 150m radius safety zone would mark a departure from the typical application of safety zones around offshore renewable installations. It considered it would be important to plan these operations in advance as far as possible in liaison with the fishing industry so that fishing operations were not inadvertently disrupted by the commencement of activities and so that fishing businesses can take into account maintenance operations in conducting their own operations. It noted that the Addendum Application document incorrectly referred to the coexistence plan as reflecting an agreement with all relevant fishing interests in the area that fishing gear markers will not be located within 150m of turbines. It considered the document reflected the position of the Applicant with respect to achieving coexistence objectives rather than a mutually agreed position between the Applicant and commercial fishing parties. It also considered that it was not possible to practically guarantee that fishing markers will not become located in such areas due to gear shifting in poor weather conditions. If granted, the Addendum Application should only apply to the SOV when using a gangway to transfer personnel that results in restricted manoeuvrability. In other circumstances, where vessels are fully manoeuvrable, COLREGS provide the means to ensure safe operating practices are upheld.

The NFFO supplemented the above with a further representation. It noted the Applicant's view that the SOV undertaking "normal routine maintenance operations" was already encompassed within the definition of "major maintenance" under the 2007 Regulations. However, based on the Addendum Application, the operation of the SOV in routine maintenance operations was not a material consideration in the 2016 application. The NFFO consider this highlights a discrepancy between the wording of the 2007 Regulations and their intended application to activities under the 2016 application. Notwithstanding the above, the NFFO consider the 500m rolling safety zones under frequently occurring general maintenance activities would be disruptive to fishing operations in the area and unnecessary and were not accounted for in the 2016 application. The NFFO also further questioned what additional safety mitigation either a 500m or 150m rolling safety zone would provide over COLREGS and good safety practice (e.g. monitoring, active warning and lighting) and applying such safety zones for general maintenance operations would also set a precedent for other projects; and

vi) The Maritime and Coastguard Agency ("MCA") made a number of representations in response to the Application. Whilst supporting the change to exclude the SOV from triggering the 500m radius major maintenance safety zone, the MCA believed there was not sufficient evidence to support the establishment of a 150m radius safety zone as triggered by the SOV. It had considered the difference between protecting vessels and installation during major maintenance with the safety zone as accepted, against protecting the Walk to Work System and believed there was a clear difference in the need for a safety zone where

large vessels are conducting major works for a long time, compared to very short term works, in multiple locations throughout the day, where the Walk to Work System could be disconnected relatively quickly in an emergency.

The MCA acknowledged the SOV would potentially have up to 60 personnel onboard and understood the inherent risks with the Walk to Work system to personnel, but also considered that there were many vessels carrying out similar activities every day in terms of risk that utilise effective practice of good seamanship, with appropriate lookouts able to use very high frequency radios to alert errant or unsuspecting marine craft in the vicinity, Safety Management System practices and procedures, and risk assessment, to ensure the risk is suitably mitigated and remains as low as reasonably practicable ("ALARP"), without the need for further legislative requirement such as safety zones. COLREGs should ensure that other vessels automatically keep clear.

Further, the MCA also understood that the legislation allows for 500m radius safety zones around renewable energy installation during construction, extension, major maintenance or decommissioning (as indicated by large construction vessels such as jack up vessels etc), a rolling 50m radius safety zone around installation during the construction phase until commissioning, and then 50m (where justified) for the operational phase. Further, given the above safety zones during the operational and construction phases are well known, the MCA considered having a 150m radius SOV safety zone may actually add confusion. The case of a SOV utilised for a Walk to Work system during routine operation and maintenance work of short duration, was not considered major maintenance and there was not a sufficient safety case to justify a safety zone triggered by the use of a SOV over and above good watchkeeping, seamanship and the COLREGs.

The MCA had concerns over the general idea of SOVs triggering safety zones around structures regardless of radius and would also not necessarily class the SOV as a maintenance vessel for the purposes of 'major maintenance'. The MCA also stated that mitigating against nuisance behaviour was not the intended purpose of safety zones and it was also happy for the general topic of safety zones associated with SOVs to be proposed as a discussion point for the Nautical & Offshore Renewable Energy Liaison ("NOREL") group, which brings together the relevant Government Departments and representatives of the Shipping and Energy industries and works to ensure that the commercial and recreational shipping and ports industries successfully co-exist with the offshore renewable energy industries.

In conclusion, the MCA considers that a 150m safety zone for SOVs, in addition to current practices, would create another tier of regulation, and, consequently, enforcement and was not justified. Whilst supporting safety zones during major works being undertaken by large heavy lift or jack up barge construction vessels where major works are being undertaken for a

long period of time, what was proposed with the SOV were very short term works in multiple locations throughout the day and the Walk to Work system could be disconnected relatively quick in an emergency.

2.2 Whilst also consulted by the Secretary of State, the British Marine Aggregate Producers Association, Inshore Fisheries and Conservation Authority (Eastern) and the Royal Yachting Association offered no comments on the application. Further, no representations were received in response to the publication of the Public Notice.

2.3 The Applicant's response

As part of the Applicant's ongoing fisheries stakeholder management and liaison for the Race Bank Offshore Wind Farm, a reduction in the SOV safety zone had been proposed to ensure impacts on fishing activities and vessel transit through the site would be minimised while still ensuring safe operations. The Applicant would expect the existing 500m major maintenance works safety zone to continue to apply even if the Secretary of State were minded to refuse the lesser 150m radius SOV safety zone applied for. Should they be removed during major maintenance, the Applicant's opinion was that risk to the safety of the SOV and crew given that allision and collision risk would no longer be ALARP. The Applicant noted the increased use of SOVs by developers for operational maintenance in the Southern North Sea and considered it was important to set a precedent to ensure they can operate safely.

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 SOV and jack-up vessel should not be drawn. The Applicant noted that when bridge-linked to a structure, the SOV is not just restricted in its ability to manoeuvre, but unable to manoeuvre.

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. First-hand experience to date at the Race Bank Offshore Wind Farm site confirmed the presence of a safety zone around a bridge-linked SOV was a key means of ensuring safe separation distances. Not applying this risk mitigation measure would, to some degree, increase the probability of an incident occurring.

Evidence on-site showed that third-party vessels were willing to navigate in close proximity to a bridge-linked SOV and safety zones were considered necessary to provide such vessels with unambiguous information delineating the area that needed to be avoided. The Applicant considered prohibiting vessels from being within a 150m radius of a structure would reduce the potential for nuisance behaviour to become dangerous.

The SOV would display 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. The number of different turbines likely to be visited during a typical day's work could vary significantly but was expected to be between one and six. The SOV would normally operate between the hours of 06.00-22.00 and the Applicant considers it unlikely that a 150m radius safety zone would be a frequent event at night. A dedicated guard vessel during the hours of darkness was not therefore considered necessary but may be used if a risk assessment undertaken by the Applicant deemed them necessary. Monitoring arrangements in the event of no dedicated guard vessel being present would be in place.

Given the nature of the SOV operations, a timetabled description was not practical. However, details of the 150m radius SOV safety zone would be promulgated via all standard means, and procedures put in place to warn vessels in the area of any active safety zones on a daily basis. A notice to mariners would also be issued to identify vessels currently working on site that are applicable to safety zones.

In the Applicant's view, the establishment of a SOV safety zone when bridge-linked 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. A distance of 150m was also considered to be well known within the Race Bank Offshore Wind Farm due to the existing fisheries agreement and a SOV safety zone with that radius would bring the two into line.

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. In the Applicant's view the issue was whether the extent of the safety zone for major maintenance works should be reduced from a 500m radius to a 150m radius when an SOV is attached to the wind turbine.

The Applicant considered that the need for a SOV safety zone is established by the following:

i) The definition of 'major maintenance works' in the 2007 Regulations (see footnote 1 above);

ii) SOV safety zones when attached to a structure were assessed as a necessary mitigation during the 2016 application and subsequent addendum, and also in the Navigational Risk Assessment undertaken as part of the consent which identified the risk to major maintenance vessels. Without them collision risk is not ALARP and a safety zone is therefore considered to be a vital mitigation measure;

iii) The Applicant was not aware of any adverse effects of the SOV safety zone that would outweigh the safety related benefits they would provide

(noting that as only one SOV would be employed, there would never be more than one associated safety zone); and

iv) No objections had previously be raised when discussed with the Department and other stakeholders, including Trinity House who had also raised no objection in written representations on the 2016 Application and Addendum Application.

III. The Secretary of State's Decision

3.1 In addition to the points set out in paragraph 2 above, the Secretary of State notes:

- an existing "standard safety zone" of 500m radius currently applies during "major maintenance works" being undertaken around wind turbines and offshore substations, but the Applicant is now requesting that SOVs be specifically excluded from a proposed new 500m radius safety zone and that a separate 150m radius safety zone for SOVs only also be applied when attached to any wind turbines or offshore substations;

- the Applicant has not indicated that a 150m radius safety zone for SOVs is required for the purpose of anchoring next to any wind turbines or offshore substations;

- section 95(6) of the Energy Act 2004 allows the modification or revoking of a previous notice;

- as a relatively new type of sea vessel, the use of SOVs for more routine maintenance would perhaps not have been envisaged at the time the 2007 Regulations came into force;

- it would typically take 30-40 minutes to 'attach' the SOV to a wind turbine and deploy personnel and kit and a similar time to disconnect from it (even in an emergency); and

- the SOV is 81 metres in length and so, when attached to a wind turbine, an operational "standard safety zone" of 50m radius for operational wind turbines would not be appropriate.

3.2 The Secretary of State, having considered the representations and all other material considerations, does not consider it appropriate for a public inquiry to be held with respect to the Addendum Application.

3.3 The Secretary of State is 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. In such circumstances, a standard safety zone of 500m radius measured from the outer edge at sea level of an existing wind turbine tower or offshore substation would normally apply in any event.

3.4 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. In respect of concerns that the addition of a 150m radius safety zone may lead to confusion for mariners, it is noted that the safety zone would be promulgated and procedures put in place to warn vessels in the area of any active safety zones on a daily basis. The Secretary of State considers it is likely that mariners operating more frequently within the vicinity of the Race Bank Offshore Wind Farm would also over time, become accustomed to the presence of the SOV and the specific safety zone applicable to that type of vessel.

3.5 In light of the matters above, the Secretary of State considers that the modification of safety zones of the type requested during maintenance to the Race Bank Offshore Wind Farm is necessary for the purpose of securing the safety of installations comprising the Race Bank 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[2], the Secretary of State considers it is necessary to include notice conditions. The declaration is set out in paragraph 4 below.

IV. The Declaration

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

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 or offshore substation where major maintenance works are being undertaken, excluding major maintenance works being undertaken by a Service Operation Vessel ("SOV").*

2) *A safety zone with a radius of 150 metres measured from the outer edge at sea level of any wind turbine or offshore substation where major maintenance works are being undertaken by a Service Operation Vessel ("SOV") attached to such an installation.*

3) *Notice of the 500m radius major maintenance works and 150m radius Service Operation Vessel ("SOV") safety zones, shall be given by the operator of the Race Bank Offshore Wind Farm through:*
   a) Notice to Mariners and Kingfisher bulletins; and:

[2] https://www.legislation.gov.uk/ukpga/2004/20/section/95

b) Notice to:

i) the harbour master of ports whose uses are in the opinion of the operator 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 Race Bank Offshore Wind Farm in order to maintain the safety of vessels and their personnel.

4) For day-to-day movements of a Service Operating Vessel ("SOV") within the Race Bank Offshore Wind Farm, the designated on-site monitoring vessel shall also be responsible for notifying vessels in the vicinity as to the wind turbines or offshore substations that shall be worked on that day and that the 150m radius safety zone will be active when the SOV is attached to those installations.

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

4.3 For the purposes of this notice, the Race Bank Offshore Wind Farm comprises the offshore wind turbines and offshore sub-stations for which development consent was granted by the Secretary of State under section 36 of the Electricity Act 1989 and varied on 25 March 2015 under section 36C of the 1989 Act.

Yours sincerely

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