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National Infrastructure Planning
Temple Quay House
2 The Square
Bristol, BS1 6PN

27th January 2025

Your ref: EN010125

Interested Party reference number: 20049792

Dear Sir/Madam

Application by RWE Renewables UK Dogger Bank South (West) Ltd and RWE Renewables UK Dogger Bank South (East) Ltd for an Order Granting Development Consent for the Dogger Bank South Offshore Wind Farms, with up to 200 Wind Turbine Generators (WTG), Offshore Substations and Electricity Transmission Infrastructure.

Planning Act 2008 – Section 88 and 89 and The Infrastructure Planning (Examination Procedure) Rules 2010 – Rules 4, 6, 9 and 13.

Examination Timetable – Deadline 1 – Written Representation

The Maritime and Coastguard Agency (MCA) is an Executive Agency of the Department for Transport and is responsible throughout the UK for implementing and developing the UK Government's maritime safety and environmental protection policy. This includes co-ordinating maritime Search and Rescue (SAR) through His Majesty's Coastguard 24 hours a day, and checking that ships meet UK and international safety rules. The MCA works to prevent the loss of lives at the coast and at sea, to ensure that vessels are safe, and to prevent coastal pollution. The UK Technical Services Navigation Branch is responsible for UK radiocommunication and navigation policy. This primarily covers SOLAS Convention (Safety of Life at Sea Convention 1974, as amended) Chapters IV and V; the COLREG Convention (International Regulations for Preventing Collisions at Sea 1972, as amended); and the ITU Convention (International Telecommunications Convention 1932, as amended). The Navigation Risk Assessment (NRA), the Shipping and Navigation chapter of the Environmental Impact Report and draft DCO have been reviewed and we would like to comment as follows:

7.14 Environmental Statement Chapter 14 – Shipping and Navigation (APP-121) and 7.14.14.2 Environmental Statement Appendix 14.2 – Navigation Risk Assessment (APP-124).

Dogger Bank South windfarm is considered in three distinct sections namely, Dogger Bank South (east), Dogger Bank South (west) which are referred to collectively as Dogger Bank South Offshore Windfarms, and the Offshore Export Cable Corridor. A fourth area of focus from the applicant includes a subsection of the Offshore Export Cable Corridor and concerns the Export Cable Platform Search Area.

The MCA is content that a full marine traffic survey of 28 days duration has been undertaken as per MGN 654 requirements for each of these sections in summer and winter of 2022 and summer and winter of 2023 for the Export Cable Platform Search Area. The dates of the surveys are presented in Table 14-5 of the Shipping and Navigation chapter and Table 5-1 of the NRA. In addition, Supplementary AIS data was gathered for 79 days in 2022 for the combined Dogger Bank South (DBS) East and DBS West study areas. This data was used to validate the summer and winter vessel traffic surveys recorded for each of the DBS array study areas.

We note that there are a variety of construction scenarios considered by the applicant as detailed in Chapter 5, paragraph 14 and table 5-1(APP-071). We are content that for each scenario adequate information has been provided for assessing the risks for each approach and applying relevant and effective mitigation to reduce the identified risks to As Low as Reasonably Practicable (ALARP).

It was noted in paragraph 587 and 588 of the NRA and paragraph 260 and 261 of chapter 14 Shipping and Navigation regarding the cumulative effect of vessel displacement, that collision risk has been summarised as 'frequent', with a severity of consequence of 'moderate' thus concluding a significance of effect of 'Tolerable with Mitigation'. The combination of 'frequent' and 'moderate' is also presented in table 14-32 of Chapter 14 on three occasions (relating to construction, operation and decommissioning phases) and again concluded as 'Tolerable with Mitigation'. If the significance of effect matrix in Table 14-9 of Chapter 14 is followed this should result in a risk classification of 'Unacceptable'.

Based on the information and data provided in both the NRA and Chapter 14, The MCA is not of the opinion that these scenarios are 'unacceptable' and agree with the applicant that the significance of effect is 'Tolerable with Mitigation'. We consider, again based on the information and data provided, that the frequency of occurrence falls in the 'Reasonably Probable' category and not the 'frequent' one, thus resulting in an outcome of 'Tolerable with Mitigation.' Clarification from the applicant on this matter would be appreciated and we would accept an amendment in the Cumulative Risk Assessment in due course.

Key and appropriate stakeholders were identified, and the MCA is content that suitable consultation took place via a hazard identification workshops and dedicated meetings. A completed MGN 654 Checklist has been provided as part of the NRA, and we are content the recommended NRA process has been followed.

We would like to comment as follows on the NRA and Shipping & Navigation Chapter of the EIA Report:

1. Navigable Sea Room

The changes to the Red Line Boundary (RLB) since the initial scoping report have led to an overall increase in the navigable sea room available in the area of proposed development. The current planned boundaries of the East and West arrays as presented in Figure 14-1 of Chapter 14 (APP-122) and Figure 3-2 of the NRA (APP-124), has considered concerns from Stakeholders regarding commercial routing and reduced sea space leading to an increased risk of encounter with other vessels and thus increase in collision risk. Although collision risk has increased as summarised in table 16-1 of the NRA, this increase has been mitigated by the adjustments made by the applicant to the array's respective RLBs. MCA welcomes these changes.

Guidance from MGN 654 has been used to show the minimum width required for the approximate 5NM long 'corridor' created with the southern boundary of the Dogger bank A

development and the gap between the Dogger Bank South East and West array areas is compliant.

2. Shipping and Navigation Mitigation Measures

As aforementioned, the changes post scoping and development of these changes post PEIR, although not specific mitigation measures, will contribute to the reduction of overall risk to shipping and navigation in the area. Regarding specific mitigation measures, we are content that the list of mitigation measures in Table 20-1 of the NRA and Table 14-3 of the Shipping and navigation Chapter are relevant and appropriate and will serve to reduce identified risks to ALARP.

Additionally, it should be noted that the requirement for an Emergency Response Cooperation Plan (ERCoP), as referenced in Table 14-3 of the Chapter 14 Shipping and Navigation, will be secured in the DCO/DML under the condition for complying with MGN 654. There will not be a specific condition for the completion of an ERCoP.

3. Layout Design

We appreciate that the layout as presented in Figures 6-2 and 6-3 of the NRA are currently indicative of a 'worst case' and the Applicant has been engaged with the MCA regarding the layout design. Typically, refinements to this design will be on going throughout the examination and if granted, post consent. The turbine layout design must be compliant with MGN 654 and it will require MCA and Trinity House approval prior to construction to minimise the risks to surface vessels, including rescue boats, and search and rescue aircraft operating within the site. MCA will seek to ensure all structures are aligned in straight rows and columns with a minimum of two lines of orientation. Mitigation listed in table 14-3 of Chapter 14 and Table 20-1 of the NRA, confirms the intention to continue discussions with the MCA and Trinity House. Further advice will be provided once the layout discussions have started.

4. Marking and Lighting.

MCA will seek to ensure the turbine numbering system follows a 'spreadsheet' principle and is consistent with other windfarms in the UK. All lighting and marking arrangements will need to be agreed with MCA and Trinity House. The MCA requires all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764 and MGN 654 Annex 5.

5. Emergency Response and Search and Rescue.

There is an expectation that the presence of wind farms will increase the likelihood of the requirement for emergency response, not just from navigational incidents but from other incidents such as medical evacuation or pollution. This is acknowledged by the applicant in Chapter 14: Shipping and Navigation (APP-121) section 14.8.6.

A SAR checklist based on the requirements in MGN 654 Annex 5 will need to be completed in agreement with MCA before construction starts. This will include the requirement for an approved Emergency Response Co-operation Plan (ERCoP).

During SAR discussions, particular consideration will need to be given to the implications of the site size and location. Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF

voice with Digital Selective Calling (DSC)) that can cover the entire wind farm sites and their surrounding areas. It will be expected that the applicant will provide this AIS and VHF capability to the MCA with direct access to HM Coastguard systems.

Chapter 13 of the NRA regarding lessons learned within the offshore industry references SAR helicopter trials at the North Hoyle offshore wind farm in 2005. This is now a dated document and while references may still be made, there may be more benefit in referring to documents written by the MCA in 2019, titled: “MCA report following aviation trials and exercises in relation to offshore windfarms” and “MCA report following aviation trials at Hornsea Project 1 windfarm”.

6. Construction scenarios.

We would expect to see some form of linear progression of the construction programme avoiding disparate construction sites across the development area, and the consent needs to include the requirement for an agreed construction plan to be in place ahead of any works commencing.

7. Cable Routes and Cable protection

Particular attention should be paid to cabling routes and where appropriate burial depth for which a Burial Protection Index study should be completed and subject to the traffic volumes, an anchor penetration study may be necessary. Particular attention to burial depths and protection measures will be required. It is stated in paragraph 545 of the NRA that ‘*up to 20% of all sub-sea cables may require alternative cable protection with a height (including for crossings) of 1.0m for array cables and 1.4m for inter platform and offshore export cables.’* We note in the embedded mitigation listed in Table 14.3 of Chapter 14 that a Cable Burial Risk Assessment (CBRA) will be carried out to inform this. A ‘Cable Statement’ has been provided by the Applicant giving further details in Volume 8 (APP-244).

As cable protection measures are required e.g. rock bags or concrete mattresses, the MCA would be willing to accept a 5% reduction in surrounding depths referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase, such as at the HDD location.

In an update to the project since PEIR it was noted that the Export Cable will now be High Voltage Direct Current (HVDC). Regarding HVDC there is a potential impact on ships compasses from the electro-magnetic field generated. It is noted in section 13.6, Table 13-1 of the NRA that mitigations to address this have been considered. However, a pre-construction compass deviation study may still be required on the expected electro-magnetic field. Should this go ahead, we would be willing to accept a three-degree deviation for 95% of the cable route. For the remaining 5% of the cable route no more than five-degree deviation will be attained.

If this requirement cannot be met, further mitigation measures may be required including a post installation deviation survey of the cable route. This data must then be provided to the MCA and UKHO, as a precautionary notation may be required on the appropriate Admiralty Charts regarding possible magnetic anomalies along the cable route.

8. Safety Zones.

The requirement and use of safety zones as detailed in the application as embedded mitigation in Table 14-3 of chapter 14 and Table 20-1 of the NRA is noted, and MCA will comment on the

safety zone application once submitted, as a statutory consultee. Safety zones during the construction, maintenance and decommissioning phases are supported. A detailed justification would be required for a 50m operational safety zone, with significant evidence from the construction phase in addition to the baseline NRA required supporting the case. Safety zones triggered by a Service Operation Vessel connecting to a wind turbine will not be supported as there is no clear benefit for reducing risk in addition to good watchkeeping, communications, seamanship and COLREG.

Draft Development Consent Order (DCO) (APP-027)
We would like to comment on the draft conditions in the Deemed Marine Licences as follows:

Schedules 10 and 11 Part 2. Marine Licence 1 and 2: DBS East and West Projects Offshore Generation. Works 1,4 and 7 (A and B).

The below comments apply to both schedules 10 and 11 part 2 as the numbering and layout are the same.

- 9(7)(b) amend to: '*as soon as reasonably practicable and no later than 24 hours of completion of all offshore activities.'*

- 9(10) add '*MCA'* for notification.

- 9(11) amend to: '*In case of damage to, or destruction or decay of, the authorised project seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker shall as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify MMO, MCA, Trinity House, UKHO, the Kingfisher Information Service of Seafish and regional fisheries contacts.'*

- 9(12) add: *'and regional fisheries contacts'* after '*Kingfisher Information Service of Seafish'*

- 13(10) amend to: '*All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'*

- 15(1)(a)(i) and(ii) add*: 'substations and meteorological masts.*'

- 20(4)(b) amend to: '*A swath bathymetric survey to IHO Order 1a of the area within the Offshore Order Limits extending to an appropriate buffer around the site, must be undertaken. The survey shall include all proposed cable routes. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy 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 Order Limit shapefiles must be submitted to MCA. The Report of Survey must also be sent to the MMO.'*

- 22(3)(b) amend to: '*a full sea floor coverage swath-bathymetry survey to IHO order 1a that meets the requirements of MGN654 and its annexes'*.

- 22(3)(d) amend to: '*Post construction monitoring must include vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of authorised project, unless otherwise agreed in writing by the MMO. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the three year period.'*

- 24(1)(a) amend to: *'the final number of installed wind turbine generators;*

- 24(1)(d) amend to: *'latitude and longitude coordinates of the centre point of the location for each wind turbine generator and offshore platform, substation, booster station and meteorological mast; provided as Geographical Information System data referenced to WGS84 datum.'*

<u>Schedules 12 and 13 Part 2. Marine Licence 3 and 4: DBS East and West Projects Offshore Transmission. Works 2,3,6,7 and 8 (A and B)</u>

The below comments apply to both schedules 12 and 13 part 2, as the numbering and layout are the same.

- 7(7)(b) amend to: '*as soon as reasonably practicable and no later than 24 hours of completion of all offshore activities.'*

- 7(10) add '*MCA'* for notification.

- 7(11) amend to: '*In case of damage to, or destruction or decay of, the authorised project seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker shall as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify MMO, MCA, Trinity House, UKHO, the Kingfisher Information Service of Seafish and regional fisheries contacts.'*

- 7(12) add: *'and regional fisheries contacts'* after '*Kingfisher Information Service of Seafish'*

- 11(10) amend to: '*All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'*

- 18(4)(b) amend to: '*A swath bathymetric survey to IHO Order 1a of the area within the Offshore Order Limits extending to an appropriate buffer around the site, must be undertaken. The survey shall include all proposed cable routes. This should fulfil the requirements of MGN654*

and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy 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 Order Limit shapefiles must be submitted to MCA. The Report of Survey must also be sent to the MMO.'

- 20(3)(b) amend to: '*a full sea floor coverage swath-bathymetry survey to IHO order 1a that meets the requirements of MGN654 and its annexes*'.

- 20(3)(d) amend to: '*Post construction monitoring must include vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of authorised project, unless otherwise agreed in writing by the MMO. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the three year period.'*

Schedule 14 Part 2. Marine Licence 5: DBS East and West Projects Offshore Transmission. Works 5A, 5B,7A and 7B

- 5(7)(b) amend to: '*as soon as reasonably practicable and no later than 24 hours of completion of all offshore activities.'*

- 5(10) add '*MCA'* for notification.

- 5(11) amend to: '*In case of damage to, or destruction or decay of, the authorised project seaward of MHWS or any part thereof, excluding the exposure of cables, the undertaker shall as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify MMO, MCA, Trinity House, UKHO, the Kingfisher Information Service of Seafish and regional fisheries contacts.'*

- 5(12) add: *'and regional fisheries contacts'* after '*Kingfisher Information Service of Seafish'*

- 9(10) amend to: '*All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'*

- 14(4)(b) amend to: '*A swath bathymetric survey to IHO Order 1a of the area within the Offshore Order Limits extending to an appropriate buffer around the site, must be undertaken. The survey shall include all proposed cable routes. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy 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 Order Limit shapefiles must be submitted to MCA. The Report of Survey must also be sent to the MMO.'*

- 16(3)(b) amend to: '*a full sea floor coverage swath-bathymetry survey to IHO order 1a that meets the requirements of MGN654 and its annexes*'.

- 16(3)(d) amend to: '*Post construction monitoring must include vessel traffic monitoring by automatic identification system for a duration of three consecutive years following the completion of construction of authorised project, unless otherwise agreed in writing by the MMO. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the three year period.'*

MCA contact details in Schedules 10,11,12,13, and 14 Parts 1 to be amended to:

Maritime and Coastguard Agency
UK Technical Services Navigation
Spring Place
105 Commercial Road
Southampton
SO15 1EG
Email: navigationsafety@mcga.gov.uk

The Applicant has provided a comprehensive overview of the risk. The comments detailed above are to highlight items to be addressed by the applicant in consultation with the MCA and navigation stakeholders to ensure the risk to the safety of navigation and the impact on SAR capability remains low.

Yours Faithfully,

Vaughan Jackson
Offshore Renewables Project Lead
UK Technical Services – Navigation

Peter Lowson
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HM Coastguard Governance, Policy, Standards and International