



Maritime &
Coastguard
Agency

Maritime and Coastguard Agency
UK Technical Services Navigation
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Southampton
SO15 1EG

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

www.gov.uk/mca
23rd October 2024

Your ref: EN010130

Interested Party reference number: 20048569

Dear Sir/Madam

Application by GT R4 Limited trading as Outer Dowsing Offshore Wind for an Order Granting Development Consent for a new Offshore Windfarm, Outer Dowsing Offshore Wind (Generating Station), with up to 100 Wind Turbine Generators (WTG), Offshore Reactive Compensation Platforms (ORCP), Artificial Nesting Structures (ANS) 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:

6.1.15 Environmental Statement Volume 1, Chapter 15 – Shipping and Navigation (APP-070) and 6.3.15.1 Volume 3, Appendix 15.1 – Navigational Risk Assessment (APP-171)

Anatec Ltd, on behalf of Outer Dowsing Offshore Wind has undertaken a detailed Navigation Risk Assessment (NRA) in accordance with MCA guidance MGN (Marine Guidance Note) 654 and NRA risk assessment methodology. We are satisfied that appropriate traffic data has been collected in accordance with MGN 654. This includes two 14-day marine vessel traffic surveys carried out in August 2022 and November 2022 which was supplemented by 12 months of Automatic Identification

System (AIS) data from April 2021 to March 2022. AIS data for the Export Cable Corridor (ECC) was also collected in August and November 2022. In addition, a dedicated MGN 654 compliant traffic survey was carried out for the ORCP study area in January and June of 2023 and a further 12 months AIS data from 2023 was collected to inform the traffic situation for a 5 Nautical Mile (NM) radius of the proposed ANSs. A full summary of the data used to inform the Shipping and Navigation baseline is presented in Table 15.2 of chapter 15 and Table 5.1 of the NRA.

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

Changes to the array area Red Line Boundary (RLB) have been made post PEIR as presented in Figure 6-2 of the NRA. This has led to an overall increase in the navigable sea room available in the vicinity of the northern edge of the array. Concerns were raised by various stakeholders in regard to the cumulative effect of the project with other developments in the area. Of particular note was Hornsea Three due its potential impact with the Humber ports to Cuxhaven route, presented as Route 7 in Figure 11-2 and Table 11.1 of the NRA. Through further assessment and consultation with stakeholders, a refined array area has been presented by the applicant which mitigated these concerns. The applicant has summarised the changes in Paragraph 70 of the NRA. The MCA welcomes this change.

Further to the above the Applicant has also submitted post Environmental Statement, further amendments to the array RLB, ANS, and ORCP study areas. The array area RLB has been refined further along the northern extent, reducing the overall footprint. The applicant has also committed to a substantial Offshore Restricted Build Area (ORBA) for the purposes of '*Improving energy density*' (PD1-005 and PD1-081). This will further increase sea room, reduce the risk of collision and mitigate effectively conflict with the southern tip of Hornsea Three for the main commercial routes that were affected. We note that the applicant has submitted the; '*Review of Offshore Restricted Build Area Impact on Shipping Displacement and Collision Risk*' (PD1-090). The MCA agree and are content with the summary presented by this document in Section 5, paragraphs 24 and 25.

We also note that in addition to the changes proposed in the NRA for the ORCP search areas in Figure 6.6, further refinement leading to the removal of the northern search area have been submitted (PD1-005 and PD1-081). There are also refined locations for the proposed ANSs within the current compensation areas (please see part 8 below). These refinements have also contributed to improved sea room and reduction in collision/allision potential. MCA welcomes these changes.

2. Shipping and Navigation Mitigation Measures

As aforementioned, the changes post PEIR and post ES although not specific mitigation measures, will contribute to the reduction of overall risk to shipping and navigation in the area. We are also content that the list of mitigation measures in Table 18.1 of the NRA and Table

15.7 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 paragraph 183 of Chapter 15 and in paragraph 656 and Annex A, table A.1 of the NRA 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

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. Where a single line of orientation is proposed, a safety case must be prepared by the applicant. Mitigations in table 15.7 of Chapter 15 and Table 18.1 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 confirmed by the applicant in paragraph 176 of Chapter 15. 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.

Section 14 of the NRA references SAR helicopter trials at the North Hoyle offshore wind farm in 2004/5. This is now a dated document and while references may still be made as some of the findings are relevant, there may be additional benefit in also 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

The removal of the northern proposals for the ORCP has mitigated to a large extent incursion through an active aggregate area, which is welcomed by the MCA. The applicant is reminded that 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. As stated in Chapter 15, Paragraph 192 cable protection measures such as rock berms will be required for up to 21.4% of the export cable route and 22.75% for the array and interlink cables. The maximum height from the seabed of these measures is not expected to be more than 1.5m.

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 Horizontal Directional Drilling (HDD) location. Any consented cable protection works must ensure existing and future safe navigation is not compromised. Table 15.7 of Chapter 15 confirms that a Cable Burial Risk Assessment (CBRA) and Cable Specification and Installation Plan (CSIP) will be carried out to inform this. It is stated that through the Cable CSIP (APP-278), the CBRA (APP-142) and through continued consultation with MCA and relevant stakeholders, that the applicant will address these concerns.

It is noted that in 6.1, Non-Technical Summary (APP-055) that the project has confirmed that only a single transmission technology type - High Voltage Alternating Current (HVAC) transmission technology will be used. This is not expected to have an impact on electro-magnetic fields and ships' magnetic compasses.

8. Artificial Nesting Structure (ANS)

In January and June of 2023 and a further 12 months AIS data from 2023 was collected to inform the traffic situation for a 5 Nautical Mile (NM) radius of the two proposed ANSs. Additional submission to the ExA since the ES has amended the likely locations of these structures within the search area, further away from the main traffic routes identified in Figure 13-1 of the NRA. The Applicant continues to commit to no structure being considered in the area shown in Figure 13-2 of the NRA. As the ANSs will be isolated structures, all lighting and marking arrangements will need to be agreed with MCA and Trinity House.

9. Safety Zones

The requirement and use of safety zones as detailed in the application as embedded mitigation in table 15.7 of chapter 15 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.

We would like to comment on the draft conditions in the Deemed Marine Licences as follows:

Schedule 10, part 2: Generation Assets

- 7(11) add: *'regional fisheries contacts'* for notifications.
- 7(12) add: *'regional fisheries contacts'* for informing.
- 9(1) reword to: *'Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least Highest Astronomical Tide to a height as directed by Trinity House.'*
- 11(10) reword 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.'*
- 13(1)(a)(ii) add: *'substation and meteorological mast,'*
- 17(2)(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.'*
- 18(5) amend to: *'Construction monitoring must include vessel traffic monitoring by automatic identification system for the duration of the construction period. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the construction period.'*
- 19(2)(e) 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.'*
- 23(1) add after (b): *'(c) as built plans; and (d) 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.'*

Schedule 11, part 2: Transmission Assets

- 7(11) add: '*regional fisheries contacts*' for notifications.
- 7(12) add: '*regional fisheries contacts*' for informing.
- 9(1) reword to: '*Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least Highest Astronomical Tide to a height as directed by Trinity House.*'
- 11(10) reword 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.*'
- 17(2)(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.*'
- 18(5) amend to: '*Construction monitoring must include vessel traffic monitoring by automatic identification system for the duration of the construction period. An appropriate report must be submitted to the MMO, Trinity House and the MCA at the end of each year of the construction period.*'
- 19(2) add: '*The undertaker must conduct a swath 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. 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.*'
- Add 'Completion of Construction' section as schedule 10, part 2 paragraph 23 and add: '*The undertaker must submit a close out report to the MMO, MCA, UKHO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details—*
(a) as built plans; and

(b) latitude and longitude coordinates of the inter array and export cable routes; provided as Geographical Information System data referenced to WGS84 datum.

Schedules 12 and 13 part 2: Northern ANS structure 1 & 2

Apply to both as numbered the same.

- 5(11) add: '*regional fisheries contacts*' for notifications.
- 7(1) amend to: '*Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least HAT to a height as directed by Trinity House.*'
- 8(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.*'

Schedule 14 and 15 part 2: Southern ANS structure 1 & 2

Apply to both as numbered the same.

- 5(11) add: '*regional fisheries contacts*' for notifications.
- 7(1) amend to: '*Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least HAT to a height as directed by Trinity House.*'
- 8(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.*'

Schedule 16 part 2: Biogenic Reef Creation

- 8(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*

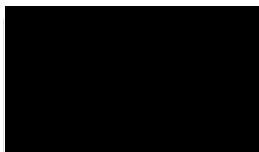
be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.'

MCA contact details in Schedules 10,11,12,13,14,15 and 16 Part 1 to be amended to:

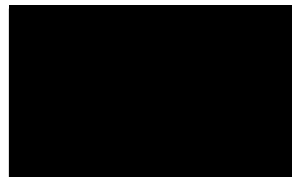
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The Applicant has provided a comprehensive overview of the risk. The comments detailed above are to highlight items to be addressed by the applicant in consultation with the MCA and navigation stakeholders to ensure the risk to the safety of navigation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

Yours Sincerely,



Vaughan Jackson
Offshore Renewables Project Lead
UK Technical Services – Navigation



Peter Lowson
Offshore Energy Liaison Officer
HM Coastguard Governance, Policy,
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