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**To:** [Rampion2;](#) [REDACTED]  
**Subject:** MMO Response to SoS Request for Information  
**Date:** 06 December 2024 13:55:48  
**Attachments:** [06122024 EN010117 MMO Response to SoS Request for information.pdf](#)

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Dear Mr Allen,

Please find attached to this email the MMO Response to the Secretary of State's Request for Information.

This response has been submitted by email only.

The interested party identification number for the MMO is 20045232.

The MMO has provided all comments for all of the requested information within this response and at this stage is not planning on providing any comments at the Part 2 Deadline on 13 December 2024.

Please could you please confirm receipt of this submission.

Kind regards,

Ethan Lakeman

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MMO Reference: DCO/2019/00005  
Planning Inspectorate Reference: EN010117  
Identification Number: 20045232

06 December 2024

Dear John Wheadon,

## **Planning Act 2008, E.On Climate and Renewables UK Ltd, Proposed Rampion 2 Offshore Wind Farm Order**

### **Post-examination submission: Request for information from Secretary of State**

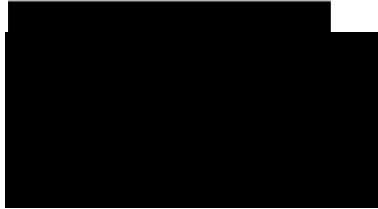
On 20 September 2023 the Marine Management Organisation (the “MMO”) received notice under section 56 of the Planning Act 2008 (the “PA 2008”) that the Planning Inspectorate (“PINS”) had accepted an application made by E.On Climate and Renewables UK Ltd (the “Applicant”) for determination of a development consent order for the construction, maintenance and operation of the proposed Rampion 2 Offshore Wind Farm (the “DCO Application”) (MMO ref: DCO/2019/00005; PINS ref: EN00117).

The Applicant seeks authorisation for the construction, operation and maintenance of DCO Application, comprising of up to 90 wind turbine generators together with associated onshore and offshore infrastructure and all associated development (“the “Project”). The associated development includes an offshore generating station with an electrical export capacity of in excess of 100 megawatts (MW) comprising up to 90 turbines, and array cables, in an area approximately 196 square kilometres (km<sup>2</sup>), located approximately 13 kilometres (km) south of the Sussex coast located to the west of the existing Rampion Offshore Wind farm.



This written representation is submitted without prejudice to any future representation the MMO may make about the DCO Application throughout the examination process. This representation is also submitted without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.

Yours sincerely,



Ethan Lakeman  
Marine Licensing Case Officer

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## 1. Request for information from the Secretary of State following the completion of Examination

Following the completion of the Examination on 6 August 2024, the Examining Authority submitted a Report and Recommendation in respect of its findings and conclusions on the above application to the Secretary of State (SoS) on 6 November 2024. In accordance with section 107 of the Planning Act 2008 (“PA2008”), the Secretary of State has three months to determine the application.

The MMO received a letter from the SoS on 25 November 2024 requesting further updates and information.

Since the completion of the Examination on 6 August 2024 the MMO in consultation with the Centre for Environment, Fisheries and Aquaculture Science (Cefas) has reviewed the following application documents submitted at Deadline 6:

- Draft Development Consent Order Rev. H (REP6-009)
- Offshore In Principle Monitoring Plan Rev. E (REP6-221)
- Rampion 2 Applicant's Response to ExA's Request for Further Information Rev. A (REP6-275)
- Environmental Statement Chapter 9 Benthic, subtidal and intertidal ecology Rev. D (REP6-182)
- Environmental Statement Chapter 6 Coastal Processes Rev. B (REP6-176)
- Environmental Statement Chapter 8 Fish and Shellfish ecology (REP6-180)
- Environmental Statement Chapter 8 Fish and shellfish-figures Rev. C (REP6-191)
- Environmental Statement Chapter 11 Marine mammals Rev. E (REP6-124)
- Environmental Statement Chapter 21 Noise and Vibration Rev. C (REP6-146)
- Draft Piling Marine Mammal Mitigation Protocol Rev. C (REP6-219)
- Issue Specific Hearing 1 Appendix 9 - Further information on Action points 38 & 39 Underwater noise Rev. C (REP6-249)

The MMO in consultation with Cefas has also reviewed the following documents submitted via email following the end of the Examination period:

- “Rampion 2 - Underwater noise and Herring” - Figures containing updated modelling of the 135 decibel (dB) noise contours for turbine locations deeper than 40 metres (m) relative to the Downs herring spawning ground. Received 3 October 2024.
- “Statement of Common Ground – Post Examination Herring Issues Marine Management Organisation” - Document containing details of issues relating to Herring, including the commitment to produce a spawning herring piling restriction plan. Received 14 November 2024.





## 2. Response to request for information 4. Post-consent adaptive management

### 2.1 General Comments

2.1.1 The MMO thanks the Secretary of State (SoS) for their proposal of the following as a possible Condition 18(5) of the DML:

*“(5) In the event that the reports provided to the MMO under sub-paragraph (3) identify impacts which are unanticipated and or beyond those predicted within the Environmental Statement and the Habitats Regulations Assessment an adaptive management plan to reduce effects to within what was predicted within the Environmental Statement and the Habitats Regulations Assessment, unless otherwise agreed by the MMO in writing, must be submitted alongside the monitoring reports submitted under sub-paragraph (3). This plan must be agreed by the MMO in consultation with the relevant statutory nature conservation bodies to reduce effects to an agreed suitable level for this project. Any such agreed and approved adaptive management or mitigation should be implemented and monitored in full to a timetable first agreed in writing with the MMO. In the event that this adaptive management or mitigation requires a separate consent, the undertaker shall apply for such consent. Where a separate consent is required to undertake the agreed adaptive management or mitigation, the undertaker shall only be required to undertake the adaptive management or mitigation once the consent is granted.”*

2.1.2 In response to this condition the MMO has the following comments to make:

2.1.3 Paragraph (5) is a new addition to Condition 18 which concerns the submission of monitoring plans containing the details of any proposed post-construction surveys. Condition 18 pertains to the requirement for the Applicant to submit post-construction monitoring plans in order to validate the assumptions of specific pre-construction documents and discharge subsections of Condition 11 (pre-construction plans and documentation).

2.1.4 Specifically, Condition 18 is concerned with the discharging of Condition 11 subsections (j) and (l) which detail the submission of the offshore in-principle monitoring plan and the piling marine mammal mitigation protocol respectively.

2.1.5 This Condition was not specially requested by the MMO in our advice or review of the DCO but **would welcome the inclusion of this condition** as this is now being requested as standard across current Examinations. However, the MMO requests minor amendments to ensure all Marine Protected Areas are included:



*“(5) In the event that the reports provided to the MMO under sub-paragraph (3) identify impacts which are unanticipated and/or in the view of the MMO in consultation with the relevant statutory nature conservation body are beyond those predicted within the Environmental Statement ~~and~~, the Habitats Regulations Assessment and the Marine Conservation Zone Assessment an adaptive management plan to reduce effects to within what was predicted within the Environmental Statement, ~~and~~ the Habitats Regulations Assessment and the Marine Conservation Zone Assessment, unless otherwise agreed by the MMO in writing, must be submitted alongside the monitoring reports submitted under sub-paragraph (3). This plan must be agreed by the MMO in consultation with the relevant statutory nature conservation bodies to reduce effects to an agreed suitable level for this project. Any such agreed and approved adaptive management or mitigation should be implemented and monitored in full to a timetable first agreed in writing with the MMO. In the event that this adaptive management or mitigation requires a separate consent, the undertaker shall apply for such consent. Where a separate consent is required to undertake the agreed adaptive management or mitigation, the undertaker shall only be required to undertake the adaptive management or mitigation once the consent is granted.”*

- 2.1.6 At Deadline 6 the Applicant submitted updated versions of the Offshore In Principle Monitoring Plan Rev. E (REP6-221) and the Draft Piling Marine Mammal Mitigation Protocol Rev. C (REP6-219), the MMO in consultation with Cefas have reviewed these documents and has provided comments for the awareness of the SoS below.
- 2.1.7 In REP6-221 the Applicant states that they are proposing to undertake monitoring of the noise generated by the installation of four from the first 12 foundations of each foundation type during the period 1 March to 31 July (the black seabream spawning period and four from the first 12 piled foundations installed outside of this period (1 August to 28 February). Should permission to undertake foundation installation using percussive piling within the black seabream spawning period (1 March to 31 July) not be granted, then the Applicant proposes that construction noise monitoring will solely comprise four of the first 12 piled foundations installed during 1 August to 28 February.
- 2.1.8 Monitoring during 1 August to 28 February will provide data on the noise reduction performance of the Double Big Bubble Curtain (DBBC) noise abatement system (NAS) at a range of water depths, to include sites at > 40m. Monitoring during 1 March to 31 July period (if permitted) will provide data on the noise reduction performance of the combined NAS (DBBC + additional NAS) mitigation.
- 2.1.9 Information will also be gathered and processed in accordance with UK Noise Registry requirements, if appropriate at the time of construction. Noise monitoring data will be recorded and provided to the MMO within 2 weeks of each foundation being monitored, and results will be included in a final report submitted to MMO within 4 weeks of completion of the fourth monitored foundation.
- 2.1.10 The MMO have previously advised that an enhanced monitoring programme be put in place for Rampion 2, which could, for example, include obtaining measurements of the first eight piles (or eight of the first 12 piles), of each foundation type, to be installed.



- 2.1.11 This advice was suggested to compensate for the uncertainties regarding the effectiveness of a NAS in deeper waters (>40m) and provide valuable evidence to validate the Applicant's noise reduction predictions and inform future consents.
- 2.1.12 The MMO has also stated that no testing of NAS or monitoring of pile installations should be conducted during the Black Sea Bream spawning and nesting period 1 March to 31 July inclusive.
- 2.1.13 For further comments on potential, seasonal piling restrictions for Black Sea Bream and Herring please see Sections 3 and 4 respectively of this Response Document.
- 2.1.14 In the updated Draft Piling Marine Mammal Mitigation Protocol (MMMP) Rev. C (REP6-219) the Applicant states in Paragraph 5.1.2 that "*the specific mitigation measure (or suite of measures) that will be implemented during the construction of Rampion 2 will be determined in consultation with Natural England, following confirmation of final hammer energies and foundation types, collection of additional survey data (noise or geophysical data) and/ or acquisition of noise monitoring data, and/ or information on maturation of emerging technologies. This additional data and information will allow the noise modelling to be updated to feed into discussions on the appropriate mitigation measure(s) and the Final Piling MMMP*". The MMO also requests that the effectiveness of the chosen noise abatement measures is also modelled to appropriately inform the MMMP.
- 2.1.15 The potential effect of underwater noise disturbance on Marine Mammals is further detailed in the Applicant's updated Environmental Statement Chapter 11 Marine mammals Rev. E (REP6-124).
- 2.1.16 The MMO has previously stated, most recently in Section 5.14 of our Deadline 6 Response (REP6-302) that we believe the results of the underwater noise modelling presented in the previous Environmental Statement Chapter 11 Marine Mammals Rev. D (REP5-033) has been misinterpreted.
- 2.1.17 The MMO stated that while we believe the interpretation and categorisation of risk to marine mammals from auditory injury and Permanent Threshold Shift (PTS) to be incorrect, it ultimately does not significantly alter the conclusions of Chapter 11.
- 2.1.18 The MMO does not have any significant comments to make on the revised Chapter 11 Rev. E (REP6-124) and defers to the advice of Natural England for comments on whether they are content with the revisions.
- 2.1.19 For further comments on post consent monitoring to secure the effectiveness of noise abatement measures to reduce the impact of piling noise on marine mammals please refer to Section 5 of this Response Document.





## 3. Response to request for information 7. Piling restrictions

### 3.1 General Comments

3.1.1 The MMO thanks the SoS for their proposal of the following as a possible new Condition 26 of the DML:

*“(26) - There shall be no piling associated with the authorised development between the dates of 01 March to 31 July inclusive, unless otherwise agreed to by the MMO and the statutory nature conservation body.”*

3.1.2 In response to this condition the MMO has the following comments to make:

3.1.3 In response to the Applicant's latest submissions at Deadline 6 (REP6-219 & REP6-249) it does not appear that the proposed zoning plan for Black Sea Bream has changed in light of previous MMO comments. The MMO appreciates that the Applicant will not have had sight of MMO Deadline 6 comments (REP6-302) before these documents were submitted, but we would make the point that many of the outstanding issues have persisted for some time and been reiterated over several Deadline Responses. The Applicant has also not submitted any new information pertaining to Black Sea Bream to the MMO since the end of Examination on 6 August 2024.

3.1.4 Whilst new modelling has been presented in the Offshore In Principle Monitoring Plan Rev. E (REP6-221) using a 135 dB behavioural noise threshold, the mapped noise contours still showed an overlap of noise disturbance with the Kingmere MCZ from piling at the east and west locations. The MMO has previously raised the concern that piling at locations closer to the Kingmere MCZ is likely to increase the size of overlap/impacted area. We also highlighted that Figures 2-1 and 2-3 (Appendix H) presented the proposed piling exclusion zones for the mono-piling and for piling of multileg foundations, respectively, using a 20 dB reduction, based on the 135 dB single strike Sound Exposure Levels (SELs) threshold, but that the modelled noise contours have not been presented for review to support the proposed zoning plan and therefore the full spatial extent of the noise is not known.

3.1.5 In Section 9.2 of our Deadline 6 Response (REP6-302) the MMO requested that the modelled noise contours were presented for review in order to validate the proposed zoning plan. We further noted that modelling using the 135 dB threshold had been presented in Figures 5.16 and 5.17 which showed the predicted worst case and mitigated behavioural response impact ranges from the piling of monopile and multileg foundations. However, this modelling was based on the use of Double Big Bubble Curtain (DBBC) so only offered a maximum 15 dB noise reduction, rather than 20 dB. Given these and other inconsistencies raised, we maintain that the Applicant's zoning plan is not viable, and that no piling should be permitted during the Black Sea Bream breeding season.

3.1.6 The MMO assumes that the condition would be titled Piling restriction and suggests the following amendments to ensure it is in line with standard wording:



~~“(26) - There shall be no piling associated with the authorised development between the dates of~~ *No piling associated with the authorised development may be undertaken between 01 March to 31 July inclusive, unless otherwise agreed to in writing by the MMO and in consultation with the statutory nature conservation body.*”

3.1.7 The updates above ensure the MMO is the decision maker in discharging the condition and the wording meets the standard drafting ‘five tests’.



## 4. Response to request for information 20. Herring and Sandeel Habitat Suitability Assessments (“HSA”)

### 4.1 General Comments

- 4.1.1 The MMO thanks the SoS for providing an opportunity to provide comment on the Applicant’s revised herring and sandeel Habitat Suitability Assessments (HSA) submitted at Deadline 6. Based on a review of documents submitted at Deadline 5 the MMO previously stated in our Deadline 6 response (REP6-302) that there remained uncertainties around the data used to form the ‘heat’ maps of potential herring spawning habitat and the modelling of appropriate noise contours to indicate potential overlap of noise impacts with herring spawning grounds (See Sections 5.7.12–5.7.22 & 8.3.1–8.3.6 of our Deadline 6 response: REP6-302).
- 4.1.2 Due to these outstanding sources of uncertainty the MMO previously advised that the only way to limit disturbance to adult spawning herring was to request a seasonal piling restriction during the herring spawning period (1 November to 31 January, inclusive).
- 4.1.3 Since the end of Examination on 6 August 2024 the MMO in consultation with our scientific advisors Cefas has worked with the Applicant to try and resolve the issues. The MMO has reviewed the updated Offshore In Principle Monitoring Plan Rev. E (REP6-221) and Issue Specific Hearing 1 Appendix 9 - Further information on Action points 38 & 39 Underwater noise Rev. C (REP6-249) submitted by the Applicant at Examination Deadline 6 and the updated underwater noise modelling relating to the Downs herring spawning ground received via email from the Applicant on 14 November 2024 (“Rampion 2 - Underwater noise and Herring”).
- 4.1.4 In REP6-249 the Applicant has provided updated ‘heat’ maps of potential herring spawning habitat and potential sandeel spawning habitat following previous MMO advice. The MMO thanks the Applicant for providing these updates and confirm with regards to REP6-249 and previous MMO advice that we have **no outstanding concerns regarding significant impacts to sandeel**.
- 4.1.5 The Applicant has updated the data layers used to generate these ‘heat’ maps including the removal of the inappropriate Jensen *et al.*, (2011) data layer, inappropriate filtering of the International Herring Larva Survey (IHLS) data layer, the incorporation of the correct Eastern Sea Fisheries Joint Committee (ESFJC) data layers described in the ‘heat’ mapping methodologies and updating the years of data (2007 – 2020) used to inform the Vessel Monitoring System (VMS) data layer.
- 4.1.6 The updated modelling received via email (“Rampion 2 - Underwater noise and Herring”) and provided in Annex 1 of this Response Document show the mitigated and unmitigated noise contours for behavioural response impact ranges based on a 135 dB SELs for spawning herring from the piling of monopile foundations at the east and west modelling locations.
- 4.1.7 With regards to herring and potential disturbance to herring spawning from piling noise, the updated modelling shows that the range of impact to adult herring at their spawning grounds from underwater noise (UWN) can be reduced to an acceptable level.



- 4.1.8 The Applicant has provided the requested clarifications of the IHLS data used in their herring potential spawning habitat 'heat' maps and in doing so, has validated that the aggregated herring larval abundances shown in the latest underwater noise modelling is accurate.
- 4.1.9 In principle, now that the IHLS data used to form the aggregated larval abundance map has been clarified, and considering the updated UWN modelling as shown in Figure 1 and 2 in Annex 1, the MMO is generally content that a piling restriction during the Downs herring spawning season may not be necessary.
- 4.1.10 Whilst the MMO is content with the modelling provided, the results of the Applicant's noise monitoring at the post consent stage, particularly where foundations are installed in deeper water (>40m) locations, should be presented for review to demonstrate that a noise reduction of at least 13 dB can be achieved before this restriction can formally be removed.
- 4.1.11 The Applicant is confident that through the use of DBBC that a noise reduction of between 13-15 dB can be achieved in deep-water turbine locations and intends to evaluate the performance of DBBC throughout the development of the site. The MMO is supportive of this approach.
- 4.1.12 Following a meeting between the MMO, Cefas and the Applicant on 16 October 2024 the Applicant produced a "Statement of Common Ground – Post Examination Herring Issues Marine Management Organisation" document, in which they provided, on a without prejudice basis a proposed condition which would require the submission of 'Spawning Herring Piling Restriction Plan'.

The suggested Condition is as follows:

*"(1) No piling activity can commence within the eastern array area during the herring spawning season until a spawning herring piling restriction plan (in accordance with the outline spawning herring piling restriction plan) containing updated underwater noise modelling has been submitted to and approved by the MMO. The updated underwater noise model shall be based on final project parameters to be used to install piles in the eastern array area and shall include details of any verified mitigation measures to be employed.*

*(2) If the herring spawning plan demonstrates that noise levels associated with piling activity in the eastern array area during the herring spawning season will exceed the levels shown on the spawning herring piling restriction plan then no piling activity may be undertaken within the eastern array area during the herring spawning season without the **written** approval of the MMO.*

*(3) All piling activity within the eastern array area during the herring spawning season must be undertaken in accordance with the details approved under sub-paragraph (1) or as required as a condition of approval under sub-paragraph (2).*

*(4) In this condition:*

*(a) "eastern array area" means the area identified as the eastern array area within the spawning herring piling restriction plan;*





- (b) “outline spawning herring piling restriction plan” means the plan certified as the outline spawning herring piling restriction plan by the Secretary of State for the purposes of the Order under article 51; and
- (c) “herring spawning season” means 1 November to 31 January inclusive.”

- 4.1.13 To support this Condition the Applicant included an annotated version of previous modelling showing mitigated noise contours for the West and South East modelling locations in the Western Array Area (Figure 3, Annex 2). The South East modelled location represents the nearest piling location within the Western Array, to the herring spawning ground as indicated by the larval abundance ‘heat’ map.
- 4.1.14 For the West modelling location mapped noise contours are presented for unmitigated 135 dB SELs, 135 dB SELs -13 dB mitigation (assuming a noise reduction of 13 dB), and 135 dB SELs -15 dB mitigation (assuming a noise reduction of 15 dB). For the South East modelling location mapped noise contours are presented for 135 dB SELs -13 dB mitigation and 135 dB SELs -15 dB mitigation, but there is no noise contour for the unmitigated 135 dB SELs.
- 4.1.15 It is unclear why the Applicant did not present the mapped noise contour for the unmitigated 135 dB SELs at the South East location, however, the MMO acknowledges that the Applicant has committed to the use of DBBC throughout the year, so on the assumption that a minimum reduction in noise of -13 dB can be achieved with DBBC, the overlap in noise disturbance will likely only affect a small portion of the herring spawning ground represented by low larval density on the ‘heat’ map (between 0.1 – 2,500 and 7,000 – 14,000 per square metre).
- 4.1.16 The Applicant has also provided an ‘Outline Spawning Herring Piling Restriction Plan’ (Figure 4, Annex 2) which the MMO believes they have provided to the SoS alongside the updated DML wording. This plan highlights the West and East Array Areas, overlain with the respective predicted mitigated noise contours (-15 dB in the West Array Area and -13 dB in the East Array Area). The MMO does request that the Outline Spawning Herring Piling Restriction Plan includes coordinates, so all parties are clear on the West and East Array Areas.
- 4.1.17 Based on the information provided, the MMO is reasonably content with the Applicant’s proposed Condition which proposes (minor amendment in blue above) that the spawning herring piling restriction plan only needs to be applied to the Eastern Array area.
- 4.1.18 The MMO emphasises that we are reasonably content, because on reviewing the bathymetry of the Western Array (Figure 5, Annex 2) the water depth in the South East modelling location appears to range from 30–45m and there remains some uncertainty regarding the efficacy of DBBC in water depths in excess of 40m. In light of the uncertainties regarding the specific depths at which piles in the South East area of the Western Array will be installed and the efficacy of DBBC in water depths in excess of 40m, there is a possibility that even with the use of DBBC, the range of impact from piling in the South East portion of the Western Array may overlap a larger portion of the herring spawning ground than is shown in Figure 5, Annex 2.



- 4.1.19 The MMO does however, agree that we would not expect any increased overlap of the predicted noise contours caused by assuming a -13 dB reduction due to depth to be significantly larger as to encompass a large area of high intensity herring spawning habitat represented by areas of high 'heat' larval abundance.
- 4.1.20 It should be noted that the MMO still expects the Applicant to conduct UWN monitoring (please see comments in Sections 4.1.21 – 4.1.24 below on monitoring) in both the Western Array and the Eastern Array areas, particularly where foundations are installed in deep water (>40m) locations, and we would expect to see the resulting reports as soon as possible.
- 4.1.21 The MMO has previously requested that the Applicant should undertake an enhanced monitoring programme such as monitoring 8 of the first 12 piles to be installed which would provide valuable evidence on the efficacy of NAS in deeper waters, particularly for depths greater than 40-45m which should be able to demonstrate / determine whether there are any issues. This would allow time for the MMO to potentially halt piling if the systems are not working as planned and the predictions are exceeded.
- 4.1.22 This advice was provided to validate the predictions on the efficacy of Noise Abatement Systems in deeper water (>40m) on the basis that no piling restriction would take place.
- 4.1.23 This information must be updated within the Offshore In-Principle Monitoring Plan alongside all noise monitoring requirements for the MMO to be content with no restriction. The MMO would also ask why the standard noise monitoring condition (with amendment of number of piles) is not stated on the face of the DML (see Section 5.1.3 The MMO will review the updated plan due to be submitted as part of Part 1 of the SoS request if requested by the SoS.
- 4.1.24 As previously advised, the results of the Applicant's noise monitoring in the Eastern Array should be presented for review before the piling restriction at the Eastern Array can formally be removed.



## 5. Response to request for information 21 & 22. Monitoring of noise abatement effectiveness on Bottlenose Dolphin

### 5.1 General Comments

5.1.1 The MMO acknowledges NE concerns in relation to the Applicant's proposed noise abatement measures and marine mammals.

5.1.2 The MMO thanks the SoS for the opportunity to comment on the Applicant's proposed wording of Condition 11(1)(j) of the DML:

*"A monitoring plan which accords with the offshore in-principle monitoring plan and is to detail proposals for pre-construction monitoring surveys, construction monitoring, postconstruction monitoring and related reporting;"*

5.1.3 The MMO understands the outline monitoring plan should have sections detailing the required monitoring agreed at this stage noting that this will be further refined based on surveys and final design. The MMO notes that on many offshore wind DMLs the construction monitoring condition includes a standalone monitoring condition in relation to piling. The MMO is currently reviewing and updating this condition for the Nationally Significant Infrastructure Projects (NSIPs) currently going through Examination. We note that it is unlikely that this updated condition can be considered at this stage.

However, it would be welcomed if the standard condition below was included in the DML, noting this has been amended to include the requests in Section 2 above and noise abatement:

*"Construction monitoring*

*17.(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for approval by the MMO in consultation with the relevant statutory nature conservation bodies, of any proposed monitoring, including methodologies and timings, to be carried out during the construction of the authorised scheme. The survey proposals must specify each survey's objectives. In the event that driven or part-driven pile foundations are proposed, such monitoring must include measurements of noise generated by the installation of at least eight of the first twelve piled foundations of each piled foundation type to be installed unless otherwise agreed in writing by the MMO, in consultation with the relevant statutory nature conservation bodies.*

*(2) The undertaker must carry out the surveys approved under sub-paragraph (1), including any further noise monitoring required in writing by the MMO, and provide the agreed reports in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing with the MMO in consultation with the relevant statutory nature conservation bodies.*

*(3) The results of the initial noise measurements monitored in accordance with sub-paragraph (1) must be provided to the MMO within six weeks of the first eight of each piled foundation. The assessment of this report by the MMO will determine whether any further noise monitoring is required. If, in the opinion of the MMO in consultation with the relevant statutory nature conservation body, the assessment shows*



*significantly different impacts to those assessed in the environmental statement or failures in mitigation, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.*

*(4) In the event that piled foundations are proposed to be used, the details submitted in accordance with the offshore in principle monitoring plan must include proposals for monitoring marine mammals and noise abatement mitigation used, unless otherwise agreed in writing by the MMO, in consultation with the relevant statutory nature conservation bodies.*

5.1.4 The MMO defers to Natural England in relation to the effectiveness of noise abatement on specific species such as the Bottlenose Dolphin. The MMO believes if the Offshore In-Principle Monitoring Plan includes information on the requirement for new information being included in the pre-construction assessment if published, then no update to the condition would be required. However, defers to Natural England on this point.





## 6. Additional Comments

- 6.1.1 The MMO notes that “*shall*” is used a number of times within the DML and would request that this is replaced with “*must*” to align with the conditions and be suitably enforceable.
- 6.1.2 The MMO has provided all comments for all of the requested information within this response and will not be providing any comments at the Part 2 Deadline on 13 December 2024. However, the MMO is aiming to liaise with Natural England on these matters and if there are any changes in position from these discussions the MMO will highlight these on 13 December 2024. For clarity, in the absence of a submission this is the MMO’s position.
- 6.1.3 The MMO would like to highlight to the SoS that there are a number of ongoing examinations where the MMO and other interested parties are an active interested party and replying to examination deadline responses. The MMO would request that if future information is required to be reviewed or further information is requested that the SoS is mindful of the dates of these deadlines and allow another week or two to assist with an effective response.
- 6.1.4 The MMO would also highlight that most government/public departments have limited to no resource from 20 December until 6 January and would welcome any additional requests after these dates.

Yours sincerely



Ethan Lakeman

Marine Licensing Case Officer

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## Annex 1

Updated modelling of the 135 dB noise contours for mitigated and unmitigated piling relative to the Downs herring spawning ground provided to the MMO via email (“Rampion 2 - Underwater noise and Herring”) - Received 3 October 2024.

Figure 1. Predicted worst-case and mitigated (DBBC) behavioural response impact ranges (based on 135 dB SELss) for spawning herring from the piling of monopile foundations at the East and West modelling locations.

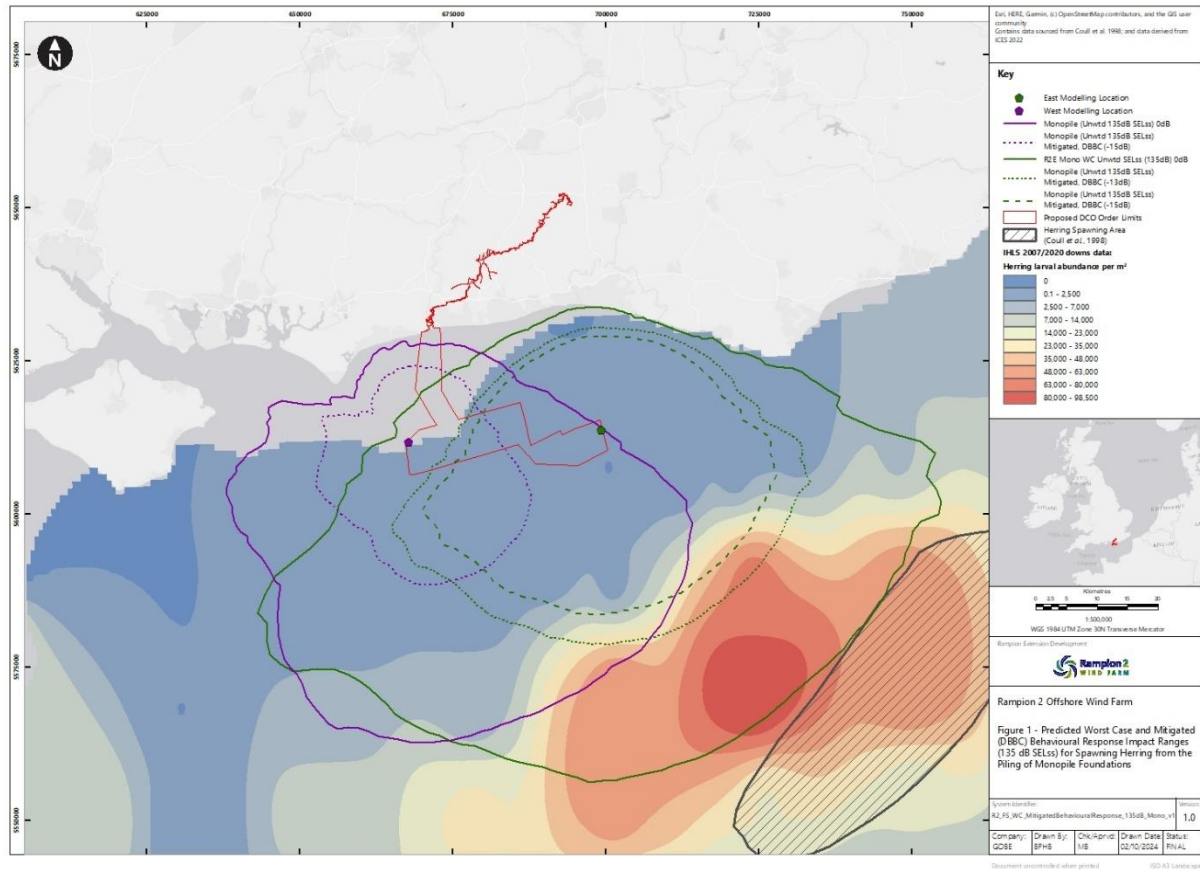
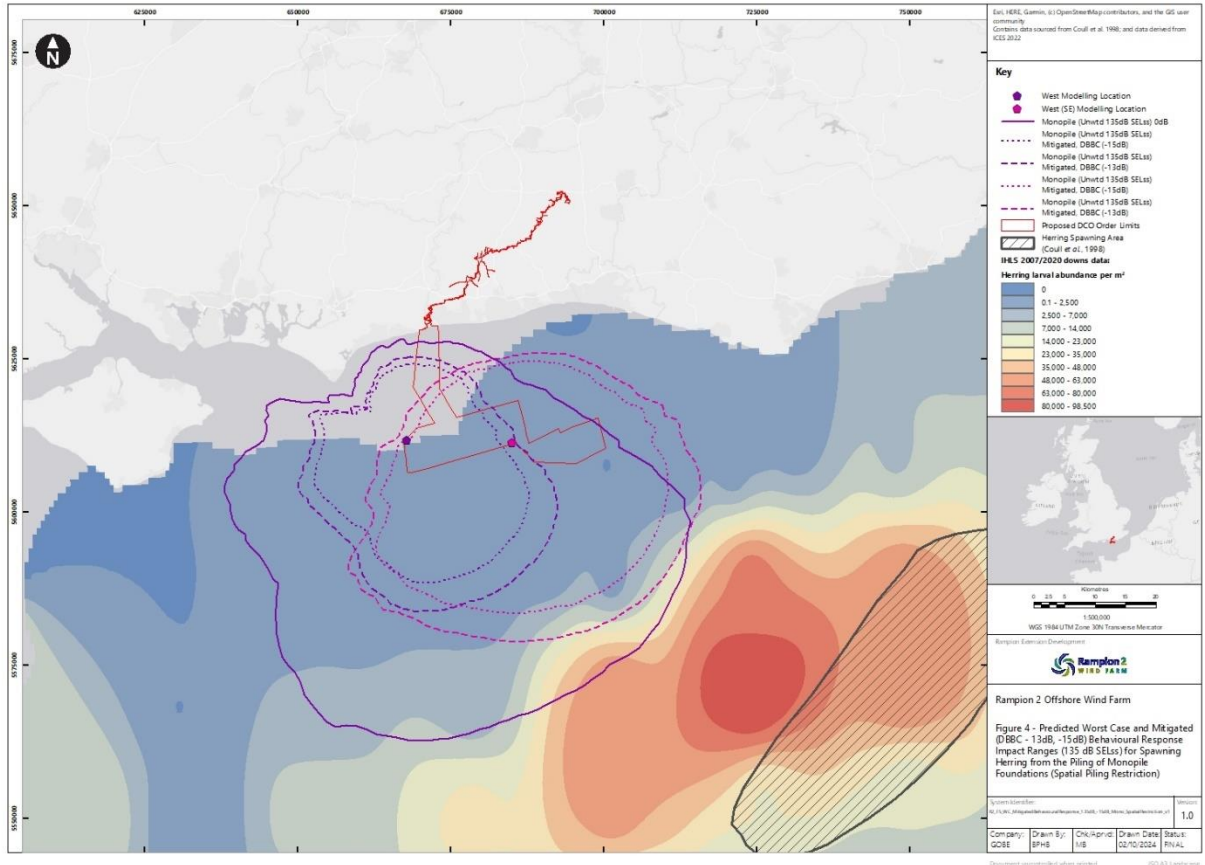


Figure 2. Predicted worst-case and mitigated (DBBC -13 dB and -15 dB reductions) behavioural response impact ranges for spawning herring (based on 135 dB SELss) from the piling of monopile foundations at the West and South East modelling locations in the Western Array.





## Annex 2

Updated modelling provided in support of the Applicants 'Spawning Herring Piling Restriction Plan' Condition, provided to the MMO via email ("Statement of Common Ground – Post Examination Herring Issues Marine Management Organisation") - Received 14 November 2024.

Figure 3. Annotated predicted mitigated (DBBC -13 dB and -15 dB reductions) behavioural response impact ranges for spawning herring (based on 135 dB SELs) from the piling of monopile foundations at the West and South East modelling locations in the Western Array.

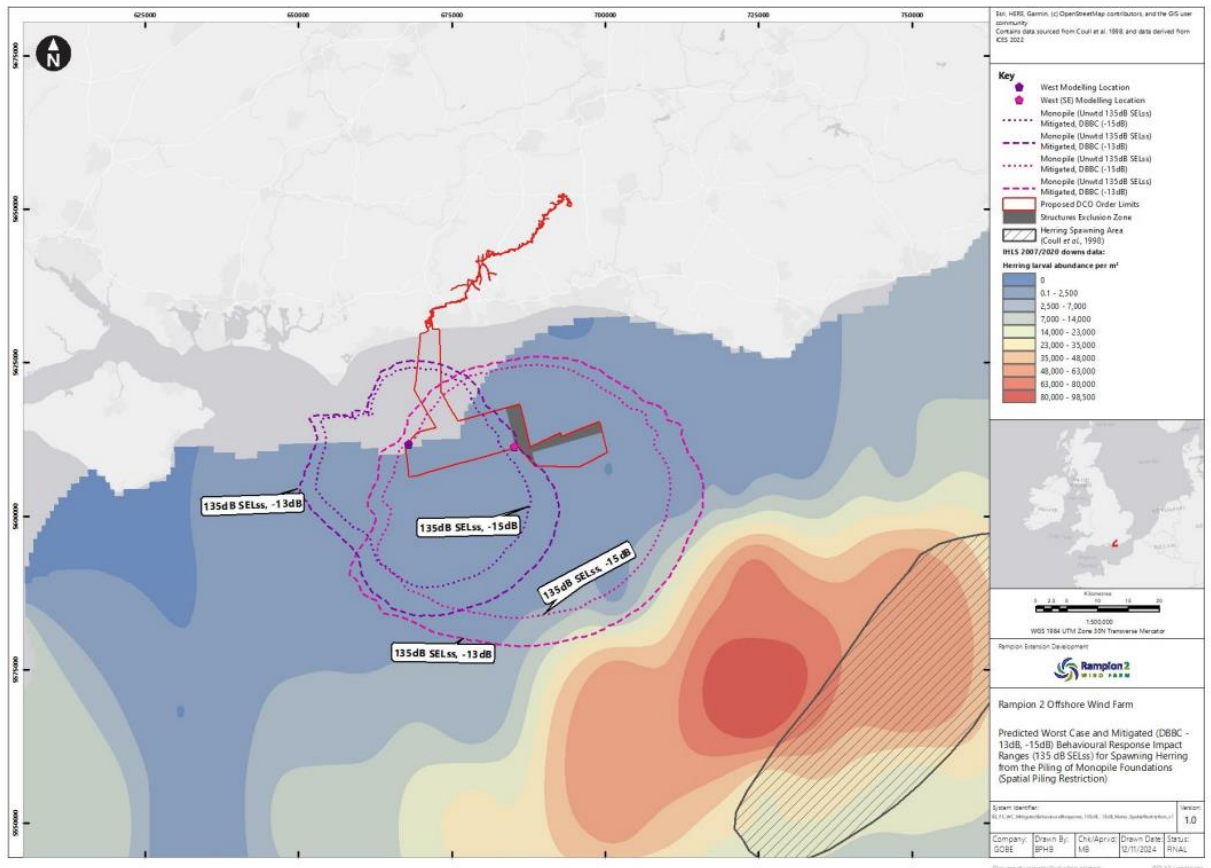




Figure 4. 'Outline Spawning Herring Piling Restriction Plan' West and East Array Areas, overlain with the respective predicted mitigated noise contours (-15 dB in the West Array Area and -13 dB in the East Array Area).

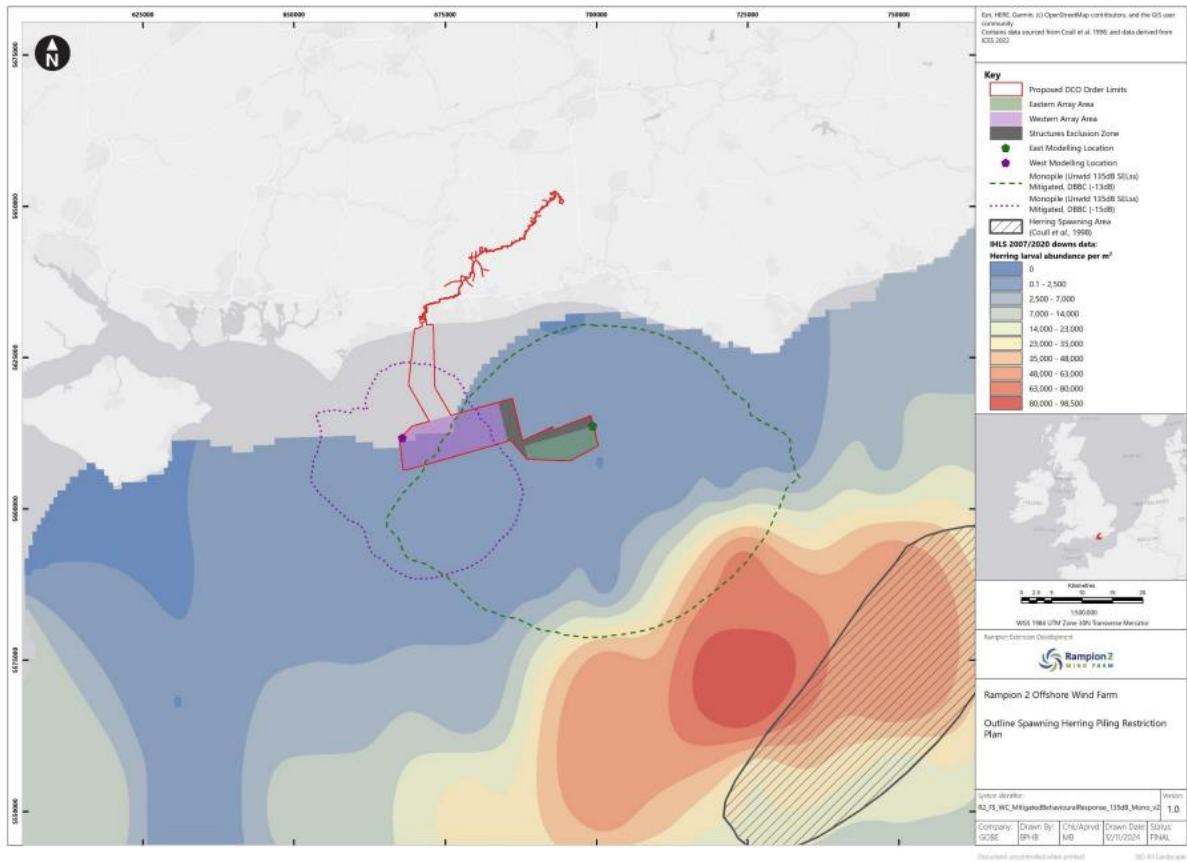


Figure 5. Bathymetry of Rampion 2 Array Area

