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(By email only)

MMO Reference: DCO/2016/00005
Planning Inspectorate Reference: EN010078
Identification Number: 200241119

28 June 2021

Dear Rynd Smith,

Planning Act 2008, Scottish Power Renewables, Proposed East Anglia Two (EA2) Offshore Windfarm Order

MMO Deadline 12 Response

On 19 December 2019, 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 Scottish Power Renewables (the “Applicant”) for determination of a development consent order (DCO) for the construction, maintenance and operation of the proposed East Anglia Two Wind Farm (the “DCO Application”) (MMO ref: DCO/2016/00005; PINS ref: EN010078).

The Applicant seeks authorisation for the construction, operation and maintenance (O&M) of the DCO Application, comprising of up to 67 wind turbine generators together with associated onshore and Offshore infrastructure and all associated development (“the “Project”). This includes two Deemed Marine Licences (DMLs) under Schedules 13 and 14.

This document comprises the MMO comments in respect of the DCO Application submitted in response to Deadline 12.

The MMO submits the following:

- 1. MMO Response to Rule 17 Letter**
- 2. Contaminant Sampling Update**
- 3. Landfall Construction Method Statement and Monitoring Plan Update**
- 4. Coralline Crag Update**
- 5. Herring Spawning Update**
- 6. Schedule 17 Update**
- 7. Comments on any additional information/submissions received at Deadline 11**
- 8. Comments on Applicants comments on MMO Deadline 10 response**
- 9. Deadline 12 Position**

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 applications 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,



Rebecca Reed
Marine Licensing Case Officer



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1. MMO Response to Rule 17 letter

1.1 MMO response

The MMO received a Rule 17 letter requesting further information from the Examining Authority (ExA) on 18 June 2021.

Interested Parties	Question	MMO Response
The Applicants Natural England Marine Management Organisation The Wildlife Trusts	Southern North Sea (SNS) Special Area of Conservation (SAC): Impact-effect pathways The Applicant's assessment [APP-043 and APP-046] in relation to the harbour porpoise feature of the SNS SAC excluded Adverse Effect on Integrity for impact-effect pathways relating to disturbance from vessels, collision risk, changes to prey resource, changes to water quality and barrier effects. For the avoidance of doubt, is it agreed with Natural England, the Marine Management Organisation and The Wildlife Trusts that the only potential impact-effect pathway relates to disturbance from underwater noise?	The MMO defers to NE on the pathways that should be included in terms of the Habitats Regulations Assessments.

2. Contaminant Sampling Update

2.1 Sediment Sampling

In response REP11-114, the MMO stated that its scientific advisors had received the information submitted by the Applicant in relation to sediment sampling and had produced a sample plan for the Applicant to use when undertaking these activities. The MMO can now confirm that this Sample Plan was issued to the Applicant on 09 June 2021 in line with information provided by our scientific advisors. The MMO now views this activity as a post-consent compliance activity and considers this issue to be closed.

3. Landfall Construction Method Statement and Monitoring Plan Update

3.1 Final Position

The MMO is content with the current process in place in relation to the works at landfall and will work closely with East Suffolk Council.

4. Coralline Crag Update

4.1 Final Position

The MMO notes the Applicant's response to Richard Reeves in Point 2 of REP6-021 in that the Horizontal Directional Drilling (HDD) bores will initially travel through Sand & Gravel and then Glacial Tills before entering the Coralline Crag. Furthermore, the Applicant has stated that, at approximately 1250m offshore, the HDD will pass through into the Red Crag and finally "punching out" at approximately 1700m offshore. The MMO is content with this statement.



The MMO notes the Applicant's assertion that the main section of the HDD works will pass through the Coralline Crag. The MMO maintains the position that there should be minimal disturbance at either surface of the Crag as a result of the HDD works.

The MMO has no further issues to raise on this matter.

5. Herring Spawning Condition Update

5.1 Herring Spawning

In response REP11-114, the MMO advised that advice was required from its scientific advisors in relation to the appropriateness of the potential replacement of the phrase '*approximately 14 days*' with '*up to 31 days*' in Condition 29, Schedule 13 and Condition 25, Schedule 14.

The MMO has now received advice from the Centre for Fisheries, Environment and Aquaculture Science (Cefas), our scientific advisors. Having regard to this advice, the MMO cannot support the change to the condition, this is because there is insufficient evidence to support the existence of a 31-day Herring Spawning period.

The MMO would like to highlight to the ExA that it does not anticipate a temporal restriction for the full Downs herring spawning season. However, any temporal restriction must be based on evidence. The January survey data requested at this stage is for the timing of the International Herring Larval Surveys (IHLS) surveys which catch herring larvae only - the surveys do not catch eggs or herring, therefore at this stage no agreement can be met on a specific timescale.

The MMO has set out below, the requirements for the refinement of the duration of a temporal piling restriction. This must be informed by a number of evidence sources which are yet to be provided by the Applicant. The Applicant requested that this information could be provided post consent. The MMO agreed to this therefore is not in the position to agree a refined period. The Information to be provided post consent must include:

- Noise modelling for the received levels of the 135 dB single strike sound exposure level (SELss) at the herring spawning ground.
- The modelling must include the locations of the offshore substation platforms. This is of particular importance because if the substations are located outside the windfarm array boundary, then the spatial extent of any potential noise impacts from the offshore substation piles are still underdetermined.
- The noise modelling contours will need to be overlaid onto a 'heatmap' of the most recently available 10-year IHLS larval dataset for the Downs herring spawning grounds.
- Interrogation of individual years of IHLS larval survey data is also required for the IHLS survey periods of 1-15 January and 16-31 January, in order to determine when the highest larval densities occur in the East Anglia One North (EA1N) and EA2 areas and whether there are 'hotspots' of continuously high larval densities in any years.
- Once the peak of high larval densities has been determined, a back-calculation from this period can be made to ascertain the approximate weeks when the herring will be aggregating, spawning and laying their eggs.

The back calculation used to determine when the herring are spawning considers egg development periods and yolk absorption periods. Hatching of eggs is dependent on water temperature (the warmer the water the less time hatching takes to occur). The incubation period also varies with temperature, about 1-3 weeks in the sea, see Table 1. After hatching the yolk sac larvae are thought to remain close to the seabed for a period, see Table 2.



Table 1 Egg development periods**Table 2 Yolk absorption periods**

Average temperature	Days	Average temperature	Days
12 - 13° C	7-9	12.8° C	3 & 9
10 - 11° C	10-12	12.0° C	5 & 14
7 - 8° C	14-18	10.7° C	7 & 16
3 -4° C	49	10.3° C	7 & 20

Figure 1: Egg Development periods and Yolk Absorption periods (Russell, F.S. 1976. *The eggs and planktonic stages of British marine fishes*, London: Academic Press. 524 pp.)

Without this evidence the MMO does not believe that a defined period should be set at this stage. Therefore, our position remains the same that the Herring Spawning condition should be:

Herring spawning

24.—(1) *The undertaker must not undertake pile driving or UXO detonations during the herring spawning period.*

(2) *The “herring spawning period” means a period within 1 November and 31 January to be confirmed in writing by the MMO following submission of a herring spawning report by the undertaker which analyses the International Herring Larval Survey data for the periods 1-15 January and 16-31 January for the preceding ten years in order to determine when the highest larval densities occur and which includes a methodology for the analysis.*

(3) *Unless otherwise agreed in writing with the MMO, the report referred in paragraph (2) must be submitted to the MMO at least six months prior to—*

(a) the date on which it is intended for UXO clearance activities to begin; or

(b) the commencement of construction,

whichever is earlier.

The MMO has continued discussions on the wording of this condition with the Applicant and understands that the Applicant has agreed to include the above wording in the dDCO. The MMO welcomes this inclusion and considers this issue to be closed.

6. Schedule 17 Update

6.1 Certified Document review

The MMO understands the Applicant is completing an audit of all the certified documents and is submitting this at Deadline 12 alongside the updated dDCO. The MMO notes there is only one remaining deadline after Deadline 12 and will review the documents and advise the Applicant at the earliest opportunity of any concerns prior to Deadline 13 so these can be updated. The MMO will set these out for the ExA at Deadline 13.

7. Comments on any additional information/submissions received at Deadline 11

Natural England (NE)

The MMO has reviewed the following documents submitted by NE and has no comments to make on their content:

- NE Cover Letter Deadline 11 [REP11-120]
- Appendix A22 Natural England’s Representation to East Anglia ONE (EA1) Non-Material Change to DCO Application [REP11-121]



- Appendix K10 - NE Response to Commentaries on the Draft Development Consent Order Deadline 11 [REP11-124]

7.1 Appendix A23 Natural England's Response to London Array Offshore Wind Farm

The MMO has received this response directly and is currently reviewing this as part of the London Array Offshore Wind Farm condition discharge process. At this stage the MMO cannot provide any further comments to the ExA.

7.2 Appendix K9 - NE Response to ExA Questions (ExQ3) Deadline 11 [REP1-123]

Written Question (WQ) 3.2.1

The MMO is aware that NE remain of the opinion that the mitigation and compensatory measures proposed by the Applicant for Red Throated Divers (RTD) does not adequately address the likely impacts of the proposal on the ability of parts of the SPA to support its qualifying feature.

The MMO defers to NE on the appropriateness of any Ornithological Compensation measures.

WQ 3.2.8

The MMO notes that NE has submitted a list of criteria that fully formed compensation proposals should provide prior to determination, the MMO welcomes this and acknowledges the usefulness of this information. The MMO supports these requirements and believes this should be reviewed in conjunction with the existing compensation measures that have been proposed.

WQ 3.2.21

The MMO welcomes NE's reiteration that they are content with the In-Principle Southern North Sea (SNS) Special Area of Conservation (SAC) Site Integrity Plan (SIP) for project alone impacts. The MMO has no further issues to raise in this respect.

The Applicant

The MMO has reviewed the following documents submitted by the Applicant and has no comments to make on their content (for Ornithological matters, the MMO defers to NE):

- EA2 Deadline 11 Cover Letter [REP11-001]
- EA2 Guide to the Application - Version 12 [REP11-002]
- EA1N&EA2 Displacement of red-throated divers in the Outer Thames Estuary (Tracked) - Version 05 [REP11-025]
- EA1N&EA2 D11 Offshore Ornithology Cumulative and In Combination Collision Risk and Displacement Update [REP11-027]
- EA1N&EA2 Underwater Noise Modelling Update - Version 02 [REP11-045]
- EA1N&EA2 Deadline 11 Project Update Note - Version 01 [REP11-053]
- EA2 HRA Derogation Case - Version 04 [REP11-069]
- EA2 Offshore Ornithology Without Prejudice Compensation Measures (Tracked) - Version 03 [REP11-070]
- EA1N&EA2 Applicants' Comments on the ExA's Commentary on the dDCO - Version 01 [REP11-081]
- EA1N_EA2 Applicants' Responses to WQ3 Volume 1 Introduction [REP11-085]
- EA1N_EA2 Applicants' Responses to WQ3 Volume 2 3.0 Overarching general and cross-topic questions [REP11-086]



7.3 Applicants' Comments on Natural England's Deadline 10 Submissions [REP11-049]

The MMO notes that the Applicant has responded to the Issues Log submitted by NE at Deadline 10 [REP10-053], the MMO considers this to be a sensible way of addressing any points of disagreement between NE and the Applicant at this late stage of these Examinations.

The MMO notes that there remains disagreement between the Applicant and NE with regards to the potential impacts of these works on Ornithological species. The MMO defers to NE on all Ornithological matters.

The MMO notes that there remains disagreement between the Applicant and NE as to the potential cumulative impacts of these works, the MMO defers to NE on this matter.

Finally, the MMO notes that the Applicant has responded to several issues using the phraseology 'Agree to disagree', the MMO considers this to be appropriate at this stage of these Examinations.

7.4 Applicant's Responses to WQ3 Volume 4 - 3.2 Biodiversity Ecology and Natural Environment [REP11-088]

The MMO notes that there remains disagreement between the Applicant and NE as to the potential displacement of Red Throated Divers (RTD) as a result of these proposed works. The MMO defers to NE on this matter.

The MMO is aware that the Applicant maintains the position that sufficient detail about the delivery of the without prejudice compensation measures has been submitted into the Examination to enable the Secretary of State to discharge its duties as Competent Authority without the need for further consultation in the decision stage. The MMO defers to NE on the appropriateness of the detail submitted by the Applicant in this case, however, the MMO still maintains its position that a 6-week timescale should be included in any compensation package submitted by the Applicant so as to assist the Interested Parties that specialise in Ornithology.

The MMO notes that the Applicant has stated they have been working closely with the MMO to explore the possibility of substituting 'approximately 14 days' with 'up to [a specified period]' in the wording of Condition 29, Schedule 13 and Condition 25 Schedule 14. The MMO has provided an update on this matter in Section 5.1 of this document.

7.5 Applicants' Responses to WQ3 Volume 8 3.11 Marine and Coastal Physical Processes [REP11-092]

The MMO notes that the Applicant has stated that the MMO would liaise with the Local Planning Authority (LPA) with regard to providing input to the approvals process for the Landfall Construction Method Statement, which must accord with the Outline Landfall Construction Method Statement [REP8-053], for which the MMO is a consultee and that it was content that the MMO will be part of the decision making process. The MMO is content with the detail contained in this response from the Applicant and is happy to be a part of the decision-making process.

The MMO welcomes the Applicant's confirmation that it will be incorporated into the decision-making process for the marine elements of the HDD through consultation during the preparation of the final document and through consultation during the approval process. The MMO has no further issues to discuss in relation to this topic.

The MMO welcomes the Applicant's assertion that consultation on monitoring of coastal processes and remedial actions will be undertaken through Requirement 13(1)(b) of the dDCO and that the MMO remain a named consultee on this document, as stated in the MMO's Deadline 9 response [REP9-060]. The MMO has no further comments to make on this issue.

The MMO notes the Applicant's assertion that that Condition 18 of the Transmission Deemed Marine Licence (DML) (Schedule 14) within the draft DCO [REP8-003] requires completion of post-construction surveys. Furthermore, Paragraph (3) of the Condition requires the survey reports to be submitted to the MMO within agreed timescales. Additionally, paragraph (4) of the Condition states that following



installation of cables, the cable monitoring plan required under condition 13(1)(d)(ii)(cc) of Schedule 14 must be updated with the results of the post installation surveys and that the plan must be implemented during the operational lifetime of the project and reviewed as specified within the plan, following cable burial surveys, or as instructed by the MMO. The MMO remains content with the drafting of this condition and has no further comments to make.

8. Comments on Applicant’s comments on MMO Deadline 10 Response [REP11-048]

8.1 Identification Number (ID)-2

The MMO acknowledges the Applicant’s assertion that the undertaking of additional sediment sampling will not be conducted within the timeframe of the Examinations due to the time required for engagement on and approval of the sampling plan, collection of samples, analysis, reporting and sufficient time for engagement on the report with the MMO and their advisors. The MMO agrees with this. The MMO has provided an update on the Applicants Sample Plan request in Section 2.1 of this document. The MMO has no further issues to address.

8.2 ID-3

The MMO stated in its Deadline 10 Response [REP10-049] that it was aware that Trinity House (TH) requested confirmation on the reference to Schedule 14, Part 2, Condition 13(1)(a) in the Windfarm Layout Principles Statement [REP8-076]. The MMO notes that the Applicant has stated this this was in error and that any reference to this condition has been removed. The MMO welcomes this amendment from the Applicant.

8.3 ID-12

The MMO notes that the Applicants still maintain that it is not necessary for a consultation period to be specified within paragraph 3 of each part of Schedule 18. The MMO still disagrees with this point and considers that this timescale should be included so all parties understand their requirements at the post-consent stage. It is the MMO’s view that these positions are unlikely to change prior to the end of these Examinations and will be decided by the SoS, as such, the MMO considers this issue to be closed.

8.4 ID-13

The MMO welcomes this acknowledgement from the Applicant that should any compensation measures be deemed necessary by the Secretary of State that are marine licensable activities, that the Applicant will engage effectively with the MMO. The MMO has no further points to add.

9. Deadline 12 Position

The MMO understands the Applicant is submitting a final Statement of Common Ground at Deadline 12. The MMO has included a table below of what is outstanding and what is not agreed and is now for the SoS to decide.

Outstanding	
Disposal Sites Site Characterisation Report (Windfarm Site) Site Characterisation Report (Offshore Cable Corridor)	The MMO has provided updates throughout the Examination in terms of the concerns regarding insufficient site sampling which meant that the MMO was unable to designate disposal sites at this stage. The MMO and the Applicant agree that this will be dealt with post consent and no further action is required at this stage.
Not Agreed	
Schedule 18 timescale	The MMO believes that a minimum of six-weeks timescale should be included in all Parts of



	<p>Schedule 18 so all parties understand their requirements at the post-consent stage.</p> <p>The Applicant still maintains that it is not necessary for a consultation period to be specified within paragraph 3 of each part of Schedule 18.</p> <p>The MMO believes this is now up to the Secretary of State to decide.</p>
<p>The inclusion of unexploded ordnance (UXO) activities within the dDCO</p>	<p>The MMO believes it is best placed for high risk activities such as UXO activities to be in a separate marine licence, therefore should be removed from the dDCO.</p> <p>The MMO believes this is now up to the Secretary of State to decide if UXO activities are to be included in the dDCO.</p> <p>If the SoS is minded to include UXO activities the MMO has agreed a without prejudice position on the condition wording for UXO activities and these are included in the dDCO to be submitted at Deadline 12.</p>
<p>The inclusion of new scour and cable protection not installed during construction within the dDCO</p> <p>Outline Offshore Operations and Maintenance Plan (OOMP)</p>	<p>The MMO believes it is best placed for high risk activities such as installing scour and cable protection in new locations to be assessed in a separate marine licence application and should therefore be removed from the dDCO and the OOMP.</p> <p>The MMO believes this is now up to the Secretary of State to decide if this activity should be included in the dDCO and if so to what extent.</p> <p>If the SoS is minded to include the activity the MMO has agreed a without prejudice position on the condition wording for the activities to be included for a maximum of five years after the construction end date. These are included in the dDCO to be submitted at Deadline 12 and highlighted within the Outline Offshore Operations and Maintenance Plan (REP7-027).</p>

Yours sincerely,



Rebecca Reed
Marine Licensing Case Officer



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