Marine Licensing Lancaster House Hampshire Court Newcastle upon Tyne NE4 7YH T +44 (0)300 123 1032 www.gov.uk/mmo

Five Estuaries Offshore Wind Farm Case Team Planning Inspectorate FiveEstuaries@planninginspectorate.gov.uk (By Email only)

MMO Reference: DCO/2019/00008
Planning Inspectorate Reference: EN010115
Identification Number: 20049306

10 March 2025

Dear Sir or Madam,

<u>Planning Act 2008</u>, Five Estuaries Offshore Wind Farm Ltd, Proposed Five Estuaries Offshore Wind Farm Order

Deadline 8 Submission

On 23 April 2024, 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 Five Estuaries Offshore Wind Farm Ltd (the "Applicant") for determination of a development consent order for the construction, maintenance and operation of the proposed Five Estuaries Offshore Wind Farm (the "DCO Application") (MMO ref: DCO/2019/00008; PINS ref: EN010115).

The Applicant seeks authorisation for the construction, operation and maintenance of the DCO Application, comprising of up to 79 wind turbine generators together with associated onshore and offshore infrastructure and all associated development ("the "Project").

As a marine licence has been deemed within the draft DCO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement, and revocation of provisions relating to the marine environment. As such, the MMO has an interest in ensuring that provisions drafted in a deemed marine licence enable the MMO to fulfil these obligations.

This document comprises the MMO comments in respect of the DCO Application submitted in response to Deadline 8.

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,	
Marine Licensing Case Officer	
D + @marinemanagement.org.uk	
Copies to: (MMO) – Case Manager: (MMO) – Senior Case Manager: @marinemanagement.org.uk	@marinemanagement.org.uk

Contents

1.	The MMO's Closing Statement	4
2.	MMO Comments on Draft Development Consent Order (DCO) - Revision H - REF	۶7-
800	/REP7-009	5
3.	MMO Comments on Applicant's Deadline 6 Submissions	6
4.	MMO Comments on Applicant's Deadline 7 Submissions	14
5.	MMO Comments on Interested Parties' (IP) Deadline 7 Submissions	19
6.	MMO Comments on PD-026 - Examining Authorities Written Questions 3 (ExQ3)	21
Ref	erences	22

1. The MMO's Closing Statement

- 1.1. The MMO would like to highlight to the Examining Authority (ExA) and Secretary of State (SoS) that requests for information from the Applicant were made during the pre-application process, especially in relation to fisheries and underwater noise. In addition to this the MMO also requested early engagement and booking meetings before and after each deadline to ensure resource was available during the Examination.
- 1.2. The MMO is disappointed that the additional information requested was provided at later deadlines within the Examination. The MMO is an enabling regulator but without the confidence in the evidence provided must take the precautionary approach, especially in relation to mitigation and impacts to species. This delay in providing the information means that we have not been able to engage in detailed discussions within the time scales of the examination period.
- 1.3. The MMO understands that disagreements are reviewed, and recommendations are made to the SoS by the ExA, so the SoS can make a decision. However, the MMO would highlight that with the Applicant leaving some of the major issues for examination, it has increased resource requirements during this process and some high priority issues remain unresolved, undermining the development consent order process.
- 1.4. The MMO would like to highlight that there has been a delay in providing further information on DML matters and understands this is frustrating for all parties. The MMO has been engaging with the Applicant and notes the Applicant did not raise DML issues within the most recent meeting. The MMO also noted that the Applicant is unlikely to agree with the proposed changes from earlier responses to the comments raised by the MMO and therefore there is a number of issues outstanding that are agree to disagree.

2. MMO Comments on Draft Development Consent Order (DCO) - Revision H - REP7-008/REP7-009

2.1. Schedule 10/Schedule 11 Comments

- 2.1.1. The MMO notes and welcomes the inclusion of '(d), (e) and' in Schedule 10, Part 2, Condition 3 (3)/Schedule 11, Part 2, Condition 4 (3).
- 2.1.2. The MMO notes the inclusion of 'and, in so far as is relevant, the principles of the outline cable installation and specification plan' for Schedule 11, Part 2, Condition 4 (4).
- 2.1.3. The MMO notes the changes made to Conditions 14/15 Site Integrity Plan and Schedule 11, Condition 20 (2), in response to the Examining Authority (ExA). The MMO notes in REP7-097 that we did not have any objections to the ExA's suggested changes.
- 2.1.4. The MMO notes the changes made to Schedule 11, Part 2 Paragraph 13(1) (g) (iv). The MMO has no comments to add.
- 2.1.5. The MMO welcomes the update of the Marine Mammal Condition in Schedule 10 to state 'or' instead of 'and' as mentioned in REP6-063. The MMO requests that this is changed for Condition 20 of Schedule 11.
- 2.1.6. The MMO provided our full position on the deemed Marine Licences (DML) in Section 1 of REP7-097 and we maintain our position.

3. MMO Comments on Applicant's Deadline 6 Submissions

3.1. General Comments

- 3.1.1. The MMO noted in our Deadline 7 Response (REP7-097) that the Applicant submitted the following documents in Deadline 6:
 - a. REP6-011/012 6.5.6.2.1 Landfall Impact Piling Modelling Revision B (Clean/Tracked)
 - b. REP6-013/014 6.5.6.4 Herring Seasonal Restriction Note Revision D (Clean/Tracked)
 - c. REP6-020/021 9.12 Outline Cable Specification and Installation Plan Revision C (Clean/Tracked)
 - d. REP6-024/025 9.16 Outline Fisheries Liaison and Co-existence Plan Revision D (Clean/Tracked)
 - e. REP6-028/029 9.32 Offshore In Principle Monitoring Plan Revision C (Clean/Tracked)
 - f. REP6-037/038 10.20.1 Technical Note Methodology for Determining MDS (Offshore) - Revision C (Clean/Tracked)
 - g. REP6 –041/042 10.30 Outline Sediment Disposal Management Plan Revision B (Clean/Tracked)
 - h. REP6-043 10.40 Applicant's Comments on Deadline 5 Submissions
- 3.1.2. The MMO reviewed the above documents with our technical advisers and have split our comments into the following topics:
 - Fish Ecology
 - Underwater Noise
 - Dredge and Disposal
 - Shellfish Ecology
 - Coastal Processes
- 3.1.3. The MMO also provided the comments in this section to the Applicant on Friday 7 March 2025 for consideration. The MMO would highlight that comments have only been provided on outstanding issues and not every response from the Applicant in REP6-043.

3.2. Fish Ecology

- 3.2.1. In providing this response the MMO has reviewed the following documents:
 - a. REP4-049 10.29 Applicant's Comments on Deadline 3 Submissions
 - b. REP6-013/014 6.5.6.4 Herring Seasonal Restriction Note Revision D (Clean/Tracked)
 - c. REP6-028/029 9.32 Offshore In Principle Monitoring Plan Revision C (Clean/Tracked)
 - d. REP6-024/025 9.16 Outline Fisheries Liaison and Co-existence Plan -Revision D (Clean/Tracked)
 - e. REP6-043 10.40 Applicant's Comments on Deadline 5 Submissions

- 3.2.2. The MMO notes the Applicant is aware of our position on the use of the 135 decibels sound exposure level single strike (dB SELss) threshold for modelling the range of effect for behavioural responses in herring. The MMO does not believe any further comments on this issue are required.
- 3.2.3. With regard to the Applicant's comment (MMO-17 of REP6-043) on larval densities in the Southern North Sea (SNS), whilst it is recognised that higher abundances of herring larvae are recorded in the English Channel portion of the Downs spawning ground in the International Herring Larvae Survey (IHLS) surveys, this does not diminish the importance of the SNS portion of the spawning ground to the overall contribution to the Downs population as a whole. Furthermore, the Applicant's statement must caveat that IHLS data for the years 2018 to 2024 are absent for the survey period 16-31 January due to the cessation of this survey and therefore the maps presented in the Herring Seasonal Restriction Note showing larval abundance per metres squared for the period 2012-2024 (Figure 5-1) and Figure 6-6 (2019 2020), Figure 6-7 (2020 2021), Figure 6-8 (2021 2022), Figure 6-9 (2022 2023) and Figure 6-10 (2023 2024) are not truly representative of the spawning activity in the SNS in the latter part of the spawning season.
- 3.2.4. The MMO thanks the Applicant for including the 5 millimetres (mm) and 11mm hatch lengths in their back-calculation scenarios for determining the start and end dates for the peak of spawning activity as requested. This value is appropriate for the reasons outlined in our AS-074.
- 3.2.5. The MMO thanks the Applicant for including an 18-day egg development period in their back-calculation scenarios. This value is appropriate for the reasons outlined in our AS-074.
- 3.2.6. The MMO thanks the Applicant for including a 20-day yolk absorption period in their back-calculation scenarios. This value is appropriate for the reasons outlined in our AS-074.
- 3.2.7. The MMO thanks the Applicant for using the growth rate of 0.25mm per day (as per Heath,1993) in their back-calculation scenarios. This value is appropriate for the reasons outlined in our Additional Submission (AS-074).
- 3.2.8. The MMO notes, in REP6-043 (comment MMO-31), the Applicant states: 'as shown by the IHLS data (from 2000-2024), the majority of the Downs stock herring are spawning in the English Channel, and not in the southern North Sea'. Please see points 3.2.2-3.2.3 concerning the limitations of IHLS data for the years 2018-2024.
- 3.2.9. The MMO welcomes that the hatch lengths in Tables 2-4 and 2-5 in REP6-013/014 have been corrected from 5mm for all scenarios to 6mm (scenarios C, D, K, L), 7.5mm (scenarios E, F, M, N) and 11mm (scenarios G, H, O, P).
- 3.2.10. As previously highlighted, the MMO requested the Applicant to use scenarios 'I' and 'P' to determine the conservative start and end dates of the peak of herring spawning period for a precautionary approach. This has not been completed. Without this

information or evidence to the contrary, the MMO maintains that, based on scenario 'I' the start date of the peak of spawning is calculated as 02 November, and using scenario 'P' the end date for the peak of spawning is calculated as 17 December. Combining these dates with a minimum buffer period of 24 hours before piling commences to allow adult fish to migrate to the spawning ground without risk of injury and a 'buffer' period of 7 days at the end of the peak spawning period to allow developing larvae to drift away from the spawning grounds in their early developmental stages without injury, the MMO maintains that a temporal piling restriction from **01 November to 24 December (inclusive)** is appropriate due to lack of confidence in the evidence provided to date. The restriction must be included in the DMLs and updated within Schedule 10 Condition 13 (6) and Schedule 11 Condition12 (6).

- 3.2.11. The MMO understands the Applicant disagrees with this restriction but with lack of evidence and confidence in the information provided to date, the MMO has to take the precautionary approach.
- 3.2.12. The MMO understands that this is for the ExA to recommend and SoS to make a decision on and would highlight that should the decision be the dates 01 November to 24 December (inclusive), the MMO is open to further evidence being provided post consent. As per the current wording of the condition if evidence is provided the MMO can allow works to take place in this period.
- 3.2.13. The MMO notes that the Applicant has still not provided any further information to address our concerns regarding the impacts of elevated suspended sediment concentration (SSC) and associated redeposition resulting from cable installation and seabed preparation works. As stated in the previous responses, the sediment disposal restriction does not provide adequate protection to spawning herring and resultant eggs and larvae.
- 3.2.14. Given that the southern array overlaps areas of high herring spawning potential and that the impacts of elevated SSC may extend up to 500 metres (m) from the source, there may be potential for significant impacts to herring spawning success at a population level. Therefore, the MMO maintains that a temporal restriction on bed preparation and cable laying works in the southern array area will be necessary. Therefore, to minimise the potential for impacts to herring eggs and larvae from activities likely to generate high SSC, Schedule 10 Condition 13 (6) and Schedule 11 Condition 12 should be updated following: 6) No percussive piling associated with wind turbine generator foundations, cable laying or sea bed preparation may take place between 1 November to 24 January (inclusive) in any year for the protection of spawning herring unless otherwise agreed in writing with the MMO.
- 3.2.15. It should be noted that the cable corridor and northern array overlap areas of lower herring spawning potential and therefore are of less concern. However, with lack of clearly defined areas provided by the Applicant within the certified documents, the MMO is not able to reduce the requirement of the restriction to the specific location. The Applicant must propose appropriate mitigation such as a temporal restriction for

- the southern array area to minimise the potential for impacts to herring eggs and larvae from activities likely to generate high SSC.
- 3.2.16. Should the Applicant propose appropriate mitigation and/or provide maps at the post consent stage the MMO would welcome further discussion to reduce the restriction area to enable works that overlap areas of lower herring spawning potential to take place within the restricted period.
- 3.2.17. The MMO has reviewed the Fish and Shellfish Ecology section of the Offshore In-Principle Monitoring Plan (REP6-028/029) and notes that no monitoring or surveys relating specifically to fish ecology are proposed. The MMO is content with this.
- 3.2.18. The MMO also notes that underwater noise monitoring of the first four piles of each foundation type will be undertaken to validate predictions on the received sound levels and source levels and the conclusions made within the ES, which is considered appropriate.
- 3.2.19. The MMO has briefly reviewed the Outline Fisheries Liaison and Co-existence Plan (REP6-024/025) and does not have any comments or concerns with the Applicant's plan.

3.3. Underwater Noise (UWN)

- 3.3.1. In providing this response the MMO has reviewed the following documents:
 - a. REP6-011/012 6.5.6.2.1 Landfall Impact Piling Modelling Revision B (Clean/Tracked)
- 3.3.2. The MMO welcomes the update to the Landfall Impact Piling Modelling to include the depths. The MMO would request that it is made clear that if vibropiling is not utilised, that the cofferdam is included within post consent documentation for UWN and request that this commitment is captured within the Marine Mammal Mitigation Protocol (MMMP) and design plan.

3.4. Dredge and Disposal

- 3.4.1. In providing this response the MMO has reviewed the following documents:
 - a. REP5-073 10.34 Applicant's Comments on Deadline 4 Submissions- Revision
 A
 - b. REP6-028/029 9.32 Offshore In Principle Monitoring Plan Revision C (Clean/Tracked)
 - c. REP6-037/038 10.20.1 Technical Note Methodology for Determining MDS (Offshore) Revision C (Clean/Tracked)
 - d. REP6 –041/042 10.30 Outline Sediment Disposal Management Plan Revision B (Clean/Tracked)
 - e. REP6-043 10.40 Applicant's Comments on Deadline 5 Submissions

- 3.4.2. The MMO welcomes that the Applicant provided the MMO with the raw data for sediment quality in the MMO's excel format as requested in REP3-029, as well as the shapefiles for the proposed disposal sites. The MMO is discussing the designation of the disposal sites with our technical advisers and the Applicant.
- 3.4.3. After reviewing the results in the correct templates, the MMO notes that the results are fully corroborated and acceptable with respect to risk of contaminants. However, the MMO notes that the Applicant has not filled out the template completely, missing out the "Dredge Area" column from each contaminant tab and missing out the tables "Marine licence applicant information" and "Dredge area tonnages" on tab 1. All of these should be filled out to enable annual OSPAR reporting and the MMO highlights that this should be sorted at the earliest opportunity, rather than at the point of processing the future returns data.
- 3.4.4. With regards to comment MMO-40 in REP6-043, the MMO notes the Applicant states that they "did not apply a threshold of 6% to determine whether a samples should be included for contaminant analysis" and that contaminant samples instead "incidentally all contained a mud fraction higher than 6%" and that the contaminant survey "was designed to target those sediments with the greatest predicted mud content."
- 3.4.5. The main question the MMO had on this concern was what were the criteria for selecting which samples to test for contaminants and whether a silt fraction threshold was used as is sometimes the case for sediments expected to be coarse. The apparent coincidence that all samples were above 6% fines was the reason for raising the comment in the first instance, due to lack of any sort of justification from the Applicant on sampling effort. The Applicant's reference to other relevant responses does not elucidate this any further. Ultimately the sampling effort is not adequately justified, however, due to the late stage in the examination process the MMO considers the overall risk remains acceptable.
- 3.4.6. The MMO has reviewed the Sediment Disposal Management Plan (REP6-041/042) and has no significant concerns. The report clarifies that the anticipated dredge volumes will amount to 31.5 million cubic metres (Mm³) total, with the majority of the material being associated with sandwave clearance intra-array, inter-arrays and associated with export cables (29.7Mm³). Most of this disposal will be within the Array area disposal site(s) (24.5Mm³), with the remaining 9.2Mm³ going to the Cable Corridor disposal site. The volumes are clear, and the relevant information related to methodology and mitigation is best practice.
- 3.4.7. The MMO highlights that there are no major dredge and disposal concerns left for further discussion, other than the raw data and designation of the disposal sites, which is ongoing. As per the comments in Section 1.10 of REP7-097 the MMO and the Applicant are still in discussions on the disposal site reference numbers and requests the DML is updated accordingly.

3.5. Benthic Ecology

3.5.1. In providing this response the MMO has reviewed the following documents:

- a. REP5-013/REP5-014 5.5.2 Outline Benthic Implementation and Monitoring Plan Revision B (Clean/Tracked)
- b. REP5-027/REP5/028 9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan Revision D (Clean/Tracked)
- c. REP6-028/029 9.32 Offshore In Principle Monitoring Plan Revision C (Clean/Tracked)
- d. REP6 –041/042 10.30 Outline Sediment Disposal Management Plan Revision B (Clean/Tracked)
- e. REP6-043 10.40 Applicant's Comments on Deadline 5 Submissions
- 3.5.2. The MMO agrees with the Applicant's response to previous concerns raised regarding sediment bound microplastic load (comment MMO-42 in REP6-043) and would note the approach taken by an Offshore Wind Farm (OWF) developer in the Irish Sea which included post-construction monitoring of paint loss and leading-edge protection erosion (and updates to the In-Principle Monitoring Plan accordingly) to provide the required context and potential scale of the input of paint flakes. The MMO encourages the Applicant to consider doing similar to enable a better understanding of the potential release of microplastics from OWF developments, however this is not a major comment.
- 3.5.3. The MMO is content with the changes made to clarify the post-construction monitoring of potentially impacted biogenic / geogenic reef in REP6-028/029.
- 3.5.4. The MMO defers to the relevant Statutory Nature Conservation Body regarding the proposed approach to monitoring installed cable (and cable protection) within the Margate and Long Sands Special Area of Conservation (M&LS SAC). The MMO notes that the Applicant has added text to Section 4.6.13 of the Offshore In-Principle Monitoring Plan (REP6-028/029) to outline the approach to post-construction monitoring of cable protection within M&LS SAC and to clarify the aims of post-construction monitoring survey.
- 3.5.5. The MMO acknowledges the Applicant's recognition of potential impacts to sensitive habitats such as biogenic reefs from disposal activities in REP6-041/042 and is content with the Applicants commitment to identify and avoid these areas.
- 3.5.6. The MMO notes there are no major benthic ecology concerns left for further discussion, however the MMO would encourage the Applicant to consider postconstruction monitoring to enable a better understanding of the potential release of microplastics from OWF developments.

3.6. Shellfish Ecology

- 3.6.1. In providing this response the MMO has reviewed the following documents:
 - a. REP6-028/029 9.32 Offshore In Principle Monitoring Plan Revision C (Clean/Tracked)
 - b. REP6-024/025 9.16 Outline Fisheries Liaison and Co-existence Plan -Revision D (Clean/Tracked)
 - c. REP6-043 10.40 Applicant's Comments on Deadline 5 Submissions

- 3.6.2. The MMO notes the Applicant states the following in section 4.8 in REP6-028/029: 'the impacts on fish and shellfish ecology during the construction, operation and decommissioning phases of the Five Estuaries Offshore Wind Farm (assessed in Volume 6, Part 2, Chapter 6: Fish and Shellfish Ecology) found that there will be impacts of negligible to minor adverse significance with no residual impact on fish and shellfish ecology assessed'. Accordingly, no specific shellfish monitoring is specified. The MMO notes that benthic monitoring will occur, and shellfish presence/absence can be reported from this, however no assessment of shellfish populations would be feasible as benthic grabs or beam trawl surveys are not suitable methods to catch shellfish.
- 3.6.3. The MMO also notes the changes made to section 4.10 of REP6-028/029. The MMO notes no monitoring specific to commercial shellfish fisheries is listed, however it is noted that the AIS activities will be reviewed to compare pre and post fishing impacts alongside Fisheries Liaison Officer records. Outcomes from this is to be reported. It is important to note that this is reported in line with monitoring reports to capture any observations on impact on commercial fisheries.
- 3.6.4. The MMO notes that monitoring commitments within the Outline Fisheries Liaison and Co-existence Plan (FLCP) Revision D will be agreed in a final version prior to start of construction.
- 3.6.5. The MMO notes the Applicant recognises the importance of effective communication with fisheries stakeholders in managing relations and, therefore, has developed appropriate liaison and information sharing strategies which includes implementation of mitigation strategies to minimise the overall impacts of the Project. These include: communication and dialogue throughout the project, minimising restrictions on safety distances, safe working practices, claim guidance etc in line with best practice and industry guidance.
- 3.6.6. The MMO notes that there are no further shellfisheries concerns left for further discussion, however, would like to highlight that it will be important to include the output of this monitoring within monitoring reporting to establish the level of impact on commercial shellfish fisheries.

3.7. Coastal Processes

- 3.7.1. In providing this response the MMO has reviewed the following documents:
 - a. REP6-020/021 9.12 Outline Cable Specification and Installation Plan -Revision C (Clean/Tracked)
 - b. REP6-028/029 9.32 Offshore In Principle Monitoring Plan Revision C (Clean/Tracked)
 - c. REP6-037/038 10.20.1 Technical Note Methodology for Determining MDS (Offshore) Revision C (Clean/Tracked)
 - d. REP6 –041/042 10.30 Outline Sediment Disposal Management Plan -Revision B (Clean/Tracked)
 - e. REP6-043 10.40 Applicant's Comments on Deadline 5 Submissions

- 3.7.2. The MMO requests the Applicant updates documents REP6-028/029 in section 4.2.3 to include meteorological and oceanographic.
- 3.7.3. The MMO notes that in documents REP6-028/029 in section 4.3.1, the 500m potential impact zone survey around pre-construction activity should be regarded as a minimum with 100% coverage of the seabed by Swath and sidescan sonar within this zone. The MMO would like to highlight that if the disposal zone from dredgings is outside of this zone then the coverage should also include the disposal zone.
- 3.7.4. The MMO requests clarification for REP6-020/021, whether in Table 1, is the 22m minimum cable burial depth reflected in the total volumes of sediment to be dredged along with what will be provided post consent in relation to this?
- 3.7.5. In response to comment MMO45 in REP6-043, the MMO would like to highlight that whilst the reuse of clay is relatively well known, the use of sand and gravel in a beneficial manner is also an established principle in the UK, and new opportunities for re-use and recycling are developing, such as in the Harwich Haven area for coastal defences (L/2020/00360): https://www.bbc.co.uk/news/articles/c5yxvrj5enjo
- 3.7.6. In Section 3.5.2 of REP6 –041/042, the MMO notes the deposition of clay will depend on the method of removal, storage, transportation and placement. The final version of the Sediment Disposal Management Plan must describe this in detail. Any losses of fine material (sourced from Clays) can travel a significant distance due to the low settling velocity.
- 3.7.7. The MMO notes there are a few points that require clarification from the Applicant. The MMO has also provided what must be included in the final Sediment Disposal Management Plan. There are no major concerns left regarding coastal processes that the MMO believes cannot be resolved.

3.8. Summary

- 3.8.1. The MMO notes that a majority of our concerns have been resolved. The following major concerns are still outstanding:
 - Herring seasonal restriction and sediment disposal restriction on bed preparation and cable laying works
 - Dredging in the deep water routes
 - Disposal sites (however two options provided in REP7-097).
- 3.8.2. The MMO has provided our reasons and comments for the restrictions we have requested in RR-070, AS-074 and section 3.2 of this response.

4. MMO Comments on Applicant's Deadline 7 Submissions

4.1. General Comments

- 4.1.1. The MMO notes the Applicant submitted the following documents in Deadline 7:
 - a. REP7-027/028 5.5.1 Benthic Compensation Strategy Roadmap Revision B (Clean/Tracked)
 - b. REP7-029/030 5.5.2 Outline Benthic Implementation and Monitoring Plan -Revision C (Clean/Tracked)
 - c. REP7-038/039 9.8 Dredge Disposal Site Characterisation Report (Clean/Tracked)
 - d. REP7-040/041 9.12 Outline Cable Specification and Installation Plan Revision D (Clean/Tracked)
 - e. REP7-042/043 9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan Revision E (Clean/Tracked)
 - f. REP7-044/045 9.14.1 Outline Marine Mammal Mitigation Protocol Piling (Clean/Tracked)
 - g. REP7-046/047 9.14.2 Outline Marine Mammal Mitigation Protocol UXO (Clean/Tracked)
 - h. REP7-048/049 9.20 Outline Navigation and Installation Plan Revision D (Clean/Tracked)
 - i. REP7-060/061 9.32 Offshore In-Principle Monitoring Plan Revision D (Clean/Tracked)
 - j. REP7-078/079 10.30 Outline Sediment Disposal Management Plan (Clean/Tracked)
 - k. REP7-083 10.56 Applicant's Responses to the Report on the Implications for European Sites (RIES)
 - I. REP7-084 10.58 Applicant's Responses to ExQ3
 - m. REP7-085 10.59 Applicant's Comments on Deadline 6 Submissions
- 4.1.2. The MMO has reviewed the documents above and has provided any comments below where necessary.

4.2. REP7-027/028 – 5.5.1 Benthic Compensation Strategy Roadmap - Revision B (Clean/Tracked)

- 4.2.1. The MMO welcomes the inclusion of Defra's Written Ministerial Statement and interim guidance in the Marine Recovery Fund in the document. The MMO defers to Natural England regarding the updates and necessary compensation measures required.
- 4.3. REP7-029/030 5.5.2 Outline Benthic Implementation and Monitoring Plan Revision C (Clean/Tracked)

4.3.1. The MMO welcomes the inclusion of Defra's Written Ministerial Statement and interim guidance in the Marine Recovery Fund in the document. The MMO defers to Natural England regarding the necessary compensation measures required.

4.4. REP7-038/039 – 9.8 Dredge Disposal Site Characterisation Report (Clean/Tracked)

4.4.1. The MMO notes the Applicant has updated the maximum volumes to be disposed of within the Array Area disposal sites in REP7-039. The MMO has no concerns in relation to this as the numbers have been reduced and are within the worst-case scenario. As per the comments in Section 1.10 of REP7-097 the MMO and the Applicant are still in discussions on the disposal site reference numbers and requests the DML is updated accordingly.

4.5. REP7-040/041 – 9.12 Outline Cable Specification and Installation Plan - Revision D (Clean/Tracked)

- 4.5.1. The MMO notes the changes made to REP7-041 to take into consideration the Deep Water Routes (DWRs).
- 4.5.2. The MMO notes the inclusion of a section on Wet Storage and stating that this will not occur within the DWRs.
- 4.5.3. The MMO would like to highlight that it should be clear on Schedule 11 Paragraph 2, 'Details of licensed marine activities' and Condition 1 'Design Parameters', the worst case wet storage impact figures. However, due to the stage of the Examination and the fact the maximum area of seabed disturbed by the wet storage area will be 15,000 m² (with an indicative shape of 75 m x 200 m). The MMO will not be requesting this update to the DML and is content this is captured within a certified document.

4.6. REP7-042/043 – 9.13 Margate and Long Sands Special Area of Conservation (SAC) - Benthic Mitigation Plan - Revision E (Clean/Tracked)

4.6.1. The MMO notes and welcomes the commitment to not use a jack-up barge within the SAC and that the material will be disposed of within the same sediment cell.

4.7. REP7-044/045 – 9.14.2 Outline Marine Mammal Mitigation Protocol - Piling (Clean/Tracked)

- 4.7.1. The MMO notes and welcomes that the Applicant has updated REP7-045 to mention the Defra Noise Policy 2025 and that 'VE will demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise reduction methods for pile driving activity'. The MMO welcomes that VE will demonstrate that they have utilised best endeavours.
- 4.7.2. However, would echo the advice provided in Section 2.4 of REP7-097 that Noise Abatement Systems (NAS) (this also includes any additional Noise Mitigation Systems (NMS)) will likely be required for all piling in the coming years and stresses that this commitment to using these techniques should be clear in the MMMP and Application now and not as a potential to review post consent. The cost alone is not enough to show best endeavours and the MMO may be in a position where approval for a wildlife licence/approval of the MMMP is either delayed or rejected unless NAS

- is utilised, therefore commitment to utilise NAS/NMS as part of the consent should be clearly stated.
- 4.7.3. As the enabling regulator this position would not be taken lightly and would encourage the Applicant to start engagement for NAS procurement as soon as possible should the SoS be minded to grant consent.
- 4.7.4. The MMO notes NE is also requesting this commitment.
- 4.7.5. The MMO notes the changes made to section 4.5 to reference 'noise reduction' instead of 'noise abatement'.

4.8. REP7-046/047 – 9.14.2 Outline Marine Mammal Mitigation Protocol - UXO (Clean/Tracked)

4.8.1. The MMO notes the Applicant has included references to the Defra Noise Policy 2025 and has stated that low-order clearance techniques will be the default method for clearance. The MMO welcomes this commitment and that the MMMP will be used as part of the separate marine licence application for UXO investigation and clearance.

4.9. REP7-048/049 – 9.20 Outline Navigation and Installation Plan - Revision D (Clean/Tracked)

- 4.9.1. The MMO notes the changes made to REP7-049, the MMO understands that section 2.6 of the document sets out the approval's mechanism.
- 4.9.2. The MMO would encourage the Applicant and interested parties to come to an agreement prior to the document being submitted to the MMO.
- 4.9.3. In relation to the updates, all updates should be provided to the MMO for approval, the MMO should always have the most up to date version of the documents and these all have to be approved, no matter how minor. If these documents are not shared and approved and changes are implemented the Applicant would be in breach of the licence.
- 4.9.4. The MMO would also welcome all updates being provided to interested parties prior to submission as these may have to be consulted on post consent which could cause delays.

4.10. REP7-060/061 - 9.32 Offshore In-Principle Monitoring Plan - Revision D (Clean/Tracked)

- 4.10.1. The MMO notes the update to the Offshore In-Principle Monitoring Plan (IPMP) to consider the potential monitoring options for migratory bats. The MMO provided further comments regarding bats in Section 5.1.2 of this response.
- 4.10.2. The MMO still notes that the Applicant is not willing to commit to utilising best practice standards. This should already be stated within the IPMP for the current standards that exist.

- 4.10.3. The MMO notes that other offshore wind developments have updated the IPMP to state they will consider industry standards post consent. For example, this is updated in Morecambe Offshore wind Farm Application (REP4-026):
 - 'In the development of detailed monitoring methods post-consent (for receptors identified as requiring monitoring), including data collection and reporting, the Applicant will consider the application of standardisation where widely recognised agreed standards for monitoring already exist at the time.'
- 4.10.4. The MMO does not believe that this update is too onerous at this stage, as utilisation of current best practices is standard across the industry.

4.11. REP7-078/079 - 10.30 Outline Sediment Disposal Management Plan (Clean/Tracked)

4.11.1. The MMO notes the Applicant has updated the REP7-079 to include a section regarding boulder clearance. The MMO welcomes this addition and clarity.

4.12. REP7-083- 10.56 Applicant's Responses to the Report on the Implications for European Sites (RIES)

4.12.1. The MMO has no comments on this document and defers to NE in relation to the specifics on marine protected areas.

4.13. REP7-084 – 10.58 Applicant's Responses to ExQ3

- 4.13.1. The MMO notes that the Applicant is content with the ExA's suggested wording from DCO.3.12 of PD-026, which the MMO also did not have any objections to.
- 4.13.2. The MMO notes the Applicant's response to HE.3.03 where they do not consider it necessary to name the Essex County Council (ECC) as a consultee for Condition 13 of the DML. The MMO is content to consult with ECC under this Condition, but would also be content for ECC to be a named consultee, should the ExA/SoS include this.

4.14. REP7-085 – 10.34 Applicant's Comments on Deadline 6 Submissions – Revision A

- 4.14.1. The MMO notes comment MM0-13 where the Applicant does not consider it reasonable to commit to following the guidance provided in our REP6-063 in relation to a project being undertaken on the standardisation of offshore wind post-consent monitoring data for In-Principle Monitoring Plans.
- 4.14.2. The MMO would like to highlight that this will become the default approach, which will impact Five Estuaries going forward. Therefore, the MMO requests for these changes to be made as set out in Section 4.10 above.
- 4.14.3. The MMO notes the Applicant's response to comment MMO-21, stating that for the same commitment to be in three places it would be unnecessary and confusing. The MMO would like to highlight that the DMLs are standalone documents and as the matters relate to the MMO's jurisdiction, then wording would be necessary within the DMLs. As long as the wording is consistent, then it should not be confusing. As this

was a major issue the MMO believes it would be beneficial for this to be on the face of the DML and the detail within the plan.

5. MMO Comments on Interested Parties' (IP) Deadline 7 Submissions

5.1. Natural England (NE)

- 5.1.1. The MMO notes NE submitted the following documents in Deadline 7:
 - a. REP7-102 Cover Letter
 - b. REP7-103 Appendix B7 Natural England's Marine Processes Advice on the Applicant's Deadline 5 and 6 Documents
 - c. REP7-104 Appendix C7 Natural England's Offshore Ornithology Advice on the Applicant's Deadline 5 Documents
 - d. REP7-105 Appendix E7 Natural England's Benthic Ecology Advice on the Applicant's Deadline 5 Documents
 - e. REP7-106 Appendix H7 Natural England's Marine Mammal Advice on the Applicant's Deadline 5 Documents
 - f. REP7-107 Appendix J7 Natural England's Advice on the Applicant's Deadline 5 Documents Related to the Proposed Lesser Black Backed Gull Compensation Site at Orford Ness
 - g. REP7-108 Appendix L7 Natural England's Risk and Issues Log
 - h. REP7-109 Natural England Appendix M5 Natural England's Comments on the Examining Authority's Written Questions 3
- 5.1.2. The MMO notes Natural England's comments regarding migratory bats in REP7-109. The MMO is responsible for wildlife licensing in the English marine area. A wildlife licence may be required for actions which result in an offence to protected species. There is currently insufficient evidence to understand impacts to the species, and therefore whether it may be appropriate to consider licensing this activity. This evidence gap should be addressed to inform whether a licence may be appropriate, however, the MMO would not pre-determine any licence application.
- 5.1.3. When determining a wildlife licence application, the MMO must consider if satisfactory alternatives or solutions exist. The MMO therefore advises that if impacts to migratory bats are identified, the primary approach must be to avoid impact through project design before a licence could be considered.
- 5.1.4. The MMO notes that NE reiterates their advice that Noise Abatement System (NAS) within the MMMP and Site Integrity Plan (SIP) should be committed to. The MMO advised the use of NAS in Section 2.4 of REP7-097 and Section 4.7 of this response.
- 5.1.5. The MMO notes that NE has outstanding concerns regarding the Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan. The MMO defers to NE regarding these matters.

5.2. Port of London Authority (PLA)

- 5.2.1. The MMO notes the PLA submitted the following documents in deadline 7:
 - a. REP7-112 Comments on any submissions received at Deadlines 6 and 6A
 - b. REP7-113 Responses to the ExA's ExQ3

- 5.2.2. The MMO notes that there are still some outstanding comments from the PLA in relation to suggested changes for the Outline Cable Specification and Installation Plan and Outline Sediment Disposal Management Plan. The MMO does note that the Applicant has included maintenance within the term for DWR areas, which the PLA suggested.
- 5.2.3. The MMO has liaised further with the PLA and understands that they will be providing a further response in response to REP7-097. The MMO has hopefully covered the comments to be raised below.
- 5.2.4. In relation to Section 1.1.12 of REP7-097 we requested that "the PLA is added as a consultee to the following conditions in Schedule 11, Condition 4 (4), 7 (9-15), 8 (2) and Condition 16". The MMO understand that reference to Condition 16 relates to Condition 18 (Pre-construction monitoring and surveys) and is content that this condition is updated accordingly.
- 5.2.5. In relation to Section 1.1.14 of REP7-097 the MMO notes that the PLA suggested adding the following new sub condition 13(1)(g)(ii) as it is dealing with a different activity:
 - "(g)(ii) a detailed cable laying plan for the Order limits within that stage, incorporating a burial risk assessment demonstrating compliance with condition 3(3) within the Area of Interest".
- 5.2.6. The MMO understands this update is dealing with activities generally against the parameter. Meanwhile the next sub-paragraph is dealing with cable protection. The MMO is content for this to be included.
- 5.2.7. In relation to 'in accordance' Section 1.1.15 of REP7-097 the MMO understands there is a slight drafting preference between the PLA and ourselves. The PLA has requested "which substantially accords with". The MMO believes that in accordance with is enough as the outline document should be the base of the development of the final document post consent and therefore more should be added rather than taken away, unless with agreement and justification the information is no longer relevant as part of the design plan so can be removed. This is not a matter of disagreement and the MMO would be content with the inclusion of substantially if this is clearly defined.

6. MMO Comments on PD-026 - Examining Authorities Written Questions 3 (ExQ3)

6.1. DCO.3.13 - Condition 6(16) (Notifications and inspections) of Part 2 of Schedule 10 (Deemed marine licence – Generation Assets)

What type of materially false or misleading information is being referred to in subparagraph (16) of condition of the Deemed Marine Licence for the generation assets?

6.1.1. The MMO believes the addition of this condition puts a positive obligation on the Applicant in the event the environmental data submitted is identified as wrong or misleading at the post consent stage. This is an unlikely event but allows the MMO to understand any issues and identify if we need to react and/or take further action, should this be identified by the Applicant.

Yours sincerely,



Marine Licensing Case Officer

D + @marinemanagement.org.uk

References

Heath, M. 1993. An evaluation and review of the ICES herring larval surveys in the North Sea and adjacent waters. Bulletin of Marine Science, 52: 795-817.

ICES. 2014. Report of the Herring Assessment Working Group for the Area South of 62°N (HAWG), 11-20 March 2014, ICES HQ, Copenhagen, Denmark. ICES CM 2014/ACOM:06. 1257 pp.

ICES. 2016. Report of the Herring Assessment Working Group for the Area South of 62°N (HAWG), 29 March-7 April 2016, ICES HQ, Copenhagen, Denmark. ICES CM 2016/ACOM:07. 867 pp.

ICES. 2024. Herring (Clupea harengus) in Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, her.27.3a47d.