



Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

The Applicant's Comments on the Report on Implications to European Sites

Revision A

Deadline 7

July 2023

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Table of Contents

| | | |
|----------------|---|-----------|
| 1 | Introduction | 5 |
| 2 | The Applicant's Response on the RIES Section 2: Likely Significant Effects | 6 |
| 3 | The Applicant's Response on the RIES Section 3: Adverse Effects on Integrity | 10 |
| 4 | The Applicant's Response on the RIES Section 4: Derogations..... | 60 |
| Annex I | | 67 |

Table of Tables

| | | |
|---------|---|----|
| Table 1 | The Applicant's Response on Section 2 Likely Significant Effects of the RIES | 7 |
| Table 2 | The Applicant's Response on Section 3 Adverse Effects on Integrity of the RIES | 11 |
| Table 3 | The Applicant's comments on RIES Table 3-3: Matters raised in the Examination to date in relation to the Applicant's assessment of AEoI (alone and in-combination) to marine mammal SACs | 18 |
| Table 4 | The Applicant's comments on RIES Table 3-4: Matters raised in the Examination to date in relation to the Applicant's assessment of AEoI (alone and in-combination) to offshore ornithology European sites | 50 |
| Table 5 | The Applicant's Response on Section 4 Derogations of the RIES..... | 61 |

Glossary of Acronyms

| | |
|-------|---|
| AEoI | Adverse Effect on Integrity |
| CIMP | Compensation Implementation and Monitoring Plan |
| DEP | Dudgeon Offshore Wind Farm Extension Project |
| ExA | Examining Authority |
| HRA | Habitats Regulations Assessment |
| LSE | Likely Significant Effects |
| NE | Natural England |
| OCoCP | Outline Code of Construction Practice |
| OEMP | Outline Ecological Management Plan |
| RIES | Report on the Implications for European Sites |
| SAC | Special Area of Conservation |
| SEP | Sheringham Offshore Wind Farm Extension Project |
| SPA | Special Protection Area |
| SoCG | Statement of Common Ground |
| STCSG | Sandwich Tern Compensation Steering Group |
| UK | United Kingdom |

1 Introduction

1. This document provides the Applicant's responses to the Examining Authority's questions provided within the Report on Implications for European Sites (RIES) [PD-020]. In addition, where relevant, comments on specific matters raised within the RIES have been provided where the Applicant felt it useful to update or restate its position, or to seek to provide clarity. It should be noted that the Applicant and Natural England (NE) have submitted a Joint Natural England (NE) and Applicant Position on Habitats Regulations Assessment (HRA) Conclusions and Derogation Requirements within Appendix A.2 of **Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions** [document reference 21.5.1].
2. Where matters remain outstanding or it is unclear if they have been resolved, the Applicant will seek to clarify these with NE and will ensure the agreement status is reflected in the relevant final NE Statement of Common Ground (SoCG) documents at Deadline 7 and 8.

2 The Applicant's Response on the RIES Section 2: Likely Significant Effects

3. **Table 1** below provides the Applicant's response on Section 2 of the RIES regarding Likely Significant Effects (LSE).

Table 1 The Applicant's Response on Section 2 Likely Significant Effects of the RIES

| RIES ID | RIES Question / Extract | Question Addressed to | Applicant Response |
|---------|---|-----------------------|--|
| RIES-Q1 | The Applicant is requested to provide further clearly labelled figures to show the extent of all European sites considered in the Applicant's HRA assessment in relation to the Proposed Developments, including a figure(s) to show non-UK European sites. | The Applicant | <p>These are provided in Annex I.</p> <p>Due to space limitations each figure is provided as follows:</p> <ul style="list-style-type: none"> • UK SPA AND RAMSAR • UK SAC • EUROPEAN SPA AND RAMSAR • EUROPEAN SAC (France) • EUROPEAN SAC (excluding France) <p>It should be noted that the 'SEP and DEP reference' number shown on each figure corresponds to those within Table 3-2 of the Habitats Regulations Assessment Screening Matrices (Revision B) [REP4-009].</p> |
| RIES-Q2 | Except for those sites/features listed in Table 2- 1 of this RIES, the ExA is not aware of any representations from IPs identifying any additional UK European sites or qualifying features for inclusion in the Applicant's HRA. IPs are invited to comment. | NE All Ips | As per the Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements provided within Appendix A.2 of Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions [document reference 21.5.1], the Applicant is agreed with Natural England on all sites/features screened into the HRA. |
| 2.3.2 | The European sites and qualifying features for which the Applicant concludes no LSE are listed in Appendix 2 HRA Screening Matrices [REP4- 009]. The Applicant concluded no LSE on 43 European sites within the NSN. The Applicant's conclusions in relation to these European sites and qualifying features were disputed by IPs during the Examination, as noted in Table 2-1 to this RIES below, and amendments were made to the Applicant's screening assessments during the Examination (eg in [REP4- 009]). Following the amendments and representations made on the matters listed in Table 2-1 below, it is not yet known | N/A | |

| RIES ID | RIES Question / Extract | Question Addressed to | Applicant Response |
|-----------------------------|--|--------------------------|---|
| | <p>whether NE are content with the Applicant's screening conclusions for all European sites in England/English Waters, although it appears that screening matters identified in Table 2-1 have been addressed. No response was received from NS at Deadline 5 in respect of European sites in Scotland/Scottish Waters.</p> | | |
| RIES-Q3 | <p>Please can you confirm whether you are content with the Applicant's screening assessment for European sites as updated during the Examination [REP4-009].</p> | <p>NE NatureScot</p> | |
| <p>RIES-Q4 ID 2-1-4</p> | <p><u>Berwickshire and North Northumberland Coast SAC - grey seal</u></p> <p>The Applicant is requested to provide the Conservation Objectives for this SAC and the grey seal qualifying feature to the Examination.</p> | <p>The Applicant</p> | <p>The Berwickshire and North Northumberland Coast SAC Conservation Objectives can be found at [REDACTED]</p> <p>Further detail on the specific features within the SAC is provided in the Supplementary Advice on Conservation Objectives: [REDACTED]</p> |
| <p>RIES-Q5 ID 2-1-4</p> | <p><u>Berwickshire and North Northumberland Coast SAC - grey seal</u></p> <p>Can NE confirm it is still in agreement that there would be no AEol to this SAC and qualifying feature from the Proposed Developments, alone or in-combination with other plans or projects.</p> | <p>NE</p> | <p>As stated above (RIES-Q2), the Applicant is agreed with Natural England on HRA screening.</p> |
| <p>2-1-5</p> | <p><u>Humber Estuary SAC - grey seal - impacts to supporting habitat of seals</u></p> <p>NE [RR-063] did not agree that impacts to supporting habitats of the Humber Estuary SAC could be screened out of having LSE, as it considered that there could be some material effect on the behaviour of seals associated with the site. NE recommended that 'impacts to grey seal habitats' impact pathway should be assessed as having LSE. The Applicant</p> | <p>N/A</p> | <p>Regarding the potential for effect on the supporting habitats of grey seal of the Humber Estuary SAC, as per the Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements provided within Appendix A.2 of Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions [document reference 21.5.1], the Applicant is agreed with Natural England on all sites/features and <u>pathways of effect</u> screened into the HRA. Therefore, this matter is considered to be resolved.</p> |

| RIES ID | RIES Question / Extract | Question Addressed to | Applicant Response |
|---------|--|-----------------------|---|
| | <p>[REP2-051] responded at Deadline 2 that due to the distance of Project to the supporting habitats of the Humber Estuary SAC (59km) any potential for LSE was screened out [APP-060] and has not been considered further. The Applicant confirmed that grey seal as a qualifying feature has been assessed for impacts outwith the SAC including disturbance, vessel interactions and supporting habitat considerations (such as changes in prey availability). NE responded at Deadline 5 [REP5-093] in its latest Risk and Issues log that the Applicant has provided an updated assessment of barrier effects to seals, which has addressed its concerns in part.</p> | | <p>Regarding the potential for barrier effects, see responses to RIES 3-3-3, 3-3-4, 3-3-6, 3-3-7 below.</p> |
| 2-1-6 | <p><u>Humber Estuary SAC – grey seal – barrier effects to seals</u> NE [RR-063] requested to see more details in the assessment of barrier effects to seals. Further detail was requested to be provided in the assessment of barrier effects to seals, specifically regarding movement between important sites and feeding areas.</p> | N/A | <p>See responses to Points 3-3-3, 3-3-4, 3-3-6 and 3-3-7 below.</p> |

3 The Applicant's Response on the RIES Section 3: Adverse Effects on Integrity

4. **Table 2** below provides the Applicant's response on Section 3 of the RIES regarding Adverse Effects on Integrity, and **Table 3** provides the Applicant's responses to Table 3-3 in the RIES.

Table 2 The Applicant's Response on Section 3 Adverse Effects on Integrity of the RIES

| RIES ID | RIES Question | Question Addressed to | Applicant Response |
|----------------------------|---|-----------------------|---|
| General HRA matters | | | |
| RIES-Q6 | The ExA notes that the Schedule of Mitigation and Mitigation Routemap [APP-282] has not been updated since the application was submitted. The Applicant is requested to update this Routemap to reflect the latest mitigation measures within the dDCO by the end of the Examination. | The Applicant | The Schedule of Mitigation and Mitigation Routemap [APP-282] will be updated and submitted at Deadline 8. |
| RIES-Q7 | Please provide a position statement for the marine mammal SACs and their qualifying features. Please provide any comments on the matters in Table 3-3 to clarify the ExA's understanding, where you consider this to be inaccurate/contain omissions. | The Applicant NE | A Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements has been provided within Appendix A.2 of Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions [document reference 21.5.1]. It is noted that within this, a number of conclusions with respect to bottlenose dolphin, grey seal and harbour seal are to be confirmed pending additional information from the Applicant. The Applicant has sought to provide this within the Marine Mammals Technical Note and Addendum (Revision B) [document reference 16.14] and anticipates being able to reach agreement with NE that AEoI on these qualifying features can be ruled out following NE review of that document. This will be reflected in an updated Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements to be provided at Deadline 8. The Applicant has provided a point-by-point response to the relevant points in Table 3-3 of the RIES in Table 3 below. |
| 3.3.18 | At Deadline 5, the MMO [REP5-080] provided comments on the Marine Mammal Technical Note and Addendum [REP3-115]. The MMO commented that it welcomed the use of the dose response approach for assessing disturbance and deferred to NE as the marine mammal specialists for | N/A | The Applicant can confirm that the SELss 5dB contours have been provided in an update to the Marine Mammals Technical Note and Addendum (Revision B) [document reference 16.14] at Deadline 7. |

| RIES ID | RIES Question | Question Addressed to | Applicant Response |
|--|--|-----------------------|---|
| | <p>comments on whether it was content with the Applicant's use of density estimates for harbour porpoise and seal species. The MMO had reviewed ES Appendix 10.2 [APP-192] and stated that the Sound Exposure Level (single strike) SELss contours at 5dB were not provided. The MMO requested that this information is provided for review, or a signpost provided to where the information could be located.</p> | | |
| Terrestrial ecology HRA matters | | | |
| <p>RIES-Q8(a) ID 3-1-1</p> | <p><u>River Wensum SAC</u> Can NE confirm whether the updated OEMP [REP3-068] and updated Outline CoCP [REP5-029] satisfy its request for further information to be provided in the OLEMS.</p> | <p>NE</p> | <p>In the Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements provided within Appendix A.2 of Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions [document reference 21.5.1], Natural England advises without agreement of an outline bentonite breakout mitigation plan we are unable to agree that Adverse Effects on the Integrity of the SAC cannot be excluded.</p> |
| <p>RIES-Q8(b)ID 3-1-1</p> | <p><u>River Wensum SAC</u> Does NE consider the necessary mitigation is adequately secured through the dDCO (current version [REP5- 029]) and is NE of the view that an AEol can be excluded to the SAC and its qualifying features?</p> | <p>NE</p> | <p>The Outline Code of Construction Practice (OCoCP) [REP5-029] includes a commitment to provide a Bentonite Breakout Plan (see Table 1-1). In paragraphs 2 and 6 of the Appendix I4 to the Natural England Deadline 3 Submission (Natural England's Advice on the Onshore RIAA Technical Note and Addendum to Chapter 20 Onshore Ecology and Ornithology [REP3-145], it is stated that <i>'Natural England is content that, with inclusion of the mitigation measures in relation to sediment management, pollution prevention and bentonite breakout identified in the Report to Inform the Appropriate Assessment Technical Note [REP2-050], that the risk of an adverse effect on the integrity of the River Wensum SAC can be sufficiently reduced. We advise the Applicant submits these mitigation measures as outline plans into examination and appropriately secure within the Outline</i></p> |

| RIES ID | RIES Question | Question Addressed to | Applicant Response |
|------------------------|--|-----------------------------|--|
| | | | <p><i>Code of Construction Practice (OCoCP), the Outline Ecological Management Plan (EMP) and Development Consent Order (DCO). As advised in our Relevant Representation [RR-063] the bentonite breakout mitigation plan should include reporting of any bentonite breakout within or close to a designated site to Natural England within 24 hours and before clean-up operations begin’.</i></p> <p>The Applicant confirms that Section 7.1.4 of the OCoCP includes the mitigation measures in relation to sediment management, pollution prevention and bentonite breakout set out in the Report to Inform the Appropriate Assessment Technical Note [REP2-050] together with a commitment to report all bentonite breakouts within designated sites to Natural England within 24 hours. This is secured by Requirement 19 of the draft DCO (Revision J) [document reference 3.1].</p> |
| <p>RIES-Q9ID 3-1-2</p> | <p><u>North Norfolk Coast SPA and Ramsar</u></p> <p>Please provide an update with regards to the discussions concerning pink-footed goose mitigation measures and how these are to be secured. Could the Applicant confirm whether amendments are required to the dDCO to secure such measures. Does NE agree that there would be no AEol to this feature of the SPA and Ramsar?</p> | <p>The Applicant NE</p> | <p>Natural England published its Best Practice Advice on North Norfolk Coast SPA Pink Footed Geese at Deadline 1 [REP1-137], which set out two mitigation route options. The Applicant has been in dialogue with Natural England regarding one of the options, an emerging proposal for a pink-footed goose mitigation scheme that would be set up in a manner that third parties, such as the Applicant, could contribute to. It is evident that the emerging scheme will not be sufficiently developed by the close of the Examination for the Applicant to include it in its dDCO and as a result the Applicant has concluded this is not the route to secure pink-footed goose mitigation measures. In order to secure appropriate mitigation measures the Applicant has updated the OEMP (Revision D) [document reference 9.19] submitted at Deadline 7, to include suitable measures, which comprises an iteration of the</p> |

| RIES ID | RIES Question | Question Addressed to | Applicant Response |
|---------|---------------|-----------------------|--|
| | | | <p>Watching Brief Option within the Advice Note. In summary, with more detail in the OEMP, those measures include:</p> <ul style="list-style-type: none"> • A survey to identify fields suitable for foraging pink-footed goose. • Monitoring by the ECoW of those fields between November and January. • Cessation of works in and around those fields if pink-footed geese are present. <p>The Applicant considers the above approach would be effective at ensuring SEP and DEP would not lead to an Adverse Effect on the Integrity of the North Norfolk Coast SPA/Ramsar site by impacting these sites' PFG qualifying features. It would ensure any PFG foraging on fields within/bordering the Order Limits were not disturbed or displaced by construction works, and it would not remove any potentially suitable functionally linked land unless and until that land had been exhausted as a foraging resource. In addition, this approach is considered more proportionate to the project than what is set out within Natural England's best practice advice on North Norfolk Coast SPA Pink Footed Geese [REP1-137] given that no pink-footed geese were recorded within the Order Limits and wider survey areas (see Figure 1 of the Wintering Birds Survey Report [APP-217]) in two winters of bird surveys (2019-2021).</p> <p>The EMP prepared post-consent will provide the full details of delivery in a Pink-footed Goose Mitigation Plan. That Plan will be approved by the relevant LPAs in consultation with Natural England.</p> |

| RIES ID | RIES Question | Question Addressed to | Applicant Response |
|----------------------------------|---|-----------------------|---|
| Marine mammal HRA Matters | | | |
| RIES-Q10a ID 3-3-3 | Could NE confirm whether the Applicant's response to this matter at Deadline 1 [REP1- 034] addressed the point raised by NE that an assessment of impacts to seal SACs (Humber Estuary and The Wash and North Norfolk Coast SAC) should include impacts to functionally linked habitat in the wider environment that is used by the seal qualifying features? | NE | From the information available, the Applicant understands the outstanding concerns to be related to Point 3-3-8 in Table 3 below; however, the Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8. |
| RIES-Q10b ID 3-3-3 | Noting that D16 in the latest Risk and Issues Log [REP5-093] (original Point 68 of NE's RR) identifies that the Applicant has in part addresses its concerns, could NE expand on its outstanding concerns. | NE | No response required. |
| RIES-Q11 ID 3-3-4 | Can NE confirm whether the Applicant has satisfied its request for an updated assessment of barrier effects with information on movements (from telemetry data) and area lost due to effects. Please expand on any remaining concerns with the assessment of barrier effects. | NE | From the information available, the Applicant understands the outstanding concerns to be related to Point 3-3-8 in Table 3 below; however, the Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8. |
| RIES-Q12 ID 3-3-8 | Can the Applicant respond to the request of NE [REP5-093] for further assessment of potential direct disturbance of a haul-out and breeding site at Blakeney Point. Please provide this assessment or provide further justification/ explanation of why this is not required. | The Applicant | Further information on the potential for disturbance at the Blakeney Point harbour seal haul-out site has been provided in response to Point 3-3-8 in Table 3 below. |
| RIES-Q13 ID 3-3-10 | Point 74 of NE's RR [RR-063] does not specifically appear in NE'S Risk and Issues Log [REP5-093]. It is unclear if the clarification provided by the Applicant at Deadline 2 [REP2-051] and in the Marine Mammals Technical Note [REP3-115] with regards to simultaneous piling has addressed NE's concerns on this matter. Please can NE respond. | NE | The Applicant considers that the information provided within Section 5.1.2.1 of the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115) is sufficient, and that this matter is resolved, although a formal response from NE has not yet been received. |

| RIES ID | RIES Question | Question Addressed to | Applicant Response |
|---------------------|--|-----------------------|---|
| RIES-Q14 ID 3-10-12 | Can NE confirm whether the Applicant has addressed its concerns in its Deadline 2 response [REP2-051]. Please expand on any remaining concerns. | NE | The Applicant considers that this matter is resolved, although formal response from NE has not yet been received. |
| RIES-Q15 ID 3-3-13 | Can NE confirm whether the Applicant has addressed its concerns in its Deadline 2 response [REP2-051]. Please expand on any remaining concerns. | NE | The Applicant considers that this matter is resolved, although formal response from NE has not yet been received. |
| RIES-Q16 ID 3-3-17 | Can NE confirm whether the Applicant has addressed its concerns in the Marine Mammals Technical Note [REP3-115]. Please expand on any remaining concerns | NE | The Applicant considers that the information provided within Section 5.4.1.1.2 of the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115) is sufficient, and that this matter is resolved, although formal response from NE has not yet been received. |
| RIES-Q17 ID 3-3-18 | Noting NE's response at Deadline 5 [REP5- 094] to WQ3 Q3.12.2.4 and initial comments in its RR [RR-063], together with statements made in the Applicant's Marine Mammal Technical Note [REP3- 115] that 'any mitigation measures to reduce the disturbance of harbour porpoise in the project specific SIPs may also reduce the potential disturbance of grey seal/harbour seal', does the matter of the use of the MMMP and SIP for disturbance also relate to the seal SACs (Humber Estuary SAC and The Wash and North Norfolk Coast SAC) or only the SNS SAC? | NE | See the Applicant's response to 3-3-18 in Table 3 below. |
| RIES-Q18 ID 3-3-19 | Can NE confirm whether the Applicant has addressed its concerns in its Deadline 3 response [REP3-017]. Please expand on any remaining concerns. | NE | The Applicant considers that this matter is resolved, although formal response from NE has not yet been received. The Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8. |

| RIES ID | RIES Question | Question Addressed to | Applicant Response |
|---|--|-----------------------|---|
| Offshore ornithology HRA matters | | | |
| RIES-Q19 ID 3-4-16 | Can the Applicant respond to this matter raised by NE and clarify whether these data have been incorporated into the assessment. | The Applicant | Refer to response ID 3-14-16 in Table 4 . |

Table 3 The Applicant's comments on RIES Table 3-3: Matters raised in the Examination to date in relation to the Applicant's assessment of AEol (alone and in-combination) to marine mammal SACs

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
|---------------------------|---|---|--|--|
| Humber Estuary SAC | | | | |
| 3-3-1 | Grey seal – baseline and approach to reference population | <p>NE [RR-063] (Point 66) identified concerns with regards to the seal baseline characterisation and the same approach being used to the ES, for which it had concerns (ie in relation to using August counts; mismatch between spatial scales of density and abundance and so underestimation of impacts). NE [RR-063] (Point 67) also raised concerns the Applicant use of two different scales of reference population, one for the project alone against the local SAC and Management Unit (MU) population, and one for the project in-combination against the wider MU (termed the 'in-combination reference population'). NE raised concerns that this would result in no in-combination assessment against the local SAC population.</p> <p>The Applicant [REP2-051] initially responded to NE's Point 66 that any further assessments prior to construction for the final design, if required, would be based on the latest information and guidance at that time and this would include any updates to seal abundance, density, and reference populations. The Applicant [REP2-051] stated that NE's Point 67 would be addressed in Marine Mammal Technical Note to be submitted at Deadline 3.</p> <p>The Applicant's seal baseline and approach remained a matter of outstanding concern to NE by Deadline 3 [REP3-146]. The Applicant did however provide in its Marine Mammal Technical Note [REP3-115] updates to both grey seal and harbour seal baseline information (including updated density estimates and</p> | Matter not yet resolved. Detailed response from NE expected by Deadline 7. | <p>Both the updated grey seal and harbour seal density estimates, and reference population and SAC population estimates were updated in line with NE comments (RR-063). These updates included use of the updated Carter <i>et al.</i>, 2022¹ seal densities, both general and SAC specific, as well as corrected population estimates using the methods provided. These updated assessments were provided in the Marine Mammals Technical Note and Addendum at Deadline 3 [REP3-115].</p> <p>The Applicant considers this matter to be resolved; however, a formal response has not yet been received from NE.</p> |

¹Carter, M.I.D., Boehme, L., Cronin, M.A., Duck, C.D., Grecian, W.J., Hastie, G.D., Jessopp, M., Matthiopoulos, J., McConnell, B.J., Miller, D.L., Morris, C.D., Moss, S.E.W., Thompson, D., Thompson, P.M. and Russell, D.J.F. (2022). Sympatric Seals, Satellite Tracking and Protected Areas: Habitat-Based Distribution Estimates for Conservation and Management. *Front. Mar. Sci.* 9:875869. doi: 10.3389/fmars.2022.875869.

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
|-------|---|--|--|--|
| | | <p>population estimates). The Applicant confirmed that Annex 2 to the note [REP3-115] provides an update to all assessments as provided within the RIAA Section 8 [APP-059] that rely on the grey seal or harbour seal density estimates and reference populations. Section 5.3.1 of the note [REP3-115] states that "While there are some changes in the number of grey seal potentially at risk, due to both a change in density estimate and SAC population, there are no changes to the overall assessments of effect. Therefore, as assessed in RIAA Section 8.4.3, there is no potential for adverse effect on the integrity of the grey seal feature of the Humber Estuary SAC."</p> <p>NE [REP4-049] had not yet had the opportunity to review the note by Deadline 4 and anticipated comments would be submitted at Deadline 5 or 6.</p> <p>At Deadline 5, NE [REP5-093] acknowledged that the Applicant had updated parts of its assessment as requested (eg updated at-sea seal density estimates). NE confirmed it would be providing a full response to the Applicant's population modelling at Deadline 7. The ExA notes that NE's comments at Deadline 5 [REP5-093] reference The Wash and North Norfolk Coast SAC and harbour seal feature; however, NE's RR [RR-063] directed also to the assessment of grey seal of the Humber Estuary SAC in the RIAA [APP-059] and the Applicant provided updates relating to grey seal in its Marine Mammal Technical Note [REP3-115]. The ExA therefore considered this as matter also relevant to the Humber Estuary SAC.</p> | | |
| 3-3-2 | Grey seal - potential disturbance effects of underwater noise during piling (construction) alone and in-combination | NE [RR-063] (Point 90) stated that the RIAA [APP-059] predicts that 382 grey seals, or 9.8% of the Humber Estuary SAC population, may be at risk of disturbance (based on TTS as a proxy) and that this is higher (almost double) the Applicant's threshold for a significant effect. NE stated that it considers it inappropriate to say that the MMMP will reduce the likelihood of disturbance to grey seals. NE was not satisfied that the mitigation | Matter not yet resolved. Detailed response from NE expected by Deadline 6. | At Deadline 6, NE provided their response on the population modelling for grey seal of the Humber Estuary SAC (REP6-029). Regarding the project alone disturbance effects to grey seal, |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>will reduce the risk of a significant effect on the population and required further information from the Applicant to justify their assessment conclusion. NE requested that the Applicant should provide further information on the assessment of disturbance to grey seals of the Humber Estuary SAC during simultaneous piling, to demonstrate no AEol.</p> <p>NE [RR-063] (Point 93) also noted that the Applicant's in-combination assessment of potential disturbance in Table 8-47 of the RIAA [APP-059] predicted that up to 1,610 individual grey seals may be impacted. This is equivalent to 41.3% of the SAC, and 6.68% of the wider reference population. NE did not agree that such numbers would not be significant and requested further evidence from the Applicant to demonstrate how this number of animal disturbed would not have an AEol on the Humber Estuary SAC. NE requested the Applicant consider what appropriate mitigation could be secured at this stage to reduce the number of individuals which may be disturbed.</p> <p>At Deadline 2, the Applicant [REP2-051] responded to NE's concerns over the Humber Estuary SAC population of grey seals, stating that the approach to disturbance to grey seals and potential impacts on the Humber Estuary SAC would be addressed in the Marine Mammals Technical Note at Deadline 3.</p> <p>With regards to Point 93, the Applicant [REP2-051] maintained its position that measures to reduce the potential significant disturbance of harbour porpoise in the SNS SAC (through noise reduction or avoidance) could also reduce the potential for any significant disturbance in other marine mammal species. The Applicant stated that the total impact assumes that nine wind farms would be piling simultaneously, which is deemed highly unrealistic. The Applicant identified in the case of UXO (as a significant contributor to the in-combination total) it is highly likely that low order techniques would be required, making this an over-estimate. The Applicant also noted that the single biggest source</p> | | <p>NE requested further information to support that one pile per day would represent the worst-case. Further information on this point has been included within the updated Marine Mammals Technical Note and Addendum (Revision B) [document reference 16.14], submitted at Deadline 7, which confirms that one pile per day at the projects is the worst-case scenario.</p> <p>Regarding the projects included within the in-combination assessments, NE stated in their D6 (REP6-029) response that:</p> <p><i>"The Applicant's review of the available project data for screened in offshore wind farms projects (see Table 4-18) appears comprehensive and based on the best available information at the time. We note that projects in the pre-application phase may continue to refine and publish their project data. However, it is reasonable to implement a cut off point for new data and we consider that what is presented in Table 4-18 is acceptable."</i></p> <p>Within the population modelling, the Applicant determined a threshold of 1% additional annual</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>of impact in the assessment (approximately 1/3 of the magnitude) is due to seismic survey which is ongoing and unrelated to offshore wind. The Applicant stated it would further consider the conclusions of the assessment in the Marine Mammals Technical Note at Deadline 3 and would present dose response curves for the relevant species.</p> <p>The Marine Mammals Technical Note and Addendum [REP3-115] confirmed that all assessments of disturbance to seal species have been updated using the updated density and population estimates as noted above. Section 5.4.1.2 of the note provided an updated in-combination assessment for this SAC from underwater noise, including: piling impacts with other OWFs; non-piling construction noise generating activities from other OWFs; noise from geophysical and seismic surveys at other OWFs; and overall cumulative disturbance.</p> <p>The Applicant's updated assessment results are included in the following tables of the note, with accompanying text:</p> <p>Table 5-18: in-combination assessment for potential disturbance during piling at OWFs which could be piling at the same time as SEP and DEP;</p> <p>Table 5-19 in-combination assessment for potential disturbance during the construction (other than piling) at OWFs at the same time as construction at SEP and DEP;</p> <p>Table 5-20 in-combination assessment for the potential disturbance for OWF geophysical surveys at the same time as piling at SEP and DEP;</p> <p>Table 5-21 in-combination assessment for the potential disturbance for seismic surveys at the same time as piling at SEP and DEP; and</p> | | <p>decline (when compared to the unimpacted population) to represent a significant effect to the population assessed. In their D6 response, NE agree with this threshold as suitable, and that the results of the population modelling for grey seal are not significant in line with the 1% annual decline threshold (REP6-029).</p> <p>The Applicant therefore considers this matter to be resolved and, as noted in response to RIES-Q7 in Table 2, will seek to reflect this within an update to the Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements at Deadline 8.</p> |

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| | | <p>Table 5-22 overall in-combination assessment for the potential disturbance from all underwater noise sources during piling at SEP and DEP (Worst-Case).</p> <p>Of the above, the Applicant concludes for Tables 5-19 to 5-21 that while the number of seals at risk of disturbance has increased under the updated assessments, there is no change to the overall assessment of effect as assessed within the RIAA [APP- 059] and therefore, as noted in the RIAA, there is no potential for AEol of the grey seal feature of the Humber Estuary SAC from these effects.</p> <p>In respect of Table 5-18, the Applicant concludes that under the in-combination scenario of single piling at all other OWFs, there is the potential for up to 13.62% of the Humber Estuary SAC grey seal population to be disturbed. For the worst-case in-combination scenario of simultaneous piling at the relevant projects, there is the potential for 17.4% of the Humber Estuary SAC population to be disturbed. The note stated that this represented a significant increase in the number of grey seal at risk of disturbance from disturbance at other OWFs when compared to the assessment provided within RIAA Section 8.4.3.4 [APP-059]. The Applicant stated that to determine the population level consequences of disturbance for grey seal at the Humber Estuary SAC, under the worst-case simultaneous piling scenario, population modelling has been undertaken (see Section 5.4.1.4 of the note [REP3-115]). The population modelling concludes no AEol to the grey seal feature of the Humber Estuary SAC.</p> <p>For the overall in-combination disturbance effects (Table 5-22), the note concluded for grey seal associated with the Humber Estuary SAC, up to 3,465.8 individuals (or 22.4% of the SAC population) could be disturbed as a result of disturbance from underwater noise in-combination with other projects (Table 5-22 and Table 4-32). This is stated to be an increase in the number of grey seal at risk of disturbance in comparison to RIAA Section</p> | | |

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| | | <p>8.4.3.4 (Table 8-74) [APP-059], and a decrease in the proportion of the SAC population at risk of disturbance. The Applicant explained that the likelihood of simultaneous piling and that in addition, with the implementation of any management measures for the SNS SAC, the potential impacts could be reduced and that any mitigation measures to reduce the disturbance of harbour porpoise in the project specific SIPs may also reduce the potential disturbance of grey seal. As noted above, further population modelling was undertaken by the Applicant, which concludes no AEol to the grey seal feature of the Humber Estuary SAC.</p> <p>[REP3-115] stated that, while there were some changes predicted in the number of grey seals potentially at risk, due to both a change in density estimate and SAC population, no changes were had been made to the overall assessments of effect. The Applicant states that, as assessed in RIAA Section 8.4.3, there would be no potential for AEol of the grey seal feature of the Humber Estuary SAC.</p> <p>At Deadline 5, NE [REP5-093] confirmed that the Applicant has undertaken population modelling (iPCoD) of the grey seal feature of this SAC alone and in- combination and acknowledged that the Applicant considers that no additional mitigation is required. NE [REP5-093] stated that they will defer responding on this matter to Deadline 6, pending further consideration.</p> | | |
| 3-3-3 | Grey seal – impact pathway ‘impacts to habitats within the wider environment/ functionally linked habitats’ | <p>NE [RR-063] (Point 68) stated that an assessment of impacts to seal SACs should include impacts to functionally linked habitat in the wider environment that is used by the seal qualifying features. NE did not agree with the assessment of no LSE to the habitats of the qualifying features and considered they should be carried forward to an assessment of AEol.</p> <p>At Deadline 1 [REP1-033, REP1-034, REP2-051] the Applicant responded to NE’s RR on this matter, stating that due to the distance of the Proposed Developments to the supporting habitats of the Humber Estuary SAC (59km), any potential for LSE was</p> | <p>Matter not yet resolved.</p> <p>RIES-Q10a: To NE -</p> <p>Could NE confirm whether the Applicant's response to this matter at Deadline</p> | <p>From the information available, the Applicant understands the outstanding concerns to be related to Point 3-3-8 below; however, the Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8.</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>screened out in the HRA Screening Assessment [APP-060] and has not been considered further.</p> <p>The Applicant [REP1-033, REP1-034] stated that grey seal as a qualifying feature has been assessed for impacts outside the SAC including disturbance, vessel interactions and supporting habitat considerations (such as changes in prey availability). The Applicant confirmed that any clarifications or amendments to the existing assessment based upon NE's RR comments will be addressed in the Marine Mammals Technical Note submitted at Deadline 3.</p> <p>NE's latest Risks and Issues Log [REP3-146] stated that there had been no change on this matter at Deadline 3. The Applicant's Marine Mammals Technical Note and Addendum submitted at Deadline 3 [REP3- 115] did not provide further commentary on this matter and the Applicant's HRA Screening Matrices [REP4-009] updated at Deadline 4 do not include this pathway of effect.</p> <p>NE's latest Risks and Issues Log [REP5-093] at Deadline 5 states that "The Applicant has provided an updated assessment of barrier effects to seals which in part addresses out concerns."</p> | <p>1 [REP1- 034] addressed the point raised by NE that an assessment of impacts to seal SACs (Humber Estuary and The Wash and North Norfolk Coast SAC) should include impacts to functionally linked habitat in the wider environment that is used by the seal qualifying features?</p> <p>RIES-Q10b: To NE -</p> <p>Noting that D16 in the latest Risk and Issues Log [REP5-093] (original Point 68 of NE's RR) identifies that the Applicant has in part addresses its concerns, could NE expand on its outstanding concerns.</p> | |

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| 3-3-4 | Grey seal – impact pathway 'barrier effects' | <p>NE [RR-063] (Point 91) and [REP3-146] stated it does not agree with the Applicant's reasoning in respect of the significance of barrier effects.</p> <p>The Applicant [REP2-051] responded with reference to the ES assessment, stating that the potential sensitivity of barrier effects from noise has been considered as 'medium' for seals and due to the nature of the impact there is unlikely to be any significant long-term impacts from any barrier effects, as any areas affected would be relatively small in comparison to their range.</p> <p>NE [REP1-038, REP2-064, REP3-146] maintained its request the Applicant update its assessment of barrier effects with information on movements (from telemetry data) and area lost due to the effects.</p> <p>In response, the Applicant [REP3-115] provided at Section 5.2 of its Marine Mammals Technical Note and Addendum an updated assessment of barrier effects to seals. The Applicant concludes that there would be no significant disturbance of grey seal and no AEol of the Humber Estuary SAC in relation to the conservation objectives for grey seal due to potential barrier effects for SEP and DEP.</p> <p>NE's latest Risks and Issues Log [REP5-093] at Deadline 5 states that "The Applicant has provided an updated assessment of barrier effects to seals which in part addresses out concerns." The ExA notes that at D6 (Point 24) of NE's latest Risk and Issues Log [REP5- 093] in respect of the Applicant's updated ES Chapter 10 (ie EIA matters), NE confirm that the Applicant has presented a more detailed assessment of barrier effects, including information on movements relative to SEP and DEP, with satisfies Point 24 of its RR [RR- 063].</p> | <p>Unclear whether matter yet resolved.</p> <p>RIES-Q11: To NE –</p> <p>Can NE confirm whether the Applicant has satisfied its request for an updated assessment of barrier effects with information on movements (from telemetry data) and area lost due to effects. Please expand on any remaining concerns with the assessment of barrier effects.</p> | <p>From the information available, the Applicant understands the outstanding concerns to be related to Point 3-3-8 below; however, the Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8.</p> |
| 3-3-5 | Harbour seal – method for determining seal abundance | <p>See also point 3-3-1 of this RIES above.</p> <p>As for the Humber Estuary SAC at 3-3-1 above, NE [RR-063](Point 66 and 67)and [REP3-146] queried the methods used</p> | <p>Matter not yet resolved. Detailed response from NE</p> | <p>Both the updated grey seal and harbour seal density estimates, and reference population and</p> |

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| | | <p>to determine seal abundance. NE expressed concerned that the number of harbour seals impacts had been underestimated and thus the impact on this SAC.</p> <p>In response, the Applicant [REP3-115] provided at Section 3 of its Marine Mammal Marine Mammals Technical Note and Addendum updated baseline information for seal species, including seal density estimates and seal population estimates. The Applicant confirmed that Annex 2 to the note [REP3-115] provides an update to all assessments as provided within the RIAA Section 8 [APP-059] that rely on the grey seal or harbour seal density estimates and reference populations. Section 5.3.2 of the note [REP3- 115] states that “While there are some changes in the number of harbour seal potentially at risk, due to both a change in density estimate and SAC population, there are no changes to the overall assessments of effect. Therefore, as assessed in RIAA Section 8.4.4, there is no potential for adverse effect on the integrity of the harbour seal feature of The Wash and North Norfolk Coast SAC.”</p> <p>At Deadline 5, NE [REP5-093] acknowledged that the Applicant had updated parts of its assessment as requested (eg updated at-sea seal density estimates, updated haul-out count for this SAC, and application of correction factors). NE acknowledged the Applicant has assessed the impact to the SAC through population modelling and confirmed that it would be providing a full response to the Applicant's population modelling at Deadline 7.</p> | <p>expected by Deadline 7.</p> | <p>SAC population estimates were updated in line with NE comments (RR-063). These updates included use of the updated Carter <i>et al.</i>, 2022 seal densities, both general and SAC specific, as well as corrected population estimates. These updated assessments were provided in the Marine Mammals Technical Note at Deadline 3 (REP3-115).</p> <p>The Applicant considers this matter to be resolved; however, a formal response has not yet been received from NE and so the Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8.</p> |
| 3-3-6 | Harbour seal – impact pathway ‘impacts to habitats within the wider environment/ functionally linked habitats’ | <p>See point 3-3-3 above, which also applies to harbour seal of this SAC.</p> <p>NE's latest Risks and Issues Log [REP3-146] stated that there had been no change on this matter at Deadline 3. The Applicant's Marine Mammals Technical Note and Addendum submitted at Deadline 3 [REP3- 115] did not provide further commentary on</p> | <p>Matter not yet resolved. See question at 3-3-3 above.</p> | <p>From the information available, the Applicant understands the outstanding concerns to be related to Point 3-3-8 below; however, the Applicant will seek clarity on this matter with NE and ensure the agreement status is</p> |

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| | | <p>this matter and the Applicant's HRA Screening Matrices [REP4-009] updated at Deadline 4 do not include this pathway of effect.</p> <p>NE's latest Risks and Issues Log [REP5-093] at Deadline 5 stated that "The Applicant has provided an updated assessment of barrier effects to seals which in part addresses out concerns."</p> | | <p>reflected in the final SoCG at Deadline 8.</p> |
| 3-3-7 | Harbour seal – impact pathway 'barrier effects' | <p>As point 3-3-4 above.</p> <p>The Applicant [REP3-115] concluded at Section 5.2 of its Marine Mammals Technical Note and Addendum there would be no significant disturbance of harbour seal and no AEoI of The Wash and North Norfolk Coast SAC in relation to the conservation objectives for harbour seal due to potential barrier effects for SEP and DEP.</p> <p>NE's latest Risks and Issues Log [REP5-093] at Deadline 5 states that "The Applicant has provided an updated assessment of barrier effects to seals which in part addresses out concerns." The ExA notes that at D6 (Point 24) of [REP5-093] in respect of the Applicant's updated ES Chapter 10 (ie EIA matters), NE confirm that the Applicant has presented a more detailed assessment of barrier effects, including information on movements relative to SEP and DEP, with satisfies Point 24 of its RR [RR-063].</p> | <p>Unclear whether matter yet resolved. See question at 3-3-3 above.</p> | <p>From the information available, the Applicant understands the outstanding concerns to be related to Point 3-3-8 below; however, the Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8.</p> |
| 3-3-8 | Harbour seal – assessment of disturbance from piling | <p>NE [RR-063] (Point 95) and [REP3-146] advised the Applicant to provide an assessment of disturbance of harbour seals during piling, using the 25km disturbance range from Russell et al (2016).</p> <p>In response, the Applicant [REP2-051] confirmed it would address the approach to disturbance to harbour seals and potential impacts on the Wash and North Norfolk Coast SAC in a Marine Mammals Technical Note at Deadline 3.</p> <p>Section 5.1.2.2.2 of its Marine Mammals Technical Note and Addendum [REP3-115] provided an updated assessment of disturbance piling. The note concluded that under</p> | <p>Matter not yet resolved.</p> <p>RIES-Q12: To the Applicant – Can the Applicant respond to the request of NE [REP5-093] for further assessment of potential direct disturbance of a</p> | <p>The SEP site is less than 25km from the Blakeney Point haul-out for harbour seal. This would suggest that, under the approach of assuming a 25km disturbance range, seals at the Blakeney Point haul-out site could be at risk of disturbance. However, the Applicant considers the assessment using the 25km disturbance range to be overly precautionary, and based on</p> |

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| | | <p>the updated assessments of harbour seal associated with The Wash and North Norfolk Coast SAC, assuming a 25km disturbance range for each piling location, there is the potential for more than 5% of the SAC population to be disturbed from either piling at SEP, or from piling at SEP and DEP at the same time (Table 5-7). To further investigate the potential for AEol on The Wash and North Norfolk Coast SAC, the Applicant utilised dose response curve assessments and population modelling. The note states that results of the dose response show that for the WCS, of 93 harbour seal being disturbed by piling at SEP and DEP (for either sequential or simultaneous piling), less than 2.4% of The Wash and North Norfolk Coast population would be disturbed.</p> <p>Therefore, the Applicant concludes there is no potential AEol of The Wash and North Norfolk Coast due to piling-induced behavioural disturbance of harbour seal.</p> <p>NE [REP5-093] stated that the Applicant had presented an illustrative assessment of disturbance to seals at sea using a 25km disturbance distance, which partially addressed its concerns. NE stated that based on the additional approaches presented by the Applicant in [REP3-115] there appears to be potential for direct disturbance to the harbour seal of The Wash and North Norfolk Coast SAC, specifically the haul-out site at Blakeney Point. NE requested further assessment of potential direct disturbance of a haul-out and breeding site at Blakeney Point.</p> | <p>haul- out and breeding site at Blakeney Point.</p> <p>Please provide this assessment or provide further justification/ explanation of why this is not required.</p> | <p>conservative disturbance ranges, as it assumes all individuals would respond at the furthest distance of 25km, rather than taking into account any individuality in response. Therefore, the Applicant considers the results of the dose response curve assessments to be more representative and realistic.</p> <p>Within the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115), the dose response curve assessment for harbour seal (which addresses seals that are underwater, not above the surface or hauled out on land – see below) shows a potential for overlap of underwater noise from piling (at SEP only) with the Blakeney Point haul-out site, which is within The Wash and North Norfolk Coast SAC (Figures 4.5-4.6 & 5.3-5.4 of REP3-115), depending on the modelling location in question. For example, Figures 4.6 and 5.4 (REP3-115) show the 5dB contours for the DEP SE modelling location, with no overlap of underwater noise from piling with the Blakeney Point</p> |

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| | | | | <p>haul-out site. However, figures 4.5 and 5.3 (REP3-115) show the underwater noise 5dB contours for the SEP E modelling location, with a potential to overlap with the Blakeney Point haul-out site. The contours for 120dB and 125dB overlap with the Blakeney Point haul-out site, with the contour for 130dB very close to the site. However, as shown by Whyte <i>et al.</i>, 2020² (Plate 4-2 in REP3-115), the dose response curve for seal species shows no reaction to piling noise at less than 145dB. The 145dB contour is approximately 7-8km from the Blakeney Point site, and the 150dB contour is 10-11km from the site. At 145dB, approximately 36.4% seals are expected to be disturbed, and at 150dB, approximately 47.3% will be (Whyte <i>et al.</i>, 2020).</p> <p>It is important to note that the underwater noise associated with piling would not cross the water-air boundary, and therefore any noise associated with piling would affect those seals that are</p> |

²Whyte, K. F., Russell, D. J. F., Sparling, C. E., Binnerts, B. and Hastie, G. D. (2020). Estimating the effects of pile driving sounds on seals: Pitfalls and possibilities. The Journal of the Acoustical Society of America, 147(6), 3948–3958.

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | | | <p>underwater only. No seals would be disturbed due to the underwater noise associated with piling if they were at the Blakeney Point haul-out site only (as they would be on land and therefore not be able to detect underwater noise).</p> <p>While additional information has been provided above to give context as to the level of noise expected to be present in the vicinity of the Blakeney Point haul-out site, this is only relevant for seals that are underwater. A full assessment of disturbance effect of seals while foraging in the water column has been provided in Section 4.1.2.1 & 4.1.2.2 of the Marine Mammals Technical Note and Addendum (REP3-115), and an assessment for disturbance to seals at the haul-out site itself has been provided in ES Chapter 10 (APP-096) (noting that, as above, seals hauled-out would not be at risk of disturbance from the underwater noise associated with piling). Therefore, the assessments as provided within ES Chapter 10 and the Marine Mammals Technical Note / Addendum remain valid.</p> |

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| 3-3-9 | Harbour seal – in-combination assessment | <p>NE [RR-063] (Point 67) [REP1-138, REP3-146] did not agree with the in-combination assessment method used by the Applicant for this SAC. NE advised the Applicant to undertake an in-combination assessment against the SAC population specifically.</p> <p>The Applicant [REP3-115] provided a response in its Marine Mammal Marine Mammals Technical Note and Addendum. This was informed by its updates to the harbour seal baseline and reference population. The Applicant [REP3-115] provided at Section 5, and specifically at Section 5.4.1.3, an updated in-combination assessment for this SAC from underwater noise, including: piling impacts with other OWFs; non- piling construction noise generating activities from other OWFs; noise from geophysical and seismic surveys at other OWFs; and overall cumulative disturbance.</p> <p>The Applicant's updated assessment results are included in the following tables of the note, with accompanying text:</p> <p>Table 5-23: in-combination assessment for potential disturbance during piling at OWFs which could be piling at the same time as SEP and DEP</p> <p>Table 5-24 in-combination assessment for potential disturbance during the construction (other than piling) at OWFs at the same time as construction at SEP and DEP</p> <p>Table 5-25 in-combination assessment for the potential disturbance for OWF geophysical surveys at the same time as piling at SEP and DEP</p> <p>Table 5-26 in-combination assessment for the potential disturbance for seismic surveys at the same time as piling at SEP and DEP</p> <p>Table 5-27 overall in-combination assessment for the potential disturbance from all underwater noise sources during piling at SEP and DEP (Worst-Case)</p> | Matter not yet resolved | <p>At Deadline 6, NE provided their response on the population modelling for harbour seal of The Wash and North Norfolk Coast SAC (REP6-029).</p> <p>Regarding the project alone disturbance effects to harbour seal, NE requested further information to support that one pile per day would represent the worst-case. Further information on this point has been included within the updated Marine Mammals Technical Note and Addendum (Revision B) [document reference 16.14], submitted at Deadline 7, which confirms that one pile per day at SEP and DEP is worst-case. The Applicant therefore considers this matter to be resolved.</p> <p>Regarding the projects included within the in-combination assessments, NE stated in their D6 (REP6-029) response that:</p> <p><i>“The Applicant’s review of the available project data for screened in offshore wind farms projects (see Table 4-18) appears comprehensive and based on the best available information at the time. We note that projects in the pre-application phase may</i></p> |

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| | | <p>Of the above, the Applicant concludes for Tables 5-24 and 5-25 that while the number of seals at risk of disturbance has increased under the updated assessments, there is no change to the overall assessment of effect as assessed within the RIAA [APP- 059] and therefore, as noted in the RIAA, there is no potential for AEol of the harbour seal feature from these effects.</p> <p>The updated assessment provided in Table 5-23 [REP3-115], based on project-specific data and updated density and SAC population estimates concluded that under the scenario of single piling at all other OWFs, there is the potential for 163.3 harbour seal associated with The Wash and North Norfolk Coast SAC or up to 4.1% of the SAC population to be disturbed. Population modelling was undertaken to determine the population level consequences of disturbance to harbour seal of the SAC. The results of the population modelling, as provided in Section 4.1.2.3.3, showed that there would be no effect on the population of any of the modelled species. No mitigation for disturbance was therefore proposed or required for piling at SEP and DEP (Section 4.1.2.4).</p> <p>In respect of Table 5-26 (seismic surveys), the Applicant concludes that the updated assessment indicates a significant number of harbour seal associated with The Wash and North Norfolk Coast SAC could be disturbed due to seismic surveys taking place at the same time as piling at SEP and DEP. Population modelling has been undertaken for in-combination disturbance within the SAC, to determine whether there could be a population level consequence due to in-combination disturbance (see Section 5.4.1.4 of the note [REP3-115]). The population modelling concludes no AEol to the harbour seal feature of this SAC.</p> <p>For the overall in-combination disturbance effects (Table 5-27), the note concludes for harbour seal associated with The Wash and North Norfolk Coast SAC, up to 553.4 individuals (14.0% of</p> | | <p><i>continue to refine and publish their project data. However, it is reasonable to implement a cut off point for new data and we consider that what is presented in Table 4-18 is acceptable.</i></p> <p>Within the population modelling, the Applicant determined a threshold of 1% additional annual decline (when compared to the unimpacted population) to represent a significant effect to the population assessed. In their D6 response, NE agree with this threshold as suitable, and it is in line with NRW's recent advice on this matter (NRW, 2023).</p> <p>NE have provided agreement on the results of the in-combination population modelling for harbour seal of The Wash and North Norfolk Coast SAC within their D6 response (REP6-029);</p> <p><i>"The population modelling of harbour seal, at both the MU and SAC level, from both project alone and cumulative effects (see Tables 4-12, 4-38, 5-11 and 5-29), shows effectively no difference in the size of the unimpacted population mean and the impacted population mean. Therefore, the results as</i></p> |

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| | | <p>the SAC population) could be disturbed as a result of in-combination disturbance. This is an increase in the number of harbour seal at risk of disturbance in comparison to RIAA Section 8.4.4.4 (Table 8-84) [APP- 059].The Applicant explains the precautionary approach regarding the seismic surveys and likelihood of simultaneous piling and also that with the implementation of any management measures for the SNS SAC, the potential impacts could be reduced and that any mitigation measures to reduce the disturbance of harbour porpoise in the project specific SIPs may also reduce the potential disturbance of harbour seal. As noted above, further population modelling was undertaken by the Applicant, which concludes no AEol to the harbour seal feature of this SAC.</p> <p>The note [REP3-115] concludes that, as assessed in RIAA Section 8.4.3, there would be no potential for AEol of the harbour seal feature of this SAC.</p> <p>NE [REP5-093] commented that the Applicant has undertaken an in-combination assessment against The Wash and North Norfolk Coast SAC population as requested. NE acknowledge that the results are significant in the Applicant's terms and therefore, the Applicant has undertaken population modelling, also against the SAC population. NE stated that it would provide a full response to this at Deadline 6, pending further consideration.</p> | | <p><i>presented indicate that offshore wind impacts will not cause any additional decline to the harbour seal populations assessed”</i>.</p> <p>The Applicant therefore considers this matter to be resolved, with no AEol of The Wash and North Norfolk Coast SAC due to in-combination disturbance.</p> |
| SNS SAC | | | | |
| 3-3-10 | Harbour porpoise - assessment of WCS: simultaneous piling | NE [RR-063] (General and Point 74) requested clarification on the WCS in relation to the SNS SAC, in relation to simultaneous piling at DEP vs simultaneous piling across sites. NE also queried the number of piling days in the seasonal scenario, which was slightly lower than the WCS. NE stated that based on the information in Table 8-13, it appears that simultaneous piling at one site (ie SEP or DEP) is within the project envelope. Whilst simultaneous piling across sites may represent the worst-case spatial area, NE were | Unclear whether matter is resolved. RIES-Q13: To NE - Point 74 of NE's RR [RR-063] does not specifically appear in NE'S Risk and Issues | The Applicant considers that the information provided within Section 5.1.2.1 of the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115) is sufficient, and that this matter is resolved, although a |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>of the view that it is unlikely to represent the worst-case spatial overlap with the SNS SAC because of the differing distances between the sites and the SNS SAC. Indeed, NE considered simultaneous piling at the DEP site would lead to greater overlap with the SNS SAC summer area than has been presented and would be the worst-case scenario. NE advised that this scenario, of simultaneous piling at DEP site, must be assessed as it is the worst-case. In this scenario consideration should be given to the maximum separation distance of such simultaneous piling, and whether a maximum separation distance should be considered to be secured as a mitigation measure, to reduce the Proposed Developments overall contribution to disturbance at the SNS SAC. Similarly simultaneous piling at DEP would also likely represent the worst-case overlap with the winter area of the SNS SAC.</p> <p>NE [REP3-146] requested the Applicant clarify whether simultaneous piling at one site is an option and if so, the impacts of such a scenario be assessed if it is the worst-case for some impact pathways eg confirm whether it would lead to a greater overlap with the SNS SAC. NE [REP3-143] also requested the Applicant consider committing to a maximum separation distance between piling that occurs on the same day.</p> <p>The Applicant [REP2-051] clarified in response that that simultaneous piling in either SEP or DEP is a potential option. The Applicant confirmed that modelling was undertaken for the NE and SE locations within DEP (See Appendix 10.2 - Underwater Noise Modelling Report [APP-192]) and that this can be applied to further inform the potential overlap with the SNS SAC for a simultaneous piling scenario. The Applicant intended to address this within the Marine Mammals Technical Note to be submitted at Deadline 3.</p> <p>The Applicant provided in its Marine Mammals Technical Note [REP3-115] at Section 5.1.2 'Assessments of Disturbance from</p> | <p>Log [REP5-093]. It is unclear if the clarification provided by the Applicant at Deadline 2 [REP2-051] and in the Marine Mammals Technical Note [REP3-115] with regards to simultaneous piling has addressed NE's concerns on this matter. Please can NE respond.</p> | <p>formal response from NE has not yet been received.</p> |

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| | | <p>Simultaneous Piling for the Southern North Sea SAC' in response to NE's RR [RR-063]. The Applicant stated that the assessments provide an update to account for the potential for two simultaneous piling events at DEP as being the worst-case, rather than one simultaneous piling event at SEP and DEP (as has been assessed in RIAA Section 8.4.1.1.1.1.2 [APP-059]). The approach to assessment is the same as provided in RIAA Section 8.4.1.1.1.1.2. The provided an assessment against the SNS SAC disturbance thresholds (of 20% on any given day and 10% on average over a season).</p> <p>The Applicant's Marine Mammals Technical Note and Addendum [REP3-115] updated the spatial assessment for simultaneous piling with either two monopiles at DEP or two monopiles at SEP, so that the maximum area of disturbance within the SNS SAC would be 2.32% of the summer area due to two monopiles at DEP. The note stated that disturbance of harbour porpoise would not exceed 20% of the spatial component of the SNS SAC summer or winter area on any given day during simultaneous piling at SEP or DEP, or SEP and DEP (Table 5-1).</p> <p>The note [REP3-115] concluded there would be no significant disturbance and no AEoI of the SNS SAC in relation to the conservation objectives for harbour porpoise due to disturbance from piling during construction, for SEP or DEP, or SEP and DEP.</p> <p>The assessment also provided clarification on the disturbance overlap with the SNS SAC for one monopile at DEP, and for one monopile at SEP and DEP on the same day.</p> <p>At Deadline 5 and in response to the ExA's WQ3 [PD- 017] regarding piling controls, the Applicant [REP5- 049] explained that it does not consider that a DML condition to prevent simultaneous piling between SEP and DEP and other consented offshore wind farms is necessary or appropriate. The Applicant explained that the SIP mechanism has been developed to specifically address the matter of piling between developments and avoid AEoI to the</p> | | |

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| | | <p>SNS SAC harbour porpoise feature. The Applicant stated that through the SIP mechanism, each project with potential to have an effect on the SNS SAC is required to develop a SIP to ensure that underwater noise impacts do not breach the threshold of effect. The Applicant stated that one method to achieve this is through scheduling of piling post-consent which would be managed by the MMO in consultation with NE and developers as part of the SIP process, and that the potential requirement for further noise mitigation systems would also be considered at this stage. The Applicant reiterated that the MMO were content with the SIP.</p> <p>The MMO [REP5-080] confirmed at Deadline 5 that it was satisfied that the SIP currently provides sufficient control over the timing and nature of noisy activities to ensure that the relevant in-combination disturbance impact thresholds for marine mammals would not be breached. The MMO stated it is satisfied that the SIP and the subsequent SIP process are enforceable, and therefore have no further comment on the document.</p> <p>The MMO [REP5-080] stated that the final SIP would be used to identify and assess any potential management or mitigation measures that could ensure no AEol on the SNS SAC for the significant disturbance of harbour porpoise based on the final design of the Proposed Developments and considered that a Condition to the DML for the Proposed Developments of SEP and DEP would place an unfair burden on this project. NE also confirmed that it did not consider a need to include a Condition within the DMLs to prevent concurrent piling between the Proposed Developments and other consented offshore windfarms for marine mammals.</p> <p>Point 74 of NE's RR [RR-063] does not appear in NE'S Risk and Issues Log. It is unclear if the clarification provided by the Applicant at Deadline 2 [REP2-051] and in the Marine Mammals Technical Note [REP3-115] with regards to simultaneous piling</p> | | |

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| | | has addressed NE's concerns on this matter. Please could NE respond. | | |
| 3-10-11 | Harbour porpoise – assessment of effects: seismic and geophysical sources (in-combination) | <p>NE [RR-063] (Point 85) advised that the Applicant include an assessment of seismic and geophysical sources should as mobile sources in the HRA.</p> <p>The Applicant [REP2-051] responded that its Marine Mammals Technical Note to be submitted at Deadline 3 would include consideration of geophysical and seismic surveys as a mobile source.</p> <p>The Marine Mammals Technical Note [REP3-115] included at Section 5.4.1 (Updates to In-Combination Assessment of Disturbance from Underwater Noise) consideration of noise sources from seismic and geophysical sources (at Section 5.1.1.2).</p> <p>The Applicant stated that the updated assessments show that for the seismic survey assessment, there is potential for the 20% spatial threshold to be breached within both the summer and winter area, without the inclusion of SEP and DEP (Table 5-15). However, the Applicant stated that it should be noted that the potential for seismic surveys to take place at the same time as SEP and DEP constructing is unknown, and this assessment is based on a generic approach only. Prior to piling at SEP and DEP, a project specific SIP would be implemented to ensure that the spatial thresholds are not breached. The Applicant concludes that with the use of appropriate management measures defined through the SIP process, and managed by the MMO, there would be no AEoI of the SNS SAC in relation to the conservation objectives for harbour porpoise as a result of in-combination disturbance effects from underwater noise due to construction activities (other than piling) for SEP and DEP in-combination with other plans and projects.</p> | Matter not yet resolved. Detailed response from NE expected by Deadline 7. | The Applicant considers that the information provided within Section 5.4.1.1.2 of the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115) is sufficient, and that this matter is resolved, although formal response from NE has not yet been received. |

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| | | <p>No response on this matter was received from NE at Deadline 5, although the ExA notes that NE intend to provide comments on the Applicant's [REP3-115] at Deadline 6/7.</p> | | |
| 3-10-12 | <p>Harbour porpoise - disturbance effects from underwater noise during effects (SEP or DEP In Isolation) - seasonal average</p> | <p>NE [RR-063] (Point 72) requested assurance from the Applicant that the assumption of one location being complete per day is appropriate for pin piles, where four piles need to be installed with associated set up in between. Furthermore, NE requested clarification on what is meant by a recovery day, what activity would occur on a recovery day? As these have been included as a day of disturbance in Table 8-19.</p> <p>The Applicant responded that it confirms that the assumption of one piled jacket foundation installation per day is appropriate. Installation of each pin pile is anticipated to take up to 3 hours, so for four pin piles this would be a total of up to 12 hours with a further 12 hours being sufficient for set up in between.</p> <p>In respect of recovery day, the Applicant [REP2-051] responded that this is derived from BEIS (2020)⁶ 'The precise pile-driving schedules for all the wind farms are unknown and it is likely that some may undertake more pile-driving each month or season than would be predicted if an average was used. Furthermore, if pile-driving is not continuously undertaken on a daily basis, consideration of the recovery period is required as this increases the overall number of days during which the impacts from disturbance are predicted to occur'. The Applicant stated that this is therefore precautionary and a WCS that has been applied to the assessment.</p> <p>No response on this matter was received from NE at Deadline 5, although the ExA notes that this did not persist in NE's updated Risk and Issues Log [REP5- 093].</p> | <p>Unclear whether matter resolved RIES-Q14: To NE – Can NE confirm whether the Applicant has addressed its concerns in its Deadline 2 response [REP2-051]. Please expand on any remaining concerns</p> | <p>The Applicant considers that this matter is resolved, although formal response from NE has not yet been received.</p> |
| 3-3-13 | <p>Harbour porpoise – potential construction effects of any changes in</p> | <p>NE [RR-063] (Points 79, 80 and 81) raised several points concerning the Applicant's assessment of this matter. NE stated it would be beneficial for the Applicant to undertake a brief</p> | <p>Unclear whether matter resolved</p> | <p>The Applicant considers that this matter is resolved, although</p> |

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| | prey availability due to underwater noise impacts (SEP and DEP in isolation) | <p>assessment of impacts to sandeel specifically, using appropriate assumptions about auditory and behavioural response. NE advised an assessment based on the larger distances as detailed in ES Chapter 10 should be undertaken against the various marine mammal sites. NE also commented that fish that do not show a fleeing capability will not benefit from measures such as ADDs or soft start and that there is little research to suggest that fleeing responses are prolonged and directional (ie away from noise). NE commented that the mitigation measures in the MMMP would have little benefit for prey species.</p> <p>The Applicant [REP2-051] responded that it considered its assessment of sandeel prey to be suitably precautionary and based on the worst-case. The Applicant stated that given the illustrative nature of the assessment and lack of any reliable quantitative methods to determine the magnitude of effect upon marine mammals, it did not consider that there is a requirement to update the assessment. The Applicant [REP2-051] stated that mitigation may reduce impacts upon fish dependent on the mitigation chosen, but its assessment at Section 8.4.1.1.7.1 of the RIAA [APP- 059] does not rely on the MMMP as mitigation to conclude no AEol.</p> <p>No response on this matter was received from NE at Deadline 5, although the ExA notes that this did not persist in NE's updated Risk and Issues Log [REP5- 093].</p> | <p>RIES-Q15: To NE –</p> <p>Can NE confirm whether the Applicant has addressed its concerns in its Deadline 2 response [REP2-051]. Please expand on any remaining concerns</p> | <p>formal response from NE has not yet been received.</p> |
| 3-3-14 | Harbour porpoise - seasonal averages used (including in- combination assessment) | <p>NE [RR-063] (Point 84) [REP3-146] stated that the seasonal averages presented by the Applicant in its RIAA [APP-059] are not presented in the correct way as they do not represent the whole season. NE advised that the Applicant present an assessment of the disturbance due to piling across the whole season. This should be applied to all seasonal assessments undertaken but is of particular importance to the in- combination assessment (Table 8-53 of the RIAA).</p> | <p>Matter not yet resolved. See Points 3- 3-15 and 3-3-16 of this RIES below.</p> | <p>The Applicant considers that the information provided within Section 5.4.1.1.2 of the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115) is sufficient, and the matter regarding updated assessments to account for seasonal averages</p> |

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| | | <p>The Applicant [REP2-051] confirmed it would review seasonal averages and re-present within the Marine Mammals Technical Note to be submitted at Deadline 3, if required.</p> <p>The Applicant's [REP3-115] Marine Mammals Technical Note and Addendum (Section 5.4.1.1) stated that seasonal averages have been calculated by multiplying the average effect on any given day in each season by the proportion of days within the season on which piling could occur (ie taking into account the average of effect/ area of overlap with the SNS SAC and number of days piling per season). The assessment as presented in RIAA Section 8.4.1.6.1 [APP-059] has been updated to reflect the noisy days for all activities throughout the full relevant season.</p> <p>For other OWFs, the updated assessment [REP3-115] assumes that all piling days would be in each season assessed, and therefore most have been assessed under both the summer in-combination scenario as well as the winter. The Applicant stated that as a worst-case, no allowance has been made for downtime as a result of technical issues and no assumptions have been made for reloading of piling vessels with foundations. The average seasonal overlaps with the SNS SAC summer and winter seasons are outlined in Table 5-14 [REP3-115].</p> <p>NE [REP5-089, REP5-093] confirmed that the Applicant has updated its assessment of in-combination seasonal disturbance to the SNS SAC, and that this shows an increased maximum and average in-combination overlap with the summer and winter area, with all scenarios exceeding the threshold. NE reiterated that it maintains its concerns around the SIP process and considers that the Applicant should commit to mitigation now in-principle, to reduce impacts and therefore the potential for AEol in-combination. See also Points 3-3-15 and 3-3-16 of this RIES below for further discussion.</p> | | <p>within the Southern North Sea SAC has been addressed.</p> <p>See responses below on Points 3-3-15 and 3-3-16 regarding the SIP process.</p> |

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| 3-3-15 | Harbour porpoise – overall in- combination disturbance effects from all noise sources | <p>NE [RR-063] (Point 86) identified that Table 8-53 of the RIAA presents that the number of harbour porpoise potentially disturbed could exceed a significant effect in both EIA and HRA terms. NE stated that in terms of HRA, the Applicant has presented that 12.0% of the winter area of the SNS SAC could be subject to noise disturbance in an in-combination scenario over the season. This is in exceedance of the 10% threshold for significant disturbance over a season. NE acknowledged that the Applicant considers that the measures in the SIP will mitigate disturbance; however, NE disagree with this. NE therefore required further safeguards which ensure that a significant impact to the North Sea MU population will not occur. NE stated that the Applicant must present further information which demonstrates that a significant effect/AEoI could not occur on the harbour porpoise feature of the SNS SAC as a result of in-combination underwater noise. Specifically, what would happen in the event that there are multiple other OWF construction or noise producing projects proposed at the same time.</p> <p>In response, the Applicant [REP2-051] stated that it notes that the exceedance of the 5% threshold thresholds predicted by the underwater noise assessment from all sources, as summarised in Table 8-53 of the RIAA [APP-059] are in the absence of mitigation that would be implemented through the SIPs for all relevant projects. The Applicant considers the SIP to be the appropriate framework through which disturbance to the harbour porpoise feature of the SNS SAC should be mitigated.</p> <p>NE [REP1-138] (with reference to [RR-063] Points 83, 84 and 86) requested an updated assessment of in- combination seasonal disturbance to the SNS SAC to reflect all noisy activity is required.</p> <p>The Applicant's Marine Mammals Technical Note and Addendum [REP3-115] (Section 5.4.1.1) provided an update to the in-combination assessment due to underwater noise at the SNS SAC. The same in- combination projects were included as those</p> | Matter not yet resolved. | <p>The Applicant maintains that the SIP is the required and appropriate approach to manage disturbance within the Southern North Sea SAC, and therefore this is the approach the Projects must take.</p> <p>During the post-consent phase, the Projects must develop and agree (with both the MMO and NE) the final SIP, and the measures required to ensure there is no significant disturbance of harbour porpoise within the Southern North Sea SAC.</p> <p>The Applicant understands that the currently expected in-combination scenario shows exceedance of both the spatial (20%) and seasonal (10%) thresholds. However, this is based on a precautionary approach to determining the projects that are likely to be undertaking activities at the same time, and it is expected that the in-combination scenario that has been assessed will change significantly before piling at SEP and DEP is undertaken. Therefore, it is expected that the assessments provided within the final SIP will be significantly</p> |

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| | | <p>presented in the RIAA Section 8.4.1.6.1 [APP-059]. The project-specific data for other OWFs used to update the assessments is summarised in Table 5-12.</p> <p>The updated assessment in the note [REP3-115] summarises at Table 5-17 the potential in-combination effects from all potential noise sources during piling at SEP and DEP. The note concludes that under the updated assessments, there is the potential for up to 85.9% of the summer area, with a seasonal average of 70.4%, or up to 102.4% of the winter area, with a seasonal average of 71.9%, to be affected. Up to 39,959.2 harbour porpoise (11.5% of the North Sea MU reference population) could potentially be disturbed. The Applicant stated that with the development of project-specific SIPs to deliver the appropriate mitigation and management measures across projects and management by the MMO, there would be no significant disturbance and no AEoI of the Southern North Sea SAC in relation to the conservation objectives for harbour porpoise as a result of SEP and DEP in-combination with other plans and projects.</p> <p>The Applicant stated [REP3-115] that as both SEP and DEP are located outside of the SNS SAC summer and winter areas, there is the potential for several options to reduce the potential contribution to the underwater noise in-combination effects, for example: scheduling of piling based on specific locations within the SEP or DEP wind farm sites to avoid maximum overlap with seasonal areas, for example, piling at a location which could have potential overlap with the winter area during the summer period.</p> <p>The Applicant confirmed that to further understand the implications of in-combination wind farm piling on the harbour porpoise population, population modelling has been undertaken (at Section 5.1.2.4 of the note [REP3-115]).</p> <p>As per Point 3-3-14 above, NE [REP5-089, REP5-093] confirmed that the Applicant has updated its assessment of in-combination seasonal disturbance to the SNS SAC, and that this shows an</p> | | <p>different (i.e. improved/impacts reduced) to those as provided in Section 5.4.1.2 of the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115). While a number of mitigation measures and management options have been provided within the In-Principle SIP (APP-290), the Applicant maintains that it is not appropriate at this stage to determine which of those would be required at the time of SEP and DEP undertaking piling. This is the standard approach.</p> |

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| | | <p>increased maximum and average in-combination overlap with the summer and winter area, with all scenarios exceeding the threshold. NE REP5-089, REP5-093] reiterated that it maintains its concerns around the SIP process and considers that the Applicant should commit to mitigation now in-principle, to reduce impacts and therefore the potential for AEol in-combination. See also Points 3-3-16 of this RIES below.</p> | | |
| 3-3-16 | Harbour porpoise - in-combination assessment and mitigation | <p>NE [REP3-146] requested the Applicant update its assessment of in-combination seasonal disturbance to this SAC to reflect all noisy activity that occur through the season. This may result in the area disturbed over a season increasing further. NE asked that the Applicant present further information which demonstrates that a significant effect/AEol could not occur on the harbour porpoise feature of the SNS SAC as a result of in-combination underwater noise.</p> <p>Specifically, what would happen in the event that there are multiple other OWF construction or noise producing projects proposed at the same time.</p> <p>NE [RR-063] had overall concerns about the SIP process in that it is highly uncertain as to what other projects might eventually look to operate at the same time. Whether in a high activity scenario there would be sufficient capacity to allow all activities to occur as planned without exceeding daily and seasonal thresholds of the SAC even with the use of coordination. There should be consideration and acceptance that further mitigation measures may be required to reduce noise and disturbance if a situation where more activities are occurring in the SAC that expected.</p> <p>NE [RR-063, REP3-146] identified that there are additional mitigation measures available to the Proposed Developments and asked that the Applicant consider committing to these at this stage to minimise the risk of AEol to the SAC from noise disturbance. NE expressed its significant concerns over the effectiveness of multiple SIPs to reduce the risk. In particular, it</p> | Matter not yet resolved. | See response to Point 3-3-15 above. |

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| | | <p>stated that the SIP has limited measures to mitigate exceedance of the seasonal threshold.</p> <p>See also point 3-3-14 and 3-3-15 above, the Applicant's [REP3-115] Marine Mammals Technical Note and Addendum (Section 5.4.1.1) states that with the use of appropriate mitigation and management measures defined through the SIP process, and managed by the MMO, there would be no AEoI on the SNS SAC in relation to the conservation objectives for harbour porpoise as a result of in-combination disturbance effects from underwater noise during piling at SEP and DEP and other offshore wind farms.</p> <p>At Deadline 5, NE [REP5-089, REP5-093, REP5-094] reiterated its concerns with regards to in-combination disturbance to the harbour porpoise feature of the SNS SAC and how this will be effectively mitigated. NE considered it likely that measures will need to be implemented to reduce the noise levels of individual projects (eg through the use of noise abatement systems) and/or limit the number of projects undertaking noisy works in the relevant season and area of the SNS SAC. NE [REP5-093] identified that the Applicant has referred to a potential mitigation measure, namely to undertake piling outside the relevant season and area of the SNS SAC. NE strongly advised that the Applicant commit to a mitigation measure such as this now, as this would reduce the risk to the project compared to delaying consideration of mitigation much closer to construction. NE commented that such a commitment would need to be secured through an appropriate condition or within outline mitigation documentation.</p> <p>NE [REP5-094] in its response to WQ3 stated that its confidence in the SIP process could be increased through greater regulatory control. NE explained that from its experience to date, HRAs on submitted SIPs are not carried out by the MMO. It considered that this would provide a further element of regulatory scrutiny and potentially identify additional mitigation. NE commented that alternative options could also be considered in the future, for</p> | | |

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| | | <p>example a cross-regulator Appropriate Assessment prior to the relevant season of the SNS SAC, which identifies all projects that will occur in the season and demonstrates that AEol will not occur, with additional controls (where appropriate) placed on projects that submit applications for that relevant season but after the AA has been undertaken. However, NE recognised that the above is not in the gift of the Applicant.</p> <p>The Applicant [REP5-049] at Deadline 5 restated that the SIP is effective means of control.</p> <p>As noted above, the MMO [REP5-080] confirmed its view that the SIP currently provides sufficient control over the timing and nature of noisy activities to ensure that the relevant in-combination disturbance impact thresholds for marine mammals would not be breached.</p> | | |
| 3-3-17 | Harbour porpoise - in-combination assessment other projects | <p>NE [RR-063] (General point) requested the Applicant clarify why only two other OWF were considered to have the potential to overlap with DEP and SEP. NE queried why Outer Dowsing OWF had not been considered as potentially overlapping with the Proposed Developments.</p> <p>The Applicant [REP2-051] responded that this comment was not correct as four other OWFs are considered for the summer period, including Outer Dowsing. Updated assessments for the summer area include Outer Dowsing OWF and are provided in the Marine Mammals Technical Note [REP3-115].</p> <p>Explanation for the updated assessment areas is provided in Section 5.4.1.1 [REP3-115].</p> <p>No response on this matter was received from NE at Deadline 5, although the ExA notes that this did not persist in NE's updated Risk and Issues Log [REP5- 093].</p> | <p>Unclear if matter resolved.</p> <p>RIES-Q16: To NE –</p> <p>Can NE confirm whether the Applicant has addressed its concerns in the Marine Mammals Technical Note [REP3-115].</p> <p>Please expand on any remaining concerns</p> | <p>The Applicant considers that the information provided within Section 5.4.1.1.2 of the Deadline 3 version of the Marine Mammals Technical Note and Addendum (REP3-115) is sufficient, and that this matter is resolved, although formal response from NE has not yet been received.</p> |
| <p>Comments relevant to all three SACs – Humber Estuary SAC, The Wash and North Norfolk Coast SAC, and SNS SAC</p> | | | | |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| 3-3-18 | Disturbance effects and use of MMMP and SIP as mitigation measures for disturbance | <p>NE [RR-063] stated that the construction of the Proposed Developments will cause disturbance that will have significant effects on harbour porpoise and seals, and that it disagreed with the Applicant's determination that established mitigation measures, namely the MMMP and the SIP, will reduce the risk of disturbance to all species and all designated site features. NE stated the lack of mitigation measures specifically targeting disturbance to marine mammals means there remains the potential for significant effects from disturbance to both seals and harbour porpoise at both EIA and HRA level, the risk of which is currently underestimated within the various assessments and documentation provided. NE recommend further assessment is given to the risk and significance of disturbance to harbour porpoise and seal species and recommend that further mitigations measures which reduce disturbance and sound propagation (ie sound abating measures, be retained as possible necessary options in the MMMP and SIP to reduce the effects of disturbance).</p> <p>In response to the RRs of NE [RR-063] and MMO [RR- 053], the Applicant [REP2-051] (ID1, Table 1-1) explained that they did not intend to imply that the MMMP would be mitigation for disturbance effects. The Applicant stated that in the RIAA [APP-059] the assessments of disturbance for seals used TTS as a proxy. This assessment was considered together with the assessment of physical injury and auditory injury (Section 8.4.3.1.1 and Section 8.4.4.1.1) but was not separated and the Applicant acknowledged that they could have made clearer that the statement on mitigation is only intended to refer to injury. The Applicant therefore intended to re-present the information separately for injury and disturbance to clarify this point in a Marine Mammals Technical Note at Deadline 3 and because of the percentage of the grey seal potentially disturbed from the Humber Estuary SAC, this would also be given further consideration. The Applicant [REP2-051] also stated that they intended to undertake Population</p> | <p>Further clarity sought by ExA on this matter</p> <p>RIES-Q17: To NE - Noting NE's response at Deadline 5 [REP5-094] to WQ3 Q3.12.2.4 and initial comments in its RR [RR-063], together with statements made in the Applicant's Marine Mammal Technical Note [REP3- 115] that 'any mitigation measures to reduce the disturbance of harbour porpoise in the project specific SIPs may also reduce the potential disturbance of grey seal/harbour seal', does the matter of the use of the MMMP and SIP for disturbance also relate to the seal</p> | <p>The SIP is only relevant, and required for, the mitigation and management of <u>disturbance to harbour porpoise</u> of the Southern North Sea SAC. The mitigation and measures implemented within that SIP would be aimed at reducing the level of activity and noise disturbance within the Southern North Sea SAC, and therefore, may also have some benefit to other species, although other species are not the target of measures within the SIP.</p> <p>NE's D6 response (REP6-029) to the population modelling provided in the Marine Mammals Technical Note and Addendum (REP3-115) indicates they agree there is no AEoI of the Humber Estuary or The Wash and North Norfolk Coast SAC due to in-combination disturbance effects. However, as noted in response to RIES-Q7 in Table 2, a number of conclusions with respect to grey seal and harbour seal are to be confirmed pending additional information from the Applicant. The Applicant has sought to provide this within the Marine Mammals Technical Note and Addendum (Revision B) [document reference 16.14] and</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
|----|-----------------------------|---|--|---|
| | | <p>Consequences of Disturbance (PCoD) modelling to further investigate potential effects.</p> <p>The Applicant [REP2-051] stated that the In Principle SIP follows current guidance and thresholds and the SIP would be finalised prior to construction to take account of any guidance and requirements at that time, as well as the final design of the Proposed Developments. The Applicant stressed that confirmation of any measures that will be employed cannot be confirmed until the project design parameters are finalised. The Applicant stated that further assessment would be conducted prior to construction, based on the foundation type and installation method, to determine if there is the risk of significant disturbance to marine mammals. This would then be used to determine if further mitigation measures which reduce sound propagation and disturbance are required. The Applicant confirmed this would all be done in consultation with NE during the pre-construction phase together with consultation in developing the final MMMP and SIP prior to construction.</p> <p>NE [REP5-094] in response to the ExA's WQ3 [PD-019] Q3.12.2.4 stated that confidence in the SIP process could be increased through greater regulatory control. NE [REP5-094] stated that the outline mitigation in the draft MMMP is sufficient to reduce the risk of injury to marine mammals, which also reduces the risk of AEol to marine mammal designated sites. NE stated that the draft MMMP does not, and is not meant to, include measures specifically aimed at reducing in-combination underwater noise disturbance and NE's concerns around AEol were specifically due to in-combination underwater noise disturbance.</p> <p>NE [REP5-094] clarified in response to the ExA's WQ3 [PD-019] that, due to its reservations on the SIP, it is not confident that AEol can be ruled out for the harbour porpoise feature of the SNS</p> | <p>SACs (Humber Estuary SAC and The Wash and North Norfolk Coast SAC) or only the SNS SAC?</p> | <p>anticipates being able to reach agreement with NE that AEol on these qualifying features can be ruled out following NE review of that document. This will be reflected within an update to the Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements at Deadline 8</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>SAC due to potential in-combination seasonal disturbance. Harbour seal and grey seal are not features of the SNS SAC.</p> | | |
| 3-3-19 | Mitigation – vessel code of conduct/ management plan | <p>NE [RR-063] advised that a standalone vessel code of conduct/management plan be secured as a consent condition and that it contain appropriate measures for marine mammal mitigation.</p> <p>The Applicant's response at Deadline 3 [REP3-107] to NE's comments at Deadline 2 stated that NE had noted that the Vessel Code of Conduct formerly Annex 1 of the MMMP has been moved to the Outline Project Environmental Management Plan (OPEMP). Requirement for a final Project Environmental Management Plan (PEMP) would be secured through the conditions of the DMLs in the dDCO (Revision F) [REP3-009] (latest version is [REP5-005]), which 'conditions' the requirement for the Vessel Good Practice and Code of Conduct to Avoid Marine Mammal Collisions.</p> <p>No response on this matter was received from NE at Deadline 5, although the ExA notes that this did not persist in NE's updated Risk and Issues Log [REP5- 093].</p> | <p>Unclear if matter resolved</p> <p>RIES-Q18: To NE –</p> <p>Can NE confirm whether the Applicant has addressed its concerns in its Deadline 3 response [REP3-017]. Please expand on any remaining concerns</p> | <p>The Applicant considers that this matter is resolved, although formal response from NE has not yet been received. The Applicant will seek clarity on this matter with NE and ensure the agreement status is reflected in the final SoCG at Deadline 8.</p> |
| 3-3-20 | Monitoring - Offshore In-Principle Monitoring Plan (OIPMP) | <p>NE [RR-063] considered the marine mammal section of the OIPMP [APP-289] provided with the DCO application lacked detail and wasn't fit for purpose. More detail was requested.</p> <p>NE also commented on the OIPMP providing more advice at Deadline 1 [REP1-136]. NE were not supportive of the Applicant's proposal to postpone fundamental discussions regarding the scope and purpose of the monitoring to the post consent phase.</p> <p>The Applicant [REP2-051] stated that it anticipated submitting an updated Offshore IPMP (OIPMP) [APP- 289] version in response at Deadline 3.</p> <p>The updated OIPMP was submitted at Deadline 4 [REP4-014].</p> <p>NE provided a detailed response to the OIPMP [REP4- 015] in Appendix A2 submitted at Deadline 5 [REP5- 090] and referred</p> | <p>Matter not yet resolved.</p> | <p>The Applicant considers that the information provided within the OIPMP for marine mammals is sufficient at this stage of the Projects. The OIPMP provides information on the aims of the monitoring proposals, and the key knowledge gaps the monitoring will aim to achieve, including, where relevant, investigating the effectiveness of mitigation. The Applicant considers that flexibility in the final monitoring design and timeframes is appropriate to</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>the ExA to this in response to the ExA's Q3.12.2.6 [PD-019]. NE noted that the Applicant had provided further information in the OIPMP as specifically requested in relation to marine mammals (ie presenting updated conclusions from the RIAA and ES; assumptions and knowledge gaps). The Applicant had also presented options that would evidence the impacts to marine mammals, and also demonstrate the effectiveness of mitigation. NE stated that nevertheless, NE consider that that further detail is still required, as per its comments at Deadline 1 [REP1- 136].</p> | | <p>ensure the final project design and programme can be properly considered, and to ensure that other monitoring plans and future research is taken into account.</p> |

Table 4 The Applicant's comments on RIES Table 3-4: Matters raised in the Examination to date in relation to the Applicant's assessment of AEol (alone and in-combination) to offshore ornithology European sites

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
|----------------|---------------------------------------|---|--|--|
| FFC SPA | | | | |
| 3-4-2 | Gannet (breeding) – collision risk | <p>NE [RR-063] confirmed in its RR that providing there are no further significant changes to the collision and displacement figures provided for the Proposed Developments, it is likely to reach a conclusion of no AEol for gannet of this SPA when considering the in- combination impact including SEP and DEP.</p> <p>NE [REP1-139] responded to the ExA's WQ1 [PD- 010] on this matter (Q1.14.1.5), summarising what might constitute significant changes to the modelling, the differences between EIA and HRA conclusions, and the approach taken for the Hornsea Project Four OWF Examination.</p> <p>The joint position statement between the Applicant and NE [REP3-103] at Deadline 3 states that it remains anticipated there will be no AEol and thus the derogations are not anticipated to engaged and compensatory measures not anticipated to be required.</p> <p>At Deadline 5, NE [REP5-091] provided its position in respect of gannet at Section 10. NE noted that some corrections/updates will be required for the Applicant's HRA update (eg assessment of Hornsea Project Four OWF for a range of mortality rates, and inclusion of changes in the CRM update [REP3-089]). NE expanded on its conclusions on AEol to gannet from the Proposed Developments alone and in-combination and concluded that there would be no AEol from the Proposed Developments alone (SEP, DEP) and together (SEP and DEP). NE [REP5-091, REP5-094] also advised that there is no AEol from the Proposed</p> | <p>n/a – matter resolved, although some corrections noted to be required.</p> <p>NE agree no AEol, alone or in-combination with consented projects [REP5- 091, REP5-094]</p> | <p>The Applicant has submitted the Apportioning and HRA Updates Technical Note (Revision D) [document reference 13.3] at Deadline 7 which provides corrections/updates to the gannet and kittiwake assessment. It is noted that any changes do not affect the assessment conclusions.</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>Developments in-combination with currently consented projects.</p> <p>The Applicant [REP5-049] also confirmed the agreement of NE in its Deadline 5 submission.</p> | | |
| 3-4-7 | <p>Seabird assemblage – effects on abundance, diversity and supporting habitats due to collision risk (operation and maintenance) and disturbance/displacement (construction and operation and maintenance) in-combination</p> | <p>The position statement between the Applicant and NE [REP3-103] records that the Applicant concludes no AEol on the seabird assemblage; however, the position of NE is TBC.</p> <p>The Applicant [REP3-103] states that where individual species compensatory measures are agreed to be appropriate, further compensation will not be needed for the assemblage.</p> <p>The RSPB [REP3-162] in response to the ExA's WQ2 stated that it did not agree that the seabird assemblage would remain intact given the impact on key features (kittiwake, gannet, guillemot and razorbill) that contribute to the assemblage feature.</p> <p>NE [REP3-143] stated that it was awaiting text that addressed its concerns around individual species impacts to ensure they incorporated the full range of possible impacts before it could comment on the seabird assemblage. The Applicant [REP4-031] confirmed it would be addressing these points in a further update to the Applicant's Apportioning and HRA Updates Technical Note to be submitted at Deadline 5.</p> <p>The Applicant provided an updated Apportioning and Habitats Regulations Assessment Updates Technical Note (Revision C) at Deadline 5 [REP5-043]. The Applicant's conclusion on the assemblage at Section 11 did not change.</p> | <p>NE's [REP5-091] position at Deadline 5 is that it cannot rule out AEol in-combination with plans and projects. NE is awaiting update from Applicant at Deadline 5.</p> | <p>The Applicant notes that NE's position on the FFC assemblage (i.e. that it cannot rule out AEol) rests largely on its position that AEol in respect of guillemot and razorbill (as qualifying features of FFC SPA in their own right, but also assemblage species) cannot be ruled out. The Applicant highlights that 'without prejudice' compensation measures have been provided for these species [REP5-017], and that in the event that the SoS concluded that there would be an AEol in respect of these species, proposed compensation would ensure that no additional measures would be required for the assemblage. This is acknowledged by NE in its response to Q2.14.1.13 [REP3-147]. It is the Applicant's view that if no AEol was concluded by the SoS in respect of FFC SPA guillemot and razorbill, then it follows that no AEol could also be concluded for the FFC SPA assemblage.</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>NE [REP5-091] stated at Deadline 5 that it is awaiting in-combination guillemot and razorbill updates in the HRA Apportioning and Habitats Regulations Assessment Updates Technical Note (Revision C) note to provide a position on in-combination impacts. NE confirmed it agreed with the Applicant's conclusion, set out in HRA and Apportioning updates technical note (Revision B) that the effects from Proposed Developments alone (SEP, DEP) and together (SEP and DEP) would not result in an AEol to the breeding seabird assemblage qualifying feature of the FFC SPA.</p> | | |
| Greater Wash SPA | | | | |
| 3-4-12 | Red-throated diver (RTD) (non- breeding) – construction phase displacement/ barrier effects | <p>The Applicant concludes no AEol alone or in- combination [APP-059]; however, NE does not agree an AEol can be excluded in-combination with other projects [REP3-103]. Further discussion on avoidance/mitigation measures is stated to be required [REP3-103].</p> | Matter not yet resolved | <p>The Applicant is maintaining dialogue with NE on these matters, most recently at a meeting between NE and the Applicant on 26 June 2023.</p> |
| 3-4-13 | RTD (non- breeding) – operational phase displacement/ barrier effects | <p>NE [RR-063] expressed increasing concern in relation to disturbance and/or displacement of RTD from the more persistent presence of infrastructure- related vessels making transits through diver SPA (eg due to OWF O&M requirements) and consider that these could make a meaningful contribution to in-combination effects on the SPAs. NE requested further investigation of all potential vessel movements within the Greater Wash SPA and the mitigation hierarchy be applied. NE stated permanent displacement effects arising from the presence of the SEP array also need consideration.</p> | | <p>As noted in the Apportioning and HRA Updates Technical Note (Revision D) [document reference 13.3], the Applicant can confirm that, following discussions with Natural England on 26 June 2023, and notwithstanding its conclusions that AEol on the red-throated diver feature of the Greater Wash SPA can be ruled out, the Applicant has committed to the following mitigation:</p> |
| 3-4-14 | RTD (non- breeding) – operational phase displacement/ barrier effects due to operation and maintenance vessel activity | <p>Following NE's comments, the Applicant updated its Apportioning and HRA Updates Technical Note [REP2-036] at Deadline 2 to include an updated Greater Wash SPA red-throated diver construction phase displacement/ barrier effects assessment (Section 11.2.1).</p> | | |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>NE's [REP3-143] response to [REP2-036] noted that potential impacts from construction vessels transiting to and from the cable corridors had not been considered within the assessment, presumably due to the fact that the construction port(s) would not be confirmed until nearer the start of construction.</p> <p>However, it considered that since use of a port adjacent to either the Greater Wash SPA or Outer Thames SPA is plausible, some further consideration of the possible impacts from construction vessels transiting to and from the Export Cable Corridor (ECC) should be undertaken. NE [REP3-143] advised that the Applicant provide any available information relevant to potential impacts from construction vessels transiting to and from the ECC on the Greater Wash SPA and/or Outer Thames Estuary SPA. The Applicant [REP4-031] at Deadline 4 stated that it would review this information and if possible, address NE's comments in a further update to the Apportioning and HRA Updates Technical Note to be submitted at Deadline 5.</p> <p>NE [REP3-143] also identified a number of errors in the RTD assessment, which the Applicant [REP4-031] stated it would update in the further update to Apportioning and HRA Updates Technical Note to be submitted at Deadline 5.</p> <p>NE [REP3-143] commented that the in-combination assessment for the Greater Wash SPA did not include any attempt to quantify the level of displacement due to vessel activity associated with existing OWFs, both in terms of the construction phase and vessels associated with ongoing O&M. NE was of the view that is additional data available on the impacts resulting from vessel activity associated with relevant existing OWFs, both in terms of mortality and the area subject to displacement, which would enable the Applicant to undertake a more quantitative assessment for</p> | | <ul style="list-style-type: none"> Seasonal restriction on export cable laying activity within the SPA as secured by Condition 24 of Schedules 12 and 13 of the dDCO (Revision J) [document reference 3.1]; Turbine restriction zone within the southeast corner of the SEP wind farm site resulting in an approximate 4.5% reduction in buildable area of SEP (as secured through an update to the Works Plans (Offshore) (Revision C) [document reference 2.7]); and Updates to the best practice protocol for minimising disturbance to red-throated diver with respect to a firm commitment to utilise existing vessel transit routes and an additional commitment regarding considering the potential for crew transfer vessels to transit to the wind farm sites in convoy, where practicable. This is secured within the Outline Project Environmental Management Plan (PEMP) (Revision D) [document reference 9.10]. |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>the Greater Wash SPA. A link was provided. The Applicant [REP4-031] confirmed that it would review this information and if possible, address NE's comments in a further update to the Apportioning and HRA Updates Technical Note to be submitted at Deadline 5.</p> <p>NE [REP3-143] stated that in terms of consideration of the reduction in available habitat as a result of cable installation vessels, it felt there was not enough information provided to determine whether the Applicant's suggested WCS (concurrent construction of the export cables for the Proposed Developments) can be considered as such. It requested further justification. The Applicant [REP4- 031] clarified in response that it has assumed that the sequential (and not concurrent) approach represents the WCS in respect of RTD. This is because the total duration of work is longer for the sequential scenario and that the displacement effect at any one location would be short-term, ie birds would return to affected area soon (within a few hours) after vessel departure.</p> <p>NE [REP3-143] raised some concerns over the validity of the method used to calculate the 'effective area' of displacement by scaling the area of effect proportionally according to the corresponding rate of displacement. NE stated it would welcome the presentation of figures for all approaches to calculating the area over which RTD are subjected to displacement. The Applicant [REP4-031] in response stated that it maintains that it is reasonable to use the displacement gradient as a proxy to understand the 'effective area' of displacement. However, the information presented in the Apportioning and HRA Updates Technical Note (Revision B) [REP2-036] has included both the total area and effective area calculations. The Applicant stated it would review NE's</p> | | <p>The Applicant anticipates that agreement with NE can be reached by the close of Examination, to enable AEoI in respect of red-throated diver to be ruled out for all impact pathways.</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>comments and, if appropriate, provide further clarification in the update to this technical note at Deadline 5.</p> <p>NE [REP3-143] reiterated its view that in light of the conservation objectives for the Greater Wash SPA, it considers that, whilst the Proposed Developments' contribution to these impacts is minimal, AEoI on the RTD feature of the SPA could be ruled out due to in combination displacement causing a significant reduction in the functional extent of the SPA available, which would modify the distribution of birds within those sites. NE [REP3-143] considered that adverse effects from the operational array would be avoided were all turbines to be located at least 10km from the SPA.</p> <p>At Deadline 4, NE [REP4-049] identified outstanding requirements including the need for a more quantitative assessment of in-combination impacts from vessel activity. NE stated that until these are addressed, it will not be able to provide definitive advice on the Applicant's in-combination assessments.</p> <p>At Deadline 5, the Applicant provided at Section 12.2.2 of its Apportioning and HRA Update (Revision C) [REP5-043] updated RTD operational displacement values, to account for buffer overlap areas where the effect of SEP would be greater than from existing OWFs. The Applicant's Appendix 3 'Area calculations used for red-throated diver displacement assessment' was updated for Revision C but not tracked. The Applicant [REP5-049] confirmed in response to the ExA's WQ3 [PD-017] that it has updated the displacement values to address NE's comment in [REP3-143] (at Table 12-4 of the technical note [REP5-043]). The Applicant stated that the values presented in the update are slightly increased from the Apportioning and Habitats</p> | | |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>Regulations Assessment Updates Technical Note (Revision B) [REP2-036] but have not affected the conclusions presented by the Applicant. The Applicant also provided mortality values for 1% and 10% in Tables 12-2 and 12-5 of the Apportioning and HRA Updates Technical Note (Revision C) [REP5- 043].</p> <p>NE at Deadline 5 [REP5-091] stated that it was unable to rule out AEol in-combination for the RTD of this SPA at this stage.</p> <p>Mitigation and monitoring</p> <p>With regards to avoidance/mitigation measures, the Applicant [REP1-017] stated at Deadline 1 that mitigation for RTDs is contained in the OPEMP.</p> <p>The ExA in its WQ2 [PD-012] asked NE and the RSPB whether do they considered the OPEMP to be sufficiently detailed to give you assurances that appropriate mitigation for RTD will be implemented.</p> <p>NE [REP3-147] responded that it anticipated that the Applicant will be submitting an updated OPEMP at Deadline 3 to which NE would respond at Deadline 4. NE highlighted its previous advice that the use of the best practice protocol, whilst welcome, may not remove the need for seasonal restrictions. The RSPB [REP3-162] stated in response that it was not yet able to comment on the OPEMP and would continue to review this and other relevant Examination documents and would provide comments at future deadlines, as appropriate. NE suggested that an AEol could be avoided if all turbines at SEP were located at least 10km from the SPA [REP3-143, point 24].</p> <p>The Applicant submitted its updated OPEMP at Deadline 3 [REP3-060].</p> | | |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <p>The Applicant [REP4-031] in response to NE's comments on this matter in [REP3-143] maintained its conclusions within the Apportioning and HRA Updates Technical Note (Revision B) [REP2-036] of no AEoI of the RTD qualifying feature of the Greater Wash SPA (project-alone and in-combination).</p> <p>Therefore, considered no additional mitigation to be required. The Applicant stated it has committed to implementing a best practice protocol for avoiding disturbance to RTD as embedded mitigation (see the Outline PEMP (Revision C) [REP3-060]). The Applicant stated that the best practice protocol wording was further updated at Deadline 3 to adopt wording provided by NE to the Hornsea Project Four OWF, which was similar but not identical to the wording already proposed by the Applicant. The Applicant asserted that it has updated this wording in dialogue with NE and therefore considers that no further mitigation regarding construction and O&M vessel movements is required.</p> <p>At Deadline 4, NE [REP4-049] stated it welcomed the adoption of the Best Practice Protocol in respect of RTD; however, it has outstanding concerns regarding displacement and thus wishes to discuss other mitigation measures, including seasonal restrictions. The Offshore IPMP (Revision B) [REP4-014] was updated at Deadline 4 to respond to NE comments at Deadline 1 and included the addition of RTD into the monitoring proposals (at Table 8).</p> <p>The ExA in its WQ3 [PD-017] asked the Applicant about measures for RTD. The Applicant [REP5-049] in response advised that it has scheduled a meeting with NE for 26 June 2023 to discuss matters relating to RTD and will aim to submit an update at D7, subject to the receipt of the required clarification.</p> | | |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
|---------|-----------------------------|--|--|--|
| 3-14-16 | Sandwich tern – colony data | <p>NE [RR-063] stated that data it holds from the National Nature Reserve (NNR) manager for the colonies in question (Table 9-43 of the RIAA [APP059]) present some discrepancies, mainly minor. NE stated that it had already provided the data to the Applicant. The key discrepancy is that there is productivity data for Scolt Head in the Seabird Monitoring Programme in 2019 (where the Table reads no data). NE advised the Applicant to update the figures - and explore whether the changes warrant an updated PVA. The Applicant [REP3-033 and REP3-034] responded at Deadline 1 stating that the corrected data was acknowledged and had been reviewed. The Applicant stated it had confirmed that these small discrepancies would make no appreciable effect on the PVA outputs. NE's [REP3-146] updated Risk and Issues Log at Deadline 3 stated there had been no change on this matter by Deadline 3 and requested the Applicant clarify that these data have been incorporated into the assessment. NE's Deadline 5 updated Risk and Issues Log [REP5-091] also records no change at Deadline 5.</p> | <p>RIES-Q19: To the Applicant – Can the Applicant respond to this matter raised by NE and clarify whether these data have been incorporated into the assessment.</p> | <p>As set out in REP3-033 and REP3-034, it is confirmed by the Applicant that the amended data have been reviewed, but that these would have no appreciable effect on the PVA outputs, and hence the conclusion to the assessment. It is noted that the Applicant has concluded that an AEol cannot be ruled out, and that compensation is therefore proposed. Again, as the small discrepancies in the data would not affect the PVA outputs, there is also no effect on the compensation requirements. The Applicant considers this matter closed.</p> |
| 3.4.4 | | <p>At the point of issue of the RIES, the ExA understands that the Applicant's conclusions of no AEol are not yet agreed with the ANCB on the following sites and features, due to potential outstanding matters, as identified in Tables 3-1 to 3-4. Of the remaining outstanding matters detailed in Tables 3-1 to 3-4, the ExA seeks responses from the Applicant and the ANCB, where indicated.</p> <ul style="list-style-type: none"> • River Wensum SAC – white-clawed crayfish, bullhead, brook lamprey – construction phase risk of bentonite breakout. | | <p>As per the Joint Natural England and Applicant Position on HRA Conclusions and Derogation Requirements provided within Appendix A.2 of Supporting Documents for the Applicant's Responses to the Examining Authority's Fourth Written Questions [document reference 21.5.1], there remain a number of outstanding matters as described within each receptor group section within that document which the Applicant and Natural England are seeking to resolve and therefore a further update to that document will be provided at Deadline 8. Outstanding</p> |

| ID | Qualifying feature / matter | Details of matter / understanding of latest position | ExA observation / question | Applicant's Comment |
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| | | <ul style="list-style-type: none"> • North Norfolk Coast SPA and Ramsar – pink-footed goose (nonbreeding) – construction phase direct effects on wintering birds present in ex-situ habitats/functionally linked land to the SPA and Ramsar. • Humber Estuary SAC – grey seal – construction phase disturbance in-combination (see Table 3-3). • The Wash and North Norfolk Coast SAC – harbour seal – construction phase disturbance in-combination (see Table 3-3). • SNS SAC – harbour porpoise – construction phase disturbance in-combination (see Table 3-3). • FFC SPA – guillemot and razorbill – operational phase collision risk in-combination effects. • FFC SPA – seabird assemblage – operational phase collision risk in-combination effects. • Greater Wash SPA – RTD (non-breeding) – construction and O&M phase displacement/barrier effects during construction and operation in-combination. • Outer Thames Estuary SPA – RTD (non-breeding) – construction and O&M phase displacement/barrier effects during construction and operation in-combination. | | <p>matters remain in relation to offshore ornithology, marine mammals and terrestrial ecology.</p> <p>The Applicant also notes that with respect to the guillemot and razorbill features of the FFC SPA (and also as component species of the FFC assemblage feature), the impact pathway is in relation to operational phase disturbance, displacement and barrier effects rather than operational phase collision risk. The Applicant assumes the Examining Authority reference to this is a typographic error.</p> |

4 The Applicant's Response on the RIES Section 4: Derogations

5. **Table 5** below provides the Applicant's response on Section 4 of the RIES regarding derogations.

Table 5 The Applicant's Response on Section 4 Derogations of the RIES

| Paragraph Number | RIES Question / Extract | Question Addressed to | Applicant Response |
|------------------|---|-----------------------|--|
| 4.4.7 | <p>In response to the ExA's question (Q2.14.1.4 [PD-012]), NE advised that if compensatory measures remain undetermined by the close of the Examination, it is highly likely that the SoSESNZ would not be able to conclude that compensatory measures could be secured [REP3-147]. The availability or otherwise of compensatory measures should not affect decisions on alternative solutions and IROPI; where there is uncertainty about the effectiveness of the measures this would require "...provision at a higher impact:benefit ratio to take the increased level of risk into account" [REP3-147].</p> | N/A | <p>Since submitting the DCO application in September 2022, the Applicant has been maturing its compensatory measures proposals. This has involved a large body of work, including an extensive programme of stakeholder engagement and the formation of dedicated delivery teams to further develop key project-led measures for those sites and features where it has not been possible for the Applicant to rule out AEoI (i.e. NNC / GW SPA Sandwich tern and FFC SPA kittiwake). Whilst Heads of Terms are still to be agreed with the respective landowners, these discussions are progressing positively and letters of support received from Gateshead Council, Dumfries and Galloway Council and the land owner from within the preferred area of search at Loch Ryan have been provided within the HRA Derogation and Compensatory Measures Update (Revision C) [REP6-009]. Pre-application consultation has also commenced with Gateshead Council on the proposed modifications to the Saltmeadows Tower, which includes the concept designs.</p> <p>The Applicant is in the process of further developing the concept designs for the Saltmeadows tower upgrades and Loch Ryan and will provide an update to the HRA Derogation and Compensatory Measures Update (Revision C) [REP6-009] at Deadline 8 to draw together the latest information.</p> <p>Following a meeting between the Applicant and NE on 4th July 2023 the Applicant is also preparing an additional figure showing potential locations for the inland pool at Loch Ryan which will demonstrate the ability to site a pool within the current area of search that will meet the minimum size requirement and outline design criteria. This</p> |

| Paragraph Number | RIES Question / Extract | Question Addressed to | Applicant Response |
|------------------|-------------------------|-----------------------|--|
| | | | <p>has been presented in an update to the Sandwich Tern Compensation Document (Revision B) [document reference 5.5.2] at Deadline 7.</p> <p>With respect to 'impact:benefit' ratios specifically, the Applicant considers that these requirements have been addressed through the ongoing development of the measures as discussed. For the nest site improvements for kittiwake, NE has indicated that the Gateshead Kittiwake Tower Modification Quantification of Productivity Benefits (Revision B) [REP3-087] addressed its outstanding concerns [REP5-092]. For Sandwich tern, as noted above the Applicant has provided further information at Deadline 7 to provide further reassurance with respect to size and location of the inland pool and has been working with both NE and National Trust to develop a new proposal for compensation at Blakeney through predator control, details of which have also been provided in an update to the Sandwich Tern Compensation Document (Revision B) [document reference 5.5.2] at Deadline 7. The Blakeney measures, which have the support of NE and National Trust, are designed to support the 'primary' measure at Loch Ryan and therefore respond directly to the question of uncertainty.</p> <p>Schedule 17 of the Draft DCO (Revision J) [document reference 3.1] provisions that secure regular monitoring, reporting and implementation of adaptive management measures, if required. That adds confidence that the compensation measures will be successful in the longer term.</p> <p>In addition, the Applicant notes it has also put forward a model for the implementation of collaborative or strategic delivery of compensation measures that will potentially</p> |

| Paragraph Number | RIES Question / Extract | Question Addressed to | Applicant Response |
|------------------|-------------------------|-----------------------|--|
| | | | <p>come to maturity in the timescales that the Applicant would be delivering compensation measures in respect of SEP and DEP. For example, engagement with Defra has confirmed that the MRF could be available to developers as early as late 2023 (see Annex 1D Record of HRA Derogation Consultation [APP-068]). Based on industry engagement it is also considered possible that other suitable mechanisms for delivery of collaborative or strategic compensation could be available even sooner than this. The Applicant considers such measures could be implemented wholly or partly in substitution for project-led delivery of compensation measures, or as part of an adaptive management approach. The Applicant is continuing to explore these options and has sought flexibility in the Draft DCO (Revision J) [document reference 3.1] to be able to take advantage of future developments. The Applicant considers that including these measures within the overall compensation package increases its robustness.</p> <p>As such it is the Applicant's position that the level of detail provided at this stage is sufficient for the SoS to have confidence that the necessary compensation requirements for SEP and DEP can be successfully delivered.</p> <p>In addition to the above, the compensation measures are secured through a comprehensive and precedented legal mechanism in the draft Development Consent Order (Revision J) [document reference 3.1].</p> <p>The Applicant considers that the information submitted with the application and through the Examination (as outlined above) demonstrates that the proposed compensation measures are (a) ecologically suitable to deliver the necessary compensation, with a high degree of confidence, (b) practically deliverable, with a high degree</p> |

| Paragraph Number | RIES Question / Extract | Question Addressed to | Applicant Response |
|--------------------|--|-----------------------|---|
| | | | <p>of certainty, and (c) legally secured through a comprehensive and precedented legal mechanism. The Applicant does not consider there would be any basis for it to be said that the measures were “undetermined”. The ExA and the Secretary of State can have full confidence that compensation measures can be secured that will ensure the overall coherence of the National Site Network.</p> <p>The Applicant will continue to progress and develop the compensation measures described above with both landowner and planning proposals proceeding to support delivery in line with programmes set out in the HRA Derogation and Compensatory Measures Update (Revision C) [REP6-009]</p> |
| 4.4.17 | NE also suggested that a research project on sandwich tern prey species could also contribute to a package of compensatory measures for Sandwich tern [RR-063]. | N/A | The Applicant confirms that it has included provision for Sandwich tern prey availability monitoring within the Offshore In-Principle Monitoring Plan (Revision C) [document reference 9.5]. |
| 4.4.24 | However, if necessary, the Applicant could extend the period over which active management is undertaken at the Loch Ryan site [REP4-028]. NE remained concerned that the Applicant had not sufficiently ‘stress tested’ the possibility of a mortality debt arising [REP5-093]. It welcomed the suggestion of extending the period of active management but requested that this commitment should be included in the CIMP. | | Appendix 2 Sandwich Tern Compensation Document (Revision B) [document reference 5.5.2] now includes provision for extending the active management of the site beyond the operational period, if it is required. |
| RIES-Q20 4.4.28 | The Applicant is requested to provide an update on the work that has been completed for the Loch Ryan Sandwich tern compensatory measures. What further actions are required to develop the package of proposals? Will these actions be completed by the close of the Examination? | The Applicant | <p>As described above (4.4.7), the Applicant is in the process of further developing the concept designs for Loch Ryan and will provide:</p> <ul style="list-style-type: none"> - An additional figure (and supporting narrative) showing potential locations for the inland pool at Loch Ryan which will demonstrate the ability to site a pool within the current preferred area of search that will meet the minimum size requirement and outline |

| Paragraph Number | RIES Question / Extract | Question Addressed to | Applicant Response |
|------------------|-------------------------|-----------------------|--|
| | | | <p>design criteria. This has been presented in an update to the Sandwich Tern Compensation Document (Revision B) [document reference 5.5.2] at Deadline 7.</p> <ul style="list-style-type: none"> - A further revision to the HRA Derogation and Compensatory Measures Update (Revision C) [REP6-009] at Deadline 8 to draw together the latest information. <p>The work that the Applicant has completed in progressing the proposals at Loch Ryan includes:</p> <ul style="list-style-type: none"> - Ecology and engineering site visits, including: - Topographical survey - Preliminary Ecological Assessment (PEA) and National Vegetation Classification (NVC) survey - Otter, badger and water vole surveys - Preliminary bat roost assessment <p>Bird surveys (multiple visits) have also commenced and are approaching completion.</p> <p>The actions that will continue to be progressed after the close of the examination (which will inform the discussions with the Sandwich Tern Compensation Steering Group (STCSG) and the onward development of the Compensation Implementation and Monitoring Plan (CIMP)) include:</p> <ul style="list-style-type: none"> - Ongoing ecological surveys including groundwater monitoring, bat and reptile surveys. - Engagement with NE, NatureScot, SEPA and Dumfries and Galloway Council, including submission |

| Paragraph Number | RIES Question / Extract | Question Addressed to | Applicant Response |
|------------------|--|-----------------------|---|
| | | | <p>of a pre-application enquiry, EIA screening request (if required) and planning application.</p> <ul style="list-style-type: none"> - Landowner engagement with the aim of signing Heads of Terms and progressing option agreements. - Progressing design detail for individual locations <p>It is noted that the progress in this regard is broadly in line with the outline roadmap provided in the Sandwich Tern Compensation Document (Revision B) [document reference 5.5.2] at the point of application, which indicated that the concept design would be progressed in consultation with stakeholders alongside the carrying out of any necessary site surveys in Q1/Q2 2023, followed by obtaining any necessary agreements with landowners, planning permissions, consents and licenses between Q2-Q4 2023.</p> |
| 4.4.76 | At Deadline 5, NE advised that it was still not satisfied with the Applicant's calculation of displacement rates for guillemot and razorbill [REP5-092, REP5-093]. It considered that the calculations should consider adult auks which form part of the NSN network rather than those from the biogeographic population in general. | N/A | The Applicant has included within Appendix 4 Guillemot and Razorbill Compensation Document (Revision D) [document reference 5.5.4], calculations for the number of auks required to be 'saved' in order to deliver the required levels of compensation to the NSN population. |

Annex I

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| SEP DEP Reference Number | Designated Site |
|--------------------------|--------------------------------------|
| 5 | Alde-Ore Estuary |
| 8 | Auskerry |
| 17 | Benacre to Easton Bavents |
| 20 | Breydon Water |
| 21 | Broadland |
| 22 | Buchan Ness to Collieston Coast |
| 23 | Calf of Eday |
| 27 | Copinsay |
| 28 | Coquet Island |
| 41 | East Caithness Cliffs |
| 42 | East Mainland Coast, Shetland |
| 46 | Fair Isle |
| 50 | Farne Islands |
| 51 | Firth of Tay and Eden Estuary |
| 53 | Flamborough and Filey Coast |
| 54 | Forth Islands |
| 55 | Foula |
| 56 | Fowlsheugh |
| 57 | Gibraltar Point |
| 58 | Great Yarmouth North Denes |
| 59 | Greater Wash |
| 70 | Hermaness, Saxa Vord and Valla Field |
| 73 | Hornsea Mere |
| 74 | Hoy |
| 76 | Humber Estuary |
| 78 | Imperial Dock Lock, Leith |
| 86 | Loch of Strathbeg |

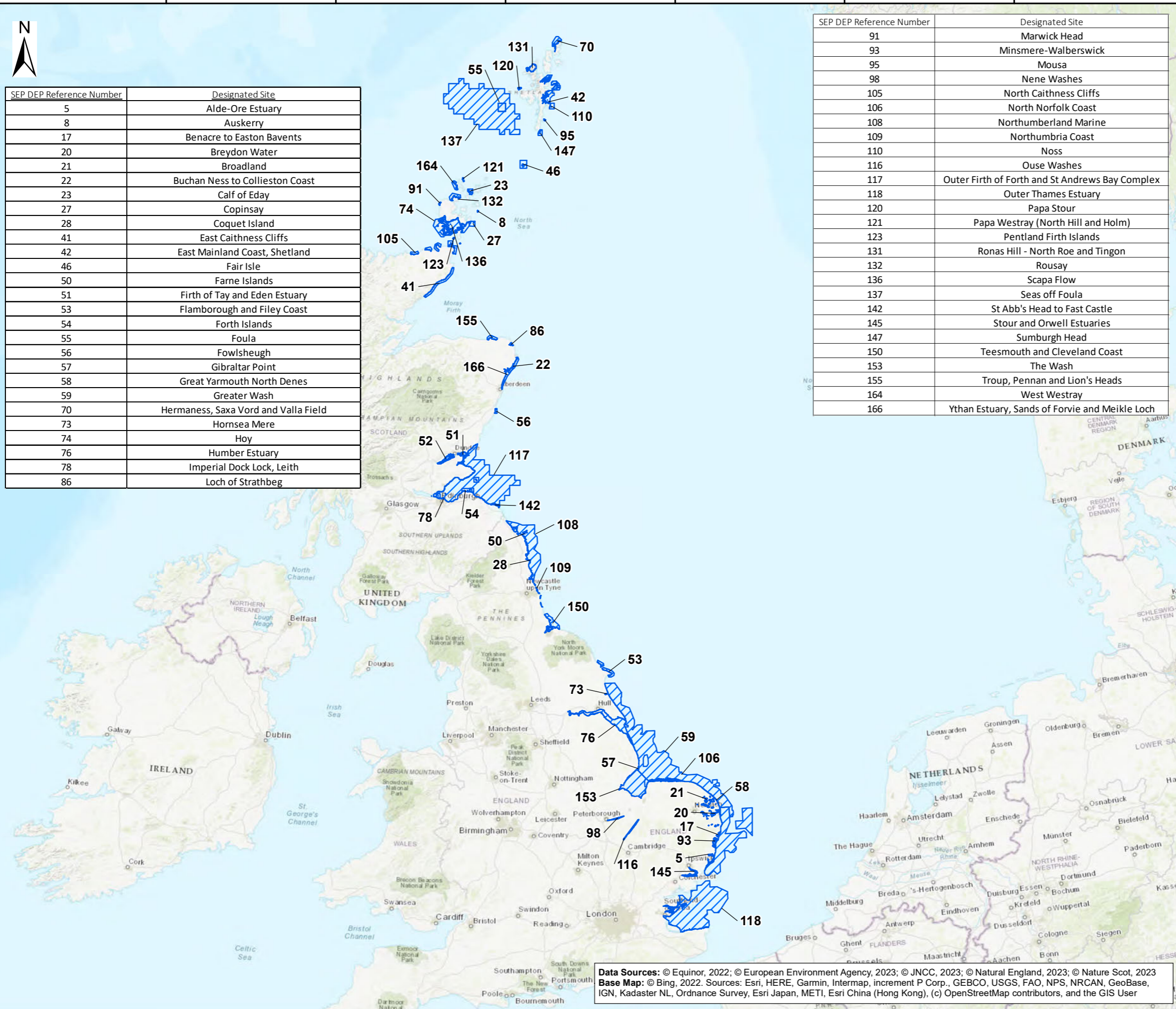
| SEP DEP Reference Number | Designated Site |
|--------------------------|---|
| 91 | Marwick Head |
| 93 | Minsmere-Walberswick |
| 95 | Mousa |
| 98 | Nene Washes |
| 105 | North Caithness Cliffs |
| 106 | North Norfolk Coast |
| 108 | Northumberland Marine |
| 109 | Northumbria Coast |
| 110 | Noss |
| 116 | Ouse Washes |
| 117 | Outer Firth of Forth and St Andrews Bay Complex |
| 118 | Outer Thames Estuary |
| 120 | Papa Stour |
| 121 | Papa Westray (North Hill and Holm) |
| 123 | Pentland Firth Islands |
| 131 | Ronas Hill - North Roe and Tingon |
| 132 | Rousay |
| 136 | Scapa Flow |
| 137 | Seas off Foula |
| 142 | St Abb's Head to Fast Castle |
| 145 | Stour and Orwell Estuaries |
| 147 | Sumburgh Head |
| 150 | Teessmouth and Cleveland Coast |
| 153 | The Wash |
| 155 | Troup, Pennan and Lion's Heads |
| 164 | West Westray |
| 166 | Ythan Estuary, Sands of Forvie and Meikle Loch |

Sheringham Shoal and Dudgeon Extension Projects

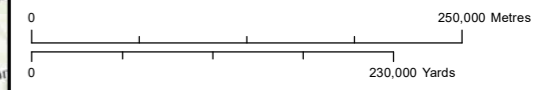
Title: UK SPA & RAMSAR Designations
 Document: Applicant Comments on the RIES

Application Doc. no.: 21.2

Legend:
 Special Protection Area (SPA)



Coordinate Reference System: British National Grid



Scale: 1:4,400,000

Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00013
 RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0304

| REV | DATE | STATUS | DRW | CHK | APR |
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| A | 06/07/2023 | First Issue | SB | PM | AP |

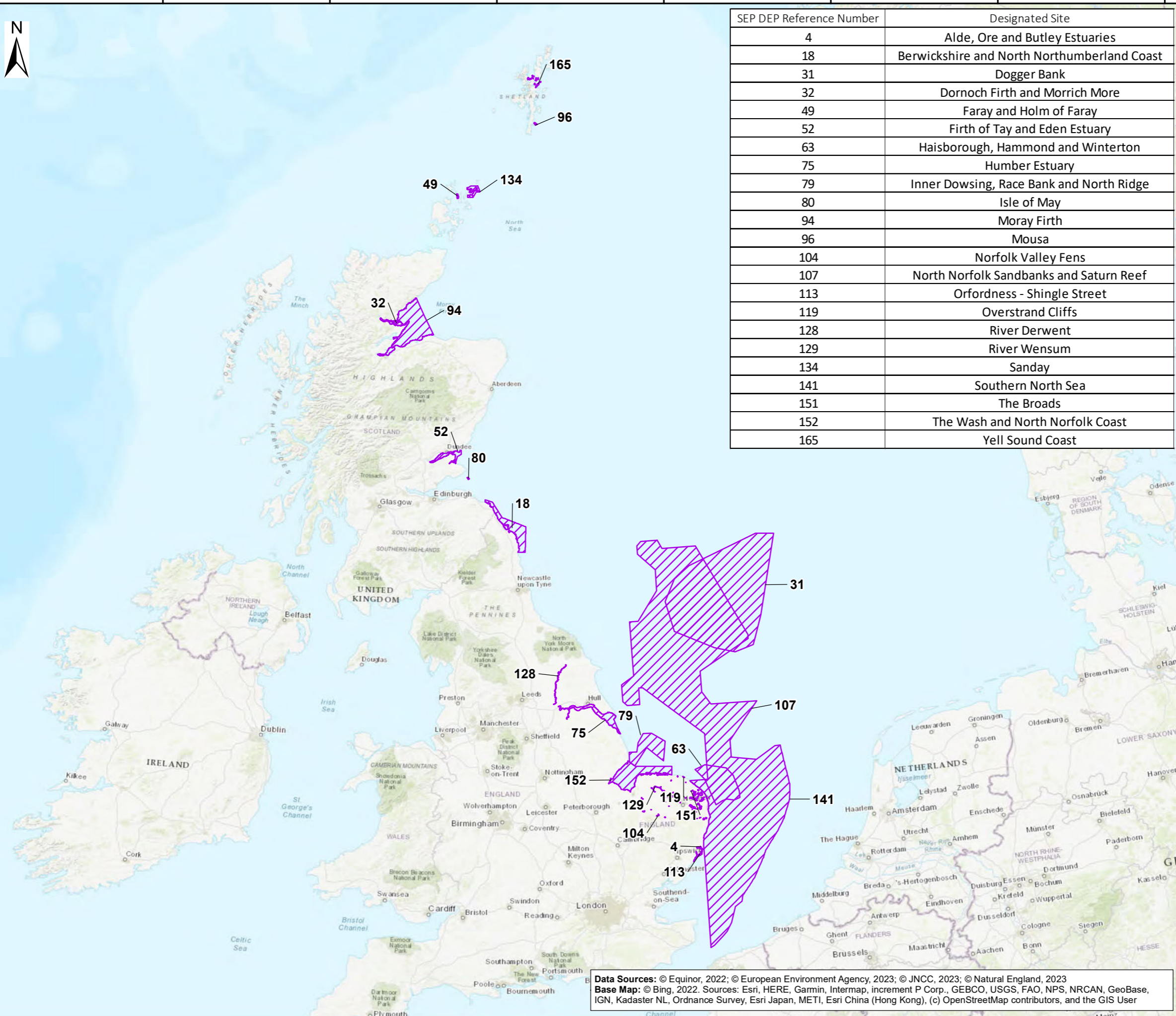
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| SEP DEP Reference Number | Designated Site |
|--------------------------|---|
| 4 | Alde, Ore and Butley Estuaries |
| 18 | Berwickshire and North Northumberland Coast |
| 31 | Dogger Bank |
| 32 | Dornoch Firth and Morrich More |
| 49 | Faray and Holm of Faray |
| 52 | Firth of Tay and Eden Estuary |
| 63 | Haisborough, Hammond and Winterton |
| 75 | Humber Estuary |
| 79 | Inner Dowsing, Race Bank and North Ridge |
| 80 | Isle of May |
| 94 | Moray Firth |
| 96 | Mousa |
| 104 | Norfolk Valley Fens |
| 107 | North Norfolk Sandbanks and Saturn Reef |
| 113 | Orfordness - Shingle Street |
| 119 | Overstrand Cliffs |
| 128 | River Derwent |
| 129 | River Wensum |
| 134 | Sanday |
| 141 | Southern North Sea |
| 151 | The Broads |
| 152 | The Wash and North Norfolk Coast |
| 165 | Yell Sound Coast |

Sheringham Shoal and Dudgeon Extension Projects

Title:
UK SAC Designations

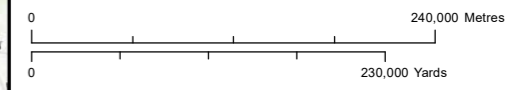
Document:
Applicant Comments on the RIES

Application Doc. no.: 21.2

Legend:
 Special Area of Conservation (SAC)



Coordinate Reference System: British National Grid



Scale: 1:4,500,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00013
 RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0305

| REV | DATE | STATUS | DRW | CHK | APR |
|-----|------------|-------------|-----|-----|-----|
| A | 06/07/2023 | First Issue | SB | PM | AP |

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| SEP DEP Reference Number | Designated Site |
|--------------------------|--|
| 12 | Baie de Seine Occidentale SPA (France) |
| 47 | Falaise du Bessin Occidental SPA (France) |
| 85 | Littoral Seino-Marin SPA (France) |
| 114 | SPA Östliche Deutsche Bucht |
| 138 | Seevogelschutzgebiet Helgoland SPA (Germany) |




Sheringham Shoal and Dudgeon Extension Projects

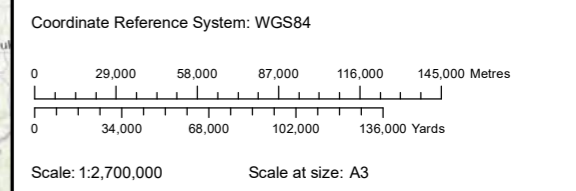
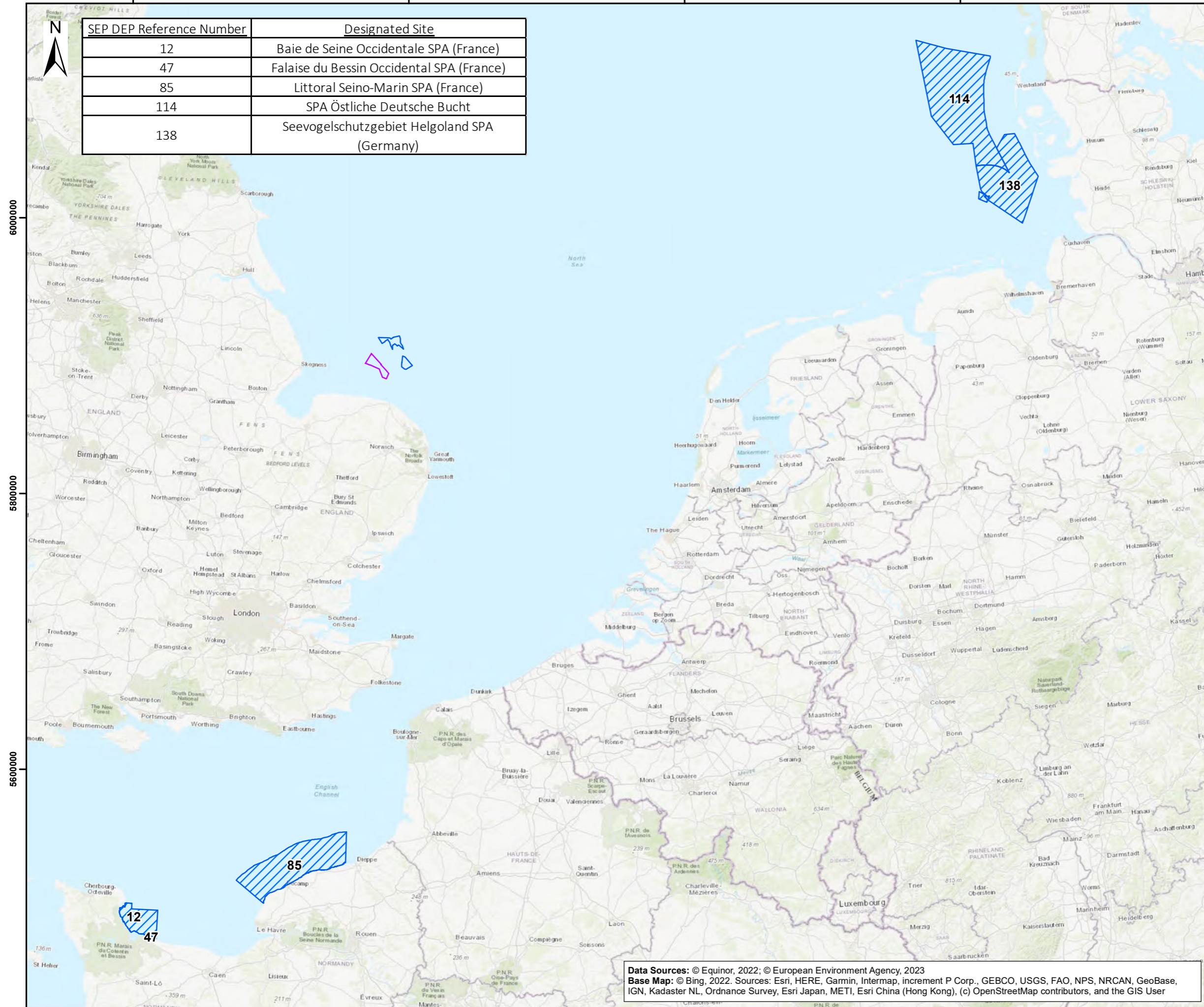
Title: European SPA & RAMSAR Designations

Document: Applicant Comments on the RIES

Application Doc. no.: 21.2

Legend:

-  Dudgeon Extension Project Wind Farm Site
-  Sheringham Shoal Extension Project Wind Farm Site
-  Special Protection Area (SPA)

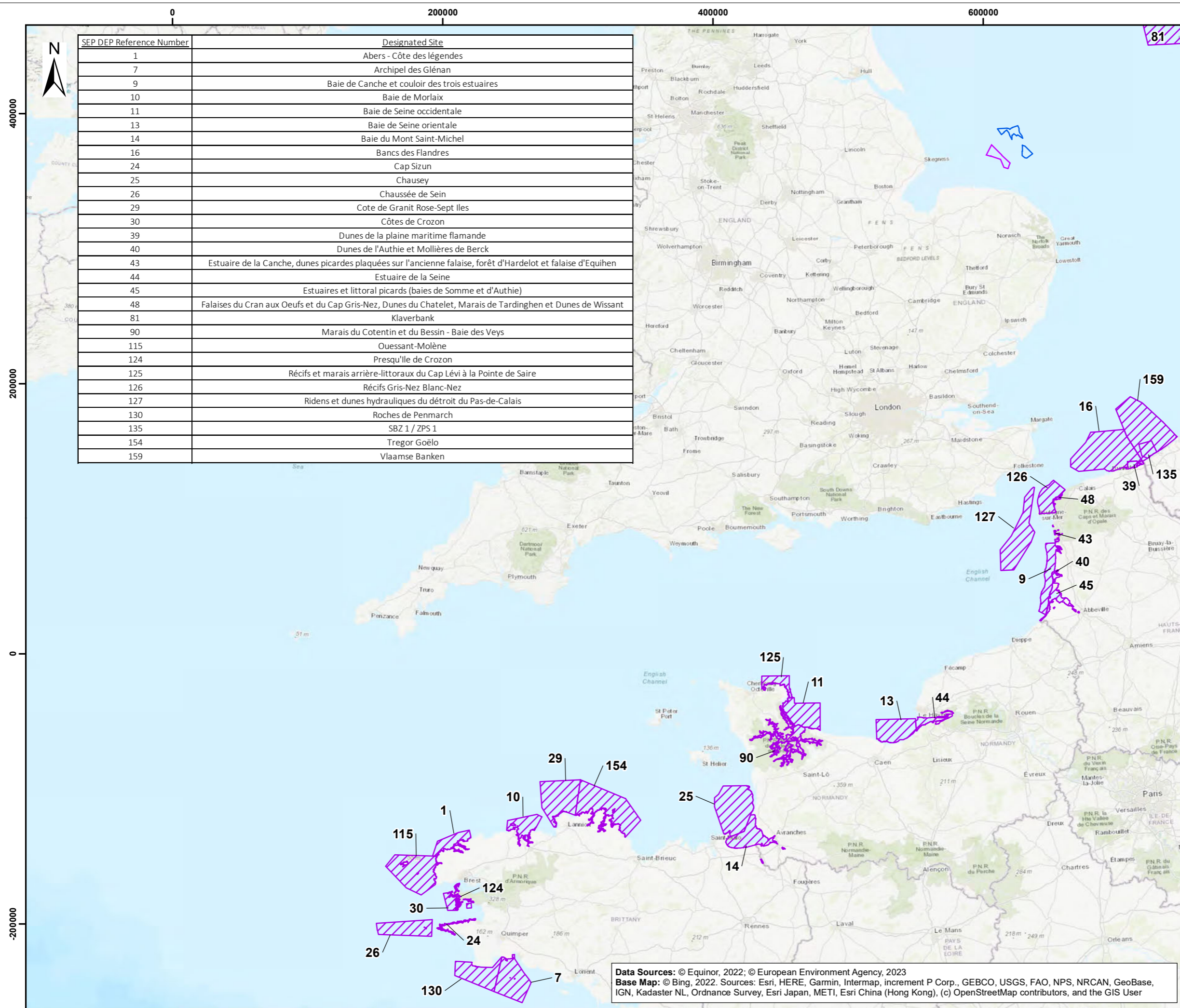


Equinor Doc. no.: C282-RH-Z-GA-00013
 RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0300

| REV | DATE | STATUS | DRW | CHK | APR |
|-----|------------|-------------|-----|-----|-----|
| A | 06/07/2023 | First Issue | SB | PM | AP |

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| SEP DEP Reference Number | Designated Site |
|--------------------------|--|
| 1 | Abers - Côte des légendes |
| 7 | Archipel des Glénan |
| 9 | Baie de Canche et couloir des trois estuaires |
| 10 | Baie de Morlaix |
| 11 | Baie de Seine occidentale |
| 13 | Baie de Seine orientale |
| 14 | Baie du Mont Saint-Michel |
| 16 | Bancs des Flandres |
| 24 | Cap Sizun |
| 25 | Chausey |
| 26 | Chaussée de Sein |
| 29 | Cote de Granit Rose-Sept Iles |
| 30 | Côtes de Crozon |
| 39 | Dunes de la plaine maritime flamande |
| 40 | Dunes de l'Authie et Mollières de Berck |
| 43 | Estuaire de la Canche, dunes picardes plaquées sur l'ancienne falaise, forêt d'Hardelot et falaise d'Equihen |
| 44 | Estuaire de la Seine |
| 45 | Estuaires et littoral picards (baies de Somme et d'Authie) |
| 48 | Falaises du Cran aux Oeufs et du Cap Gris-Nez, Dunes du Chatelet, Marais de Tardinghen et Dunes de Wissant |
| 81 | Klaverbank |
| 90 | Marais du Cotentin et du Bessin - Baie des Veys |
| 115 | Ouessant-Molène |
| 124 | Presqu'île de Crozon |
| 125 | Récifs et marais arrière-littoraux du Cap Lévi à la Pointe de Saire |
| 126 | Récifs Gris-Nez Blanc-Nez |
| 127 | Ridens et dunes hydrauliques du détroit du Pas-de-Calais |
| 130 | Roches de Penmarch |
| 135 | SBZ 1 / ZPS 1 |
| 154 | Tregor Goëlo |
| 159 | Vlaamse Banken |

Sheringham Shoal and Dudgeon Extension Projects

Title: European SAC Designations (France)

Document: Applicant Comments on the RIES

Application Doc. no.: 21.2

- Legend:
- Dudgeon Extension Project Wind Farm Site
 - Sheringham Shoal Extension Project Wind Farm Site
 - Special Areas of Conservation & Sites of Community Importance



Coordinate Reference System: WGS84

0 29,000 58,000 87,000 116,000 145,000 Metres
 0 34,000 68,000 102,000 136,000 Yards

Scale: 1:2,700,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00013
 RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0302

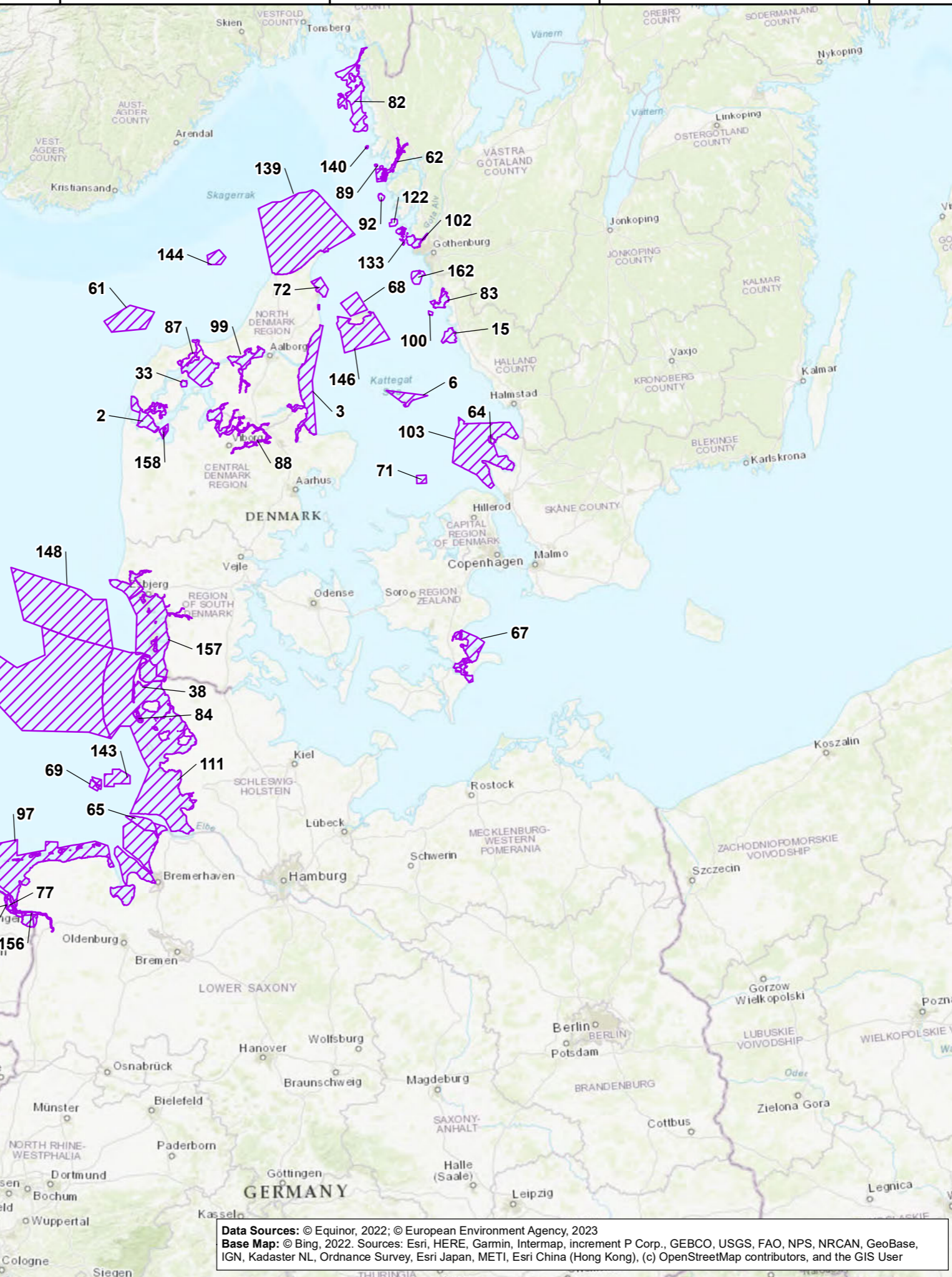
| REV | DATE | STATUS | DRW | CHK | APR |
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| A | 06/07/2023 | First Issue | SB | PM | AP |

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0 200000 400000 600000 800000 1000000

| SEP DEP Reference Number | Designated Site |
|--------------------------|---|
| 2 | Agger Tange, Nissum Bredning, Skibsted Fjord og Aggerø |
| 3 | Ålborg Bugt, Randers Fjord og Mariager Fjord |
| 6 | Anholt og havet nord for |
| 15 | Balgø |
| 19 | Borkum-Riffgrund |
| 33 | Dråby Vig |
| 34 | Duinen Ameland |
| 35 | Duinen en Lage Land Texel |
| 36 | Duinen Goeree & Kwade Hoek |
| 37 | Duinen Vlieland |
| 38 | Dünenlandschaft Süd-Sylt |
| 60 | Grevelingen |
| 61 | Gule Rev |
| 62 | Gullmarsfjorden |
| 64 | Hallands Väderö |
| 65 | Hamburgisches Wattenmeer |
| 66 | Haringvliet |
| 67 | Havet og kysten mellem Præstø Fjord og Grønsund |
| 68 | Havet omkring Nordre Rønner |
| 69 | Helgoland mit Helgoländer Felssockel |
| 71 | Hesselø med omliggende stenrev |
| 72 | Hirsholmene, havet vest herfor og Ellinge Å's udløb |
| 77 | Hund und Paapsand |
| 82 | Kosterfjorden-Våderfjorden |
| 83 | Kungsbackafjorden |
| 84 | Küsten- und Dünenlandschaften Amrums |
| 87 | Løgstør Bredning, Vejlerne og Bulbjerg |
| 88 | Lovns Bredning, Hjarbæk Fjord og Skals, Simested og Nørre Ådal, Skravad Bæk |
| 89 | Malmøfjord |
| 92 | Måseskär |
| 97 | Nationalpark Niedersächsisches Wattenmeer |
| 99 | Nibe Bredning, Halkær Ådal og Sønderup Ådal |
| 100 | Nidingen |
| 101 | Noordzeekustzone |
| 102 | Nordre ålvs estuarium |
| 103 | Nordvästra Skånes havsområde |
| 111 | NTP S-H Wattenmeer und angrenzende Küstengebiete |
| 112 | Oosterschelde |
| 122 | Pater Noster-skärgården |
| 133 | Sälöfjorden |
| 139 | Skagens Gren og Skagerak |
| 140 | Soteskär |
| 143 | Steingrund |
| 144 | Store Rev |
| 146 | Strandenge på Læsø og havet syd herfor |
| 148 | Sydlige Nordse |
| 149 | Sylter Außenriff |
| 156 | Unterems und Außenems |
| 157 | Vadehavet med Ribe Å, Tved Å og Varde Å vest for Varde |
| 158 | Venø, Venø Sund |
| 161 | Voordelta |
| 162 | Vrångskärgården |
| 163 | Waddenzee |



Sheringham Shoal and Dudgeon Extension Projects

Title: European SAC Designations (excluding France)

Document: Applicant COMMENTS on the RIES

Application Doc. no.: 21.2

- Legend:
- Dudgeon Extension Project Wind Farm Site
 - Sheringham Shoal Extension Project Wind Farm Site
 - Special Areas of Conservation & Sites of Community Importance

6400000
6200000
6000000
5800000



Coordinate Reference System: WGS84

0 37,500 75,000 112,500 150,000 187,500 Metres

0 45,000 90,000 135,000 180,000 Yards

Scale: 1:3,500,000 Scale at size: A3

Equinor Doc. no.: C282-RH-Z-GA-00013
RHDHV Doc. no.: PB8164-RHD-ZZ-OF-DR-Z-0303

| REV | DATE | STATUS | DRW | CHK | APR |
|-----|------------|-------------|-----|-----|-----|
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