NORTH FALLS

Offshore Wind Farm

Applicant's Response to Natural England's Deadline 4 submissions

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1. INTRODUCTION

1.1 Introduction

1.1.1 This document has been prepared by North Falls Offshore Wind Farm Limited ('the Applicant') in relation to the North Falls Offshore Wind Farm (hereinafter referred to as 'North Falls' or the 'Project').

1.1.2 The Examining Authority's Rule 8 letter **[PD-008]** confirmed that Deadline 4 for the Examination was Friday 25 April 2025.

1.1.3 This document has been prepared by the Applicant for submission at Deadline 5 on Friday 30 May 2025, and responds to submissions received at Deadline 4 from Natural England.

1.2 Purpose of the document

1.2.1 This document presents the Applicant's response to the following Natural England's Deadline 4 submissions:

- Appendix B4 **[REP4-058]**: Natural England's comments on Further Information Regarding Seabed and Bedform Mobility, and Implications for Sand Wave Recovery after Levelling (Rev 0);
- Appendix E4 **[REP4-059]**: Natural England's comments on Further Information Regarding Marine Mammals;
- Appendix G4.1 **[REP4-060]:** Natural England's LBBG Compensation Advice on the Applicants Deadline 1 Documents;
- Appendix G4.2 **[REP4-061]**: Natural England's Guillemot and Razorbill Advice on the Applicant's Deadlines 1 and 3 Documents;
- Appendix G4.3 **[REP4-062]**: Natural England's Kittiwake Compensation Advice on the Applicant's Deadlines 1 and 2 Documents;
- Appendix G4.4 **[REP4-063]**: Natural England's comments on HRA Shadow AA for Guillemot at the Farne Islands;
- Appendix H4.1 **[REP4-064]**: Natural England's Proposed LBBG Compensation Sites Advice on the Applicant's Deadline 1 Documents;
- Appendix H4.2 **[REP4-065]**: Natural England's Biodiversity Net Gain Advice on the Applicants Deadline 1 and 3 Documents;
- Appendix I4 **[REP4-066]**: Natural England's SLVIA Advice on the Applicants Deadline 2 and 3 Documents; and
- Appendix K4 **[REP4-067]** Natural England's Risk and Issues Log.

2. APPLICANT'S RESPONSE TO NATURAL ENGLAND'S DEADLINE 4 SUBMISSIONS

2.1 Applicant's Response to Natural England's comments regarding Appendix B4 [REP4-058] (Seabed and Bedform Mobility)

Table 2.1 Applicant's Response to Natural England's comments regarding Appendix B4 [REP4-058]

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice at D4 to Resolve Issue	Applicant's Response
REP4-058_a	1	11	Natural England welcomes the additional information provided by the Applicant on the sandwave fields identified within the proposed order limits. Two primary sandwave fields have been identified within the offshore export cable corridor (OECC) and two within the array. These sandwave fields are the areas where it is anticipated that sandwave levelling will be required. There is no mention in the note whether identification of specific sandwave levelling locations has enabled the Applicant to reduce the worst-case scenario (WCS) sediment disturbance volume due to sandwave levelling, accordingly. It would be helpful if this could be clarified.	We seek clarification from the Applicant as to whether the WCS sandwave levelling sediment disturbance volumes, as presented in the ES, can now be reduced in line with the refinement of anticipated sandwave levelling areas.	Revised volumes were provided in the Supporting Information on Offshore Additional Mitigation [**REP4-041]** at Deadline 4.
REP4-058_b	2	Figures 2.3-2.15	The bathymetric survey data presented in this technical note are helpful for characterising the bedforms and their geometry, which we welcome. However, direction of bedform movement has been derived from a single dataset of bathymetric surveys (May-Sept 2021). Therefore, while the survey data presented may give an indication of bedform movement direction at the time of the survey (i.e. a snapshot), bedform migration analysis requires high-resolution, time-lapse bathymetry, from multiple surveys carried out over the same area of seabed at different times. This should enable the monitoring of the change in the sandwave crest position and estimation of sandwave migration direction and rates. Moreover, by estimating the lowest observed sandwave trough that could migrate to a given point along the centreline (actual location of the cable) during the project lifetime, this will provide a vertical reference level for sandwave levelling and reduce the risk of cable exposure.	We advise that further bedform migration analysis will be needed using high-resolution, time-lapse bathymetry from multiple surveys carried out over the same area of seabed at different times. This should be considered in the pre- and post-construction monitoring scope and methodology (i.e. captured in the IPMP).	The Applicant agrees that additional surveys of the sand wave fields would enable quantification of the migration rates for each of them and would also add to the evidence base regarding the recovery of the sand waves after levelling. Pre- and post-construction monitoring of specific parts (to be agreed with the MMO) of the offshore cable corridor and array area containing sand waves will be completed and outlined in an updated version of the IPMP to be submitted at Deadline 6.
REP4-058_c	3	2.21/Para 13	Natural England notes that whilst consideration has been given to particle size distribution; no consideration has been given to the relative importance of water depth, waves, and tides, in driving seabed mobility and morphological change. However, it is suggested that the sandwaves observed in the west of the OECC and in the	As advised above, further repeat surveys will be needed to support the conclusions made regarding long-term stability of the bedforms, and to quantify their migration direction and rate. Consideration will also need to be given to water depth, and the relative importance of	In all cases, the physical presence and large size of the bedforms indicates that they are in dynamic equilibrium with the driving physical processes and would not be prone to significant changes in geometry and direction of movement in the future (i.e. their size or migration direction is unlikely to change) and would be stable over

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice at D4 to Resolve Issue	Applicant's Response
			southern part of the array will be stable over the long-term. Furthermore, as noted above, the conclusions of long-term bedform stability, bedform migration and sediment transport direction have been based on one dataset of bathymetric surveys. Therefore, we do not believe there is sufficient information to support the conclusions of likely bedform stability over the long-term.	waves and tides for seabed mobility and driving morphological change. As detailed above, Natural England welcomes the additional information presented but note that the evidence remains limited. Therefore, based on the information presented, we believe there is a low risk of marine processes being significantly impacted. However, we recommend that surveys will be required pre consent and post consent to verify predictions.	the long-term. This is regardless of the specifics of the physical processes that drive them. Indeed, sand wave migration is not driven by waves and the water depths are typically greater than 20m and so below wave base. The driver of the sand waves is tidal currents with appropriate magnitude and an adequate supply of sediment to be able to form them. Given the presence of the bedforms and their size, both requirements are met here. The Applicant agrees that this would be substantiated by additional surveys, and these will be part of the IPMP to be submitted at Deadline 6 as described above. The Applicant reiterates the conclusions of the assessment presented in ES Chapter 8 Marine Geology, Oceanography and Physical Processes **[APP-022]** that marine processes would not be significantly impacted by North Falls.
REP4-058_d	4	2.4/Para 30	It is expected that sandwave recovery will occur within a few days to a year (based on evidence from Race Bank Larsen et al. 2019). However, Natural England notes that the report only showed a trajectory towards recovery and not full recovery.). In addition, we note that currently, there are no specific details in the IPMP [APP-245] on the proposed sandwave recovery monitoring scope, methodology and programme. There are also no measures of success or triggers for intervention. (Although, we understand that the scope of the surveys, programmes and methodology will be submitted to the MMO for approval prior to the survey works commencing.) Consequently, we advise that sufficient evidence will need to be gathered pre- and post-construction to validate these predictions of sandwave recovery.	We advise that it is important to gather sufficient evidence pre-construction to validate the predictions of sandwave recovery. We also refer to our advice and guidance on IPMPs in **[REP2-053]**.	The Applicant agrees that additional surveys of the sand wave fields would add to the evidence base regarding the recovery of the sand waves after levelling. Pre- and post-construction monitoring of specific parts (to be agreed with MMO) of the offshore cable corridor and array area containing sand waves will be completed and outlined in an updated version of the IPMP to be submitted at Deadline 6.

2.2 Applicant's Response to Natural England's comments regarding Appendix E4 [REP4-059] (Marine Mammals)

Table 2.2 Applicant's Response to Natural England's comments regarding Appendix E4 [REP4-059]

Ref	Section	Natural England Comments	Applicant's Response
		Overview	
REP4-059_a		Natural England welcomes the updates the Applicant has made in line with our advice regarding: • the sensitivity of seals to disturbance whereby the assigned sensitivity score has been changed to 'Medium' (Section 2.1.1)	The Applicant acknowledges Natural England's review and appreciates the feedback. Responses in relation to Natural England's further comments have been made below.

Ref	Section	Natural England Comments	Applicant's Response
		• the cut-off for inclusion of other Offshore Wind Farms (OWFs) into the Cumulative Effect Assessment (CEA) and in-combination assessment and inclusion of the projects with unknown construction timelines (Section 2.6) • the correction to the RIAA Part 3 relating to SNS SAC summer area (Section 3.2) However, with regards to the iPCoD modelling, Natural England strongly disagrees with the Applicants conclusions for the following reasons: • Over reliance on iPCoD as the main assessment tool • Apparent 'cherry-picking' of the least impactful outcomes resulting in non-significant effects • Assessment has not been carried out based on the most conservative method (for the project alone, cumulative, and in-combination) • Approach is not in line with EIA methodology.	
		Section 2.2 – Risk of Collison with Vessels	
REP4-059_b		Natural England notes that the Applicant maintains its position regarding the risk of collision sensitivities used in the Environmental Statement (ES) (Section 2.1.2). We uphold our original advice that sensitivity to collision risk should be '*Medium*' for all species due to the potential severity of the impact resulting in injury or death of the animal. We acknowledge the references used to justify the Applicant's position, however other stranding datasets from the North Sea (Frontiers | Pathological findings in stranded harbor porpoises (Phocoena phocoena) with special focus on anthropogenic causes) show that 4% of stranded harbour porpoises (25 out of 612) died due to anthropogenic causes (and most likely due to ship collisions). Thus, despite the low likelihood, the potential for injury and death remains of concern. Natural England welcomes the clarification regarding calculation of the number of marine mammals at risk due to increase in vessel numbers. We are also content with the additional information provided (Section 2.2).	The Applicant has noted Natural England's comment. The Applicant maintains its position that the approach applied is precautionary and proportional to the impact taking into account each species behaviour and sensitivity. However, for information purposes the assessment has been reviewed using a 'medium' sensitivity for all species, and the findings of this are within Marine Mammal Assessment Clarifications submitted at Deadline 5 **[9.81, (Rev 0)]**.
		Section 2.5 – Clarification for iPCoD Modelling	
REP4-059_c		Natural England maintains its position regarding the Applicant's iPCoD modelling, and we do not consider that the Applicant has addressed our comments sufficiently. Instead of giving due consideration to all assessment methods, the Applicant has relied on iPCoD as the primary assessment method, upon which outcomes and conclusions are based. Moreover, there are significant issues with the assessment presented in this document with an apparent 'cherry-picking' of the least impactful outcomes, resulting in non-significant effects. Natural England considers this approach not to be in line with our advice nor with the precautionary principle of the EIA methodology. Therefore, we reiterate our original advice in our Relevant Representation **[RR-243]**: *"Natural England does not agree with the project-alone assessment of disturbance impacts from piling as we have concerns with how the results of the interim Population Consequences of Disturbance (iPCoD) modelling are presented. We also advise that the impact significance is presented based on each approach taken to assessing disturbance, not just based on the iPCoD modelling. We cannot agree with the assessment conclusions of the project-alone disturbance effects at this stage."*	The Applicant notes Natural England's comment, however, all the different approaches used have been previously presented for the project-alone impacts either in the ES Chapter 12 **[APP-026]** or in the 9.14 Further Information Regarding Marine Mammals technical note **[REP1-057]**. As outlined in Section 2.2.1 in Marine Mammal Assessment Clarifications **[9.81, (Rev 0)]** submitted at Deadline 5], the iPCoD modelling has been used as a tool alongside the other methods (EDR and dose response) for assessing the impacts of disturbance for project-alone piling. In order to provide further clarification and make clear that using all the different approaches lead to a minor adverse significance of effect for all species during project-alone piling, this has been detailed within Section 2.2.1 in Marine Mammal Assessment Clarifications submitted at Deadline 5 **[9.81, (Rev 0)]**. The Marine Mammal Assessment Clarifications **[9.81, (Rev 0)]** provides further information for the overall cumulative assessments. The Project's stance on mitigation options has also been updated in the Draft MMMP (**[7.7 (Rev 2)]**, submitted at Deadline 5) and Outline SIP (**[7.8, (Rev 1)]** submitted at Deadline 5).

Ref	Section	Natural England Comments	Applicant's Response
		"Natural England advises that the significance of the disturbance impact must be presented for each of the approaches used to determine cumulative disturbance, dose-response, and population modelling (iPCoD) in this case. Each approach and subsequent assessment of impact significance provides necessary information for Natural England to inform its advice. *"We advise that the Applicant should not present the iPCoD modelling results alone, and that an assessment of cumulative impacts to cetacean species is presented using the approach that generates the worst-case numbers disturbed."* In general, Natural England views the iPCoD as a tool to help support the conclusions of the assessment that had not been supported by robust evidence[1]. However, we acknowledge the evidence gaps in the relationship between sound, disturbance and population impacts and assumptions and uncertainties built into the model. Furthermore, there is limited understanding of how disturbance leads to health, reproduction and consequently population level impacts in marine mammals. Thus, the results of the model are only **an indication** of the possible population impacts and should be interpreted with **caution**. Although the model can be used as a tool alongside other methods for assessing the impacts of disturbance (EDR and dose response), it does not mean the results of the modelling should dictate the final significance conclusion. Going forward, a new iPCoD model iteration using species energetics will be published imminently which would provide a higher level of confidence in the outputs.	The Applicant maintains that, considering the overall evidence base, including the number of animals impacted at any one time and the duration of effects, the magnitude of the effect based on the population modelling is the most appropriate and proportional to determine the overall cumulative significance of effects. Other relevant consented offshore windfarms (OWFs) that have taken this approach include Awel Y Mor and Sheringham Shoal Extension Project and Dudgeon Extension Project.
		Section 2.5.1 - Clarifications to the Project Alone impacts from Underwater Noise due to Piling Assessment	
REP4-059_d1	2.5.1.1	Harbour porpoise - The magnitude of impact to harbour porpoise for project alone using the dose response approach is Medium, which when combined with a medium sensitivity, leads to a Moderate impact significance. Thus, the dose response method should be used to inform the conclusions of the assessment being more precautionary than the IPCoD modelling outcomes. Natural England does not support the Applicant's method of defining significance from the iPCoD model results for the project alone. The method is not conservative as other threats (such as bycatch, prey availability and shipping) which also impact populations, are not included in the model.	The magnitude of impact for harbour porpoise using the dose response method for the project alone impacts was assessed as negligible due to less than 1% of the reference population being disturbed, as seen in Table 12.34 in Chapter 12 Marine Mammals **[APP-026]**. Therefore, the conclusion remains the same.
REP4-059_d2	Table 2.9	Natural England questions the predicted outcomes for harbour seals whereby the 'mean impacted as % of unimpacted' is higher than 100%.	The Applicant notes Natural England's comment and has provided an explanation for these results in Section 2.2.3 in the Marine Mammal Assessment Clarifications submitted at Deadline 5 **[9.81, (Rev 0)]**.
		Section 2.6 – Cumulative Assessment	
REP4-059_e1	Table 2.10	Cumulative disturbance for harbour porpoise due to piling using dose response shows that over 30,000 harbour porpoises (9.09% of the NS MU) could be disturbed during a single piling event. This is a marked contrast to the iPCoD modelling predicting a negligible effect on the harbour porpoise population over time due to piling (Table 2-13). Thus, the dose response outcome cannot be ignored.	Further information on the dose response and the iPCoD assessment has been provided within Marine Mammal Assessment Clarifications submitted at Deadline 5. **[9.81, (Rev 0)]**. Further assessment information has been provided within Table 2.3. The dose response outcome has been taken into consideration accordingly. The Project's stance on mitigation options has been clarified in the updated Draft MMMP (**[7.7, (Rev 2)]** submitted at Deadline 5) and Outline SIP (**[7.8, (Rev 1)]** submitted at Deadline 5).

[1] Here in most case, the assessment outcomes based on the dose response were robust enough not to warrant to be replaced and dominated by iPCoD.

Ref	Section	Natural England Comments	Applicant's Response
REP4-059_e2	Table 2.14	The iPCoD modelling predicted a decline in the minke whale population of up to 7.25% over the modelled period and a decline of 3.49% over the first five years. This decline is of concern and thus cannot be classed as non-significant. We disagree with the conclusion: *"For minke whale, the potential magnitude of impact for the CEA for disturbance from underwater noise from piling is assessed as low, due to there being less than a 1% population level impact on average per year over the first six years…"* The justification of less than 1% decline on average per year is not robust enough to conclude non-significant effects.	This assessment was updated in Section 2.6.2.2 of document 9.14 Further Information Regarding Marine Mammals **[REP1-057]** to include the updated screening information. The updated results indicated a decline of less than 1% of the population on average per year within the first six years, and a predicted decline of 6.52% over the full 25-year modelled period. As less than 1% of the population was predicted to be affected after the first six years but not over the full period the magnitude of effect was assessed as low rather than negligible. There is a lack of guidance for assessing outputs of population modelling, however, an NRW position statement (2023) indicates, if as a result of permanent threshold shift (PTS), which has been incorporated in to all population modelling, a population shows a continued annual decline of >1% per year (versus a modelled unimpacted reference population) over a set period of time (e.g., the first six years, based on the former Favourable Conservation Status (FCS) reporting period), then there is a high likelihood that a significant effect cannot be ruled out (NRW, 2023). The 2023 position statement by NRW notes that this threshold could be used as one possible method to determine the significance of behavioural disturbance on a population, based on the iPCoD outputs. However, this guidance is intended for consideration of PTS and remains under development. In absence of other guidance, the Applicants maintain that a 1% decline per year threshold remains a valid way to review results of population modelling to draw overall assessment conclusions.
REP4-059_e3	Table 2.17	The outputs of the modelling for '*mean impacted as % of unimpacted*' are showing consistently that the impacted population of harbour seals is larger than unimpacted. This is questionable given that the population of harbour seals is widely known to be declining, and it is unreasonable to expect that an impacted population would be larger. The results of this modelling should be disregarded.	As described previously in the ES Chapter 12 Marine Mammals **[APP-026]**, the recent declines in harbour seal populations were incorporated into the iPCoD model by using the worst-case demographic parameters for the similarly decreasing population on the Scottish East coast. Therefore, the model using these parameters assumes the population to be gradually declining over time, which is shown by the decreasing un-impacted population numbers within Table 2-9 and Table 2-17 in the 9.14 Further Information Regarding Marine Mammals **[REP1-057]** document. Due to the iPCoD model indicating there is no effect on the harbour seal population, differences between the un-impacted and impacted populations is likely due to slight variations between the populations because of variations in environmental and demographic stochasticity. This is discussed further within Section 2.2.3 of the Marine Mammal Assessment Clarifications submitted at Deadline 5 **[9.81, (Rev 0)]**.
REP4-059_e4	Table 2.18	This table should be amended to include the outcomes of all the assessments not just iPCoD in line with our original advice. The outcomes of the dose response assessment are not considered while they indicate greater effects. Thus, we disagree with the conclusions stated in the *2.6.2.5. Effect significance* as they are based solely upon iPCoD modelling. This has not been acknowledged in the text of this section which is misleading and not in line with our original advice.	In 9.14 Further Information Regarding Marine Mammals **[REP1-057]**, Table 2.18 provides a summary of the assessment when using the iPCoD approach, however, the assessment using the dose response method is provided in Tables 2-10 to 2-12. The overall effect significance of these assessments is summarised as 'the quantitative assessment for cumulative disturbance from piling at other OWFs, uses the dose response method for harbour porpoise and seals and the TTS ranges for minke whale. With a medium sensitivity and medium magnitude for harbour porpoise and grey seal a moderate adverse effect has been assessed. With a medium sensitivity and low magnitude of effect, minke whale and harbour seal have been assessed as having a minor adverse effect (as outlined in paragraph 79 in 9.14 Further Information Regarding Marine Mammals **[REP1-057]**. The Applicant understands Natural England's concerns and the potential for cumulative impacts. Therefore, further assessment information has been provided within Table 2.3 of the Marine Mammal Assessment Clarifications submitted at Deadline 5 **[9.81, (Rev 0)]**. The dose response outcome has been taken into consideration accordingly. The Project's stance on mitigation options has been clarified in the updated Draft MMMP (**[7.7, (Rev 2)]** submitted at Deadline 5) and Outline SIP (**[7.8, (Rev 1)]** submitted at Deadline 5).

Ref	Section	Natural England Comments	Applicant's Response
REP4-059_e5	Table 2.26	We strongly disagree with the information presented in this table. There is an apparent 'cherry-picking' of the least significant outcomes which leads to an assessment of low magnitude for the cumulative disturbance. For example, using the results of the iPCoD modelling (population level impact over the first 6 years) as the worst-case disturbance at North Falls. Whilst values for other activities have been derived by other means and cannot be added together (e.g. '<1% population level impact over first six years' + 'numerical values'). Adopting this approach, has resulted in the total number of harbour porpoises impacted by all noisy activities being less than OWF only impacts (Table 2.10). Consequently, we consider that calculation of the total number of animals impacted is not valid and cannot be used to support the conclusion of low magnitude in all cases Instead, the figures presented in Table 2.10, 2.11 and 2.12 should be used to calculate the total number of animals disturbed. In this case, the resulting number of animals impacted would be much greater. For example, in the case of harbour porpoises, total number of animals disturbed would be 34,180 which is 10.08% of the relevant MU population resulting in **High** magnitude.	The Applicant maintains that considering the overall evidence base, including the number of animals impacted at any one time and the duration of effects, the magnitude of the effect based on the population modelling is the most appropriate and proportional to determine the overall significance of effects. However, the Applicant understands Natural England's concerns and the potential for cumulative impacts, therefore, further assessment information has been provided within Table 2.3 of the Marine Mammal Assessment Clarifications submitted at Deadline 5 **[9.81, (Rev 0)].** The dose response outcome has been taken into consideration accordingly. The Project's stance on mitigation options has been clarified in the updated Draft MMMP (**[7.7, (Rev 2)]** submitted at Deadline 5) and Outline SIP (**[7.8, (Rev 1)]** submitted at Deadline 5).
REP4-059_e6	2.6.8	Effect significance - We strongly disagree that "*This is deemed to be a conservative assessment based on the worst-case scenario for OWFs constructing at the same time as North Falls."* This is due to the Applicant not using the most conservative method to inform the assessment.	The overall cumulative assessment provided by the Applicant is deemed conservative due to the number of different activities included in the assessment. It is highly unlikely for all other OWFs assessed to be piling at the same time as North Falls as well as other OWF construction activity, geophysical surveys, seismic surveys, UXO clearance and other offshore project activity to all be occurring at the same time. Therefore, this assessment only provides a snapshot of a highly unlikely scenario. Particularly, as the Applicant has already provided details within the Outline SIP and will use the Final SIP to manage the Project with simultaneous activities to ensure no adverse effects are caused.
		Section 3 – In-combination Assessment	
REP4-059_f		The same comments regarding the cumulative assessment also apply to the in-combination assessment (Section 3) i.e. Natural England disagree with the interpretation and presentation of results, as well as the outcome of the assessment.	The Applicant maintains its position that the iPCoD approach is the most realistic tool for the assessment. However, the Applicant understands Natural England's concerns and have therefore provided further information on noise reduction methods within the Draft MMMP (**[7.7, (Rev 2)]** submitted at Deadline 5) and Outline SIP (**[7.8, (Rev 1)]** submitted at Deadline 5), in order to mitigate any potential cumulative significant effects. In addition, the Final SIP will be updated at the time of construction to ensure all simultaneous activities are considered and impacts are managed to ensure no significant/ adverse effects. Further information on the assessment approaches have been provided within Marine Mammal Assessment Clarifications **[9.81, (Rev 0)]** submitted at Deadline 5.

2.3 Applicant's Response to Natural England's comments regarding Appendix G4.1 [REP4-060] (Lesser Black-Backed Gull Compensation)

Table 2.3.1 Applicant's Response to Natural England's comments regarding Appendix G4.1 [REP4-060]

Ref	Natural England comments/advice	Applicant's response
	Summary	
REP4-060_a1	Natural England welcomes the additional work conducted and further information presented in the updated lesser black-backed gull (LBBG) compensation, and Habitats Regulations Assessment (HRA) apportioning documents. We are content with the Applicant's updated apportioning of	The Applicant welcomes the feedback from Natural England.

Ref	Natural England comments/advice	Applicant's response
	impacts to the LBBG feature of the AOE SPA. Furthermore, we are supportive of the general approach to compensation, including the calculations to inform scale and targets (though see our detailed advice), and the short-listing of the Lantern Marshes and Gedgrave Marshes sites for the predator-exclusion fencing measure. Natural England agree with the Applicant that a 4ha site is likely to be sufficient to compensate for the estimated level of impact.	
REP4-060_a2	While we are highly supportive in principle, we retain some concerns regarding the potential for the measure to be delivered collaboratively with respect to scale, and the apportionment of benefits. We suggest that further clarity on specific aspects, and suitable justification, is required to evidence the approach. Specifically, we are not persuaded that the proposed contribution (i.e., 0.2ha) to a shared measure is at all sufficient, especially if that were to be delivered in place of a project-alone site of 4ha. Nevertheless, we welcome the Applicant's continued interest in other sites (i.e. Outer Trial Bank, Five Estuaries VE2 site) and encourage continued investigation into the feasibility of these sites.	The Applicant will provide an update on the proposed area required for North Falls as a potential contribution to a shared measure based on updated calculations for compensation scale, taking into account the revised apportioning for LBBG at North Falls **[REP1- 058]**. This will be provided at Deadline 6. See also responses to more detailed comments below.
	General comments on scaling compensatory measures for LBBG	
REP4-060_b1	Natural England currently considers the Hornsea 3 Part 2 ('H3pt2') method to be the most ecologically complete for calculating the number of breeding pairs that might be required to generate sufficient recruits to compensate for a specified mortality impact. It is of note that the H3pt2 method was conceived to inform the design parameters of artificial nesting structures (ANS) for black-legged kittiwake (kittiwake hereafter). The method is also, in principle, suitable for wider application to other measures and for other seabird species. However, it may not be possible to adequately populate the H3pt2 method for all species as the required demographic information may be lacking, or poorly evidenced. Following testing of the H3pt2 method for guillemot, razorbill, and lesser black-backed gull, it has become apparent that lower levels of natal dispersal, compounded by older recruitment ages and lower productivity can produce unrealistic and disproportionate requirements for scaling compensatory measures for other seabird species. Furthermore, it is not clear that some of the necessary demographic information is well evidenced, which can introduce significant uncertainty into any calculations reliant on those data. In such cases (and pending further refinement and updates to best practice advice), Natural England consider that given the current absence of a robust alternative option for these species, it is appropriate for the Hornsea 4 ('H4') method to be used, in conjunction with other steps, as set out below. Depending on the species, proposed measure(s) and the location(s) they are to be deployed, we advise that the calculations may also need to take account of philopatry.	The Applicant welcomes the advice from Natural England that, for the reasons stated, the H4 method (taking account of philopatry for some species/locations) is considered appropriate for LBBG.
REP4-060_b2	Natural England advises that the scale of implementation of seabird compensatory measures should be sufficient to address the 95% upper confidence limit (UCL) predicted impact value. The mean or central impact value (CIV) should be used to inform and define success criteria, if appropriate. That is to say, for a LBBG measure involving predator exclusion from a discrete area, we consider that the area should be sufficient to accommodate a population that would be expected to produce enough recruits to compensate the Upper Confidence Interval (UCI) impact, scaled up by a ratio. However, the actual target population that would be required (to colonise and breed) to deem the measure successful will be smaller, with their productivity only needing to address the estimated CIV.	While noting the view of Natural England, the Applicant also notes that in the HRA for Rampion 2 OWF (DESNZ 2025), the Secretary of State has considered that the CIV is an appropriate basis for the compensation quantum.
REP4-060_b3	The application of a ratio to address the uncertainty of success should be set on a case-by case basis with consideration given to the level of impact, the feasibility of the measure, and its potential	Noted.

Ref	Natural England comments/advice	Applicant's response
	effectiveness. The ratio should be applied to scale the implementation of a measure, for example, by delivering at multiple distinct sites, each capable of addressing the impact alone.	
REP4-060_b4	Natural England highlight that the application of any method to calculate the scale of compensatory measures (with respect to the number of breeding pairs required to compensate a specified annual mortality impact) remains somewhat contentious. Natural England has commissioned the British Trust for Ornithology (BTO) to review available methods, determine the most appropriate and/or to identify an alternative method, with a particular focus on kittiwake and ANS. Natural England is currently considering the recommendations made in the BTO report and will update our advice, if necessary, in due course. We have provided the Applicant with an 'in press' copy of the BTO report to inform their approach, noting that the formal research report is not scheduled to be published until sometime in May. In the meantime, our advice remains that given in recent Examination submissions, that the Hornsea 3 part 2 method should be used to calculate the number of breeding pairs required to compensate for impacts on Kittiwake, but we will accept the use of the Hornsea 4 method for other species provided that this is based on the 95% upper confidence limit and noting that additional calculations to factor in philopatry may be required. Our case-specific advice on this topic set out below reflects current knowledge and the application of expert judgement to the potential of the Project's proposed measure to deliver tangible benefits, but we acknowledge the need for greater clarity of advice and guidance in this challenging area.	The Applicant has received the BTO report and will await Natural England's recommendations. Natural England advice on the acceptability of the H4 method for LBBG is welcomed. With respect to use of the 95% UCL the Applicant will present compensation scales based on this value, alongside the mean or CIV, at Deadline 6.
	Advice on calculating required scale and target populations for compensation by 'breeding enhancement' (e.g. predator eradication/control)	
REP4-060_c1	Natural England highlight that the proposals should be able to demonstrate that the measure; • Could compensate for the UCI value should the impacts of the project be greater than the CIV, and • Is scaled using a ratio to increase confidence that sufficient benefits will still arise, should the measure underperform, and • Takes account of philopatry if necessary to increase the prospect of a significant contribution to National Site Network (NSN) coherence.	The advice from Natural England is noted.
REP4-060_c2	Natural England considers that the target for the compensatory measure should be set with respect to the CIV. We advise the application of the H4 method, with additional consideration being made for philopatry if necessary. We advise that for the proposed sites within or immediately adjacent to the AOE SPA, no account needs to be made for natal dispersal. This is because we are content that measures here will directly and demonstrably contribute to the coherence of the NSN. However, if a measure is implemented at a location outside of, and remote from the NSN (e.g. Outer Trial Bank) we advise that the calculation of scale and targets should relate to birds expected to disperse, and thus potentially recruit back into the NSN. We do continue to consider that Outer Trial Bank offers significant benefits, by restoring an important colony that will export additional LBBG into NSN sites.	The advice from Natural England is noted. The Applicant continues to progress compensation option sites at Lantern Marshes and Gedgrave Marshes, within and adjacent to the AOE SPA, and is collaborating with Five Estuaries over LBBG and mammal surveys of Outer Trial Bank to be undertaken in 2025.
REP4-060_c3	The compensatory measure should be scaled using the UCI impact value, applying the H4 method with additional consideration of philopatry (if required – see above) to derive the quantum, and finally applying a 3:1 ratio to generate the number of pairs the measure should, theoretically, be able to accommodate. In addition, likely nesting densities should be considered to define a minimum area.	The Applicant will update the scale of compensation section of the LBBG compensation document to reflect the comments from Natural England. This will be submitted at Deadline 6.

Table 2.3.2 Applicant's Response to Natural England's comments regarding *Tables 1-4* within Appendix G4.1 [REP4-060]

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to resolve issue	Applicant's Response
	[REP1-058] - HRA Update to Breeding Season Apportioning of LBBG at AOE SPA				
REP4-060_d	1	2.3 Para 12	*"During the breeding season 83% of predicted collisions are assumed to involve adult birds (para 195 in the RIAA Part 4, [APP-178]), and **47.2%** of these birds are predicted to be breeding at the AOE SPA".* Natural England assumes this should read **42.7%**, as previously detailed (section 2.2, para 11).	We advise that this should be revised, as necessary.	Agreed, the correct apportioning value is 42.7%.
	[REP1-018] - Appendix 2 Lesser Black-Backed Gull Compensation Document				
REP4-060_e1	1	5 Table 5.1	Natural England notes that the Applicant has considered both the higher natal dispersal (lower natal philopatry) rate for herring gull as well as the more poorly evidenced rate for LBBG, stating *"Natural England (DAS/27843/458975) suggest the natal dispersal rate of herring gull from Horswill and Robinson is used, as the data quality supporting the LBBG rate is deemed 'poor', and gives a rate described as 'elevated'. Both options are shown in these calculation"* Natural England would note that in the referenced advice we did not explicitly recommend the use of the herring gull rate, only saying *"Data quality informing the natal dispersal rate for lesser black-backed gull in Horswill & Robinson (2015) is poor, but the rate is characterised as "elevated" at 0.470. It is of note that this figure is relatively low compared to the other gulls. Data quality for Herring gull is good, and the natal dispersal rate is 0.629."* Nonetheless, the application of both rates gives useful context. In-lieu of relevant new evidence, we consider that there is significant uncertainty regarding the application of any natal dispersal rate for LBBG.	Natural England advise that in cases where the scale and target of compensatory measures needs to take account of philopatry (see our detailed comments above) it is appropriate, and probably precautionary, to use the LBBG rate in any calculations.	Updates to the scale of compensation measures for LBBG will be provided at Deadline 6.
REP4-060_e2	2	5 Table 5.2	Natural England welcome the clear and concise presentation of number of breeding pairs required and the minimum area required to accommodate them to inform the scale of the compensatory measure. This fully	We request that the table is replicated for the UCI impact.	The table will be updated to include the UCI at Deadline 6.

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to resolve issue	Applicant's Response
			considers a variety of dispersal rates, nesting densities, philopatric rates and compensation ratios. However, the table only addresses the requirements with respect to the CIV impact estimate. Natural England advise that the UCI impact estimate should be considered when scaling the measure (see detailed comments).		
REP4-060_e3	3	8.2.1 & 8.2.2	The Applicant has short listed Lantern Marshes and Gedgrave Marshes. We note that potential collaboration with other projects is thought to be feasible here. Natural England consider both sites to be viable options in principle and are supportive of continued development and detailing of both options in order to determine whether they are suitable and deliverable in practice. With respect to Lantern Marshes, the Applicant highlights that *"There have been positive discussions between the Applicant and the National Trust in respect of this site"*, although no substantive evidence has been submitted into the Examination to demonstrate that this site can be secured. This also applies to Gedgrave Marshes where the Applicant states, *"discussions between the Applicant and landowner are progressing".*	Natural England advise that any supporting evidence should be submitted into Examination to demonstrate the Applicant's ability to secure these sites for the delivery of compensatory measures.	An update on progress with securing potential compensation sites is provided in the HRA Land Rights Tracker **[9.75, Rev 0]**, submitted at Deadline 5.
REP4-060_e4	4	8.2 Para 89 Para 101	Natural England welcomes retention of the Five Estuaries 'VE2' site in the Applicant's shortlist as a collaborative measure. We note consideration of the Outer Trial Bank site will be informed by further surveys of LBBG nesting numbers and predator impacts. We consider this a sensible approach.	N/A	Noted.
REP4-060_e5	5	9.1 Para 103	Natural England highlights that the Applicant's details on their proposed approach to monitoring are insufficient. For example, "*Monitoring will be undertaken until such time that the compensatory measure is found to be delivering the scale of required compensation".*	Natural England advises that regardless of prior success, some level of monitoring will be required to evidence ongoing efficacy, and this should be clearly acknowledged by the Applicant. Given the requirement of the measure to deliver over the lifetime of the project, it cannot be assumed that the measure will continue to deliver at the required level once that level has been reached. We continue to highlight the need for compensatory measures to be monitored rigorously to evidence efficacy, improve the evidence base for future measure deployment. Natural England consider that detailed monitoring approaches are best discussed and agreed in consultation with the LBBG Compensation Steering Group (LBCSG).	The Applicant will update the Outline LBBG CIMP at Deadline 6 to address this feedback.
REP4-060_e6	6	9.3 Para 115	Natural England recognises that it may not always be possible to implement certain compensation management measures at the most appropriate time of year. However, sub-adults may return to breeding colonies to prospect for nest sites before recruitment (Ross-Smith 2009; Camphuysen 2013) and initial	Natural England suggests that the Applicant should make every effort to avoid any management measures on the proposed site that may result in disturbance early in the breeding season, especially during the initial years of colony establishment.	The Applicant will update the Outline LBBG CIMP at Deadline 6 to address this feedback.

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to resolve issue	Applicant's Response
			nesting colony establishment is likely to be a particularly sensitive time for prospecting birds early in the season, when assessing how safe a novel site is likely to be. Any disturbance such as vegetation management at this time could delay uptake of the site and/or result in reduced nesting densities.		
	[REP1-020] - Habitats Regulations Assessment Annex 2A Outline Lesser Black-backed Gull Compensation Implementation and Monitoring Plan				
REP4-060_f1	1	3.2 Para 18	We note that the minimum proposed fenced area to be created for lesser black-backed gull LBBG compensation will be 4Ha irrespective of whether the measure is developed as a project-led measure or in collaboration with other projects. If the measure is to be delivered collaboratively with other projects, the North Falls' contribution will be the equivalent to only 0.2ha. Natural England are not persuaded that the level of contribution to a collaborative measure is sufficient. No further information of relevance is provided in the referenced section of REP1-018. Further work will be required to evidence that any collaborative measure is of an appropriate scale with respect to combined project impacts. Furthermore, the apportioning of benefits arising should be properly considered.	Natural England seek clarification on both the apportioning of contributions to a collaborative measure, as well as any benefits arising. Specifically, the contribution of 0.2ha to a collaborative measure should be justified considering a project alone commitment to deliver a 4ha area. Natural England continue to advise that an appropriate 4ha area is likely sufficient to compensate the projects estimated impacts. It is not clear, and indeed appears unlikely, that a 0.2ha contribution to a collaborative measure is sufficient. The approach to apportioning any benefits arising from a collaborative measure should be fully detailed.	The Applicant will provide an update at Deadline 6 on the proposed area required for North Falls as a potential contribution to a shared measure based on updated calculations for compensation scale, taking into account the revised apportioning for LBBG at North Falls **[REP1- 058]**.
REP4-060_f2	2	3.5 Para 31	It is the Applicant's stated intention to install the compensation measure three breeding seasons prior to operation. LBBG typically reach breeding age maturity at 4-5 years old (BTO, 2024; Horswill and Robinson, 2015), with some delaying breeding until 7 years of age (O'Connell 1995, Camphuysen 2013). Thus, while the measure will be in place, even if the site is colonised immediately, the first fledglings from the compensation site will not necessarily have recruited into the adult breeding population by the scheduled commencement of OWF operations. Any resulting mortality debt will need to be	Natural England advise that every effort should be made to implement the measure as soon as possible to reduce the risks of accumulating a mortality debt.	Noted. It is the Applicant's position that there is sufficient overcompensation in the proposed 4ha to accommodate a mortality debt of 2.3 (mean) collisions per annum. However, mortality debt will be considered during monitoring and should a material mortality debt be deemed to be accrued, the need for additional measures/ adaptive management would be considered in consultation with the LBBG steering group.

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to resolve issue	Applicant's Response
			recovered in future years, and the debt will most likely continue to compound while the colony establishes and grows to the required size. We recognise that a 4ha site should achieve the required productivity, even at low nesting densities, allowing for any mortality debt to be paid back sufficiently early in the operational lifetime of the measure. Nonetheless, we highlight the potential risk that adaptive management may be required if the compensatory measure fails, noting that the existing compensatory measure on Orfordness has not yet attracted nesting LBBG after two breeding seasons. Furthermore, we highlight the guiding principle that compensatory measures should be operational at the point of impact.		
REP4-060_f3	3	3.8.1 Para 39	The Applicant states that the success of compensation would be determined through annual monitoring of breeding LBBG at the compensation site using standardised breeding seabird survey methods "*until such time that the compensatory measure is found to be delivering the scale of required compensation"*.	Natural England advises that regardless of prior success, some level of monitoring will be required to evidence ongoing efficacy, and this should be clearly acknowledged by the Applicant. See out comment (Ref. No. 5, Table 3) above.	The Applicant will update the Outline LBBG CIMP at Deadline 6 to address this feedback.
REP4-060_f4	4	3.8.1 Para 40	Natural England welcomes the suite of monitoring measures proposed, including counting the number of Adults on Nest (AONs), productivity studies and a colour-ringing scheme, which we consider essential to confirm the success of the proposed measure. We note the Applicant's concern for LBBG welfare but would highlight that drones have previously been used successfully for the purposes of monitoring gull colonies in the UK (Rush et al, 2018), including at OWF compensation sites, with little or no disturbance caused (Dalrymple, 2023). We agree that the use of a thermal drone could be advantageous for detecting nests in vegetation.	Natural England suggests that, since thermal imagery alone cannot differentiate between species (e.g. herring gull from LBBG), any use of thermal imagery should be used in combination with an RGB camera to aid species identification. With regards to limitations of other forms of monitoring (e.g. VP surveys), Natural England also suggests that the Applicant should consider whether a correction factor will need to be established to estimate the number of nesting pairs compared to number of individual birds present (Corregidor-Castro et al, 2022).	Noted. The appropriate methodology for monitoring and analysing data will be developed post consent based on the final selection of the compensation site, in consultation with the LBCSG.
REP4-060_f5	5	3.8.2 Para 44	The Applicant states that in the event of adaptive management being required, consideration would be given to the potential of alternative or additional locations, such as Outer Trial Bank.	Natural England highlight the advantages of continuing with feasibility studies at all sites currently under consideration, so that adaptive management measures can be put in place quickly if the adopted compensation site is not sufficiently successful.	Noted. Surveys of OTB are planned for 2025 to inform post consent development or adaptive management, if this site is selected.

2.4 Applicant's Response to Natural England's comments regarding Appendix G4.2 [REP4-061] (Guillemot and Razorbill Compensation)

Table 2.4 Applicant's Response to Natural England's comments regarding Appendix G4.2 [REP4-061]

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue	Applicant's Response
	[REP1-028] - HRA Appendix 5 Guillemot and Razorbill Compensation				
REP4-061_a1	1	3.3 Para 19 Para 20	Natural England note that work is on-going to identify collaboration opportunities with other projects. We note the progress made in this area, specifically REP3-010 (7.2.1.4 HRA Annex 1D Letter of Comfort from Cornwall Wildlife Trust) which relates to the option of *"A broader, regional, compensation package led by a delivery partner and funded in collaboration with other developers."*	Natural England continue to advise that a collaborative approach to this measure is preferable, and we are supportive of the high-level principles described so far. Natural England would welcome further engagement on the development of the measure as it progresses.	Noted. The Applicant continues to engage with Cornwall Wildlife Trust and other developers on the potential collaborative measure.
REP4-061_a2	2	5 Para 31	The Applicant notes Natural England's advice in our Relevant Representation to use an alternative method for calculating compensation quantum but detail an alternative approach.	Natural England confirm that the Applicant's general methodological approach (further detailed in para 38-43) is acceptable (see also our detailed advice in Appendix G4.1 to this Deadline 4 submission)	The Applicant welcomes this advice.
REP4-061_a3	3	5 Table 5.1	We note that as local rates are not available, the Applicant has calculated the compensation quantum using both the 'West region' productivity rate of 0.823 and the national average of 0.672.	Natural England considers that due to considerable uncertainty in likely productivity rates, the more precautionary 'national average' productivity rate is most appropriate for the calculation of compensation quantum. Nonetheless, the presentation of data under different scenarios provides useful context.	Noted.
REP4-061_a4	4	5.3 58	The Applicant has calculated the potential number of breeding pairs of guillemot and razorbill that could be achieved at compensation sites by subtracting a recent colony count from the historic mean count, and then applying a correction factor of 0.67, to converts individuals to pairs citing JNCC (2021). Natural England notes the following issues: Colony Counts Natural England highlight that many of the sites in Devon and Cornwall may not have 'recent' colony counts, and their status may be unknown. While many of the sites in Table 5.6 do benefit from recent counts, North Cornwall 2 has not been counted since 2017. Natural England highlight that the short listing of sites is likely to have been biased toward those sites with recent count data. This is understandable but does risk the early elimination of data poor sites where interventions could be successful. Correction Factors Natural England suggest caution in applying a correction factor to calculate a potential increase in breeding pairs.	Colony Counts Baseline monitoring could also consider contemporary baseline data collection in the early phases at non-shortlisted sites without recent count data, but with historic breeding records of auks. This could be useful to identify additional intervention sites should adaptive management be required. Natural England suggest that this work would be best approached strategically under a collaborative delivery model. No details have been provided for either the historic or recent counts presented in Table 5.6 in terms of count methodology when calculating indicative compensation potential. Thus, it is difficult to assess how indicative they are likely to be. We also advise that counts should be undertaken prior to implementation of the compensation measure (replicating methodologies of historic peak counts if possible) to establish a baseline. More generally, Natural England advises that the sporadic nature of historic and recent monitoring of mainland auk colonies in the south-west introduces significant uncertainty as regards population trends.	The advice from Natural England with respect to available colony count data and correction factors is noted and will be taken on board as compensation proposals for guillemot and razorbill are further progressed post consent. For the 2025 breeding season, the Applicant has commissioned surveys of the sites shortlisted in the guillemot and razorbill compensation document (**[REP1-027]**, Table 5.6). Surveys will comprise whole colony counts, productivity, disturbance events and responses of birds to disturbance. The Applicant agrees that wider baseline monitoring of non-shortlisted sites could be considered as part of a strategic approach under a collaborative delivery model.

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue	Applicant's Response
			Walsh et al (1995) state the recommended census unit for guillemots is the individual on land and advise against the routine use of a correction factor due to problems of interpretation and some evidence that at some colonies the relationship between the number of breeding pairs and the number of adults is different (e.g. del Nevo, 1990). Indeed, Harris (1989) makes a plea for the presentation of original counts rather than 'corrected' figures in published work. Furthermore, Harris et al (2015) subsequently point out that the correction factor to convert individuals into breeding pairs changed substantially over the course of their long-term study due to decreases in survival and colony attendance, a situation that may well be replicated in the declining southwest colonies under discussion. It is also worth noting that Birkhead and Nettleship (1980) define the correction factor as the number of pairs that bred in an area determined by daily checks throughout the laying period divided by the number of individuals counted in the same area at the time that the colony census is made. This suggests that a substantial amount of work is required before any site-specific correction can be established.	Further, there is limited information regarding pressures on these colonies, despite the recent, welcome efforts of developers to gather initial data. In that light, it is important for the proposed collaborative approach to integrate an appropriate level of ongoing monitoring of both the candidate colonies and the pressures on them. Correction Factors The correct reference for the potential use of the correction factor is Walsh et al., (1995) based on studies by Birkhead (1978) and Harris (1989). Where more accurate studies of guillemot populations are considered necessary, the most suitable method is counting individuals at truly randomised study plots, not chosen for convenience (Harris et al, 1983). Photographs showing mapped nests in these plots can then be replicated and compared year on year where productivity monitoring is undertaken. Natural England advise that consideration be given to establishing site specific correction factors at colonies/regions where compensatory measures are implemented. In-lieu of this, breeding pairs derived from counts of individuals should be treated as indicative estimates.	
REP4-061_a5	5	9.1 Para 95	Natural England notes that the site selection procedure will be informed by surveys and consultation, taking into account existing pressures and existing management.	Natural England welcomes the Applicant's intention to use surveys and consultations to inform final site selection. However, we reiterate the need for a baseline dataset of site-specific disturbance events, against which the success of the disturbance reduction measures can be assessed. We also suggest that disturbance monitoring commences as in advance as possible before implementation of the measures.	As above, the Applicant has commissioned baseline monitoring of short-listed sites for auk compensation (**[REP1-027]** Table 5.6) in 2025 with the aim of collecting baseline data on disturbance, as well as the numbers and productivity of razorbill and guillemot at a number of sites, and reactions of birds to disturbance.
REP4-061_a6	6	9.3 Para 101 Para 102	Timing of compensation delivery is stated as three breeding seasons prior to operation of North Falls OWF, with an acknowledgement that this will result in a potential mortality debt due to age at first breeding of guillemot (6 years) and razorbill (5 years). However, it is argued that because the measure will be in place over the lifetime of the project (30+ years), the delay will have a negligible effect on the success of the measure.	We reiterate our comments made in our Relevant Representations [RR-243] and question the validity of the assumption that every colony exhibiting population declines is doing so due to the impacts of recreational disturbance. Establishing this as a causal factor should be achieved firstly by undertaking sufficient investigations of current population declines at shortlisted sites and secondly, by considering other potential factors (such as food availability or predation pressure), notwithstanding the considerable uncertainty surrounding future population dynamics in light of the effects of climate change and disease risk (e.g. HPAI). Natural England remain concerned that if disturbance impacts are not a major factor at short-listed sites, then the ability of the measure to recover a mortality debt will be diminished, as the debt will compound while alternative solutions to as yet unknown pressures are sought. We also highlight the potential need for adaptive	The concerns of Natural England are noted. The Applicant considers that the approach taken in the desk-study to identify a shortlist of potential compensation sites for guillemot and razorbill (**[REP1-027]**, Section 8) is robust and systematic based on the available colony count data. As stated above, this is being followed up with baseline surveys in 2025. The site selection of the final location(s) for the compensatory measure will take into account the findings of the 2025 surveys, including relevance of disturbance as a pressure on the colony.

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue	Applicant's Response
				management at some sites once they have been adopted and welcome the Applicant's recognition of this.	
	[REP1-030] - Annex 5A Outline Guillemot and Razorbill CIMP				
REP4-061_b1	1	3.3 Paras 20-23	Natural England consider the short-listed sites to represent viable locations for further investigation into disturbance impacts on breeding auks. We note that other sites may still be considered and support this flexible approach to the measure. Natural England are aware of the ongoing work by other projects & strategic initiatives investigating the potential to reduce recreational disturbance at southwest auk colonies. We welcome potential collaboration between the Applicant and other OWF projects provided sufficient benefits can be secured for all collaborating projects.	We advise the Applicant should continue to investigate options to deliver the measure as part of a collaborative effort. Natural England recommend strategic approaches at all levels, from site identification and baseline monitoring to interventions/measure implementation and ongoing (efficacy) monitoring.	The Applicant welcomes the feedback from Natural England that the short-listed sites (**[REP1-027]** Table 5.6) are considered viable locations for further investigation. The Applicant also continues to liaise with the Cornwall Wildlife Trust and other OWF developers over a strategic and collaborative approach.
REP4-061_b2	2	3.5 Para 30	The Applicant states that monitoring would commence at least one breeding season prior to commencement of the compensatory measure and that monitoring will be required for the first three years or until the measure is deemed to be operating successfully.	Natural England maintain that the success of the measure relies on the Applicant's ability to quantify the reduction in recreational disturbance, with resulting increases in the size of the colony. This can only be achieved if baseline data exist detailing frequency and intensity of disturbance events from site-specific disturbance studies conducted over several seasons prior to the measure being deployed. Alternatively, the efficacy of the disturbance-reduction element of the measure could be quantified. If attending vessels or wardening staff at compensation sites intervene and preclude potential disturbance events, the logging and reporting of such interventions could evidence the successful operation of the measures. With respect to monitoring for the first three years, or until the measure is operating successfully, we suggest that regardless of prior success, some level of long-term monitoring will be required to evidence ongoing efficacy, and this should be clearly acknowledged by the Applicant. Natural England continue to advise that strategic, collaborative approaches to all levels of monitoring are preferable.	As above, the Applicant has commissioned baseline monitoring of short-listed sites for auk compensation (**[REP1-027]** Table 5.6) in 2025 with the aim of collecting baseline data on disturbance, as well as the numbers and productivity of razorbill and guillemot at a number of sites, and reactions of birds to disturbance. The Applicant will update the Outline Guillemot and Razorbill CIMP at Deadline 6 to address Natural England's comment regarding long-term monitoring.
REP4-061_b3	4	3.8.1 Para 40	The Applicant suggests that due to the nature and scale of the proposed measure(s), it may be difficult to derive cause and effect relationships, so indirect monitoring methods, such as visitor statistics or colony counts, and comparing trends with control colonies in the region, may be appropriate.	Natural England agree that it may be difficult to determine cause and effect. However, we maintain that determining the success of the measure relies on being able to demonstrate a reduction in disturbance to the birds, which should then hopefully be reflected in an increase in colony count(s). Thus, we consider that monitoring of these elements is key to establishing the	The advice from Natural England is noted. As stated above, the Applicant has commissioned baseline monitoring of short-listed sites for auk compensation (**[REP1-027]** Table 5.6) in 2025 with the aim of collecting baseline data on disturbance as well as the numbers and productivity of razorbill and guillemot at

Ref	NE Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue	Applicant's Response
				success of the measure and all the suggested indirect monitoring methods are employed to this end. Disturbance data collected prior to or during measure implementation, is of key importance, as we have previously highlighted.	each site and reactions of birds to disturbance. The intention would be to continue these surveys at the selected compensation site(s) in future years (either by the Project alone, or in collaboration with other OWF developers), as the compensation measure to reduce disturbance is introduced, to gather a time series of data on disturbance levels, productivity and population size of colonies, to facilitate the investigation of links. The Applicant is also involved in discussions with CWT and other OWF developers over a strategic and collaborative approach.

2.5 Applicant's Response to Natural England's comments regarding Appendix G4.3 [REP4-062] (Kittiwake Compensation)

Table 2.5 Applicant's Response to Natural England's comments regarding Appendix G4.3 [REP4-062]

Ref	Issue raised by Natural England	Applicant response
	Overview	
REP4-062_a1	Natural England currently considers the Hornsea 3 Part 2 ('H3pt2') method to be the most ecologically complete for compensatory measures where it is necessary to calculate the number of breeding pairs required to compensate for a specified mortality impact. It is of note that the H3pt2 method was conceived to inform the design parameters of artificial nesting structures (ANS) for black-legged kittiwake (kittiwake hereafter).	Noted. The Applicant has presented compensation calculations for kittiwake based on the Hornsea 4 method in the kittiwake compensation document **[REP2-011/12]**. This document and the Outline Kittiwake CIMP **[REP1-024/25]** will be updated at Deadline 6 to include the H3pt2 method alongside the Hornsea 4 method.
REP4-062_a2	Natural England generally advises that the scale of implementation of compensatory measures for seabirds should be sufficient to address the 95% upper confidence limit (UCL) predicted impact value. Given the uncertainty regarding OWF impacts, this approach increases confidence in the adequacy of the compensatory measures if the impacts exceed those of the central prediction.	The advice from Natural England is noted. In this context it is also noted that in consenting the Rampion 2 OWF, the Secretary of State considered that it was appropriate to base the compensation quantum for kittiwake at the Flamborough and Filey Coast SPA on the mean or central impact value (0.72 predicted collisions per year) rather than the 95% UCL (DESNZ 2025). The mean predicted collisions for North Falls apportioned to the FFC, is 0.76 per year.
REP4-062_a3	However, it is important to distinguish between the scaling of the measure to be implemented, which will inform the design parameters (e.g. number of nest spaces), and the compensation target to achieve. Habitats Regulations Assessments (HRA) have generally set this target (i.e. success criteria) with respect to the central impact value (CIV) and Natural England consider this usually represents a pragmatic approach.	Noted.
REP4-062_a4	The application of a ratio to address the uncertainty of success should be set on a case-by-case basis, considering the level of impact, the feasibility of the measure, and its potential effectiveness. Guidance is clear that a 1:1 ratio is only appropriate where there is high confidence in the likelihood of success. Seabird compensation measures to date remain largely un-tested and un-proven, and ratios must reflect this situation. We highlight that the ratio should only be applied to scale the implementation of a measure (i.e., not to increase the target or define success).	Noted.
REP4-062_a5	Natural England highlight that the application of any method to calculate the scale of compensatory measures (with respect to the number of breeding pairs required to offset a specified annual mortality impact), remains somewhat contentious. The pressing need for independent expert advice on the topic led to the British Trust for Ornithology (BTO) being contracted by Natural England (on behalf of the Collaboration on Offshore Wind Strategic Compensation) to critically review the	Noted. The Applicant has received the BTO report and will await any updated advice from Natural England. The current advice regarding the Hornsea 3 part 2 method is noted and, as stated above, the Kittiwake Compensation Document **[REP2-011/12]** and Outline Kittiwake CIMP **[REP1-024/25]** will be updated at Deadline 6 to take this into account.

Ref	Issue raised by Natural England	Applicant response
	available methods and determine the most appropriate for this application, or to identify an alternative method. Natural England is currently considering the recommendations made in the BTO report and will update our advice, if necessary, in due course. We have provided the Applicant with an 'in press' copy of the BTO report to inform their approach, noting that the formal research report is not scheduled to be published until sometime in May. In the meantime, our advice remains that given in recent Examination submissions, that the Hornsea 3 part 2 method should be used to calculate the number of breeding pairs required to compensate for impacts on Kittiwake.	
	Predicted Impacts	
REP4-062_b	Natural England agree with the Applicant's calculated central impact value (CIV) of 0.76 and UCL of 2.72 collisions apportioned to the FFC SPA population per annum. Natural England advises that an adverse effect on the integrity (AEOI) of the SPA cannot be ruled out in-combination but accept that North Falls only makes a small contribution to the in-combination total.	The Applicant notes the advice of Natural England.
	General advice on the proposals	
REP4-062_c1	Given the modest contribution that the Applicant's proposal makes to the in-combination collision total for the kittiwake feature at FFC SPA, Natural England considers the general proposal proportionate and appropriate. Indeed, Natural England proposed using the RWE Renewables UK Dogger Bank South 'kittiwakery' for the compensatory requirements of Rampion 2, Five Estuaries and North Falls OWFs during Discretionary Advice Service meetings with these developers.	Noted.
REP4-062_c2	The Applicant has presented their position as follows, *"between seven and ten breeding pairs are required to produce sufficient fledglings per year that survive to breeding age to compensate for the predicted annual collision mortality for breeding adult kittiwakes from the Flamborough and Filey Coast Special Protection Area (FFC SPA)."* Natural England request further clarity on how this is to be achieved, in principle, at a shared ANS with relatively limited capacity. Furthermore, consideration should be given to the apportioning of benefits arising at the structure. It is our understanding that Five Estuaries OWF are attempting to secure a share in the ANS equivalent to approximately 48 nesting spaces (Five Estuaries Examination Document REP5-018) for a broadly similar impact. It remains unclear that a contribution in line with the required scale of implementation is possible or proposed by the Applicant. However, it does appear likely that the Applicant is investigating an option that should result in there being sufficient breeding pairs to compensate their CIV, assuming that the ANS is sufficiently colonised.	The Gateshead Kittiwakery can accommodate 240 nests. It is expected that this will be shared equally between five projects (i.e. 48 nests each). It is noted that in consenting Rampion 2 (R2), the Secretary of State concluded that the provision of 10 nesting spaces would sufficiently compensate for the predicted effect on the kittiwake feature of the FFC SPA (0.72 adults per year) (DESNZ, 2025). It should be noted that the Five Estuaries Kittiwake Compensation – Evidence, Site Selection and Roadmap **[REP5-018]**, states the scale of compensation required for Five Estuaries is between 7 and 46 pairs, subject to the Secretary of State's conclusion.
	Information provided on compensation requirements	
REP4-062_d	The Applicant has presented compensation quanta based on their impact values (CIV and UCI), based on the Hornsea 4 method with additional consideration of philopatry. Scenarios considering a range of influential parameters and demographic rates have been usefully presented. However, the Applicant has not been able to successfully replicate the H3Pt2 calculation methods.	Noted (see also response below).
	Advice on compensation requirements	
REP4-062_e1	Natural England continue to advise that for kittiwake ANS, compensatory requirements should be calculated using the H3Pt2 method and be scaled with respect to the UCL impact. To assist the	The Applicant notes the values from Natural England's calculations based on the H3Pt2 methodology. These have been checked against a version of the H3 method derived from Niras and

Ref	Issue raised by Natural England	Applicant response
	Applicant in following our advice, Natural England have replicated and utilised the H3Pt2 method (including the demographic rates therein) to inform our advice on the scale required as follows: Using the CIV value of 0.76 results in a target of **5** pairs under a 1:1 ratio. It is also important that the compensatory proposals should be able to demonstrate that: i. they could compensate for the UCI value should the impacts of the proposal be greater than the CIV, and ii. the measure is scaled using a ratio to increase confidence that sufficient benefits will still arise, should the measure underperform. Using the UCL impact value of 2.72 results in a requirement for **17** pairs, again on a 1:1 basis. If a 2:1 or 3:1 ratio is applied the required scale of the measure is the provision of **34 or 51 nest spaces** on an ANS, respectively.	GoBe (2020) (as referenced in **[REP2-011]**) and the same outputs have been obtained based on the input parameters in that reference. As stated above, the compensation scale for kittiwake will be updated for Deadline 6 to include results from the H3Pt2 method, alongside the H4 method. In this context, the Applicant notes that in consenting R2, the SoS appears to have accepted the use of the Hornsea 4 approach for kittiwake, and calculation of a compensation quantum based on the mean or CIV and a 2:1 ratio.
REP4-062_e2	Natural England highlight that while the ANS has already been built, which gives comfort around lead-in times, it remains unclear exactly how the Applicant intends to utilise and share the ANS with other interested parties, and if there is sufficient space to satisfy the total requirement. We are keen to understand from the Applicant whether they will be taking a similar approach to Rampion 2 and Five Estuaries in securing a specific share of nest spaces on the 'kittiwakery'.	North Falls would have a 20% share of 240 nests (i.e. 48), which is anticipated to exceed the compensation requirement for this species for North Falls. See also the response to REP4-062_c2.

2.6 Applicant's Response to Natural England's comments regarding Appendix G4.4 [REP4-063] (Guillemot from the Farne Islands SPA)

Table 2.6 Applicant's Response to Natural England's comments regarding Appendix G4.4 [REP4-063]

Ref	Natural England's Comments	Applicant's Response
	Potential for Adverse Effect on Integrity (AEOI) of the guillemot feature at Farne Islands Special Protection Area (FI SPA)	
REP4-063_a1	Natural England welcome the Applicant's update to the shadow appropriate assessment (AA) for guillemot at the FI SPA to include an in-combination assessment, in response to our relevant representation [RR-234]. We are content with the general approach to the in-combination assessment and welcome the presentation of full displacement matrices alongside detailed consideration of the Applicants preferred displacement and mortality rates of 50% and 1% as well as Natural England's advised reference rates of 70% and 2%.	Noted.
REP4-063_a2	Natural England highlight that while we continue to advocate a range-based approach to impact assessment for displacement, recent decisions have been made using our advised reference rates, including at the recently consented Rampion 2 Offshore Wind Farm (OWF) where the Secretary of State (SoS) stated, *"values of displacement and mortality for the assessment of displacement impacts on guillemot of 70% and 2% are, at the current time and based on current evidence, suitably precautionary for an assessment to be made."* (Rampion 2 - DESNZ HRA). We further note that in the Rampion 2 decision the Secretary of State agreed with Natural England and concluded that AEOI, in-combination with other plans and projects, could not be ruled out beyond reasonable scientific doubt for the guillemot feature at FI SPA and consent was granted with derogations.	Noted.
	Population used for assessment and application of correct factors	
REP4-063_b1	Natural England note that there has been some inconsistency in the population counts considered by OWF projects for the guillemot feature of the FI SPA and, therefore, in the calculation of a baseline mortality rate and any predicted change to that rate. We note that the Applicant's baseline characterisation data were collected over the 2019 and 2020 breeding seasons, and that the FI SPA colony was heavily impacted by Highly Pathogenic Avian Influenza (HPAI) in 2022 and 2023. Natural England advise that colony counts used for impact assessment should, ideally, be contemporaneous	Noted.

Ref	Natural England's Comments	Applicant's Response
	with baseline characterisation data; however, that in itself does not appear to be the source of the inconsistency.	
REP4-063_b2	The Applicant has calculated a 5-year (2020-2024) mean count of 54,948 individuals, equivalent to 36,815 pairs after the application of a 0.67 correction factor. The number of pairs has then been doubled to calculate the number of breeding adult individuals at FI SPA as 73,630.	Noted.
REP4-063_b3	Birkhead and Nettleship (1980) define the correction factor (*k*) as the number of pairs that bred in an area determined by daily checks throughout the laying period, divided by the number of individuals counted in the same area at the time that the colony census is made. Clearly, a substantial amount of work is required before any site-specific correction can be established. The authors also highlight the need to understand interannual variation. Harris (1989) presents convincing evidence that a *k* value of 0.67 is likely to represent a reasonable generic correction factor for a range of (but not all) guillemot colonies. 'Individuals' was the preferred count unit of guillemot for Seabirds Count (Burnell et al, 2021), but any counts of Apparently Occupied Nest/Apparently Occupied Territory/Apparently Occupied Site (AON/AOT/AOS) were multiplied by 1.49 to derive the number of individuals.	Noted.
REP4-063_b4	Nonetheless, Natural England urge some level of caution in the application of the 0.67 correction factor to transform counts of individuals in breeding habitat to estimates of breeding adults at a colony. Caution here is especially crucial when populations are being derived for the purposes of Habitats Regulations Assessment (HRA), where impacts could be significantly underestimated if inflated population sizes are considered.	Noted.
REP4-063_b5	We suggest the generic correction factor is probably best used to estimate an indicative number of breeding pairs at a colony unless a colony-specific correction factor has been derived from, for example, mapped and photographed productivity plots. Walsh *et al* (1995) state that the recommended census unit for guillemots is the individual on land and advise against the routine use of a correction factor. This is due to problems of interpretation, and evidence that at some colonies the relationship between the number of breeding pairs and the number of adults is different (e.g. del Nevo, 1990). We further note that the data presented in Harris (1989) are now dated, and we are not aware of specific ongoing monitoring at the Farnes that could ascertain whether the correction factor is appropriate.	Noted.
REP4-063_b6	It is of note that Harris *et al* (2015) found that the correction factor to convert individuals into breeding pairs changed substantially over the course of their long-term study due to decreases in survival and colony attendance, a situation that may well be replicated at the Farne Islands in recent years due to quite severe HPAI mortality impacts. We therefore question if the application of the correction factor to a mean count of individuals taken from a period of substantial change in colony counts is appropriate.	Noted.
REP4-063_b7	Natural England do recognise that the 0.67 correction factor was used in the FI SPA Departmental Brief (Natural England, 2015), and further, to inform the FI SPA SACOs (Designated Sites View) and calculate the breeding population abundance target of 32,875 breeding pairs. Furthermore, we accept that the colony counts of individuals reported for auks will inevitably underestimate the number of breeding birds in the population, and this would ideally be accounted for when assessing impacts.	Noted.
REP4-063_b8	While Natural England highlight that recent OWF applications have not adopted a consistent FI SPA population to assess impacts against, we do believe that to date, all assessments have considered an uncorrected population count of individuals on land, as directly reported in the Seabird Monitoring Programme (SMP). This is considered precautionary, as these counts represent known underestimates. Outer Dowsing OWF (ODOW) assessed impacts against the 2023 SMP count of 43,332 birds, while both Five Estuaries and Dogger Bank South OWFs have used the Seabirds Count (Burnell *et al*, 2021) figure of 64,042, which represents the peak count of individuals on land made between 2015-21 (in 2019).	Noted.
REP4-063_b9	In this case we advise that the 'corrected' Farne Islands SPA guillemot population estimate used for the Applicant's assessment is can be justified but also consider that an assessment against the Seabirds Count figure of 64,042 (uncorrected individuals) in line with other recent projects would	Noted.

Ref	Natural England's Comments	Applicant's Response
	have represented a suitably precautionary approach. We would not expect to draw different conclusions if this smaller population been considered by the Applicant.	
REP4-063_b10	It should be recognised that any assessment and subsequent Population Viability Analysis (PVA) is currently complicated by the recent high level of mortality resulting from HPAI. Precautionary approaches to account for colony recovery and the potential for other high impact stochastic events are likely to be required. We highlight the need for further work to inform more accurate population counts for breeding auks, especially at SPA colonies.	Noted.
	Level of impact and risk of AEOI	
REP4-063_c1	Natural England continue to base our advice on a range-based approach to displacement impacts, as detailed in our best practice advice. Specifically, we will consider impacts under 30 - 70% displacement and 1 - 10% mortality scenarios. However, in line with previous relevant cases we will also use the mortality level arising at 70% displacement and 2% mortality as a reference point.	Noted.
REP4-063_c2	Natural England note that at 70% displacement and 2% mortality of displaced birds, **3** (95% CLs 0-8) adult guillemots are predicted to die per year due to displacement from North Falls. Noting that the matrices presented consider a corrected population estimate and baseline mortality level, we would not expect project alone impacts to exceed an increase in baseline mortality of 1% even if an uncorrected population was considered in line with recently consented applications. In any event, at this level of impact and with connectivity in the non-breeding season only, it is evident that there will not be an AEoI on the guillemot feature of the Farne Islands SPA for North Falls alone.	Noted.
REP4-063_c3	Natural England have previously advised regulators that we cannot rule out an in-combination AEOI on guillemot at the Farne Islands SPA due to the substantial impacts of the Berwick Bank OWF both alone and in-combination with other plans and projects. Furthermore, Natural England did not agree with the impact assessment carried out for Berwick Bank OWF and considered the estimated mortality from that project likely to be an underestimate.	Noted.
REP4-063_c4	The Applicant has estimated a total in-combination annual mortality impact of 240 (at 70% displacement and 2% mortality) apportioned to the guillemot feature of FI SPA, which for the Applicant's proposed population represents an increase in baseline mortality of 5.4%. The Applicant has investigated this increase in baseline mortality by PVA, which predicts a reduction in colony growth rate of 0.3%. We note this is lower than the 0.5% reduction in growth rate calculated by a PVA recently submitted as part of the ODOW application which considered a lower in-combination total impact of 214 mortalities per year. The higher reduction in growth rate is likely to be attributed to that projects consideration of a much smaller post-HPAI, uncorrected population count of 46,332 (SMP 2023 count).	Noted.
REP4-063_c5	Taking into account the above, while Natural England considers the projects contribution of 3 birds to the in-combination total to be relatively small and restricted to the non-breeding season, we note that it is directly comparable to the project alone impact arising at Rampion 2. Thus, we consider the conclusions drawn at that project to be equally applicable here. However, we do consider the Applicant's compensatory measure for guillemot at FFC SPA can be sufficiently scaled to also compensate for the FI SPA impact. As such, a separate derogations case for the Farnes is not necessary.	Noted.
REP4-063_c6	In conclusion, we are unable to rule out AEoI beyond scientific doubt for guillemot at the Farne Islands SPA in-combination with other plans and projects.	Noted.

2.7 Applicant's Response to Natural England's comments regarding Appendix H4.1 [REP4-064] (Onshore ecology)

Table 2.7 Applicant's Response to Natural England's comments regarding Appendix H4.1 [REP4-064]

Ref	Update made	NE position at D4	Applicant's Response
	REP1-018		
REP4-064_a	We note that Shingle Street has been removed as a proposed LBBG compensation site option, whilst Gedgrave Marshes has been added. The Gedgrave Marshes site is adjacent to, but not within, designated sites and is on agricultural land that does not have evidence of previous usage by LBBG for nesting. The area of Gedgrave Marshes that would be fenced (as a compensation site) is currently grassland opposite Havergate Island, where a large LBBG colony exists. The proximity of Gedgrave Marshes to the Alde-Ore Estuary Special Protection Area (AOE SPA), Ramsar and Special Site of Scientific Interest (SSSI) and the presence of suitable habitats for wintering waterbirds indicates there is potential for functional linkage to designated sites. This is reinforced by Gedgrave Marshes being a High Priority Wetland Bird Survey (WeBS) count sector (Alde Estuary Sector 8 Location 33448), highlighting the site's likely usage by SPA waterbirds. Accordingly, we advise that the Applicant will need to carry out an assessment of the potential implications of the proposed measures on waterbird features of the SPA/Ramsar site through the HRA process, and if warranted identify appropriate mitigation measures for the construction and operational phases to minimise effect	New issue.	An assessment of the effects of LBBG compensation, should the Gedgrave Marshes option be selected, is provided in the LBBG Compensation - Gedgrave Marshes Impact Assessment **[9.84, (Rev 0)]** submitted at Deadline 5.
	REP1-018 Para 103-104		
REP4-064_b	We note that delivery of the compensation site is to be secured by relevant provision of the DCO and the specific location likely to be agreed after Examination. This implies that baseline characterisation surveys of the compensation site will only be undertaken when the final site is agreed. In line with the advice provided by Natural England to Five Estuaries OWF project, the Applicant will need to commit to pre-construction surveys of the compensation site, in order to address the gaps in the baseline characterisation evidence for this site, and to inform mitigation measures to address any impacts on designated sites (including functionally-linked land if relevant).	Not progressed.	As stated in Section 2.4 of 7.2.2.2 HRA Annex 2B Lesser Black-backed Gull Compensation Effects on Designated Sites (Rev 0) **[REP4-010]**, the Applicant is committing to carrying out pre-construction surveys, including ecological, Invasive Non-Native Species (INNS) and unexploded ordnance (UXO) surveys where applicable to inform the final design of compensation. The Applicant will update the Outline LBBG CIMP at Deadline 6 to confirm the commitment to pre-construction surveys.
	REP1-020 Section 3.4.1		
REP4-064_c	The Applicant has confirmed that consideration of field surveys will not be undertaken until a compensation site has been selected. We would advise consideration of site surveys does not guarantee that they will be carried out. Furthermore, the Applicant states (in paragraph 25) that habitat mapping for design will take account of mitigation required for other designated features and will use National Trust and RSPB available data to inform development of final site. We advise, as above, that the Applicant will need to	Not progressed.	See response to REP4-064_b above.

Ref	Update made	NE position at D4	Applicant's Response
	consider robust baseline survey data collection as the site selection progresses.		

2.8 Applicant's Response to Natural England's comments regarding Appendix H4.2 [REP4-065] (Biodiversity Net Gain)

Table 2.8 Applicant's Response to Natural England's comments regarding Appendix H4.2 [REP4-065]

Ref	Natural England's Comments	Applicant's Response
	BNG Calculations	
REP4-065_a	Natural England has reviewed both versions of the BNG Technical Note [REP1-050 and REP3-028]. The Applicant's position remains that "*in the absence of any statutory requirements and guidance on BNG for NSIPs, the calculations provided within the BNG Strategy provide a reasonable assessment of the BNG baseline for the purpose of pre-consent outline BNG assessment*". It is important to note that the updated BNG calculations provided in the Technical Note are provided only for the purposes of demonstrating the BNG unit changes predicted should the Natural England assumptions be used.	Noted.
	Commitments	
REP4-065_b	Natural England welcomes the Applicant continues to commit to securing a minimum 10% gain through the Development Consent Order (DCO).	The Applicant would like to clarify their position is that they are exploring opportunities to deliver a minimum 10% BNG (see the Biodiversity Net Gain Strategy [**REP3-027**]). This is not a firm commitment to achieving 10% BNG. However, as demonstrated in the early design stage assessment BNG calculations presented in the BNG Strategy 10% BNG across the habitats and hedgerows modules is predicted to be achieved by the Project, based on the current outline landscape design at the onshore substation and using the Applicant's assumptions (see section 5.1.3 of **[REP3-030]**).
	NSIP guidance to BNG	
REP4-065_c	To date, Natural England has received no further information or guidance on how BNG will apply to Nationally Significant Infrastructure Projects (NSIPs). We are awaiting clarity around the policy approach to large infrastructure. Therefore, our comments are advisory only.	Noted. The Applicant will continue engaging with Natural England and other relevant stakeholders during the development of the final BNG assessment post-consent, when further guidance on BNG for NSIPs is likely to have been published. The Applicant notes that a Government consultation on BNG for NSIPs was published on 28 May 2025.
	Scale of impacts to water courses	
REP4-065_d	The Technical Note compares two BNG scenarios (the project alone, and the project in-combination with Five Estuaries). We note that the technical note applies Natural England's assumptions, which are based on current Town and Country Planning Act (TCPA) guidance and assesses the impact of these on the BNG calculations for the scheme. By applying Natural England's assumptions this has resulted in a lower percentage gain for area and hedgerow units compared to the Applicant's assumptions. However, applying Natural England's assumptions has reduced the predicted loss in watercourse units and therefore we satisfied with outcomes included within the assessment.	Noted.
	BNG options	

Ref	Natural England's Comments	Applicant's Response
REP4-065_e	Natural England notes that the Applicant's metric predicts a watercourse loss of -29%. They have stated that they are minimising impacts on watercourses as far as possible, but do not intend to compensate for this loss due to the difficulties in securing offsite watercourse units. As BNG is not yet mandatory for NSIPs, the Applicant would be unable to register any offsite gains or qualify for a statutory credit purchase (as they have noted in para.86 of the BNG Strategy). While we note that the options via BNG appear limited; Natural England through our Discretionary Advice Service may be able to explore with the Applicant potential projects that align with relevant Local Nature Recovery Strategy (LNRS) watercourse actions that the Applicant could fund or contribute towards. This could enhance the proposed BNG to help address the loss.	The Applicant will consult with Natural England and other relevant stakeholders during the development of final BNG assessment post-consent to further explore the potential options for watercourse enhancement.
	Monitoring and maintenance commitments	
REP4-065_f1	Natural England notes that the Applicant intends to put a 5-year management and maintenance plan in place for reinstated hedgerows, which they note is typical for NSIPs. However, para.101 in the revised BNG Strategy now states the project will provide up to 10 years of post-reinstatement surveys (only). Therefore, we advise that clarity is required on whether the surveys will be linked to potential further maintenance if surveys indicate the need for further action. The Applicant notes the difficulties around land ownership, i.e. acquiring land on a temporary basis and returning it to a landowner with a 30-year BNG commitment attached. Due to the lack of clarity on land that is temporarily acquired for NSIPs. we believe that a 10-year management plan proposal for this project is reasonable. However, we advise that, where possible, plans should be in place until the end of operations.	As stated in paragraph 101 of the Biodiversity Net Gain Strategy **[REP3-027]**, post-reinstatement surveys of hedgerows will be carried out for up to 10 years, after which it will be assumed that the landowner will continue to maintain the area as they deem fit. This is due to the difficulties acknowledged by Natural England surrounding land ownership during maintenance and monitoring. Therefore, post-reinstatement hedgerow surveys will not be linked to potential further maintenance if surveys indicate the need for further action beyond the 10 year period. Clarification regarding the aftercare and monitoring and management periods the Applicant has committed to are provided in an updated version of the OLEMS **[7.14 (Rev4)]**.
REP4-065_f2	Natural England supports the Applicants proposal to update BNG calculations and metric scores as the detailed design is refined.	Noted.

2.9 Applicant's Response to Natural England's comments regarding Appendix I4 [REP4-066] (SLVIA)

Table 2.9.1 Applicant's Response to Natural England's comments regarding Appendix I4 [REP4-066]

Ref	Natural England's Comments	Applicant's Response
	[REP2-024] Applicant's response to NE's SLVIA Rel Reps (submitted at DL1)	
REP4-066_a1	REP2-024 does not contain new information requiring further detailed Natural England comment. Minor comments on the contents on REP2-024 are as follows: REP2-024 refers to a new technical document, REP3-044, submitted at Deadline 3 (DL3), which contains an Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape (SECHNL) and Suffolk Heritage Coast (SHC). Natural England's comments on REP3-044 are provided in point 2 below.	Noted. Please refer to the Applicant's responses to REP4-066_b1 to REP4-066_b8 below.
REP4-066_a2	Natural England note the Applicant's response to issue I7, that "*the inclusion of any other measures specifically to further the purposes of the SECHNL would not be considered reasonable, proportionate or appropriate, in the context of concluding no significant effects on the special qualities of the SECHNL from the Project.*" Natural England do not agree with this conclusion and our key concerns remain as summarised in issue I2 of the Natural England's Relevant Representations (RR).	Noted. There has been no change in the Applicant's position. The Applicant refers to its response to issue I2 in the Applicant's Response to Natural England's Relevant Representation Appendix I2 Seascape, Landscape and Visual Impact Assessment **[REP2-024]**.
REP4-066_a3	Natural England note the Applicant's responses to issues I8, I10, I11 and confirm there is no change in our advice provided in Natural England RR.	Noted.

Ref	Natural England's Comments	Applicant's Response
REP4-066_a4	For issue I9, Natural England would like to provide a note of clarification. Natural England's advice for I9 does relate to the Applicant's judgements made on impacts to visual receptors (people) at Orford Ness. With this clarification, Natural England's comments for I9 remain unchanged (that the sensitivity of receptors at Orford Ness is high) and Natural England do not accept the Applicant's rationale regarding where the attention of receptors at Orford Ness will be focussed.	The Seascape, Landscape and Visual Impact Assessment (SLVIA) presented in ES Chapter 29 Seascape, Landscape and Visual Impact Assessment **[APP-043]** recognises the higher susceptibility of recreational receptors on the coast, from many coastal viewpoints in the SLVIA. There are several other viewpoints where effects on high sensitivity receptors are considered, e.g. Viewpoint 9 Shingle Street; Viewpoint 10 Pulhamite Cliffs. It is the Applicant's view that Viewpoint 8 at Orford Ness represents the view experienced by recreational receptors specifically visiting the nature reserve (which is accessed by ferry). As such, the medium susceptibility identified here is considered to be justified. Even if a high susceptibility was attributed to receptors at Viewpoint 8, the overall level of effect would remain moderate, as at the other viewpoints noted above.
	[REP3-044] - Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast - Technical Note (Rev 0)	
REP4-066_b1	Natural England's comments on REP3-044, Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast, are as follows: Natural England welcome the submission of REP3-044, which directly provides the further information Natural England requested in issues I5 and I6 of the Natural England RR.	Noted.
REP4-066_b2	The submission of Table 4 Potential Effects on Each of the Selected Special Qualities of the SECHNL is welcomed. For each special quality listed, the scale of effect is reported and the magnitude of change to these special qualities is stated as low. We note the Applicant's conclusion that "the project will give rise to moderate-minor (not significant) effects on the Scenic Quality and Relative Wildness aspects of the natural beauty of the SECHNL". Based on this assessment: • Natural England agrees with the Applicant's assessment that special qualities relating to landscape quality, scenic quality and relative wildness special qualities have the potential to be influenced by the project. • **Natural England disagrees with the judgements applied.** Please see Table 1 for examples of how these special qualities could be impacted by the project.	Noted. See response to detailed comments in Table 2.9.2 below (REP4-066_b5 to REP4-066_b8).
REP4-066_b3	Natural England welcome the Applicant's assessment of impacts to the SHC in Table 5. Upon review of this information, Natural England do not change our advice on the significance of impacts to the Landscape Character Types identified in Table 3 of our Natural England RR, for the reasons stated in that submission.	Noted.
REP4-066_b4	For issue I12 Natural England welcomes the Applicant's updated position on the significance of cumulative effects on Landscape Designations. Natural England note that the Applicant now concludes that "total cumulative effects on the special qualities of the SECHNL and the special character of the SHC may be significant". This updates the Applicant's previous judgement described in Table 29.39 of the SLVIA stating that "the cumulative effect is predicted to be moderate-minor, which is not significant in EIA terms". Natural England advice on cumulative effects remains unchanged.	Where the Applicant states "*total cumulative effects on the special qualities of the SECHNL and the special character of the SHC may be significant*" in paragraph 35 of the Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note **[REP3-044]**, this assessment refers to the combined (or total) effects of all operational, consented and proposed offshore wind farms, taken together. As also stated in paragraph 35, "*the contribution of the North Falls project will be limited*". The total cumulative effects for all operational, consented and proposed offshore wind farms may be significant should the proposed North Falls offshore wind farm go ahead or not. As such, the contribution the proposed North Falls offshore wind farm makes to 'total' cumulative effects is not judged to tip the balance towards total cumulative effects being significant. The additional cumulative effect of North Falls remains moderate-minor, as reported in ES Chapter 29 SLVIA **[APP-043]**, and this judgement has not been updated. Further detail is provided in the updated version of the Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note that has been submitted at Deadline 5 **[9.33 Rev1)]**.

Table 2.9.2 Applicant's Response to Table 1 in Appendix I4 [REP4-066]

Ref	Special Quality	Applicant judgement on scale of effect within REP3-044	The Applicants judgement on significance of effect in EIA terms, as indicated in REP3-044	Natural England advice on significance of effect in EIA terms	Applicant's Response
	Landscape Quality				
REP4-066_b5	Offshore wind turbines at Greater Gabbard, Galloper and the more distant London Array are visible from some stretches of the coastline. These create a cluttered horizon and, like the large scale elements onshore, also divide opinion.	Small	Not significant	**Disagree – moderate (significant).** See Natural England advice on the impact of the current Environmental Statement (ES) design in I12. Natural England advise that the North Falls array will be visible from some stretches of coastline and will contribute to the cluttered horizon. Please refer to Table 3 in Natural England RR, where Natural England judgements on the significance of effects on landscape character are described.	The Applicant agrees that the North Falls array will be visible from the coast of parts of the SECHNL, but it does not follow that effects on this special quality (which recognises the influence of offshore wind farms) will be significant. The Applicant stands by the content of the Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note **[REP3-044]**, which was submitted at Deadline 3. Refer to Table 4 of **[REP3-044]** for further details on the Applicant's position on this matter.
	Scenic Quality				
REP4-066_b6	Extensive shingle beaches and shallow bays provide opportunities for long distance and panoramic views including out to sea and along the Heritage Coast. Views to coastal landform also possible from locations offshore.	Medium	Moderate-minor (not significant)	**Disagree - major adverse (significant) from select viewpoints.** Natural England advise that the sensitivity of receptors at Orford Ness is high, see Natural England issue I9. As described in Natural England issue I2, one of Natural England's key concerns is the significance of visual effects, particularly between Orford Ness and Bawdsey Manor.	The assessment of effects on this special quality is assessed within the Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note **[REP3-044]** with reference to the range of views available along the coast of the SECHNL - not just from one specific location. As noted in Table 4 of **[REP3-044]**: "*Potential to alter perceptual qualities associated with 'long distance and panoramic views including out to sea…' Offshore wind farms have altered these views and the proposed development will be seen in this cumulative context. Figure 29.1.9a of ES Chapter 29 Seascape and Landscape Visual Impact Assessment **[APP-077]** highlights the widespread visibility of existing offshore wind farms along the coastal edge and the limited nature of additional visibility introduced by the project. The viewpoint assessment identifies a magnitude of impact no greater than medium from coastal viewpoints, and this will reduce with distance from the Offshore Above-sea Development*."
REP4-066_b7	Elevated vantage points provide impressive views over low lying coastal marshes, estuaries, beaches and	Medium	Moderate-minor (not significant)	**Disagree – major adverse (significant) from select viewpoints.**	The Applicant considers that an assessment that the Project would have a major adverse impact on this special quality, when the offshore wind farm is approximately 40km distant

Ref	Special Quality	Applicant judgement on scale of effect within REP3-044	The Applicants judgement on significance of effect in EIA terms, as indicated in REP3-044	Natural England advice on significance of effect in EIA terms	Applicant's Response
	expansive long distance views out to sea. Views to the coastline from out to sea are also noted.			Please refer to Table 3 in Natural England RR, where Natural England judgements on the significance of visual effects are described.	at its closest point (and seen in the context of other offshore wind farms) overstates the nature of the effects. There is little justification in Table 3 of Natural England's Relevant Representation Appendix I2 **[REP1-071]** to support their alternative judgements of visual effect. Accordingly, the Applicant maintains its position in respect of this point.
	Relative Wildness				
REP4-066_b8	Largely undeveloped coastline and offshore areas and areas of semi-natural habitat including Sandlings Heath, forests, reedbeds, estuaries and marshland.	Medium	Moderate-minor (not significant)	**Disagree – moderate (significant).** See Natural England advice on the impact of the current ES design in I12. Natural England advise that the North Falls array will be visible from some stretches of coastline and will contribute to the industrialisation of views from the SECHNL.	The Applicant accepts that the North Falls array will be visible from some stretches of coastline but submits that this does not equate to significant effects on this special quality. As noted in Table 4 of **[REP3-044]**: "*Potential to alter perceptual qualities associated with the largely undeveloped offshore areas. While there are currently remaining undeveloped areas off the coast of the SECHNL, the project will be located close to other offshore development. There will be a further reduction in undeveloped offshore views, and cumulatively the project will contribute somewhat to 'curtaining', though it will occupy a modest extent of the skyline*."

2.10 Applicant's Response to Natural England's comments regarding Appendix K4 [REP4-067] Risk and Issues Log

Table 2.10 Applicant's Response to Natural England's comments regarding Appendix K4 [REP4-067]

(The Applicant has only commented here by exception to items listed within Natural England's Appendix K4. A lack of response to a particular point does not suggest the Applicant agrees with Natural England's position on that point.)

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(A) DCO									
REP4-067_a1	Schedule 15	2	A2	Schedule 15 compensation only covers impacts to Lesser Black Backed Gull (LBBG). We cannot	No change.		No change.		*Without prejudice* compensation schedules have been provided at Deadline 5 for Kittiwake (FFC SPA),

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				advise that an Adverse Effect on Integrity (AEoI) on the Flamborough and Filey Coast (FFC) Special Protection Area (SPA) can be excluded. Provision for compensatory measures for the relevant features should be included in the draft DCO on a without prejudice basis.					Razorbill (FFC SPA), Guillemot (FFC SPA and Farne Islands SPA) and Red-throated diver (OTE SPA) [**9.73, (Rev 0)**].
REP4-067_a2	Schedule 1 Part 3 Para 2, Schedule 8 Part 1 Condition 2, and Part 2 Condition 10	3	A4	Natural England recommends that the Applicant considers an amendment to the DCO to include the maximum volumes of drill arisings within the requirements and both dMLs.	No change.		No change.		Maximum volumes for drill arisings were included in the design parameters within the dMLs at Deadline 4, at Schedule 8, Part 2, Condition 10, Schedule 9, Part 2, Condition 11, and Schedule 10, Part 2, Condition 11. See [**REP4-004**]
REP4-067_a3	Schedule 1 Part 3 Para 7	4	A5	We would expect the landscape requirements to also cover survey methods, monitoring requirements and the requirement to maintain, including the potential for replanting due to plant failures. Further, we would expect to be consulted on these plans prior to their approval by the relevant Local Planning Authority (LPA).	Requirement amended to include consultation with the SNCB, in Deadline 1 update. Issue is partially resolved.		No Change.		The Applicant has addressed this point in its response to Natural England's Deadline 3 submissions [**REP4-028**] at Table 2.6 and notes a further updated Outline Landscape and Ecological Management Strategy (OLEMS) was submitted at Deadline 4 [**REP4-006**] and [**REP4-007**].
REP4-067_a4	Schedule 1 Part 3 Para 8	5	A6	Natural England requests the text be amended to include a requirement to consult the relevant Statutory Nature Conservation Body (SNCB) on the Code of Construction Practice (CoCP) and recommends that the requirement should note the final CoCP must accord with the outline CoCP.	Requirement amended to include consultation with the SNCB, in Deadline 1 update. Issue is partially resolved.		No Change.		Schedule 1, Part 3, Requirement 8 does note that the final CoCP must accord with the outline CoCP. The Applicant considers this point is resolved.
REP4-067_a5		6	A7	Natural England requests that the relevant SNCB be included as a required consultee. We also note that based on the wording here, and the interpretation of onshore commencement, clearing works could be conducted prior to the submission and approval of the final Ecological Management Plan (EMP). This provision should be amended to state that no pre commencement clearance works should be undertaken until a written EMP, as relevant to the stage of the works, has been submitted to, and approved by, the LPA following consultation with the relevant SNCB.	Requirement amended to include consultation with the SNCB, in Deadline 1 update. Issue is partially resolved.		No Change.		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England [**REP1-044**] at Table 2.3. The Applicant notes that reference was made in error to requirement 13(3) in the relevant response in [**REP1-044**]. The Applicant meant to refer to requirement 12(3).

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REP4-067_a6	Schedule 1 Part 3 Condition 21	8	A9	The relevant SNCB is not listed as a consultee on the Biodiversity Net Gain (BNG) strategy, given the nature of this plan we would request consultation on this document. Further we note that no time period is given for the duration of which the strategy should be monitored, maintained or when adaptive management measures may be implemented. The requirement should ensure the strategy is enforced for a period of thirty years, or for the lifetime of the development.	Requirement amended to include consultation with the SNCB, in Deadline 1 update. Issue is partially resolved.		No Change.		The Applicant has addressed this point in its response to Natural England's Deadline 3 submissions **[REP4-028]** at Table 2.6.
REP4-067_a7	Schedule 8 Part 3 Condition 21 (1) (m)	9	A10	Due to the need to appropriately consider in-combination impacts of other developments it is important that the Site Integrity Plan (SIP) should not be submitted too early. Natural England advises this condition should be amended to give an individual timing requirement to be submitted no sooner than 9 months and no later than 6 months prior to commencement of piling.	No Change		No Change		Table 1.2 of the Outline SIP [**APP-243**] provides an indicative programme showing consultation on a draft SIP around 12 months prior to foundation installation and submission of the SIP by 6 months prior. Therefore, timings are not required in the DCO. The Consultation process for the SIP will ensure it is not submitted too soon. The MMO state **[REP3-056]** that if the SIP were "submitted too early, this may be rejected as the information to discharge the document may not be provided or multiple updates to the SIP may be requested prior to the discharge." Therefore, it is the Applicant's position that there are already adequate controls in place. Following discussion with the MMO on the 15th May 2025, the Applicant understands this is agreed with the MMO.
REP4-067_a8	Schedule 8 Part 2 Condition 25	10	A11	Natural England notes that the monitoring conditions only cover benthic monitoring. Ornithological and marine mammal monitoring should also be requirements due to the potential for impact.	No Change		No Change		The Applicant has addressed this point in its response to Natural England's Deadline 3 submissions [**REP4-028**] at Table 2.6.
REP4-067_a9	Schedule 8 Part 2 Condition 27	12	A13	Natural England notes that this condition does not have provision for marine mammal monitoring. Further, we note the recent SoS decision for SADEP approved the following	No Change		No Change		As above in response to A11.

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				recommendation from Natural England and the Marine Management Organisation (MMO) for particular impacts requiring remediation or further mitigation works in the event of impacts being greater than predicted. Natural England requests that a similar condition is included within all dMLs.					
REP4-067_a10	Schedule 8, 9 and 10	14	A15	Natural England notes that nowhere within these dMLs does there appear to be any requirement to notify the MMO with regard to which build option has been chosen.-As Five Estuaries is still in examination we would recommend consideration for both projects to capture a requirement to co-ordinate on the onshore cable works. We recommend consideration of including provisions for co-operation and for notification to the MMO as offshore enforcing body of the build option selected.	No Change		No Change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.
REP4-067_a11	Schedule 15 General point	15	A16	Natural England notes that compensation provisions have been provided for LBBG only. We have advised that compensation is required for other ornithological and benthic features, specifically kittiwake, guillemot and razorbill at Flamborough & Filey Coast Special Protection Area (SPA). The compensation schedule should be updated to cover all sites where there is currently disagreement regarding an adverse effect on site integrity.	No Change		No Change		At Deadline 5 the Applicant has submitted *without prejudice* compensation schedules for Kittiwake and Razorbill at FFC SPA, Guillemot at FFC SPA and Farne Islands SPA, and Red-throated diver at OTE SPA **[9.73 (Rev 0)]**.
REP4-067_a12	Scheule 15	16	A17	All references to Natural England within this schedule should be amended to the 'relevant SNCB' to ensure consistency with the rest of the DCO.	No change		No change		The Applicant updated Schedule 15 of the draft DCO at Deadline 1 so that all references in Schedule 15 to Natural England now refer to the relevant SNCB. The Applicant has made a further change to Schedule 9, Part 2, Condition 36(1) of the DCO at Deadline 4 to update the reference from Natural England to 'the relevant SNCB' **[REP4-004]**.

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									The Applicant considers this issue is resolved.
REP4-067_a13	Schedule 15, Para 2	17	A18	The Offshore Ornithology Engagement Group appears similar to the steering groups used on other compensation provisions. However, the condition does not include the need to provide and consult upon; terms of reference for the group, details of proposed meetings, timetable for the preparation and delivery of the LBBG Compensation Implementation and Monitoring Plan (CIMP), or a dispute resolution mechanism.	No Change		No Change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.
REP4-067_a14	Schedule 15 Para 3 (1)	18	A19	Natural England notes the wording here is confusing as it implies that compensation may be delivered through some other unknown, or undetailed, mechanism and thus the compensation within this provision may not be required. We recommend amending this provision and consideration of how to appropriately implement a provision allowing strategic compensation options. This could also be applied to other compensation schedules provided on a without prejudice basis.	No Change		No Change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.
REP4-067_a15	Schedule 15 Para 4	19	A20	The list of requirements to include in the CIMP is lacking in detail when compared to similar provisions. Within (d) we would expect to see survey methodologies, timetables for the monitoring to be conducted and reports delivered and success criteria. Within (g) we would expect to include a detailed mechanism to determine the need for any alternative compensation or adaptive management measures, along with potential further monitoring and maintenance of such measures.	No Change		No Change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.
REP4-067_a16	Schedule 15 para 5	20	A21	We note this requirement ensures that LBBG compensation must be provided three full breeding seasons prior to operation.-Natural England recommends the Applicant amends the condition to reflect four full	No Change		No Change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.

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				breeding seasons in line with compensation requirements for other projects.					
REP4-067_a17	Schedule 15 Para 8	21	A22	The compensation may be required for longer than the lifetime of the project and so should be maintained until the SoS approves its decommissioning in consultation with the relevant SNCB. Natural England recommends the Applicant amends the provision to require the approval of the SoS and consultation with the SNCB.	No Change		No Change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.
REP4-067_a18	Appendix A	23	A24	It would be helpful if the Outline Operations and Maintenance plan could specifically set out O&M activities so it can be read as a standalone document.	No Change		No Change		The Applicant has addressed this point in its response to Natural England's Deadline 3 submissions **[REP4-028]** at Table 2.6.
REP4-067_a19	Appendix A	24	A25	The replacement or addition of scour protection around foundations for the lifetime of the project (Page 13) doesn't align with comments made in the DCO and/or the Benthic Appendix.	No Change		No Change		The Applicant has addressed this point in its response to Natural England's Deadline 3 submissions **[REP4-028]** at Table 2.6.
REP4-067_a20	General point	25	A26	This plan doesn't really align with the Cable statement [APP-262] and we advise that this is addressed by the Applicant.	No Change		No Change		The Applicant submitted an updated Outline Offshore Operations and Maintenance Plan at Deadline 3 **[REP3-024]** and **[REP3-025]**. The Applicant also submitted an outline Cable Specification and Installation Plan at Deadline 4 **[REP4-039]**, along with an updated Cable Statement **[REP4-015]** and **[REP4-016]**.
REP4-067_a21	General point	26	A27	Natural England notes the Schedule of Mitigation and [APP-262] Cable Statement are not a named documents in the DCO, Natural England considers these documents should be certified under the DCO. Further, the use of terms such as 'where practicable' throughout the document cause concern because listing out mitigation doesn't mean it is achievable and/or that there is commitment to do it. In addition, there is no detail to demonstrate that by undertaking the	No change		No change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.

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				mitigation it will sufficiently minimise impacts to acceptable levels. We advise that this document is updated to clarify what is/isn't committed to by the Applicant.					
REP4-067_a22	General point	27	A28	There is reliance by the Applicant on monitoring as a form of mitigation, which it is not. We advise that all references to monitoring other than to test the effectiveness of mitigation measures are removed from the schedule.	No change		No change		The Applicant has addressed this point in its response to Relevant Representations Received from Natural England **[REP1-044]** at Table 2.3.
REP4-067_a23	General point	28	A29	Natural England highlights that the document [APP-262] Cable Statement is currently overly simplified and too high level and that it is not clear how this plan aligns with the other named plans and document. Reliance on these documents alone as set out in the documents purpose could cause key commitments to not be implemented. Natural England would welcome further clarification from the Applicant on how the plans work together, and further detail being included within the ocument.	No change		No change		The Applicant has submitted an updated Cable Statement at Deadline 4 **[REP4-015]** and **[REP4-016]**, as well as an outline Cable Specification and Installation Plan at Deadline 4 **[REP4-039]**.
REP4-067_a24		30	A31 New issue	Natural England has requested the DCO include a condition or requirement to ensure that the project does not exceed the operational lifetime considered within the Environmental Statement.	n/a		New issue raised within Natural England Deadline 4 cover letter.		The Applicant's position remains as set out in the Applicant's Response to Deadline 3 Submissions and Deferred Responses from Deadline 2 **[REP4-027]**, in response to the MMO in Table 2-4 at row REP3-056_n.
(B) Marine Processes									
REP4-067_b1		1	B1	There is uncertainty regarding the likely success of subtidal Horizontal Directional Drilling (HDD) at the landfall point. Geotechnical/expert evidence in support of HDD should be presented. Otherwise an alternative WCS should be presented as a contingency.	In Progress. The Applicant states [REP1-044] that the Outline HDD methodology is based on initial feasibility work. It is considered that an HDD exit in the intertidal area may not be feasible, hence the subtidal exit was considered the most feasible option based on the best available information at the application submission. Applicant to		No Change. No further information provided since Deadline 3.		Response provided at Deadline 4 in Document Reference 9.43 Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**, section 2.6 confirming that further site investigation works are planned for later this year to inform post-consent detailed design.

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					confirm that further ground investigations and surveys will be carried out.				
REP4-067_b2		2	B2, B10	There is uncertainty with the (realistic) WCS parameters for seabed level changes during construction from deposition. Further consideration and assessment of WCS for seabed level changes due to the different seabed preparation and construction activities is required, including sediment deposition thickness, extent, and persistence.	No Change. In [REP1-044] the Applicant has stated that project-specific geophysical survey data is being reviewed to further define the location, geometry, and potential mobility of the sandwaves across the Project. This is anticipated to further refine sandwave levelling locations. We will provide an update at Deadline 4.		No change. [REP3-045] considers bedform movement and sediment transport direction inferred from a single dataset of bathymetry surveys, however, it doesn't provide any further information on WCS parameters for seabed level changes due to construction. Therefore, our earllier advice remains unchanged.		Response provided at Deadline 4 in Document Reference 9.43 Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**, section 2.6. The Applicant has undertaken bespoke hydrodynamic and dispersion modelling **[REP4-040]**, This document provides details on the worst-case scenario parameters for relevant construction activities. Further information on the refined worst-case scenario parameters is provided in Supporting Information on Offshore Additional Mitigation **[REP4-041]**.
REP4-067_b3		3	B3, B16, B30, B31, B32	"(a)There is uncertainty regarding the wave and current modelling and a lack of information regarding seabed mobility and seabed erosion/deposition. As a result, we are currently unable to support the impact assessment conclusions relating to sediment transport processes and scour development at KKE MCZ and Annex I sandbanks. (b) Equally further consideration of bed shear stress changes and the sediment erosion/deposition potential within and adjacent to the array through the different phases for the Project alone and cumulatively with other nearby Offshore Wind Farms (OWFs) is required due to uncertainties."	In Progress. The removal of GBS from the project design and the 50m separation distance between turbine foundations [REP1-007] and KKE MCZ are welcome but further evidence is needed to demonstrate that the MCZ will not be impacted by changes to waves, hydrodynamics and sediment transport over the lifetime of the Project.		No change. No further information has been provided to demonstrate that the MCZ will not be impacted by changes to waves, hydrodynamics, and sediment transport over the lifetime of the Project.		Associated with the modelling report **[REP4-040]** submitted at Deadline 4, the Applicant has also submitted a technical note presenting the interpretation of the hydrodynamic and sediment dispersion modelling results **[REP4-042]** and supporting information on offshore additional mitigation **[REP4-041]** which includes consideration of the Kentish Knock East MCZ and confirms there will be no hindrance of the conservation objectives of this site.
REP4-067_b4		4	B4, B16, B26	"(a) Further detail on bedform mobility, morphology, stability and longevity to support the predictions of sandwave recovery is required. Anticipated location(s) of sandwave levelling should inform this. (b)Pre- and post-construction surveys should be secured in the Development	In Progress. In [REP1-044] the Applicant has stated that project-specific geophysical survey data is being reviewed to further define the location, geometry, and potential mobility of the sandwaves across the Project. This is anticipated to further refine sandwave levelling locations and provide a basis for the predictions of sandwave		Progressed. The Applicant has provided further information in [REP3-045] on the locations anticipated sandwave levelling areas, across the offshore export cable		Pre- and post-construction monitoring of specific parts (to be agreed with MMO) of the offshore cable corridor and array area containing sand waves will be included in an updated IPMP to be submitted at Deadline 6.

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				Consent Order (DCO) and/or In-Principle Monitoring Plan (IPMP) to demonstrate sandwave recovery (as predicted) and ensure remedial measures will be undertaken if impacts are found to be greater than predicted."	recovery. We will provide an update at Deadline 4.		corridor and the array. Consideration has been given to bedform movement direction, but this has been inferred from a single dataset. Therefore, if the Applicant can agree to carry out further bedform migration analysis using high-resolution, time-lapse bathymetry collected pre- and post-construction (i.e. captured in the IPMP) then we will consider this issue resolved. Please see Appendix B4 at Deadline 4		
REP4-067_b5		5	B5, B28	"Further information on the anticipated location and extent of cable protection near MLS SAC is required to demonstrate that adverse impacts to the SAC due to disruption of sediment transport pathways operating around the northern boundary and seabed morphology can be excluded. The assessment should consider total amounts of cable protection proposed across the different project phases. Please also refer to B13. "	In Progress. Natural England welcomes the Applicant's commitment to a 150m buffer between MLS SAC and export cable protection [REP1-007]. However, further evidence is needed to demonstrate that cable protection near the SAC will not modify sediment transport pathways/processes operating on/near the SAC and in turn lead to morphological change.		No change. Further evidence is needed to demonstrate that cable protection near the SAC will not modify sediment transport pathways/processes operating on/near the SAC and in turn lead to morphological change.		As informed in document 9.43 Applicant's Response to Natural England's Deadline 3 **[REP4-028**], the Applicant has undertaken bespoke hydrodynamic modelling **REP4-040]** and interpretation of the results with respect to cable protection **[REP4-042]**. These documents show the location and extent of potential cable protection and show that changes in bed shear stresses (sediment transport) due to its presence are minimal. The Applicant has also submitted Supporting Information on Offshore Additional Mitigation **[REP4-041]** at Deadline 4, which includes consideration of the Margate and Long Sands SAC and confirms there will be no AEOI of this site.
REP4-067_b6		6	B8, B28	North Falls acknowledge that cable protection on the seabed would represent the WCS at HDD exit pits and along the intertidal cable route. Natural England is unable to agree with the Applicant's negligible significance assessment of this impact. Further clarity is require on	In progress. The North Falls HDD exit will be in the subtidal zone [REP1-038] not the intertidal zone which partially resolves this issue. We advise that the Applicant should provide WCS parameters for nearshore cable protection requirements and specify locations.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The specific locations of cable protection cannot be determined pre-consent. This is standard for offshore wind farms and other offshore cables. However, a worst case scenario based on indicative cable protection locations has been used to inform the

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				whether rock berms for cable armouring are proposed within the intertidal, If that is the case then further investigation of potential disruption to longshore drift and the potential to impact overlapping designated sites downdrift is required.					hydrodynamic modelling **[REP4-040]** and the interpretation of the results with respect to cable protection **[REP4-042]**, submitted at Deadline 4. The positioning of the cable protection along 8 locations of an indicative offshore cable route was based on the assessment of areas that could prove difficult for burying and potential cable crossings.
REP4-067_b7		7	B11, B29	Sediment deposition from sandwave levelling could led to an order of magnitude difference in seabed height which could have significant implications for sensitive receptors, such as spawning fish, benthic ecology. The significance of which will be influenced by the persistence of the mound. Further evidence from adjacent OWFs of mound persistence/redistribution and thickness should be provided to support conclusions.	The Applicant is confident that sandwave levelling/seabed preparation mounds will be mobile and re-distributed by the prevailing physical processes. However, the WCS parameters for the mounds need to be confirmed and their persistence.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		As informed in the Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**, mound persistence is not usually monitored and based on expert interpretation it has been ascertained that sediment will be redistributed because their particle size characteristics will be the same as the sand waves from which they were created. Hence, the physical processes driving the sand waves will drive transport of the sediment in the mounds.
REP4-067_b8		8	B12, B29	The WCS for foundation installation requiring drilling is 10% of 34 Wind Turbine Generators (WTGs) and one Offshore Substation Platform (OSP)/Offshore Converter Platform (OCP). The rationale for this WCS is unclear. The anticipated location where drilling may be required for foundation installation has not been provided. It is also stated that aggregated mud clasts within drill spoil mounds would mostly remain static. Conversely, it is also stated that over time the mound would gradually winnow away and lower through erosion. Further clarity on WCS for persistence of drill arisings and their location is required, before we can advise on the scale and significance of changes to marine process and potential impacts to sensitive receptor from the presence of the arisings.	In Progress. The Applicant has stated [REP1-044] that all monopiles at Greater Gabbard were installed by piling hence the Applicant's expectation that drilling will not be required at North Falls. However, if needed, drilling could lead to creation of persistent mounds that are unlikely to fully erode. We advise that indicative drilling and disposal locations should be provided.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		As informed in document 9.43 Applicant's Response to Natural England's Deadline 3 **[REP4-028]**, the closest turbine foundations to the KKE MCZ have been chosen conservatively as the worst-case scenario to inform the hydrodynamic and dispersion modelling **[REP4-040]** for both the smaller turbine and larger turbine layouts.

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REP4-067_b9		9	B13	"(a) Currently the project design allows for additional cable protection allowance for both the array and platform interconnector cables (20% of the length) and the offshore export cable length (10% of the length). Further information is needed regarding the rationale as to why cable protection is needed given the alternatives, the amounts required and how they have been minimised, and their anticipated placement location demonstrating there is no overall increase in footprint, before we can advise further on potential scale and significance of the impacts. (b) Standard quantities of additional scour and/or cable protection replenished outside of benthic SACs should be committed to namely 10% of any scour prevention/cable protection laid during installation within a 10-year period only with a requirement for further marine licence beyond that."	In Progress. The Applicant has provided further justification for the additional cable protection allowance [REP1-044] and proposes further consideration. We will provide an update following the Applicant's update.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The maximum area and volume of scour and /or cable protection are included in Schedule 1, Part 3 of the draft DCO. Additionally, Part 2 of Schedules 8 and 9 in conditions 34 and 35, respectively, inform that any cable protection authorised under this licence must be deployed within 10 years from the date the Order comes into force unless otherwise agreed by the MMO in writing.
REP4-067_b10		10	B14, B28	It is stated that currently “the exact number of crossings are still being confirmed.” Therefore, the WCS for the number of cable protection needed at crossings is unclear. A map should be provided identifying the location of cable crossings offshore, including designated sites and sensitive receptors. And assessments updated accordingly.	In Progress. While Applicant has provided an Export Cable Crossing Zone Plan [REP1-059] we advise that a map is needed with indicative locations of any other potential crossings with the North Falls ECR. The Applicant also needs to demonstrate whether impacts to MPA supporting processes and other Annex I sandbanks will be avoided.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant’s Response to Natural England’s Deadline 3 **[REP4-028] submitted at Deadline 4.**
REP4-067_b11		11	B11, B15	The calculation of drill arising mound footprint is based on a mound height ‘fixed’ at the equivalent average height of the naturally occurring sandwaves on the seabed within the site i.e. 2m high. We believe that this figure could be higher at certain locations. Further clarification as to why this has been fixed as the WCS height for the drill arising mound should be provided and assessments updated.	in Progress. We are content with the rationale provided by the Applicant [REP1-044]. However, in areas where drill arising mounds may affect sensitive ecological receptors (e.g. sandeel or spawning herring which in turn provide prey resource for other sensitive receptors), we advise that appropriate surveys to determine change in size and form of the disposal mounds, should be carried out.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant’s Response to Natural England’s Deadline 3 **[REP4-028] submitted at Deadline 4.**
REP4-067_b12		12	B17	It is stated that current speeds will return to baseline conditions with progression downstream of each	No change. We advise that an indication of WCS wake effects should be		No change. We advise that an indication of		As informed in document 9.43 Applicant’s Response to Natural

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				foundation and generally will not interact with wakes from adjacent foundations. It is also stated that these effects will be relatively small in magnitude and local. However, we are unable to agree until the WCS spatial extent of turbulent wakes have been evaluated to inform the impact assessment.	parameterised. This will help inform the scour potential assessment.		WCS wake effects should be parameterised. This will help inform the scour potential assessment.		England's Deadline 3 **[REP4-028]**, the Applicant has undertaken bespoke hydrodynamic modelling **[REP4-040]** and interpretation of the results with respect to interruption of flow and changes to bed shear stresses due to the presence of the foundations **[REP4-042]**. These documents provide details on the worst-case scenario parameters for operation of the foundation layouts.
REP4-067_b13		13	B18	"Link to several points in the R&I long the Applicant should consider and address the following evidence gaps and update the assessments within the Environmental Statement (ES) chapters accordingly. • Up to date sediment transport pathways at the array and indication of sediment transport rates • Site-specific wave measurements for model calibration (within or close to the array) • Characterisation of significant bedforms along the OECC and within/adjacent to the array. • Seabed mobility/susceptibility to scour. "	No Change. [REP1-044] The Applicant has stated that project-specific geophysical survey data is being reviewed to further define the location, geometry, and potential mobility, sediment transport pathways and susceptibility to scour. This will be submitted at Deadline 3. We will provide an update once we have reviewed this.		Progressed. The Applicant has characterised the bedforms within identified sandwave field areas [REP3-045]. Bedform movement and sediment transport direction has been inferred at these locations. However, there is still a need for more accurate and confident assessment of observed bedform migration directions and rates, mobile bed thickness and the potential for erosion/deposition potential. This is particularly important for areas of sandbank and adjacent to KKE MCZ.		Pre- and post-construction monitoring of specific parts (to be agreed with the MMO) of the offshore cable corridor and array area containing bedforms will be completed. This will be included in an updated IPMP to be submitted at Deadline 6.
REP4-067_b14		14	B19, B20, B30	"There is insufficient evidence to support the conceptual approach taken for tidal currents and sediment transport characterisation at North Falls. Further evidence/information is needed to demonstrate that the GWF, GGOW and VE modelling results are directly applicable to the conditions prevailing at North Falls. Additionally, Natural England advises further justification is needed for the	No change. We advise that when making use of previously collected data, it is important to demonstrate that the data are still valid for the intended purpose (i.e. is not out-of-date) and directly applicable to the study area.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant's Response to Natural England's Deadline 3 **[REP4-028] submitted at Deadline 4.**

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				conceptual approach that has been used."					
REP4-067_b15		15	B21	Wave measurements have not been gathered at the North Falls site for model validation. The data used for calibrating the wave model were collected at West Gabbard 2 and South Knock wave buoys. The model was calibrated against a range of past significant storm events, but some were underpredicted. Therefore, the modelled data may not accurately describe the baseline wave climate. Further evidence should be provided to demonstrate that the wave model data are representative of the present-day conditions at the project site.	No change. We advise that when making use of previously collected data, it is important to demonstrate that the data are still valid for the intended purpose (i.e. is not out-of-date) and directly applicable to the study area.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant's Response to Natural England's Deadline 3 **[REP4-028]** submitted at Deadline 4**.**
REP4-067_b16		16	B22	Currently there is a lack of information regarding seabed mobility and seabed erosion/deposition potential to allow us to agree with the assessment conclusions in terms of impacts to bedload transport and secondary scour due to the placement of cable protection in the array. The seabed mobility and seabed erosion/deposition potential need to be considered and assessed. Full consideration should be given to these impacts over the course of the Project and beyond. We also advise that every effort should be made to minimise the placement of external cable protection, particularly on Annex I sandbanks or adjacent to KKE MCZ where it may interrupt sediment transport pathways and affect seabed morphology. Please also refer to our advice in NE Ref B5 and B13 relating to impacts from cable protection	No Change. [REP1-044] the Applicant has stated that project-specific geophysical survey data is being reviewed to further define the location, geometry, and potential mobility of the sandwaves across the Project. This is anticipated to further refine sandwave levelling locations and provide a basis for the predictions of sandwave recovery. We will provide an update at Deadline 4.		Partially progressed. The Applicant has given further consideration to bedform movement direction in [REP3-045]. However, there is still a need for more accurate and confident assessment of observed bedform migration directions and rates, mobile bed thickness and the potential for erosion/deposition potential. This is particularly important for areas of sandbank and adjacent to KKE MCZ.		Pre- and post-construction monitoring of specific parts (to be agreed with MMO) of the offshore cable corridor and array area containing bedforms will be completed. This will be included in an updated IPMP to be submitted at Deadline 6.
REP4-067_b17		18	B24	"The potential for temporary physical disturbance associated with Operations and Maintenance (O&M) vessels has only been considered for Annex I sandbanks in the array area. Furthermore, it is stated that all other receptors are beyond the Zone of Influence (ZoI) for this impact. Does	No change. Only impacts to Annex I sandbanks from O&M vessel indentations on the seabed and UXO clearance have been considered. Impacts to other receptors need to be considered e.g. the nearshore, areas of designated seabed or sensitive habitats/species.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant's Response to Natural England's Deadline 3 **[REP4-028] submitted at Deadline 4.**

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				this exclude potential impacts to the nearshore. Further clarification is needed that indentations to the seabed due to O&M vessels (and Unexploded Ordnance (UXO)clearance) are not anticipated in the nearshore zone. "					
REP4-067_b18		19	B25	"It is suggested that the magnitude of decommissioning impacts would be comparable to or less than those identified for construction. However, the following should be used to inform an outline decommissioning plan to inform the consent: • Potential lasting impacts to the marine physical environment and processes of any assets left in situ; and • Emerging alternatives to decommissioning such as repowering and life extension. Natural England advises that the Applicant should consider emerging alternatives to decommissioning and secure any associated monitoring in the outline decommissioning plan."	No change. We advise that decommissioning should be considered in the Schedule of Mitigation with regards to marine physical processes/environment.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant's Response to Natural England's Deadline 3 **[REP4-028] submitted at Deadline 4.**
REP4-067_b19		20	B27	It is stated that the receptors potentially affected by the cumulative change in sediment transport during operation will not experience a significant cumulative effect. However, the extent of cumulative change has not been quantified. This is important for understanding the implications of the predicted cumulative change over the lifetime of the Project at KKE MCZ and Annex I sandbanks. The cumulative change in sediment transport should be quantified and the implications to KKE MCZ and the Annex I sandbanks over the lifetime of the Project assessed.	"No change. The potential for cumulative changes to the wave and tidal regimes may, extend a considerable distance from the array and persist for the duration of the development. Therefore, we advise that consideration needs to be given to potential cumulative impacts due to the other nearby developments."		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant's Response to Natural England's Deadline 3 **[REP4-028] submitted at Deadline 4.**
REP4-067_b20		21	B29, B31	"The tolerance, adaptability, recoverability, and sensitivity to changes in seabed level due to foundation installation, have been assessed as 'negligible' for KKE MCZ. This 'negligible' conclusion is	No change. We advise more detailed information is needed regarding the anticipated worst-case sediment deposition parameters associated with sandwave levelling/seabed preparation spoil disposal near KKE MCZ.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided in Section 2.6 of the Applicant's Response to Natural England's Deadline 3 **[REP4-028] submitted at Deadline 4.**

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				contradictory to Table 8.17 [APP-022] which shows that the near-field magnitude of impact is 'medium.' Given the proximity to KKE MCZ, presence of potentially sensitive species within the array, uncertainty regarding the WCS sediment deposition thickness and insufficient supporting site-specific evidence, we unable to agree with the conclusions of the impact assessment. Further clarification and supporting evidence are required regarding the WCS sediment deposition height to inform the impact assessment for KKE MCZ. "					
REP4-067_b21		22	B33	Natural England advises that the Applicant should provide further evidence to support the predictions of negligible sediment loss through scour during the lifetime of the Project.	We advise that scour potential should be assessed including assessment of the level that the seabed is likely to drop below during the lifetime of the project due to the movement of mobile sediments. Scour (and secondary scour) monitoring should be included in the IPMP. Note: this issue was missing from the Risk and Issues Log at DL1.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		As informed in response provided in Section 2.6 of the Applicant's Response to Natural England's Deadline 3 **[REP4-028], submitted at Deadline 4,** scour protection will be used where required to minimise the impacts of scour. Secondary scour effects are included in the assessment in Sections 8.6.3.4.2 and 8.6.3.5 of ES Chapter 8 **[APP-022]**. Pre- and post-construction monitoring of scour around a selection of turbine foundations (to be agreed with MMO) will be completed. This will be included in an updated IPMP to be submitted at Deadline 6.
(C) Benthic Ecology									
REP4-067_c1		1	C1, C13, C38	Further information is required to provide the necessary confidence in the Worst-Case Scenario (WCS) for cable protection requirements adjacent to Margate and Long Sands SAC, and the remaining cable route, over all project phases.	No change.		No change. No new information has been provided that changes the advice provided at Deadline 3.		The Applicant has undertaken bespoke hydrodynamic modelling **[REP4-040]** and interpretation of the results with respect to cable protection **[REP4-042]**. These documents consider the location and extent of potential cable protection and show that changes in bed shear stresses (sediment

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									transport) due to its presence are minimal. The Applicant has also submitted supporting information on offshore additional mitigation **[REP4-041]** at Deadline 4, which includes consideration of the Margate and Long Sands SAC and confirms there will be no AEOI of this site.
REP4-067_c2		2	C2, C33, C35, C37	Due to uncertainty (reasonable scientific doubt) in relation to consideration of indirect impacts on MLS SAC, we cannot advise the exclusion of an Adverse Effect on Integrity (AEoI). A more detailed assessment of the likely nature and scale of impacts as a result of changes to physical and biological process following the placement of infrastructure is required. Consideration should also be given to the condition assessment for MLS SAC.	In Progress. Natural England notes the inclusion of a separation distance in the Schedule of Mitigation [REP1-007] between infrastructure and the SAC, but further evidence is required to support said buffer.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The applicant has provided response at Deadline 4 with the submission of bespoke hydrodynamic modelling **[REP4-040]** and interpretation of the results with respect to cable protection **[REP4-042]**. The Applicant has also submitted additional mitigation, discussed in Supporting Information on Offshore Additional Mitigation **[REP4-041] at Deadline 4**, which includes consideration of the Margate and Long Sands SAC and confirms there will be no AEOI of this site.
REP4-067_c3		3	C3, C20, C33, C37	Pressures/impacts on supporting benthic habitats and prey availability for Special Protection Area (SPA) features including the Outer Thames Estuary SPA (OTE SPA) red-throated diver populations require full consideration including nature, extent, duration, and significance of impacts.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The effects on supporting benthic habitats have been assessed in Section 2.5 of the RIAA Part 2 **[APP-175]**. Additionally, ES Chapter 13 Offshore Ornithology **[APP-027]**, Sections 13.6.1.2, 13.6.2.4 and 13.6.2.6 assesses the indirect effects of changes to habitats and prey species on offshore ornithology receptors.
REP4-067_c4		4	C4, C33, C 37	Further mitigation measures are required for all relevant Section 41 NERC Habitats. Natural England advises that, where possible impacts to all Section 41 NERC Habitats are avoided particularly where such habitats support rare and/or irreplaceable communities.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Response provided at Deadline 4 in 9.43 Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**. Impacts on Section 41 NERC Habitats will be minimised through the provision for micrositing, and by the extensive commitments made by the Applicant embedded in the project design, including reducing the number of export cables from four to two and reducing the maximum number of turbines from 72 to 57.

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REP4-067_c5		5	C5, C31, C33, C37, C49, C50	"(a)Sediment deposition upon benthic features within Kentish Knock East MCZ (KKE MCZ) requires a more robust assessment regarding the anticipated worst-case sediment deposition parameters due to sandwave levelling/ seabed preparation activities in the vicinity of KKE MCZ. (b) Natural England advises that commitments should also be made and secured to avoid indirect impacts on designated features."	Issue progressed, NE welcomes commitments to reduce WCS impacts to the MCZ through a 50m buffer. However, further evidence is needed re Benthic impacts of sandwave levelling/seabed prep and placement of hard substrate.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		This issue was addressed at Deadline 4 with the submission of bespoke hydrodynamic modelling **[REP4-040],** interpretation of the results **[REP4-042]** and Supporting Information on Offshore Additional Mitigation **[REP4-041]**.
REP4-067_c6		6	C6, C44, C50	Further clarification/evidence is required to demonstrate that an appropriate buffer has been applied around the infrastructure closest to the KKE MCZ boundary to ensure that direct impacts from wake effect, scour, etc. and in direct effect effects from changes to marine process will not impact on the interest features of the MCZ. Without the application of a suitable buffer, there is a risk that proposed mitigation does not sufficiently avoid impacts to the MCZ.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		This issue was addressed at Deadline 4 with the submission of bespoke hydrodynamic modelling **[REP4-040],** interpretation of the results **[REP4-042]** and Supporting Information on Offshore Additional Mitigation **[REP4-041]**.
REP4-067_c7		7	C7, C32, C41	(a)WCS is based on use of external cable protection in the form of rock protection, but due consideration has not been given to the use of the mitigation hierarchy and reducing/mitigating the impacts as much as possible through the choice of cable protection especially in regard to removal at the time of decommissioning. (b)An Outline Decommissioning Plan should be provided at the time of consent to ensure that mitigation measures requiring the removal of cable protection are achievable and secured. See Point 11 for more detail	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		(a) Cables will be buried where practicable, minimising the requirement for cable protection measures. This mitigation is secured through the Outline Cable Specification and Installation Plan [**REP4-039**]. In addition, due to the commitments made by the Applicant, in consultation with Natural England, there will be no cable protection placed within MPAs designated for benthic habitats. (b) The Applicant's position remains that it is most appropriate for an outline decommissioning plan to be submitted post-consent, prior to the commencement of offshore works, as secured by Requirement 25 of the DCO. This is the standard approach

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									taken for OWF NSIPs, including Sheringham Shoal and Dudgeon Extension and Rampion 2.
REP4-067_c8		8	C8, C32, C48	Further mitigation measures could be adopted by the Applicant to avoid, reduce, and minimise the project's environmental impacts, including (but not limited too) reducing the Rochdale envelope to limit the types of cable protection and foundations to be used on the project.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		This issue was addressed at Deadline 4 with the submission additional mitigation, discussed in Supporting Information on Offshore Additional Mitigation **[REP4-041]**.
REP4-067_c9		9	C9, C19	There is currently no commitments relating to the minimum water depth at which the HDD exit pit location is placed. Recognising that rock protection is usually required at the exit pit location, a commitment to no rock protection landward of 10m LAT is required to mitigate potential impacts to bedload transport and any associated changes to benthic ecology along the Essex coastline.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		It is not possible for the Applicant to make the requested commitment to no cable protection landward of 10m LAT, as 10m LAT extends for the first 22km of the cable route (which is over one third of the overall length). For the exit pit, the expectation is that this would be buried. The current geophysical information shows significant space to avoid areas of outcropping, and hence the ability to bury. The primary means of cable protection is burial. The areas where cable protection may be required are the areas of outcropping, cable crossings and for unforeseen issues. The outcropping is generally at depths of -10m LAT or deeper, however, there are some areas in the nearshore area. Generally, the project will try to mitigate these areas by cable routing, so that surface cable protection is not required.
REP4-067_c10		10	C10, C41	The Applicant has not committed to using any specific type of cable protection, and has not considered the limitations of some methods, particularly given the potential for pathways of effect to supporting processes within Margate and Long Sands SAC whilst cable protection is in place. Due consideration should be given to the nature of the cable protection included in the project design envelop and should favour those engineering options with the	No Change.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The Applicant has committed to any cable protection being a minimum of 150m from the Margate and Long Sands SAC. In addition, modelling of cable protection (shown in Hydrodynamic and Dispersion Modelling Report **[REP4-040]** and discussed further in Hydrodynamic and Sediment Dispersion Modelling Results Interpretation **[REP4-042]** and Supporting Information on Offshore Additional Mitigation **[REP4-041]**), shows there will be no AEOI on the

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				greatest likelihood of successful removal at decommissioning. Unless it can be demonstrated otherwise, the scale of impacts from cable and scour protection that have been described by the Applicant have the potential to hinder the 'maintain' conservation objective.					SAC from indirect effects of cable protection regardless of the type of cable protection.
REP4-067_c11		11	C11	An outline decommissioning plan should commit to the removal of all surface laid infrastructure at the decommissioning stage. We agree with the Applicant's assessment approach which considers that, in the continued absence of any commitments to remove specified amounts of infrastructure, including cable protection, assessments should be based on a worst-case scenario of lasting/permanent impacts under all infrastructure.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The Applicant's position remains that it is most appropriate for an outline decommissioning plan to be submitted post-consent, prior to the commencement of offshore works, as secured by Requirement 25 of the DCO. This is the standard approach taken for OWF NSIPs, including Sheringham Shoal and Dudgeon Extension and Rampion 2.
REP4-067_c12		12	C12	(a) Natural England advises that there is insufficient detail on the proposed activities relating to the potential placement of additional scour prevention/cable protection measures over the operational lifetime of the project. (b) Further detail should be provided on the parameters for O&M activities including how total amounts have been determined, and where those amounts are likely to be placed relative to sensitive areas of seabed, such as Margate and Long Sands SAC. (c) Standard for quantities of additional scour and/or cable protection outside of benthic SACs should be committed too for the replenishment of 10% of any scour prevention/cable protection laid during installation within a 10-year period as long as the overall footprint is not increased.	No change		Progressed. The Applicant has amended text on additional cable protection to state that cable protection must be deployed within 10 years of construction completion. The values of scour protection around foundations for the lifetime of the Project have also been updated following the removal of gravity base foundations which has reduced the MDS parameter values – values are lower than previously assessed. However, this point has not been fully addressed in relation to quantities.		The Applicant is unclear what Natural England is referring to with regards to "*this point has not been fully addressed in relation to quantities*".
REP4-067_c13		13	C14	There is insufficient evidence regarding ground conditions to rule out HDD failure potentially requiring trenching and/or rock protection within the intertidal. If this was to occur, it	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		As acknowledged by Natural England in REP4-067_b6, there will be no impact on the intertidal.

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				could alter the significance and nature of predicted impacts on intertidal and benthic receptors including designated sites/features. Further evidence is required to provide sufficient confidence that the HDD will be successful, and that the current WCS prediction of impacts from HDD in the ECR on intertidal and subtidal habitats is realistic.					The ES includes assessment of an additional HDD to account for potential failure i.e. three are assessed when only two are required (e.g. shown in Table 10.2 of ES Chapter 10 **[APP-024]**).
REP4-067_c14		14	C15, C26, C29, C31	(a) in the absence of confirmed dredge disposal locations, or parameters to determine the dredge disposal location criteria, then it is not possible to determine the WCS and, therefore, robustly assess the impacts from sandwave levelling activities. (b)Commitments should be made to minimise impacts from sediment deposition.	Issue progressed, NE welcomes commitments to reduce WCS impacts to the MCZ. However, further evidence is needed re Benthic impacts of sandwave levelling/seabed prep and placement of hard substrate.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		This issue was addressed at Deadline 4 with the submission of bespoke hydrodynamic modelling **[REP4-040],** considering the simulation of the disposal of dredged material in the array area **(Section 7.12 and 7.13).** An interpretation of these results has been presented in Hydrodynamic and Sediment Dispersion Modelling Results Interpretation **[REP4-042]**. Additionally, an Outline Sediment Disposal Management Plan **[REP4-038]** has also been submitted at deadline 4.
REP4-067_c15		15	C21	There is a risk of potential ~~loss of~~ backfill material loss at the subtidal HDD exit pits and therefore recoverability of any remaining trench/depression, which then may warrant the requirement for cable protection. At para. 39 of the Cable Statement engineered backfill is referred to, but no further information is provided on this. Further detail is required to better understand the likelihood of side cast sediment being lost, the quantities and the potential requirement for permanent cable protection over the lifetime of the project.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Para. 39 of the Cable Statement relates to the onshore transition joint bay and associated onshore open cut ducting around it. This is not in relation to the exit pit in the sub-tidal area. In the next update of the Cable Statement, this will be updated to be onshore works at Landfall.
REP4-067_c16		16	C22, C51	Further clarification on how impacts from vessels associated with landfall activities have been assessed including use of anchor barge and/or jack up barges and whether there will be any requirement for stabilisation pads and/or medium/long term impacts.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The use of an anchor barge and spudded/jack-up barges have been considered in the worst case scenario, as shown in Section 10.3.2 in ES Chapter 10 Benthic and Intertidal Ecology **[APP-024]** and assessed in sections 10.6.1.1 and 10.6.2.1.

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REP4-067_c17		17	C23	The Applicant proposes that that whole of the red line boundary becomes a disposal location. However, as set out in Appendix C of our RR/WR [RR-243] we do not currently agree with the impact assessment for which site characterisation for sediment disposal is reliant upon. Further agreement on the MDS and WCS and evidence is required to support statements.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		An updated Site Characterisation Report [REP4-013/014] was submitted at Deadline 4 which includes separate disposal sites for the offshore cable corridor and array area. Disposal within these areas will be constrained by the commitments secured by the Outline Sediment Disposal Management Plan which was also submitted at Deadline 4 [REP4-038]. Further evidence of the effects associated with disposal was provided at Deadline 4 with the submission of bespoke hydrodynamic modelling **[REP4-040],** An interpretation of these results has been presented in **[REP4-042]**.
REP4-067_c18		18	C24	Application documents should be updated to address the ambiguity between the various Application documents as to the WCS footprint of any rock berm. Based on other OWF project assessments we query if a width of 6m is realistic?	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The Applicant maintains that the worst case scenario area of cable protection included in the assessment is appropriate.
REP4-067_c19		19	C25	Neither of the terms 'temporary' impacts or 'rapid' recovery of benthic habitats have been fully defined for relevant identified pathways of effect. An evaluation of the extent and duration of impacts on benthic habitats should be more explicitly stated in order to provide a transparent understanding of the likely impacts and recovery duration of benthic receptors, both alone and cumulatively, so that effects on designated mobile species in particular can be assessed.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The terms 'temporary' and 'rapid' have been assessed in terms of timescales for the duration of effect. Temporary impacts have been assessed in line with the MarESA recoverability criteria provided in Table 10.7 in ES Chapter 10 Benthic and Intertidal Ecology **[APP-024]**. Temporary effects would have full recovery within two years (high recoverability), and long-term would equate to an effect for the project duration (equating to low or very low recoverability).
REP4-067_c20		20	C27, C26, C33, C37	The proposed mitigation within the EIA and subsequent [APP241] 7.6 Outline Project Environmental Management Plan would benefit from appropriately considering the importance and rarity of peat and clay exposures, and every effort should be made to avoid impact	Issue progressed, NE welcomes additional mitigation, but advises they need to go further.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Responded at Deadline 4 in the Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**. Impacts on Section 41 NERC Habitats will be minimised through the provision for micrositing, and by the extensive commitments

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				(particularly permanent loss) to these priority habitats where possible through mitigation measures such as micro-siting.					made by the Applicant embedded in the project design, including reducing the number of export cables from four to two and reducing the maximum number of turbines from 72 to 57.
REP4-067_c21		22	C30	The use of dredge sediment as ballast/coastal protection/aggregates is not preferable from a nature conservation perspective. Sediment should remain within the sediment system it was removed from to best enable seabed to return it to pre-impacted state.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The Site Characterisation Report has been updated at Deadline 4 **[REP4-013-014]** which removes the option of using sediment for ballast. The Applicant is open to considering the feasibility of alternative suggestions as requested by Essex County Council, however the feasibility of such an option is highly uncertain and would be subject to a range of factors such as the shoreline management strategy, type of aggregate required, permitting and timing of both projects and/or any interim storage requirements. It is therefore critical to the viability of North Falls that at-sea disposal sites are available. The final Sediment Disposal Management Plan must be agreed with the MMO, in consultation with Natural England.
REP4-067_c22		23	C31	Within the cable statement consideration should be given to mitigation measures for seabed preparation especially in relation to boulder relocation close to designated sites and near shore to ensure that sediment transport is not disrupted.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		Mitigation has been secured through the draft DCO including a minimum buffer of 150m between the MLS SAC and the installation of the offshore export cables. In addition, modelling of cable installation (shown in Hydrodynamic and Dispersion Modelling Report [REP4-040] and discussed further in Hydrodynamic and Sediment Dispersion Modelling Results Interpretation [REP4-042] and Supporting Information on Offshore Additional Mitigation [REP4-041]), shows there will be no AEOI on the SAC from seabed preparation.
REP4-067_c23		24	C32	In addition to points 2 and 15 further information from the Applicant is required to confirm what cable protection parameters (length and	No change		No Change. No new information has been provided that changes		The Applicant has provided a response at Deadline 4 with the submission of bespoke hydrodynamic modelling in **[REP4-040]** and

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				specific placement location in relation to the SAC) have been used to inform the assessments and what the accurate worst-case scenarios are with appropriate justification provided where relevant. The RIAA and relevant ES should be updated with this information			the advice provided at Deadline 3.		interpretation of the results with respect to cable protection in **REP4-042]**. The Applicant has also submitted Supporting Information on Offshore Additional Mitigation **[REP4-041] a**t Deadline 4, which includes consideration of the Margate and Long Sands SAC and confirms there will be no AEOI of this site.
REP4-067_c24		25	C39	The ES and RIAA in-combination assessments may require updating once further information has been provided on the worst cable rock protection requirements and any related secondary impacts within the SAC.	No change		No Change. No new information has been provided that changes the advice provided at Deadline 3.		The Applicant has submitted Supporting Information on Offshore Additional Mitigation **[REP4-041]** which confirms that as the conclusions of the North Falls alone assessment has not changed, the CEA remains as provided in the Environmental Statement.
REP4-067_c25		26	C45	The MCZ assessment fails to screen in or appropriately consider the potential for sediment deposition within the benthic features of Kentish Knock East MCZ (KKE MCZ), despite paragraph 72 stating that 'sediment deposition' is predicted as an indirect effect. In the absence of a confirmed dredge disposal locations, or parameters to determine the dredge disposal location criteria, it is not possible to determine the WCS and therefore robustly assess the impacts from foundation preparation/sandwave levelling activities upon KKE MCZ benthic features.	Issue progressed, NE welcomes commitments to reduce WCS impacts to the MCZ. However, further evidence is needed re Benthic impacts of sandwave levelling/seabed prep and placement of hard substrate.		No Change. No new information has been provided that changes the advice provided at Deadline 3.		This issue was addressed at Deadline 4 with the submission of bespoke hydrodynamic modelling **[REP4-040],** considering the simulation of the disposal of dredged material in the array area **(Section 7.12 and 7.13).** An interpretation of these results has been presented in **[REP4-042]**. **Furthermore,** Supporting Information on Offshore Additional Mitigation **[REP4-041]** provides assessment of effects on the KKE MCZ and confirms there is no risk of hindering the conservation objectives of the MCZ.
(D) Fish and Shellfish Ecology									
REP4-067_d1		2	D2	We note that there is overlap with spawning grounds and nursery grounds for herring (Figure 11.2), and (Figure 11.4). We note that Table 11.14 incorrectly suggests "Spawning grounds of Downs Herring located in areas adjacent to the southern array area," as opposed to directly overlapping with it. We highlight that whilst these species are not	No change, no further information received.		No Change, the Sandeel and Herring Habitat Heatmapping Clarification note [REP3-047] does not address the overlap.		The Sandeel and Herring Habitat Heatmapping Clarification note **[REP3-047]**, was aimed at providing updated heatmaps based on the methodologies suggested by the MMO and concluded that the use of the updated heatmaps would not have any implications with regards to the conclusions of the impact assessment presented in ES Chapter 11 Fish and

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				designated any designated sites in proximity of the works, herring are a Section 41 species under the NERC Act 2006, and both provide prey resources for other receptors such as RTD designated within the Outer Thames Estuary SPA.					Shellfish Ecology [APP-025] with regard to sandeel and herring. As previously stated, due consideration was given to the location of known herring spawning grounds relative to the location of the Project throughout ES Chapter 11 Fish and Shellfish Ecology **[APP-025]** with this accounted for in the impact assessment. In addition, Table 11.2 of ES Chapter 11 Fish and Shellfish Ecology **[APP-025]**, includes specific reference to the Downs herring as one of the species with spawning grounds that overlap with the offshore project area. As shown in Figure 11.2, whilst there is overlap between the Downs herring defined spawning grounds (Coull et al 1998) and the array area, this is limited to the eastern section of the array area boundary edge, with the majority of the spawning grounds located immediately west of the array area and not within it. Additionally, the Applicant notes that specific mitigation has already been proposed to minimise impacts on herring via a piling restriction during the main spawning period of the Downs stock.
REP4-067_d2		3	D3	Natural England defers to the view of Cefas in determining the sensitivity of the species identified. It is important that the ecology of each individual species is taken into account when determining potential impacts upon them. Increased Suspended Sediment Concentration (SSC) and subsequent deposition of sediment on gravid herring and their eggs and larvae should be considered in relation to the Downs Herring spawning area. In relation to temporary increase in SSC and deposition please note our comments on the marine processes chapter. Where there is overlap with the Downs spawning area, we do not	No change, no further information received.		No Change, not addressed in updated documents. Still pending agreement with Cefas.		As previously noted, due consideration has been given to feedback provided by the MMO and Cefas with regards to the PEIR and via detailed discussions during Seabed Expert Topic Group meetings, including aspects related to the sensitivity of fish and shellfish receptors (see Table 11-1 ES Chapter 11 Fish and Shellfish Ecology **[APP-025]**). Discussions with the MMO and Cefas (via the MMO) on fish and shellfish ecology, as well as other topics, are ongoing via the SoCG.

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				agree that habitat loss will be temporary, In relation to long-term habitat loss, we advise this is permanent rather than long-term. We advise the Applicant seeks the advice of Cefas on the sensitivity of particular species, and the appropriateness of the sensitivity assigned in the assessment. When agreement is reached on the marine processes chapter, and the further characterisation work suggested by Cefas has been carried out, Natural England would welcome the opportunity to comment on an updated assessment in relation the herring and sand eel. We advise that the further baseline work as advised by Cefas is required to further understand the potential direct loss of spawning habitat, which where infrastructure is placed is likely to be permanent.					
(E) Marine Mammals									
REP4-067_e		9	E10	There is a discrepancy in the assigned sensitivity to collision risk i.e. minke whale has been assigned medium compared to low sensitivity for other marine mammals. There is not a sufficient justification for this approach. We advise that sensitivity to collision risk should be medium for all species due to the potential severity of the impact resulting in injury or death of the animal. We advise that the Applicant changes the sensitivity of all species to collision risk to medium and updates the assessment.	Natural England notes that at Deadline 1, the Applicant submitted [REP1-057] 9.14 Further information regarding marine mammals. We will provide an update to the Risk and Issues Log at Deadline 4 following our review of this document.		The issue remains. The Applicant did not agree with our advice and maintains their original approach.		The Applicant maintains its position that the approach applied is precautionary and proportional to the impact taking into account each species behaviour and sensitivity. However, for information purposes the assessment has been reviewed using a 'medium' sensitivity for all species, the findings of this are within Marine Mammal Assessment Clarifications submitted at Deadline 5 **[9.81 (Rev 0)]**.
(F) Offshore Ornithology and (G) Offshore Ornithology Compensation									
REP4-067_f REP4-067_g									Responses to key issues on offshore ornithology, including compensation are provided in Sections 2.3 to 2.6.

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									Other matters remain as per the Applicant's Response to Relevant Representations from Natural England **[REP1-044]** and the Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**.
(H) Onshore Ecology and Ornithology									
REP4-067_h1		2	H2	Lesser Black Backed Gull (LBBG) Compensation Habitats Regulations Assessment (HRA) document is relatively high level and baseline surveys to support conclusions were undertaken at the wrong time of year. The limitations need to be addressed Natural England suggests that collaboration with Five Estuaries may be appropriate to address shortfalls in evidence pre-consent.	No Change. Natural England notes that updated LBBG HRA documents [REP1-018] and [REP1-020] have been submitted. We will provide an update at Deadline 4 following our review.		Natural England has reviewed [REP1-018] and [REP1-020] and this issue has not been progressed.		An assessment of the effects of the LBBG compensation was submitted at Deadline 4 (Lesser Black-backed Gull Compensation Effects on Designated Sites **[REP4-010]**). This takes into account existing SSSI survey data for Lantern Marshes as well as a habitat survey of Gedgrave Marshes undertaken in November 2024. Noting Gedgrave Marshes is grazed or previously grazed farmland, the timing of this survey is sufficient to inform the initial assessment. The assessment will be refined post consent, informed by further surveys to inform a Planning Application under the Town and Country Planning Act. This will be clarified in the Outline LBBG Compensation Implementation and Monitoring Plan to be submitted at Deadline 6.
REP4-067_h2		3	H3	A net loss is expected in watercourse module biodiversity units, which is not being addressed, even through Biodiversity Net Gain. Please see reference point 37.	No change. However, we note that a BNG Strategy Technical Note [REP1-050] has been submitted. We will provide an update at Deadline 4 following our review of this document.		The Applicant has stated [REP1-050, REP3-028, REP3-031] that they are minimising impacts on watercourses as much as possible, but do not intend to compensate for loss. However, we believe that there may be options. Please see Appendix H4.2 to this Deadline 4 submission.		The Applicant has responded to comments relating to Appendix H4.2 to the Natural England Deadline 4 Submission Natural England's Biodiversity Net Gain Advice on the Applicant's Deadline 1 and 3 Documents **[REP4-065]** above in Section 2.8, Table 9.
REP4-067_h3		4	H4	There are possible disturbance and visual impacts for receptors along the King Charles III England Coast Path (ECP) depending on timing of opening	Partially resolved. The Applicant has provided further information on disturbance and visual impacts for receptors along the King Charles III		No change, pending review of documents submitted at Deadline 3.		Noted.

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				of ECP. Further information relating to any impacts on the associated margins, in addition to any restrictions required and impacts on the line of the path is required.	England Coast Path in [REP1-044]. However, we advise the Applicant to further consider short-term visual impacts. We also note that the ECP route will not be physically affected by the installation of the cable route due to a commitment to use HDD under the ECP. However, if diversion/blockage occurs to the ECP during construction we advise the Applicant to clarify what measures will be taken.				
REP4-067_h4		6	H8	Further reductions to the Maximum Design Scenario (MDS) should be considered to minimise environmental impacts including (but not exclusively) reducing the working corridor and cable crossings.	Natural England will provide an update on this issue at Deadline 4.		No change, pending review of documents submitted at Deadline 3.		Noted.
REP4-067_h5		7	H9	The process of backfilling as describe will potentially limited land returning to it previous use. Further detail should be included within the cable statement on ensuring that land can continue to maintain ecological function post installation and back fill.	Natural England will provide an update on this issue at Deadline 4.		No change, pending review of documents submitted at Deadline 3.		Noted.
REP4-067_h6		9	H11	There is an expectation that baseline data will be collected and assessed for any compensation locations prior to construction and mitigation measures implemented. Where required additional permits will also be obtained. This commitment should be secured with appropriate timelines allow for time to undertake these surveys and include the information in reporting and development of a conservation, mitigation, and monitoring plan whilst still ensuring measures are implemented 4 breeding seasons before North Falls becomes operational. This will need to be secured with the Development Consent Order (DCO)/Deemed Marine Licence (dML) compensation conditions.	Natural England will provide an update on this issue at Deadline 4.		We note in [REP1-018] that this issue has not progressed. The Applicant will need to commit to pre-construction surveys of the compensation site, in order to address the gaps in the baseline characterisation evidence for this site, and to inform mitigation measures to address any impacts on designated sites (including functionally-linked land if relevant). Please also refer to Appendix H4.1 to this Deadline 4 submission.		As stated in Section 2.4 of 7.2.2.2 HRA Annex 2B Lesser Black-backed Gull Compensation Effects on Designated Sites (Rev 0) **[REP4-010]**, the Applicant is committing to carrying out pre-construction surveys, including ecological, Invasive Non-Native Species (INNS) and unexploded ordnance (UXO) surveys to inform the final design of compensation. The Applicant has explicitly responded to Appendix H4.1 to Natural England's Deadline 4 Submission Natural England's LBBG Proposed Compensation Site Advice on the Applicant's Deadline 1 Documents **[REP1-018, REP1-020, and REP1-044] [REP4-064]** above in Section 2.7.

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REP4-067_h7		10	H12	Adaptive management measures will need to be secured for any compensation measures for LBBG.	Natural England will provide an update on this issue at Deadline 4.		In the [REP1-018] 7.2.2.1 HRA document the Applicant confirms that the Lesser Black Backed Gull Compensation Steering Group (LBCSG) and the development of a LBBG CIMP will facilitate agreement on necessary adaptive management measures should monitoring evidence that the compensation is failing. However, adaptive management is not sufficiently secured in the DCO, see NE issue A20. Furthermore, given the lack of colonisation at existing compensation sites, we consider it appropriate for decoys and call playback to be deployed at the outset of compensation and they therefore would not be adaptive measures unless they were changed or enhanced after monitoring later.		Adaptive management is secured through Schedule 15 of the draft DCO, paragraph 3(2)(g). See further response to A20 (Ref REP4-067_a15). The Outline LBBG Compensation Implementation and Monitoring Plan will be updated at Deadline 6 to clarify the position regarding call playback and decoys.
REP4-067_h8		11	H13	Where possible, a review of the current compensation proposals for LBBG should be included and any outcomes/conclusions considered in context of the proposal.	Natural England will provide an update on this issue at Deadline 4.		Partially resolved. The Applicant states that there will be an ongoing review of other LBBG compensation applications. For this issue to be fully resolved, the Applicant should commit to updating their proposals in the light of any outcomes/conclusions.		The LBBG Compensation Implementation and Monitoring Plan will be developed in consultation with LBBG Compensation Steering Group. This process will consider any relevant evidence.
REP4-067_h9		12	H14	Climate change resilience of any of the LBBG Compensation proposals requires further consideration. For example the long-term management of Lantern Marshes/Cobra Mist land has	Natural England will provide an update on this issue at Deadline 4.		No change.		Noted.

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				not yet been agreed so it is possible that it could breach again, and that breach remains leaving the area tidal. There is also mention of the area being deliberately flooded through the sluice occasionally to manage the habitats.					
REP4-067_h10		13	H15	The use of a vehicle or hides for compensation monitoring is proposed to reduce disturbance. However, commitments are required to ensure monitoring won't impact other features. If not possible a suitable alternative will need to be provided.	Natural England will provide an update on this issue at Deadline 4.		No change. This has not been specifically addressed, though the plan is to discuss this with Natural England when site is selected.		An assessment of the effects of the LBBG compensation, including vehicular access and monitoring has been provided for Lantern Marshes in Lesser Black-backed Gull Compensation Effects on Designated Sites **[REP4-010]** and for Gedgrave Marshes in Lesser Black-backed Gull Compensation at Gedgrave Marshes; Effects on Designated Sites **[9.84 (Rev 0)].** In addition, the assessment will be refined post consent to inform a Planning Application under the Town and Country Planning Act.
REP4-067_h11		14	H16	More detail on proposed monitoring is required. The risk of disturbing the birds during compensation monitoring should be considered and where possible the monitoring should be combined with the planned surveys to reduce the risks of disturbance. This should be considered in any outline plan and finalised prior to installation.	Natural England will provide an update on this issue at Deadline 4.		No change. This has not been specifically addressed but will be discussed and agreed with the LBCSG.		An assessment of the effects of the LBBG compensation, including monitoring has been provided in Lesser Black-backed Gull Compensation Effects on Designated Sites [REP4-010]. The Outline LBBG Compensation Implementation and Monitoring Plan will be updated at Deadline 6 to address this feedback regarding monitoring.
REP4-067_h12		16	H18	It is important to consider that material could build-up where LBBG Compensation/fencing crossed current drainage areas at Orfordness, and that blockage could then change the path of draining water and, therefore, change hydrological processes. Documents should be updated to include a requirement to remove any build-up of material on the fence as a mitigation.	Natural England will provide an update on this issue at Deadline 4.		No change. This has not been specifically addressed but maintenance and inspection intervals will be agreed by LBCSG.		The Outline LBBG Compensation Implementation and Monitoring Plan will be updated at Deadline 6 to address this feedback.

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REP4-067_h13		17	H19	Survey results notwithstanding, Holland Haven Marshes SSSI is designated for its nationally important lowland ditch systems. Therefore, characterisation of these environmental features as being of low or medium importance is inappropriate. The site is currently considered to be in favourable condition, but even where there has been some degradation of habitats, flora and fauna a duty remains to restore. And therefore every effort should be made to avoid impacts which are likely to cause damage.	Partially resolved. Natural England disagrees with the characterisation of these environmental features as being of low or medium importance. Changing the assessment, however, would not make a material difference and we would be in agreement with the final outcome. Please see Deadline 3 Appendix H3.2 in relation to the HDD management plan [REP1-038].		Partially resolved. Please see our advice at Deadline 3.		The Applicant has responded to the queries raised in Appendix H3.2 to Natural England's Deadline 3 Submission [REP1-038] **[REP3-063]** in Table 2.5 of the Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**.
REP4-067_h14		18	H20	More can be done to avoid and reduce impacts to Holland Haven Marshes SSSI by conditioning the number of Horizontal Directional Drilling (HDD) walk over surveys and surveyors. Mitigation measures should be fully secured in the Schedule of Mitigation and named plans such as the Outline HDD method statement.	No Change. Please see Deadline 3 Appendix H3.2.		No change.		Noted. The Applicant has responded to the queries raised in Appendix H3.2 to Natural England's Deadline 3 Submission [REP1-038] **[REP3-063]** in Table 2.5 of the Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**.
REP4-067_h15		19	H21, H25	There have been incidents of bentonite breakout from HDD operations on other projects, which have resulted in long term habitat contamination issues on SSSIs and SPAs. An outline HDD and/or bentonite management plan is required.	Progressed. Natural England welcomes the provision of a plan [REP1-038]. Please see Deadline 3 Appendix H3.2.		Progressed. However, no further information or new documents have been provided, so no change to our advice since Deadline 3.		The Applicant has responded to the queries raised in Appendix H3.2 to Natural England's Deadline 3 Submission **[REP1-038] [REP3-063]** in Table 2.5 of the Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**. The Applicant has then subsequently consulted with Natural England on an updated draft Outline Horizontal Directional Drilling Method Statement and Contingency Plan on 21 May 2025, to which Natural England are now broadly in agreement with. An updated draft of the draft Outline Horizontal Directional Drilling Method Statement and Contingency Plan, updated following further comments received on 21 May 2025, will be submitted into the Examination at Deadline 5 **[7.15, (Rev 2)]**.

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REP4-067_h16		25	H28	There is no commitment here to avoid work in functionally linked land, this is particularly relevant to Hamford Water SPA but applies to all functionally linked land within the red line boundary. Commitments to avoid work on functionally linked land to avoid impacts to supporting habitats and/or disturbing Annex I bird features during sensitive periods. If this is not possible then a management plan would be required to ensure impacts are sufficiently minimised.	Progressed. Natural England notes [REP1-044] 9.1 Applicant's Response to Relevant Representations from Natural England does not address our concerns regarding avoidance of impacts to functionally linked and as it focuses entirely on mitigation which should be of secondary concern in accordance with the mitigation hierarchy. We do, however, welcome confirmation that further detail will be 'included in the final Ecological Management Plan, as secured by Requirement of the Draft DCO.'		No change, pending review of documents submitted at Deadline 3.		Noted.
REP4-067_h17		26	H29	Natural England's default position is for no transits routes to occur across the SSSI. Natural England advises that this commitment should be secured in the Mitigation Schedule. But should it be found not to be possible an management plan will be required.	Part resolved. [REP1-007] The Applicant has committed to no vehicles accessing the landfall compound by tracking through the SSSI for HDD works. Please see Deadline 3 Appendix H3.2.		No change. However, no further information or new documents have been provided, so no change to our advice since Deadline 3.		The Applicant has responded to the queries raised in Appendix H3.2 to Natural England's Deadline 3 Submission **[REP3-063]** in Table 2.5 of the Applicant's Response to Natural England's Deadline 3 submissions **[REP4-028]**.
REP4-067_h18		30	H31	More information should be provided to address concerns over the suitability of temporary hedgerows and their use by dormice as well as removing them when they may be a place of shelter for dormice.	No change. Awaiting the Ecological Management Plan to be provided. Please also refer to Appendix H3.1 to our Deadline 3 submission.		No change, pending review of documents submitted at Deadline 3.		Noted.
REP4-067_h19		31	H32	To confirm the absence of dormice the preconstruction surveys must have sufficient survey effort index to base appropriate survey effort should be secured in the OLEMS.	Progressed, however, please see Appendix H3.1 to our Deadline 3 submission.		No change, pending review of documents submitted at Deadline 3.		Noted.
REP4-067_h20-		32	H33	The Applicant's commitment to exploring opportunities to deliver a minimum 10% BNG and advise that this should be secured by requirement in the DCO.	No change. However, we note that a BNG Strategy Technical Note [REP1-050] has been submitted. We will provide an update at Deadline 4 following our review of this document.		The Applicant has stated [REP1-050, REP3-028, REP3-031] that they are minimising impacts on watercourses as much as possible, but do not intend to compensate for loss. However, we believe that there may be options. Please see Appendix H4.2 to this Deadline 4 submission.		The Applicant has addressed comments relating to Appendix H4.2 to the Natural England Deadline 4 Submission Natural England's Biodiversity Net Gain Advice on the Applicant's Deadline 1 and 3 Documents **[REP4-065]** above in Section 2.8, Table 9.

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REP4-067_h21		33	H34	Any deviation from BNG best practice and principles should continue to be justified and clearly reported. Updates to metric calculations over time are required to reflect design iterations and developments are encouraged to continue to maximise their potential biodiversity outcomes throughout the detailed design process. For consistency, everything within the Red Line Boundary (Order Limits) should be included in the BNG baseline calculations, including any retained habitats.	No change. However, we note that a BNG Strategy Technical Note [REP1-050] has been submitted. We will provide an update at Deadline 4 following our review of this document.		No change following review of updated BNG technical note.		Noted.
REP4-067_h22		34	H35	(a) The project is not currently proposing to commit to achieving 10% BNG in the watercourse module due to the complexity of creating and enhancing watercourse units. Watercourses should be factored into the statutory credit calculations given the metric highlights a 29% loss in the watercourse module. (b) (b) a clear audit trail is should be kept of any land assigned for compensation, mitigation and BNG to distinguish what is being delivered for which purpose and where.	No change. However, we note that a BNG Strategy Technical Note [REP1-050] has been submitted. We will provide an update at Deadline 4 following our review of this document.		The Applicant has stated [REP1-050, REP3-028, REP3-031] that they are minimising impacts on watercourses as much as possible, but do not intend to compensate for loss. However, we believe that there may be options. Please see Appendix H4.2 to this Deadline 4 submission.		The Applicant has addressed comments relating to Appendix H4.2 to the Natural England Deadline 4 Submission Natural England's Biodiversity Net Gain Advice on the Applicant's Deadline 1 and 3 Documents **[REP4-065]** above in Section 2.8, Table 9.
REP4-067_h23		35	H36	The approach to hedgerow removal is acceptable prior to mandatory BNG, but it does not reflect best practice, or the approach used for TCPA development. Best practice would be to maintain all replaced hedgerows for a minimum of 30 years in line with BNG regulations. Where the long-term management of hedgerows for this period cannot be secured, they should be treated as "habitat loss" within the BNG metric. Once BNG is mandatory, then a legal agreement would be required to secure the management for thirty years where habitats will be lost. The	No change. However, we note that a BNG Strategy Technical Note [REP1-050] has been submitted. We will provide an update at Deadline 4 following our review of this document.		Updated and potentially resolved based on the proposed 10 year management plan. Subject to outstanding requested clarifications. Please see Appendix H4.2 to our Deadline 4 response.		The Applicant has addressed comments relating to Appendix H4.2 to the Natural England Deadline 4 Submission Natural England's Biodiversity Net Gain Advice on the Applicant's Deadline 1 and 3 Documents **[REP4-065]** above in Section 2.8, Table 9.

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				document should be updated to reflect this commitment.					
REP4-067_h24		36	H37	With regards to cropland and any agricultural grassland. The correct risk multiplier is should be applied within BNG calculations, in line with the Statutory Biodiversity Metric User Guide.	No change. However, we note that a BNG Strategy Technical Note [REP1-050] has been submitted. We will provide an update at Deadline 4 following our review of this document.		No change following review of updated BNG technical note.		Within the additional BNG option presented in the Biodiversity Net Gain Strategy Technical Note **[REP3-030]**, each area of arable habitat has been included within the baseline and categorised as either 'retained' or 'lost then created post-development', depending on the project impacts in each area. Where impacts are present for more than two years, arable habitats have been recorded in the Statutory Biodiversity Metric as lost then subsequently reinstated. This is in line with the methodology set out in the Statutory Biodiversity Metric User Guide on accounting for temporary losses. For both BNG options presented in Biodiversity Net Gain Strategy Technical Note **[REP3-030]** and Biodiversity Net Gain Strategy **[REP3-027]**, the spatial risk multiplier category is 'within (1.0)' for areas of reinstated arable land as habitat reinstatement/ creation will occur in the same area of initial loss. The temporal risk multiplier used for the purposes of both BNG options has assumed no habitat is created in advance and no delays to starting habitat creation / enhancement occur. If required, risk multipliers applied to all habitats will be adjusted in the final BNG calculation carried out post-consent.
REP4-067_h25		37	New issue	Gedgrave Marshes has been added as a potential compensation site option for LBBG at AOE SPA. There is potential for functional linkage to designated sites at Gedgrave Marshes. It is likely that the site is used by SPA waterbirds. Therefore, the Applicant will need to carry out an assessment of the potential	-		New issue. We will provide further comment if/when further information is provided by the Applicant.		An assessment is provided at Deadline 5 in Lesser Black-backed Gull Compensation at Gedgrave Marshes; Effects on Designated Sites **[9.84, (Rev 0)].**

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				implications of the proposed measures on waterbird features of the SPA/Ramsar site and, if warranted identify appropriate mitigation measures for the construction and operational phases to minimise effects.					
(I) Seascape									
REP4-067_i1		1	I1	"Natural England welcomes the removal of the northern array area, the reduction in maximum blade tip height, and the reduction in the number of WTGs proposed for the southern array area. The design as proposed in the ES significantly decreases the risk of further harm to the natural beauty of the SECHNL and the special character of the SHC from the North Falls project. Despite this, we advise that there remains insufficient information to discount significant impacts to landscape and visual receptors within the SECHNL and SHC from turbines within the southern array area. The implications for the special qualities of the SECHNL and the special character of the SHC must be fully assessed within an updated SLVIA."	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		The implications for the special qualities of the SECHNL and the special character of the SHC have been assessed by the Applicant in REP3-044. NE are unable to discount significant impacts to landscape and visual receptors within the SECHNL and SHC from turbines within the southern array area. See Natural England's Deadline 4 response (Appendix I4).		The Applicant's position has not changed. In response to ExQ14.0.5 and 14.0.8 in the Examining Authority's Second Written Questions (ExQ2), an updated version of the Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note **[REP3-044]** is being submitted at Deadline 5 **[9.33, (Rev1)]** which provides further detail on the matters raised. Please refer to the Applicant's Response to the ExA's Second Written Questions (ExQ2) **[9.68, (Rev 0)]**.
REP4-067_i2		2	I2	"Natural England disagrees with the SLVIA conclusions of: - no significant effects on special qualities of the SECHNL - no significant effects on the landscape character of onshore LCTs within the SECHNL and SHC - the significance of visual effects (including cumulative effects) particularly between Orford Ness and Bawdsey Manor. - no significant cumulative impacts on landscape character or special qualities	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		No change.		The Applicant's position has not changed.

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				- the significance of impacts on people using the Suffolk Coast Path. The Applicant should revise the assessment in accordance with NE's advice. "					
REP4-067_i3		3	I3	Adding further offshore wind turbines into the seascape setting not conserve and enhance the natural beauty of the SECHNL or positively contribute to the special character of the SHC; it will degrade these areas further. Therefore, it is necessary to understand how much extra damage to the special qualities the turbines of the North Falls proposal will cause, so that the acceptability of further harm can be considered. See also Point 6 (I7) below.	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		The implications for the special qualities of the SECHNL and the special character of the SHC have been assessed by the Applicant in [REP3-044]. natural England advise that adding further offshore wind turbines into the seascape setting will not conserve and enhance the natural beauty of the SECHNL or positively contribute to the special character of the SHC; it will degrade these areas further.		The Applicant's position has not changed. In response to ExQ14.0.5 and 14.0.8 in the Examining Authority's Second Written Questions (ExQ2), an updated version of the Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note **[REP3-044]** is being submitted at Deadline 5 **[9.33 (Rev1)]** which provides further detail on the matters raised. Please refer to the Applicant's Response to the ExA's Second Written Questions (ExQ2) **[9.68, (Rev 0)]**.
REP4-067_i4		4	I5	"The potential impacts from the North Falls OWF on the natural beauty of the SCHNL are not fully assessed within the SLVIA. is not clear which special qualities may be associated with potential moderate-minor effects, and how the impact of the project on each special quality has been assessed. The interactions between special qualities and the project are not described. As a result, it is unclear what the impact of the North Falls project will have on the natural beauty of the SCHAONB, for instance in terms of landscape quality, scenic quality, relative wildness, or relative tranquillity. "	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		The implications for the special qualities of the SECHNL and the special character of the SHC have been assessed by the Applicant in [REP3-044]. However, Natural England advise that the North Falls project will have an impact on the natural beauty of the SECHNL. See Natural England's DL4 response (Appendix I4).		The Applicant's position has not changed. In response to ExQ14.0.5 and 14.0.8 in the Examining Authority's Second Written Questions (ExQ2), an updated version of the Assessment of the Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note **[REP3-044]** is being submitted at Deadline 5 **[9.33, (Rev1)]** which provides further detail on the matters raised. Please refer to the Applicant's Response to the ExA's Second Written Questions (ExQ2) **[9.68, (Rev 0)]**.
REP4-067_i5		5	I6	"Natural England advises that the impacts of the North Falls OWF on the special character of the SHC is not assessed within the SLVIA. Heritage Coasts do not have special qualities. Instead, Heritage Coasts are	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		The implications for the special qualities of the SECHNL and the special character of the SHC have been assessed by the Applicant in [REP3-		The Applicant's position has not changed. In response to ExQ14.0.5 and 14.0.8 in the Examining Authority's Second Written Questions (ExQ2), an updated version of the Assessment of the

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				defined by their special characters and the natural beauty of the area. The presence and special character of the SHC within the SECHNL helps to define that part of the designated area which is most likely to experience significant adverse effects arising from the North Falls scheme. "			044]. However, Natural England's advice on the significance of impact remains unchanged.		Special Qualities of the Suffolk and Essex Coast and Heaths National Landscape and Suffolk Heritage Coast – Technical Note **[REP3-044]** is being submitted at Deadline 5 **[9.33, (Rev1)]** which provides further detail on the matters raised. Please refer to the Applicant's Response to the ExA's Second Written Questions (ExQ2) **[9.68, (Rev 0)]**.
REP4-067_i6		6	I7	Section 245 (Protected Landscapes) of the Levelling Up and Regeneration Act 2023 places a duty on relevant authorities in exercising or performing any functions in relation to, or so as to affect, land in a National Park, the Broads or an Area of Outstanding Natural Beauty ("National Landscape") in England, to seek to further the statutory purposes of the area. The Applicant should provide clarity on how the project proposes to enable the decision-maker to further the purposes of the SECHNL.	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		NE do not agree with the Applicant's conclusion that actions to further the purposes of the SECHNL would be unreasonable, disproportionate or inappropriate, given our key concerns regarding the impacts on SECHNL remain.		The Applicant's position has not changed. The Applicant has submitted a Position Statement of Various Issues Relating to National Landscapes at Deadline 5 [**9.78, (Rev 0)**] which provides further detail on the Applicant's position in relation to the application and discharge of the relevant duty.
REP4-067_i7		7	I8	"The significance of effects (in EIA terms) from the North Falls OWF on visual receptors at viewpoints from Orford Ness to Bawdsey Manor (located within the SCHAONB and SHC) have been underestimated. The Applicant should review NE's advice and update the assessment accordingly. "	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		No change.		The Applicant's position has not changed.
REP4-067_i8		8	I9	"The significance of effects (in EIA terms) from the North Falls OWF on visual receptors at viewpoints from Orford Ness to Bawdsey Manor (located within the SCHAONB and SHC) have been underestimated. The Applicant should review NE's advice and update the assessment accordingly."	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		We wish to clarify that Natural England's advice for I9 does relate to the Applicant's judgements made on impacts to visual receptors (people) at Orford Ness. Natural England's advice that the sensitivity of receptors at Orford Ness is high remains unchanged, and Natural England do not accept the Applicant's rationale		Please refer to the Applicant's response to point REP4-066_a4 in Table 2.9.1 above.

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							regarding where the attention of receptors at Orford Ness will be focussed.		
REP4-067_i9		9	I10	"Natural England's judgement is that the sensitivity of Orford Ness is high, not medium-high as judged by the applicant. The SECHNL is a nationally protected landscape which has been designated for its natural beauty and has a statutory purpose to conserve and enhance that natural beauty. The SHC is a nationally defined landscape because of its special character, of which natural beauty is one element. Further, the criteria used by the Applicant to judge this receptor as having a medium-high sensitivity has not been clearly articulated."	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		No change.		Please refer to the Applicant's response to point REP4-066_a4 in Table 2.9.1 above.
REP4-067_i10		10	I11	Natural England agree that the cumulative effect on users of the Suffolk Coast Path is significant in EIA terms, however considers the impact to be major adverse given the potential for the North Falls project to affect the special qualities (which are not fully assessed within the ES), taking the designated landscape further away from its required state. The Applicant should reconsider their assessment in the light of Natural England's advice.	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		No change.		The Applicant's position has not changed.
REP4-067_i11		11	I12	We disagree that the North Falls OWF will have no significant cumulative impacts on the SCHNL and SHC. The Applicant's own assessment concludes moderate significant sequential effects on users of the Suffolk Coast Path within the protected landscape. The Applicant should update their assessment in the light of NE's detailed advice on the 377.4m and 276.4m designs.	We note that the Applicant has provided a response to Natural England's Rel Reps in [REP2-024]. Natural England is reviewing this document and will provide an update at Deadline 4.		Natural England note that the Applicant now concludes that "total cumulative effects on the special qualities of the SECHNL and the special character of the SHC may be significant". This updates the Applicant's previous conclusion that cumulative effects were not significant in EIA terms". Natural England's advice on cumulative		The conclusion has not been 'updated'. Please refer to the Applicant's response to point REP4-066_b4 in Table 2.9.1 above for clarification on this matter.

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							effects remains unchanged.		
(J) Landscape VIA									
REP4-067_j		1	J1, J3	There is a potential for in-combination/cumulative impacts between Norwich-Tilbury substation, North Falls, and the Five Estuaries (VE) substations. Once more information is available during examination this should fully considered and assessed, with appropriate mitigation measures applied, if necessary, including addressing winter visibility whilst mitigation screening is established.	No change to our earlier advice.		No change to our earlier advice		The Applicant's position has not changed. Please refer to the Applicant's Response to Relevant Representations Received from Natural England **[REP1-044]** (NE-398 and NE-400).

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