THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Rampion 2 Offshore Wind Farm

Appendix N3 to the Natural England Deadline 3 Submission

Natural England's Response to the Examining Authority's Written Questions (ExQ1)

For:

The construction and operation of the Rampion 2 Offshore Windfarm located approximately
13km off the Sussex coast in the English Channel.

Planning Inspectorate Reference: EN010117

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25 April 2024

Ref	Question		Natural England's Response
ONSHORE AND OFFSHORE QUESTIONS			
AL	**Alternatives**		
AL 1.1	*Fawley and Dungeness Alternatives* **Natural England** **The Environment Agency**	Respond specifically to the identified environmental challenges of offshore cabling to the Fawley substation as identified in paragraphs 1.3.10 to 1.3.14, and to Dungeness substation as identified in paragraphs 1.3.19 to 1.3.29 of the Applicant's post-Hearing submission on Fawley and Dungeness appraisals [REP1-019].	When selecting a cable route Natural England would advise in the first instance that any route looked to avoid designated sites and designated landscapes. We agree that there is the potential for cable installation impacts on designated sites in relation to a grid connection at both Fawley and Dungeness substations. **Fawley substation** Natural England notes that the route from Rampion Offshore Windfarm to Fawley substation would likely pass through multiple designated sites including: Solent and Dorset Coast Special Protection Area (SPA) and the landfall could also potentially impact Solent Maritime Special Area of Conservation (SAC), Solent and Southampton Water SPA/Ramsar, Hythe to Calshot Marshes Site of Special Scientific Interest (SSSI) and North Solent SSSI. Additionally, the cable would make landfall within the Forest National Park. We advise that there would potentially be direct and indirect impacts on the features of these sites from:

			• cable preparation, installation and operational activities, • cable protection (including at additional cable crossings) • difficulties/limitations of burying a cable in a highly mobile substrate • from a substation location. There are also numerous other designations along the route, which have the potential to be indirectly affected. **Dungeness substation** Natural England notes that the route from Rampion Offshore Windfarm to Dungeness substation would likely pass through Dungeness SAC, Dungeness, Romney Marsh and Rye Bay SPA/SSSI, and may also need to pass through Dungeness, Romney Marsh and Rye Bay Ramsar. We advise that there would potentially be direct and indirect impacts on the features of these sites from: • cable preparation, installation and operational activities, • cable protection etc. • from a substation location. In addition to the impacts on designated sites the significantly longer cable routes have the potential to impact on benthic habitats protected under

			Section 41 of the NERC Act, and Annex 1 habitats over a much larger area.
HRA	**Habitats Regulations Assessment (HRA)**		
HRA 1.1	*Updated Kittiwake Implementation and Monitoring Plan* **Natural England**	The ExA notes the intention for the Applicant to provide Artificial Nesting Structures (ANS) for kittiwake as part of the Kittiwake Implementation and Monitoring Plan (KIMP), in the event that the SoS concludes that adverse effects on the integrity of the Flamborough and Filey Coast Special Protection Area cannot be excluded. Regarding the Applicant's updated Kittiwake Implementation and Monitoring Plan (KIMP) submitted into the Examination at Deadline 1 [REP1-026], state whether: a) The Applicant has adequately explained how it would develop the collaborative option for delivering the ANS. b) The proposed monitoring programme, adaptive management and reporting timeframes the Applicant is proposing are adequate. c) The requirement securing the KIMP in the draft Development Consent Order (draft DCO) [REP2-002] is adequate.	a) The Applicant has adequately explained how it would develop the collaborative option for delivering the ANS. b) We consider the proposed monitoring programme, adaptive management and reporting timeframes the Applicant is proposing to be broadly adequate. Natural England's response to the updated KIMP submitted at Deadline 1 [REP1-027] is provided in Appendix B2. c) Natural England has provided comments and requested amendments to the draft schedule securing Kittiwake compensation. Those comments have not yet been addressed and we are, therefore, unable to confirm that the requirement securing the KIMP is adequate. We refer to our Deadline 1 response (Appendix A1) and our risks and issues log for detailed comments on the schedules.
HRA 1.3	*In-combination Assessment of Impacts for Guillemot and Razorbill at the*	Comment on the adequacy of the Applicant's full in-combination assessment of impacts for guillemot and razorbill at the Flamborough and Filey Coast (FFC) SPA submitted at Deadline 1	Natural England's response to the full in-combination assessment of impacts for guillemot and razorbill at the Flamborough and Filey Coast (FFC) SPA submitted at Deadline 1 [REP1-027] is

	Flamborough and Filey Coast SPA **Natural England**	[REP1-027], specifically whether Natural England agrees with the Applicant's methodology and conclusions.	provided in the (Appendix B3) and summarised in the Risk and Issue Log. The Applicant has adequately provided an in-combination assessment in line with our recommended methodology, alongside impact values calculated according to its own preferred methodology. We disagree with the Applicant's conclusions that an Adverse Effect on Integrity for these features can be ruled out when considered in combination with other Offshore Wind Farms.
HRA 1.4	*In-combination Assessment of Impacts for Guillemot at the Farne Islands SPA* **Natural England**	Comment on the adequacy of the Applicant's full in-combination assessment of impacts for guillemot at the Farne Islands SPA submitted at Deadline 1 [REP1-027], specifically whether Natural England agrees with the Applicant's methodology and conclusions.	Natural England's response to the full in-combination assessment of impacts for guillemot at the Farne Islands SPA submitted at Deadline 1 [REP1-027] is provided in the (Appendix B3) and summarised in the Risk and Issue Log. The Applicant has adequately provided an in-combination assessment in line with our recommended methodology, alongside figures calculated according to its own preferred methodology. We disagree with the Applicant's conclusions that adverse effect on integrity for these features can be ruled out when all other projects are included in the in-combination assessment.
HRA 1.7	*Potential for Adverse Effect on Integrity (AEoI) to the Conservation Objectives of the*	In light of the Applicant's responses at Deadline 1 [REP1-017] to Natural England's concerns [RR-265] regarding the foraging range of the northern pintail, potential impacts from habitat	Natural England welcomes the further information provided by the Applicant. Although, we do seek further clarity regarding the distances stated between the proposed project and the Arun Valley

	Northern Pintail of the Arun Valley Ramsar site **Natural England**	fragmentation and potential temporary loss of functionally linked land of the Arun Valley Ramsar site, state: a) Whether the Applicant's responses address Natural England's concerns. b) What further assessment and / or mitigation is the Applicant advised to undertake / implement to address Natural England's concerns.	Ramsar Site and any functionally linked land. For example, the Applicant gives the closest point from the proposed DCO Order limits at 4.8 km for the Arun Valley Ramsar site but identifies the nearest functionally linked land (FLL) at over 9 km [REP1-017] [Appendix J, J17 (p432)]. Natural England requests the Applicant confirms the coordinates of the 9 km FLL location point. Natural England awaits the submission of an updated ES chapter and/or Report to Inform the Appropriate Assessment RIAA before we can advise further.
HRA 1.8	*Water Neutrality and Potential Likely Significant Effects on the Arun Valley designated sites (SPA, SAC and Ramsar)* **Natural England**	There is no change on the level of concern in Natural England's Risk and Issue log submitted at Deadline 2 [REP2-041] related to Water Neutrality within the Sussex North Water Supply Zone, in light of the Applicant's further information on this provided at Deadline 1. State: a) Natural England's latest position on the Applicant's proposed actions submitted into the examination at Deadline 1 to address Water Neutrality, and whether they are sufficient. b) What further assessment and / or mitigation the Applicant is advised to undertake / implement to address your concerns.	We advise that once the Applicants commitments are secured within a named plan this issue can be considered resolved.
HRA 1.9	*Research Findings* **The Applicant**	The Report to Inform the Appropriate Assessment (RIAA) [APP-038] contains an extensive list of references listed in section 13. Explain whether any relevant references been	Natural England are not aware of any new references that would materially change the outcome.

	Natural England	published subsequently that should be taken into account in the HRA that might materially change the outcome.	
COD	**Construction, Operation and Decommissioning Matters**		
COD 1.1	*Commitments Register* *Horizontal Directional Drilling (HDD)* **Natural England** **Environment Agency** **Forestry Commission** **South Downs National Park Authority (SDNPA)** **The Woodland Trust** **Sussex Wildlife Trust** **West Sussex County Council (West Sussex CC)** **Horsham District Council (Horsham DC)** **Arun District Council (Arun DC)**	Provide a response to the Applicant's statement in the Applicant's Responses to Relevant Representations, J3 [REP1-017] on page 416 that: "*Commitment C-5 (Commitments Register [APP-254] (provided at Deadline 1 submission) has been updated at the Deadline 1 submission to clarify that Horizontal Directional Drill (HDD) or other trenchless technology will be deployed in accordance with Appendix A: Crossing Schedule of the Outline of Construction Practice [PEPD-033] secured via Required 22 within the Draft Development Consent Order [PEPD-009]. The Applicant will not switch to open-cut trenching at these locations. The appropriate realistic Worst-Case Scenario has been assessed in the ES. Note, that in the unlikely event that another trenchless technology is deployed at a specific crossing, this would require demonstration that there are no materially new or materially different environmental effects. Any change will need to be approved by the relevant planning authority through amendment to the stage specific Code of Construction Practice and Crossing Schedule.* "Explain whether there are any remaining	Natural England does not agree with the Applicant that the 'worst-case scenario' has been expressed in the Environmental Statement (ES). Currently no on-site Ground Investigations (GI) have been carried out. Therefore, Natural England's has consistently advised that until such time as evidence is provided to confirm that HDD is feasible the worst-case scenario is open cut trenching.

		concerns on the reliance on HDD or other trenchless technology at the locations specified by the Applicant in the Crossing Schedule in Appendix A of the Outline of Construction Practice [PEPD-033] to be secured via Required 22 within the Draft DCO [REP2-002].	
COD 1.7	*Decommissioning* **The Applicant** **MMO** **Natural England** **The Environment Agency** **Relevant Planning Authorities**	**The Applicant** Provide an Outline Decommissioning Plan for the offshore infrastructure, as requested by Natural England [REP2-038, Page 3]. Explain plans in place to follow the waste hierarchy at the decommissioning stage, particularly any plans on how the wind turbine materials might be reused or recycled. **The Environment Agency / Natural England / MMO / Relevant Planning Authorities** Comment on expectations for recycling or reuse of the wind turbine materials at the decommissioning stage.	Natural England recommends that the Outline Decommissioning Plan considers all possible options for reusing and recycling of materials, as well as fully exploring using materials in the first instance that have the potential to be removed if surface laid and reused or recycled.
DCO	**Draft Development Consent Order (Draft DCO) and Draft Deemed Marine License (Draft DML)**		
	DCO Schedules		
DCO 1.33	*Prospective Schedule 17* **The Applicant** **Natural England**	Should the Secretary of State be minded to accept that Adverse Effect on Integrity to the Flamborough and Filey Coast SPA cannot be excluded, the Applicant confirmed at ISH1 [EV3-001] that a standalone Schedule 17 [PEPD-017]	Natural England has not had further discussion with the Applicant on the DCO aspect of this particular topic or seen any relevant revisions that would address our issues. We advise that an update is provided, we are open to further

		should be inserted into the DCO should the Secretary of State be minded to make the Order. Natural England [REP1-059] have raised a number of concerns with the wording of this prospective Schedule with suggested amendments and additions. In its response at Deadline 2 [REP2-026], the Applicant states discussions are ongoing including addressing Natural England's concern on the absence of provisions for the end of the lifetime of the project and the compensatory measures. Provide an update to the progress of Schedule 17 and a timescale of when an agreed position will likely be reached.	discussion with the Applicant to resolve these issues if required.
	Draft DML		
DCO 1.35	*Schedules 11 and 12* *Deemed Marine Licence* **Natural England**	In respect to Part 2 condition 2(6), the Applicant states in its response at Deadline 2 [REP2-026] that further changes to this condition are unnecessary as the condition refers to commencement of the authorised scheme, which is defined in the deemed marine license by reference to Works No 1 and 2 in Schedule 11 and Work Nos. 3 to 6 in Schedule 12. In respect to Part 2 conditions 11(1)(a) and (c), the Applicant states it will prepare its design plan to take account of micro-siting requirements and that construction method statement will also be required to take account of micro-siting requirements and by subject to approval hence no further amendment is considered necessary.	Natural England notes that some amendments have been made to the micro-siting provision which partially address our concerns. In our Deadline 1 advice (Appendix A1) we provided further changes which we consider need to be made to address this issue and would refer you to that response.

		Provide a response and if necessary, set out the changes required to the said conditions.	

Ref	Question		Natural England's Response
ONSHORE QUESTIONS			
BD	**Biodiversity**		
BD 1.1	*Biodiversity calculations* **The Applicant** **Natural England** **SNDPA** **West Sussex CC** **Horsham DC** **Arun DC** **Mid Sussex DC**	**For The Applicant** a) Volume 4, Appendix 22.15 of the ES [APP-193] states metric 4.0 version of the biodiversity metric has been used to calculate the biodiversity baseline and present planned BNG outcomes. Confirm that this was the latest version at the time of submission. b) The ExA requests the BNG metric spreadsheet used for the calculations is submitted into the Examination. **For Natural England, SDNPA, West Sussex CC** c) It is noted that the latest metric is now the Statutory Biodiversity Metric. Explain whether the calculations need to be updated using the latest version. d) Is there agreement on the biodiversity baseline presented in Appendix 22.15	Natural England supports the use of the Statutory Biodiversity Metric at this stage, but we acknowledge that Metric 4.0 was the current metric at the time the application was submitted. Natural England supports the Applicant re-running their calculations using the latest version of the Metric available at the detailed design stage. Natural England is not able to assess Biodiversity Net Gain (BNG) calculations and defers to the relevant authorities.

		Biodiversity Net Gain information [APP-193] for the: i. Total number of baseline units calculated for the worst-case realistic scenario. ii. Total number of units lost to the Proposed Development. e) Confirm whether clarity exists on how the calculations have been done and is there agreement on the methodology and the spatial areas for which the calculations have been presented?	
BD 1.2	*Mitigation Hierarchy* **Natural England** **SNDPA** **West Sussex CC** **Horsham DC** **Arun DC** **Mid Sussex DC**	Confirm that the Applicant has adequately followed the mitigation hierarchy in respect to no biodiversity net loss and biodiversity net gain.	We advise that the mitigation hierarchy requires that applicants must demonstrate that all steps to *avoid,* biodiversity loss have been robustly assessed, including through consideration of reasonable alternatives, before reducing and mitigating impacts in order to 'maintain' biodiversity. If impacts remain then appropriate compensation will be required to offset the impact. Separate to the mitigation hierarchy 'to maintain' is the requirement to enhance biodiversity which can be delivered through Biodiversity Net Gain (BNG). We have advised that it is not currently clear how the principles of avoidance have been demonstrated and that a clear distinction is

			required between the mitigation hierarchy and BNG.
BD 1.6	*Clear Differentiation between Delivery of Compensation and Enhancement.* **Natural England** **SDNPA** **West Sussex CC** **Horsham DC** **Arun DC**	Concern has been raised by SNDPA [REP1-049], Sussex Wildlife Trust [RR-381], Horsham DC [REP1-044] and Natural England [RR-265] regarding the transparency between delivery of compensation for the Proposed Development i.e. no net loss of biodiversity and biodiversity enhancement of 10% i.e. 10% biodiversity net gain (BNG). The Applicant states it has used the Natural England BNG metric tool to calculate the units required for both [APP-193]. a) Explain whether Table 4-5 on page 24 of Volume 4, Appendix 22.15 of the ES APP-193, provides a sufficiently clear and transparent explanation of how many units of each type are required and is there agreement on the number of units to achieve no net loss and 10% net gain. b) Comment on whether no double-counting is clear between activities planned to deliver mitigation, compensation, enhancement and net gain. c) Is further explanation required? If so, please specify what is needed.	We advise that Table 4.5 on page 24 of Volume 4 Appendix 22.15 of the ES [APP-193] does not currently provide a sufficiently clear and transparent explanation of the units required to achieve BNG. We therefore advise that the Applicant provides additional information via further narrative or tabular information to make a clear distinction between habitats to be provided via the mitigation hierarchy and those that are proposed though BNG. We advise that it is not currently clear whether units have been double counted. .
BD 1.8	*Timing of Delivery of Biodiversity Compensation*	The Applicant states in section 5.2.1 of Volume 4, Appendix 22.15 of the ES APP-193 that:	Natural England advises that any habitat provision for impacts to biodiversity assets associated with a statutory designated site should be mitigated for

	Natural England **SDNPA** **West Sussex CC**	*"To avoid a deficit in biodiversity growing as the construction programme progresses, the Proposed Development will follow two courses of action. The first is to enable a progressive reinstatement of habitats, whilst the second is to secure 70%[7] of the deficit (as calculated in Table 4-5 – i.e., as a realistic worst-case scenario) prior to commencement of construction. Any remaining shortfall identified following detailed design will be secured prior to construction works being completed."* *[7] It is expected that 70% of the deficit as calculated at Table 4-5, will likely be equivalent to that which will be necessary to provide to secure the commitment once detailed design has been completed."* Confirm whether there is general agreement on this approach, particularly the delivery of 70% of the deficit prior to commencement of construction. Provide details of any outstanding concerns.	and fully functioning prior to any impacts occurring. Natural England supports the delivery of non-designated biodiversity assets at an early stage to ensure habitats have time to mature and provide biodiversity value and ecological functionality prior to impacts occurring. Natural England would advise that habitats should be monitored to ensure successful establishment and deliver the expected biodiversity value. Natural England has no comment to make on the project-specific percentage of biodiversity deficit that should be delivered prior to construction and would instead defer the matter to the relevant authorities.
SLV	**Seascape and Landscape and Visual**		
SLV 1.2, 1.3, 1.4 &1.5			For all responses to SLV questions 1.2 to 1.5 inclusive please see Appendix N3 - Natural England's Response to The Examining Authority's

			Written Questions relating to Seascape, Landscape and Visual matters.
SA	**Soils and Agriculture**		
SA 1.2	*Best and Most Versatile Agricultural Land (BMV)* **Natural England**	Natural England raised a concern in its RR [RR-265] that Commitments should extend to returning BMV back to the same Agricultural Land Classification (ALC) grade as pre-construction. The Applicant amended Commitment C-7 in light of this concern. Confirm whether the re-draft of commitment C-7 addresses the concern.	Natural England welcomes the amended wording to commitment C-7, to restore land being restored to agricultural use and 'soft' use to the pre-existing ALC grade conditions. We advise that the pre-existing conditions should be informed by the baseline ALC grade. We advise this commitment should be clearly demonstrated in updated named plans to fully address our concerns.
SA 1.3	*Best Most Versatile Agricultural Land and Soils* **Natural England** **SDNPA**	Confirm whether the responses and updates the Applicant has provided regarding soils and agriculture are adequate or whether there are any outstanding concerns regarding: a) soil surveys b) soil re-instatement c) soil stockpiles d) soil handling e) use of machinery f) the Applicant's conclusions on potential impacts of BMV agricultural land	Natural England confirms the Applicant has addressed our main outstanding concerns in their response [REP1-017] Natural England will continue to provide advice on the updated Outline Soils management Plan when submitted.

TE	Terrestrial Ecology		
TE 1.2	*Ecological Surveys in the Vicinity of the Proposed Substation Location at Oakendene and Cable Route Leading to this Site* **Horsham DC** **Natural England** **The Environment Agency**	The ExA would appreciate a response from Horsham DC, Natural England and the Environment Agency to the Applicant's answer to WQ TE 1.1, either at or in advance of Issue Specific Hearing 2, to be held w/c 13th May 2024, commenting on whether remaining concerns exist regarding: a) The quantity or quality of ecological surveys undertaken by the Applicant at and in the vicinity of the Oakendene substation site and cable route near to this location. b) The extent to which the appropriate guidelines and methodologies have been followed including the time of year the surveys were carried out. c) The conclusions of the ecological assessments undertaken by the Applicant at and in the vicinity of the Oakendene substation site and cable route near to this location.	Please refer to our Appendix J3 submission on protected species.
TE 1.3	*Terrestrial Ecological Surveys and Mitigation for the Whole of the Landward part of the Proposed Development*	Comment on whether remaining concerns exist regarding: a) the quality of terrestrial ecological surveys in general undertaken by the	Please refer to our Appendix J3 submission on protected species.

	Horsham DC **Arun DC** **Natural England** **The Environment Agency**	Applicant for the whole of the landward part of the Proposed Development? b) the conclusions the Applicant has come to for the terrestrial ecological assessments for the whole of the landward part of the Proposed Development. c) the extent to which the appropriate guidelines and methodologies have been followed by the Applicant when undertaking relevant terrestrial surveys for the whole of the landward part of the Proposed Development. d) the quality and likely effectiveness of the mitigation the Applicant is proposing for potential impacts on terrestrial ecology for the whole of the landward part of the Proposed Development.	
TE 1.4	*Nightingale Species in the Vicinity of the Proposed Substation location at Oakendene and Cable Route leading to this Site* **The Applicant** **Horsham DC** **Natural England** **Environment Agency**	**Horsham DC, Natural England and the Environment Agency** State whether there are any concerns regarding: a) the Applicant's surveys undertaken for Nightingale and determination of nightingale territories. b) the quality and likely effectiveness of the proposed mitigation for nightingale. c) the suggestion in the above referenced Written Representations that nightingales	Natural England will consider the Applicant's response to the ExA question and provide further advice accordingly.

		may be unlikely to return to the area post construction work. Comment on the adequacy of the proposed mitigation for nightingale.	
TE 1.5	*Ecology of Priority and Irreplaceable Habitats in the Vicinity of the Proposed Substation site at Oakendene and Cratemans Farm* **The Applicant** **Natural England** **The Environment Agency** **Horsham DC**	**Natural England and Horsham DC** In light of the comments above: a) Comment, if required, on the Applicant's assessment and conclusions in relation to whether or not the meadow habitat around Crateman's Farm and Moatfield Farm qualifies as priority habitat lowland meadow, as summarised in the Applicant's response to CowfoldvRampion's Written Representation [REP2-030] page 56-57. b) Inform the ExA whether the areas around Oakendene and Crateman's Farm contain irreplaceable habitats. c) Comment on the mitigation for the loss of habitats in the area around Cratemans Farm and Oakendene and whether they are likely to be effective. If not, explain what additional measures would be required.	We refer you to Natural England's standing advice regarding irreplaceable habitats which is available on the government website and our Appendix J2.5a response in relation to the sufficiency and feasibility of the proposed mitigation measures for both priority habitats and irreplaceable habitat Impacts to these habitats should be avoided where possible whether inside of a designated site or not. Consideration will also need to be given to impacts of the special qualities of National Park. We defer to the local knowledge of Horsham District Council to confirm if priority and/or irreplaceable habitats are within the vicinity of Oakendene and Cratemans Farm
TE 1.10	*Protected Species - Hazel Dormouse* **The Applicant** **Natural England**	**Natural England, the Environment Agency, Relevant Planning Authorities and SDNPA** Confirm if the surveys undertaken by the Applicant and proposed mitigation measures for hazel dormouse described in the Outline	Please refer to our Appendix J3 submission on protected species.

	Relevant Planning Authorities **The Environment Agency** **SDNPA**	Landscape and Ecological Management Plan [APP-232] are adequate. If not, are there any other approaches that you consider would be effective in terms of mitigation measures for hazel dormouse?	
TE 1.11	*Protected Species - Bat Surveys* **The Applicant** **Natural England** **Relevant Planning Authorities** **The Environment Agency** **SDNPA**	**The Applicant** a) The ExA requests an update to the Terrestrial Ecology chapter of the Environmental Statement [APP-063] to include the information from the document submitted into the examination at the PEPD relating to bat activities, [PEPD-029] Environmental Statement Volume 4, Appendix 22.18: Passive and active bat activity report 2023 Date: January 2024 Revision A. b) State if the information this report provides changes any of the conclusions in the Terrestrial Ecology chapter of the Environmental Statement [APP-063] **Natural England, the Environment Agency, Relevant Planning Authorities and SDNPA** c) Confirm if the proposed mitigation measures for bats described in the Outline Landscape and Ecological Management Plan [APP-232] are adequate. If not, are there any other approaches that you consider would be	We refer you to our advice in Appendix J3 regarding mitigation for bats.

		effective in terms of mitigation measures for bats.	
TE 1.13	*Potential Impacts of Haul Roads on Ecology* **The Applicant** **Horsham DC** **Natural England** **The Environment Agency**	Provide a response to the concern raised by Cowfold v Rampion [REP1-089], Ms Smethurst [REP1-132] and Ms Creaye [REP1-106] regarding the potential impact of the noise from the proposed temporary haul roads to access the proposed cable route, on ecology and wildlife.	The Applicant and their ecologist have a responsibility to consider whether any potential impacts of the scheme are likely to result in disturbance to legally protected species. This is typically done through two routes: 1) Designing a scheme to avoid impacts which would be against wildlife law (for example, but not limited to, species protected under the Conservation of Habitats and Species Regulations 2017, which are protected from disturbance to the extents outlined in schedule 43(2) of the act) 2) If a species is likely to be unavoidably impacted in a way which is against these wildlife laws, then a licence should be applied for. Licences must meet certain tests, which broadly ensure that licensing is a last resort and other options have been considered, and that the "favourable conservation status" of the species is maintained through mitigation and compensation measures. Natural England has not viewed draft license applications for these species, so is unable to comment on the appropriateness of the temporary haul road proposal in terms of licensable actions.

			Nonetheless, where a scheme considers it appropriate not to seek a licence, it is a scheme's responsibility to seek advice from an appropriately qualified ecological consultant. We advise ecological consultants and schemes keep detailed notes outlining why a license was not considered to not be required in an area which impacts to species are being avoided. These are likely to include, but are not limited to, specific information about design, the conditions on site, and the levels of disturbance to which the species are accustomed to. The standing advice that Natural England issue with regard to the licensable species concerned is outlined in our response to question TE 1.5. For all other ecological concerns not pertaining to protected Species we defer to the local Planning Authority and Non-Governmental Organisations (NGOs)
TE 1.15	*Hibernating Species* **The Applicant** **Natural England**	**The Applicant** a) Explain if the pre-construction surveys referred to in commitment C-208 would include areas of over wintering hibernaculum which may be disturbed where hibernating species may be residing over the winter months? b) Explain how hibernating species in construction areas would be protected.	**Bats** All of the bat species identified so far within the report have been observed using trees (to some extent) during the winter months for extended torpor/ hibernation. Where trees have been identified with medium-high hibernation potential and that will be directly impacted by works or high levels of disturbance (from December - March) there will be a requirement to evidence climbed

		Natural England c) Comment on what would comprise adequate mitigation for over wintering hibernaculum?	tree inspections during the core hibernation period (Jan - February). In the first instance any trees identified as containing (or highly likely to contain) hibernation roost should look to be retained entirely (unless highly fragmented from adjoining habitat). Where trees are identified (or highly likely to contain) hibernation roost and they require structure works (limb removal etc.) this should be undertaken outside of December -March (inclusive). Any activities likely to cause high levels of disturbance to an identified roost- through noise and vibration should be undertaken outside of December - March (inclusive). **GCN** Generally, for GCN EPS Mitigation Licences, adequate mitigation for over wintering would be the creation of new hibernacula and log piles, designed to the specification set out in the Great Crested Newt Mitigation Guidelines. The amount of which would be determined by assessing the areas of suitable GCN habitat to be damaged/destroyed. **Hazel Dormouse** Dormice hibernate at ground level in hibernation nests, typically between November and March inclusive. Whilst hibernating, dormice are

			particularly vulnerable to trampling or machinery within dormouse suitable habitat. Where there is suspected / confirmed dormouse presence, great care must be taken and habitats should be avoided where possible. Where it is not possible to avoid these habitats during hibernation, suitable mitigation must be in place. We advise that any single stage clearance permitted during the hibernation season would be subject to strict measures, such as the entire area to be cleared needing to undergo hand searches for any hibernation nests immediately prior to clearance. We advise that a suitable hibernaculum could include brash/log piles. **Water Voles** Water voles do not undergo a full hibernation, but they will go into a torpid state and spend most of their time underground in their burrows. Due to this, best practice dictates that water voles are only to be displaced or trapped during the Spring period (15th February – 15th April) or during the Autumn period (15th September – 31st October). Please refer to our Appendix J3 submission on protected species for further advice.
TE 1.17	*Species in the Vicinity of the Proposed Substation Location at Oakendene*	In response to concerns raised by CowfoldvRampion in their WR [REP1-089] and Ms Creaye [REP1-106], regarding potential	**GCN** Please refer to Appendix J3.

	and Cable Route Leading to this Site **The Applicant** **Horsham DC** **Natural England** **The Environment Agency**	impacts on toad migration, adders, grass snakes and great crested newts in the vicinity of the proposed substation site at Oakendene and cable route leading to this site: **The Applicant** a) Explain why the Applicant believes the proposed mitigation for potential impacts on these species is adequate. **Horsham DC, Natural England, The Environment Agency** b) State whether there are any concerns regarding: i. the outcome of the environmental assessments for these species and ii. the proposed mitigation for potential impacts on these species	**Common toads** Natural England's Wildlife Licensing Service (NEWLS) does not issue licences in relation to impacts from development proposals to common toads. We would expect the scheme design to clearly account for mitigation. Best practice guidance includes *Guidance for Planners and Highways Engineers* relating to Common Toads and Roads published by the Amphibian and Reptile Conservation Trust. **Reptiles** Natural England would expect applicants to avoid impacts to adders and grass snakes, and where impacts cannot be avoided, to provide appropriate mitigating measures. The Applicant has undertaken to trap and translocate reptiles alongside the use of an Ecological Clerk of Works to carry out destructive searches in habitats suitable for use by reptiles. These proposed measures are in line with best practice and the mitigation approaches detailed by Natural England's Standing Advice for Reptiles. It is noted that detail on where translocated reptiles will be moved to, i.e. where the receptor site(s) will be, has not been discussed in the documents reviewed. The composition of any sites and habitats receiving translocated reptiles should adhere to the guidance detailed within the Standing Advice.

TE 1.18	*Protected Species, Great Crested Newt - Baseline Data* **Natural England**	The Applicant responded at Deadline 1 to Natural England's concern regarding eDNA for great crested newts having been undertaken outside of the optimal window. Respond to the Applicant's explanation at Deadline 1 [REP1-017, J70] which states that: *"Commitment C-214 of the Commitments Register* …[REP1-015]… *(provided at Deadline 1 submission) provides for further great crested newt survey prior to construction and is secured through the Outline Code of Construction Practice [PEPD-033], Requirement 22 of the Draft Development Consent Order [PEPD-009]."* a) Explain whether there are any outstanding concerns in relation to this matter. If so, please provide details. b) Comment on the adequacy of Commitment C-214 and its effectiveness in relation to great crested newts.	Natural England advises that: a) Please refer to Appendix J3. b) Further information would be required to understand the full nature of the works covered by Commitment C-214 to determine its effectiveness.
TE 1.19	*Protected Species, Great Crested Newt - Baseline Data* **Natural England**	The Applicant responded at Deadline 1 to Natural England's concern regarding eDNA for great crested newts at three waterbodies only, requested consideration of all waterbodies and questioned whether best practice guidelines were adhered to.	Commitment C-214 to provide further surveys prior to construction would allow for a better understanding of the site and whether the mitigation and compensation proposed are adequate. Please refer to Appendix J3 for further details.

		Provide a response to the Applicant's explanation at Deadline 1 [REP1-017, J73 & J74] which state that: *"Best practice guidelines (including habitat suitability index (HSI)) and supporting eDNA guidelines will be adhered to. Commitment C-214 of the Commitments Register [APP-254] (provided at Deadline 1 submission) provides for further great crested newt survey prior to construction and is secured through the Outline Code of Construction Practice [PEPD-033], Requirement 22 of the Draft Development Consent O* *der [PEPD-009]."* and *"Surveys were undertaken on waterbodies where great crested newt habitat was identified. Commitment C-214 of the Commitments Register [APP-254] (provided at Deadline 1 submission) provides for further great crested newt survey prior to construction and is secured through the Outline Code of Construction Practice [PEPD-033], Requirement 22 of the Draft Development Consent Order [PEPD-009]. This will include a review of waterbodies present at the time, with survey work then tailored to meet results."*	

		Explain whether there are any outstanding concerns in relation to this matter. If so, please provide details.	
TE 1.22	*Protected Species - Badger* **Natural England**	Commitment C-209 in the Commitments Register [APP-254] states that: *"Pre-construction surveys for badger will be undertaken prior to construction. Where badger setts are located within or close to the working area suitable mitigation, under a development licensefrom Natural England where necessary, will be delivered under supervision from an Ecological Clerk of Works."* Comment on the adequacy of Commitment C-209. If not adequate, provide further details.	Natural England advises that additional surveys should be undertaken and if any impacts to badgers are found Natural England must be contacted to obtain a badger development (A24) licence. Please refer to our Appendix J3 submission on protected species for further information.
TE 1.24	*Toads* **Natural England** **Horsham DC** **The Environment Agency**	In light of the evidence submitted at Deadline 1 citing toad migrations across Kent Street and surrounding land in the vicinity of the proposed substation at Oakendene and the land in the vicinity of Crateman's Farm from CowfoldvRampion [REP1-089], Ms Creaye [REP1-106] and Ms Smethurst [REP1-132]: a) Explain whether there are any specific mitigation measures for toads the organisation would expect the Applicant to commit to.	Natural England's Wildlife Licensing Service (NEWLS) does not issue licences in relation to impacts from development proposals on common toads. We would expect the scheme design to clearly take account of mitigation for this species. Best practice guidance includes *Guidance for Planners and Highways Engineers relating to Common Toads and Roads* published by the Amphibian and Reptile Conservation Trust.

TE 1.26	*Amberley Mount to Sullington Hill SSSI and Sullington Hill Local Wildlife Site* **Natural England** **Arun DC** **The Environment Agency** **SDNPA**	The Applicant has stated that surface works through the Sullington Hill Local Wildlife Site (LWS) are being avoided through use of a trenchless crossing. Respond, if required, to the decision of the Applicant to scope out the Amberley Mount to Sullington Hill SSSI, particularly in light of the proximity of the Proposed Development red line boundary to the SSSI and/or the evidence submitted into the Examination at Deadline 1 by Grahame Rhone Kittle [REP1-100] including the discovery of a nationality scarce spider.	Natural England does not provide bespoke advice on impacts to species where they do not form part of a designated site or require a license from Natural England. We defer this element of the question to the relevant authorities and NGOs.
TE 1.28	*Potential Terrestrial Ecological Impact* **The Applicant** **The Environment Agency** **Natural England** **Relevant Planning Authorities** **SDNPA**	**The Applicant** a) The ExA requests the Applicant to state the estimated worst case duration range for construction activities for: i. a 1 kilometre (km) length of open cut cable corridor ii. a trenchless crossing of a watercourse, PRoW or small track b) The ExA requests the Applicant to provide worst case construction duration times marked on a plan in sections along the whole of the cable route, in as much detail as possible. For sections where the time of year construction is undertaken would be a significant consideration, such as sensitive ecological areas, mark on the plan which months or season the	Natural England highlight the importance of adhering to relevant seasonal restrictions when undertaking the works to avoid disturbance to wintering or breeding birds where Functionally Linked Land has been identified, as well as restrictions on ground-breaking activity and use of vehicles in the area. Based on the available information Natural England has identified no further areas (to those mentioned in our Relevant Rep) requiring seasonal restrictions to avoid impacts to habitats or species associated with protected sites.

		construction work is proposed to be undertaken. **The Environment Agency, Natural England, Relevant Planning Authorities, SDNPA** c) In addition to the Commitment made to seasonal restriction of construction work at Climping Beach (C-217), comment on whether there are any other sensitive areas within the onshore section of the Proposed Development where a seasonal restriction on construction work is required from an ecological perspective.	
TE 1.29	*Application of the Mitigation Hierarchy at Climping SSSI* **Natural England**	Comment on the Applicant's response at Deadline 1 [REP1-017, J49] to Natural England's relevant representation [RR-265] that the mitigation hierarchy should be followed at Climping Beach SSSI. Specifically comment on: a) Whether the mitigation hierarchy has been adequately followed by the Applicant at this location. b) Natural England's latest position on the Applicant's explanation for landfall works at this site and mitigation plans. c) Whether further discussions with the Applicant are ongoing. d) Whether there is a change to Natural England's categorisation of this concern as 'red'.	a) The Applicants response [REP1-017, J49] confirms the routeing of the cables and that the mitigation hierarchy will be applied at the detailed design stage in *'light of engineering detail'.* Natural England has consistently advised (see answer to question COD 1.1) that this presents a considerable risk to Climping Beach SSSI. Until ground investigations have been completed, the EIA is not able to robustly demonstrate that impacts to Climping Beach SSSI will be avoided. Again, we advise that feasibility studies and ground investigation works should inform the EIA mitigation process and not be conducted post consent. For this reason, Natural England does not agree that the mitigation hierarchy has been followed. Natural England also highlighted in [REP1-017, J49] that the proposed trenchless crossing (HDD)

			at Climping Beach should be avoided in the first instance, before relaying on embedded mitigation measures. b) Natural England's latest position remains unchanged and consistent in the requirement that geotechnical ground investigations at Climping Beach SSSI are required to inform the viability of the Applicants mitigation strategy and landfall works (see our Appendix J2.5a). c)Natural England confirms there are no ongoing discussions currently on this topic with the Applicant. d) Natural England confirms this concern remains red.
TE 1.30	*Impacts to Ecologically Important and Sensitive Sites: Climping Beach SSSI, Littlehampton Golf Course and Atherington Beach LWS, Sullington Hill LWS, and Ancient Woodland at Michelgrove Park and Calcot Wood.* **Natural England** **The Environment Agency** **SNDPA**	Requirements 22 and 23 of the draft DCO [REP2-002] secure a CoCP and onshore Construction Method Statement. The onshore Construction Method Statement (at 2b) restricts access within these sensitive sites. Provide a response to these proposed Requirements, stating any outstanding concerns.	Natural England seeks clarity from the Applicant as to the circumstances and implications in relation to *'unless remedial action is required'*, in [PEPD-033] 7.2 (p51) C-112.

	West Sussex CC **Forestry Commission** **Horsham DC** **Arun DC**		
TE 1.31	*Applicant's Approach to Hedge Notching* **Natural England** **The Forestry Commission** **The Woodland Trust** **SDNPA**	The Applicant has provided further justification of its proposed hedge notching technique in responses to SNDPA in their PADS [AS-006] and WR [REP1-052], and West Sussex CC's LIR [REP1-054]. West Sussex CC commented in their LIR submitted at Deadline 2 [REP1-054] that: *"Although WSCC has concerns about the success of hedgerow 'notching', it recognises that this technique does offer some advantages and therefore is worth attempting provided any necessary remedial measures, such as re-stocking, are implemented immediately."* Provide an updated response to the Applicant's proposed hedge noting technique, specifically stating whether there is agreement between the parties or any ongoing areas of disagreement or concern.	Natural England refer the ExA to our advice provided within Appendix J2.5a.
TE 1.35	*Reinstatement of Agricultural Land Commitment C-7* **Natural England**	The Applicant amended the wording for Commitment C-7 relating to the reinstatement of agricultural land for the Deadline 1 submission [REP1-015]. Confirm if this is now deemed to be	Natural England welcomes the amended wording to commitment C-7, to restore land being restored to agricultural use and 'soft' use to the pre-existing ALC grade conditions. We advise that the pre-existing conditions should be informed by the baseline ALC grade.

		satisfactory and if not, comment on the wording of this Commitment.	We advise this commitment should be clearly demonstrated in updated named plans to fully address our concerns.
TE 1.36	*Soils and Agriculture* **Natural England**	Respond to the Applicant's submission at Deadline 1 [REP1-017] to the RR [RR-265] on the following stated concerns: a) Subsoil reinstatement b) Soil stockpiles and storage c) Use of machinery d) Soil Management Plan e) Soil handling f) Soil and land classification survey to better determine percentage of Best Most Versatile agricultural land.	Natural England confirms the Applicant has addressed our main outstanding concerns in their response [REP1-017]. Natural England advises that the Outline Soils management Plan should be updated accordingly and resubmitted into examination.

Ref	**Question**	**Natural England's Response**
OFFSHORE QUESTIONS		
FS	**Fish and Shellfish**	
FS 1.2	*Seasonal Restriction* **Natural England**	Based on the noise thresholds, Natural England advice, and the proximity of the proposed array areas to Kingmere MCZ, explain the possibility that there could be any piling within the months of March to July inclusive without the likely	Natural England continue to advise that no piling between March to July inclusive is the only measure which will avoid hindering the conservation objectives of Kingmere MCZ. The key reasons for this are:

		hindering of achieving the conservation objectives of this MCZ.	• Black seabream are likely to be susceptible to a range of noise-related impacts that have the potential to result in hearing injury to bream and/or impact their behaviour in ways that could significantly affect fitness/survival and ability to aggregate, nest, or lay, fertilise or guard eggs during breeding. This in turn has the potential to significantly affect breeding success, resulting in a decline in the population protected by the MCZ. The population size and nest abundance have restore/recover targets within the conservation advice, and therefore impacts on breeding have the potential to move the site further away from these achieving these targets. • Based on the evidence available we do not agree that a threshold can be established below which behavioural impacts on black seabream that could hinder the conservation objectives will not occur. This makes it impossible to robustly identify a threshold that can be relied upon to reduce impacts to an acceptable level. • Based on the evidence presented we do not have sufficient confidence that the noise abatement methods presented will achieve the levels of abatement presented in the specific environmental conditions in the Rampion 2 location.

			Therefore, we advise that there is insufficient evidence that the conservation objectives of Kingmere MCZ will not be hindered due to Temporary Threshold Shift and Behavioural Impacts on black seabream. Please also see our advice in Appendix E3 on the updated figures presented in relation to recoverable injury, which we continue to have concerns about, and Appendix E of Natural England's relevant representations, which contains detailed comments on this matter.
FS 1.4	*Noise Thresholds for Black Seabream* **The Applicant** **Natural England** **MMO**	Natural England does not support the use of 141 decibels (dB) re 1 micropascal (uPa) Sound Exposure Level – Single Strike (SELss) as a threshold for black seabream behavioural disturbance and does not agree that the threshold is highly precautionary [REP1-059a, Point E34]. Explain whether there are any other species that could be used as a proxy for black seabream in these circumstances that could be agreed on by all parties. If so, this should be put forward to the Examination at Deadline 3.	Natural England advises that we are not aware of any suitable studies on other species that could be used as a proxy for black seabream in these circumstances. This is because any behavioural threshold must be specific to the species (black seabream), the site (Kingmere MCZ) and the conservation objectives (including the unique breeding/spawning behaviours these cover, such as the nest guarding, displayed by male black seabream) in order to allow robust quantification of the impacts and ensure the mitigation is sufficient to prevent the conservation objectives of the site being hindered.
FS 1.8	*Nesting Season Changes* **Natural England**	Explain why the conservation advice was changed in 2021 to include the months of March and July to the nesting season for black seabream at Kingmere MCZ. Set out what evidence was this based on.	Natural England's seasonality advice changed in 2021 to include new evidence on the arrival and departure of bream both in Kingmere MCZ specifically and from other breeding locations in the English Channel region. It should be noted that the conservation objectives relate to the "*population (whether temporary of otherwise) of*

			that species occurring in the zone be free of the disturbance of a kind likely to significantly affect the survival of its members or their ability to ***aggregate, nest, or lay, fertilise or guard eggs during breeding****".* Therefore, the breeding season has a wider scope than just nesting. As detailed in Appendix N2 of Natural England's deadline 2 submission, the new evidence for July comprised of multiple years of direct observation in dedicated surveys of black bream nesting in Kingmere MCZ. These were conducted by the aggregates industry to satisfy their marine license conditions. The new evidence for March comprised of a mixture of observational data, supported by anecdotal reports from stakeholders across Sussex, the Solent and Dorset. This included official observations by the Sussex Inshore Fisheries and Conservation Authority (Sussex IFCA) of fishing activity within the MCZ, which was used to calculate annual catch statistics for 2016 – 2019 and 2022 seasons. This dataset records bream being caught within and around Kingmere MCZ from March, when they are thought to begin aggregating to commence breeding. However, it should be noted that this data is only indirect evidence of fish behaviour. Therefore, this data is limited to evidencing presence of bream within and around the site during each survey. As a general note, whilst presence has clearly been demonstrated in this instance, it would not

			be appropriate to use such data to definitively conclude absence or indeed to infer overall numbers present
FS 1.9	*Piling Noise – Background Noise* **Natural England** **MMO**	The Applicant has stated that as the presence of the noise at the threshold level would be limited in time and location, then for most of the time and place within the Kingmere MCZ, the noise would not be far in excess of noise that is already present at this site [REP2-026, Point E13, Page 102]. Provide a response on whether this is an agreed matter.	We advise that this is not an agreed matter and Natural England do not agree with this statement based on the evidence provided by the Applicant. Please see Appendix E1 to Natural England's Deadline 1 Submission. In summary: *"We do not agree with the conclusions of this survey report and as such there is no justification to revise our advice. Indeed, Natural England considers that the report usefully demonstrates that underwater noise levels at the Applicant's proposed threshold would represent a significant increase from the background underwater noise levels within the MCZ, and therefore this study supports our position that the threshold proposed is not suitable."*
FS 1.10	*Rampion Impacts on Black Seabream* **Natural England** **MMO**	The Applicant stated that R1 did not identify any adverse population effects on black seabream following construction, with the surveys showing an increase between pre- and post-construction surveys [REP2-026, Point E15, Page 104]. Provide a response on whether this is an agreed matter. Furthermore, if you agree this evidence is accurate, explain whether this suggests that the impact of piling to black seabream during July would not result in significant effects, given that there was piling in July with the Rampion 1 development?	We advise that this is not an agreed matter. We do not agree that there is sufficient evidence available to support this statement or to suggest that the impact of piling to black seabream during July would not result in significant effects. Natural England have reviewed the Applicant's response provided in REP2-026, Point E15, Page 104, and advises that this does not change our previous advice on the matter provided in point 11 of Appendix E1 of Natural England's deadline 1 submission.

			In relation to the Rampion 1 post construction monitoring, this monitoring only provides a snapshot of black seabream abundance at the Rampion 1 development and as stated within the reporting it *'does not provide any information on potential changes in black seabream behaviours'*. On any given day the number of fish caught in such trawls can vary, and this therefore does not provide robust population information. Furthermore, we advise that this monitoring was designed to look more broadly at impacts on fish, and the methodology is not appropriate for looking at nesting black seabream as a feature of Kingmere MCZ specifically.
FS 1.11	*Minimum Noise Abatement Level* **Natural England**	Within the Applicant's document "Further information for Action Points 38 and 39 – Underwater Noise" [REP1-020] it uses what it considers to be the minimum noise abatement offered by the proposed mitigation. This is a 6dB reduction based on a low noise hammer. Explain whether this is a reasonable minimum and if so, does this satisfy the concern that there would be no 'recoverable' impacts to black seabream [REP1-020, Figures 6-1 and 6-2].	We advise that the information contained within this document does not currently satisfy our concerns in relation to impacts on black seabream within Kingmere MCZ due to recoverable injury. We advise that there is also currently no commitment to achieving this 6dB minimum reduction in practice. Please see our comments on [REP1-020] in Appendix E3 for more detailed advice.

FS 1.14	*Red Seabream* **Natural England**	The ExA notes that the MMO stated that it could be suitable to use the audiogram for red seabream as a proxy for black seabream in terms of hearing ability [RR-219, Paragraph 4.7.12]. Explain why in detail, in the view of NE, red seabream should not be used as a proxy for black seabream in these circumstances [REP1-059a, Point 35].	As stated in Appendix E of Natural England's relevant representation, Natural England's remit differs to that of MMO/Cefas. Natural England's role is to advise on black seabream as a feature of Kingmere MCZ in the context of the conservation objectives, to ensure that the site fulfils its function and makes its due contribution to the Marine Protected Areas network. The MMO/Cefas remit relates to wider fish populations and fisheries. Whilst red seabream (*Pagrus major*) is in the same family as red seabream they are a different genus and species. No information has been presented to robustly evidence that their hearing ability would be the same. Furthermore, there is nothing to suggest the ecology and therefore the sensitivity to noise of black seabream, including the very specific spawning and nesting behaviours Kingmere MCZ is designated for, is equivalent to red seabream, which lay free-floating eggs and do not form and protect nests. Based on this it cannot be assumed that black seabream's reaction to noise would be the same as red seabream. The Kojima *et al*. 2010 study (the reference for which is missing from the document, but we understand to be the study entitled 'Acoustic pressure sensitivities and effects of particle motion in red sea bream *Pagrus major*)' is conducted on a different species, in a different location, does not relate to impulsive noise such as that generated from piling activities, was

			conducted in a loch/lab conditions, relates to a cardiac response (as opposed to looking specifically at impacts on breeding behaviours) and was not conducted while the fish is exhibiting breeding behaviours similar to that of black seabream. The study concludes that dual sensitivity to pressure and particle motion in fish makes the study of hearing in fish difficult, in addition to the other limitations of applying this study to black seabream. Therefore, we advise that it is not appropriate to apply the findings to black bream in Kingmere MCZ.
FS 1.16	*Temporary Threshold Shift (TTS) Mitigation for Seahorses* **Natural England**	As set out in Figures 5-1 and 5-2 [REP1-020], the mitigated impact range for TTS on seahorses do not overlap with the Beachy Head West MCZ. Confirm whether, with mitigation, there would be no adverse effects to seahorses or the conservation objectives of this MCZ.	We have provided comments on Figure 5.1 and Figure 5.2 in Appendix E3. It should be noted that these figures only relate to temporary threshold shift and therefore in addition to our comments on these figures, our relevant representations in relation to behavioural impacts on seahorses, as a feature of the 4 MCZs listed in our representations, still remain unaddressed.
FS 1.18	*Shallow Water Noise Transmission* **Natural England**	The Applicant has set out, with regards to noise effects on seahorses, that depth is the most critical factor on noise travelling as deeper water lends itself to greater transmission with rapid attenuation occurring in shallower water where the environment becomes very complex and increases attenuation, in addition to increased background noise [REP1-033, Agenda Item 109(i)]. If seahorses are within shallower coastal	We assume the point being referenced here is 10(i). Natural England were of the understanding that generally the effect of depth and seabed complexity (bathymetry) on noise attenuation would already be accounted for in the underwater noise modelling presented. We seek clarity that this has been considered in the modelling.

		waters, confirm agreement that this would reduce the noise effects, and if so would this reduce effects from noise to a level where there would be no likely significant effect on Seahorses?	We advise that insufficient evidence has been provided by the Applicant to substantiate this claim and the impact it may or may not have in the specific environment present at this location. Unless robust site-specific evidence and modelling can be provided that considers all the complex factors that might affect this, we advise that this cannot be meaningfully taken into account. Based on the lack of robust evidence presented, we cannot confirm if this would reduce the noise level and to what extent. Therefore, we cannot advise that there will be no adverse effects on seahorses based on this information. We advise that the advice of Cefas as underwater noise specialists, should also be sought on this question in relation to how this is taken account of within the underwater noise modelling.
FS 1.19	*Seahorse Numbers* **Natural England**	The Applicant states that seahorse numbers within the vicinity of the Proposed Development are generally low [REP1-017, Page 307, Ref E40]. Provide a response.	Please see our response to Q10-5, in Appendix N2 of Natural England's deadline 2 submissions.
BP	**Benthic and Offshore Processes**		
BP 1.1	*Predictive Modelling* **Natural England** **MMO**	The Applicant has provided some additional information on the use of predictive modelling to provide a habitat model for the seabed [REP1-033, Agenda Item 12(i)]. The Applicant states	We note that in Agenda Item 12(i) the question is *'why no geotechnical data has been provided and whether the predictive modelling relied on by the Applicant can be validated during the*

		that the model was retained for the ES as it provides wider contextualisation of habitats rather than being relied on instead of the site-specific data and the Applicant could have removed it but viewed it as useful information. The Applicant also states that the site-specific data has been updated and added to the model. Explain whether the use of some degree of predictive modelling a suitable approach, to address any remaining data gaps at this stage, or is it a question of the degree at which predictive modelling has been relied upon.	*Examination period'?* Natural England advises that the predictive modelling relates to the benthic characterisation, and that this is a separate issue to geotechnical data, which would look at the underlying geological conditions. We advise that geotechnical data has not been provided. In relation to benthic characterisation as stated in our written/relevant representations (Appendix F) Natural England does not support the use of *predictive* modelling. For clarity we are aware that site specific data had been incorporated into this model, but this data has limitations in terms of how robust and comprehensive it is (we refer the ExA to full our more detailed advice in Appendix F). Therefore, our written/relevant representation comments on this point remain unchanged. And therefore reiterate our advice that due to overall concerns regarding the characterisation data, it is critical that requirements are placed on the Applicant within the DCO/dML to collect robust pre-construction baseline benthic data to inform the development of mitigation measures.
BP 1.4	*Cable Protection* **Natural England** **MMO**	Explain whether there any forms of cable protection included within the ES which should be discounted where cable protection is necessary.	Natural England recognises that it is standard practice to provide a Rochdale Envelop which allows for the use of a number of potential options for cable protection. Natural England's advises that under the mitigation hierarchy consideration must be given to cable protection options which minimise the environmental impacts as far as possible and that are most

			likely to be removable at decommissioning, in order to reduce the risk of disruption to sediment transportation and habitat loss. Natural England advises that for this reason our least preferred option from an environmental perspective is rock armouring. We refer the ExA to Appendix F of our written/relevant representation and Appendix D/F of our deadline 2 response.
BP 1.5	*Removal of Cable Protection* **Natural England** **MMO**	The Applicant has stated that it cannot commit to the removal of cable protection, as this would be subject to a separate license application to enable decommissioning of the project [REP1-30, Paragraph 2.1.4]. Provide a response. Explain if there is a possibility that, over time, there could be ecological reasons (such as the colonisation of cable protection) for not wanting the removal of cable protection at decommissioning stage.	Natural England disagrees with the Applicant as the comment to remove cable protection within designated sites at the time of decommissioning has been made in the recent Hornsea Project Three, Norfolk Vanguard, Norfolk Boreas and Dudgeon and Sheringham Shoal extension project examinations and secured as a mitigation measure. We also highlight that under OSPAR there is a requirement to return the seabed to its pre impact state. Therefore, colonisation of artificial substrata is presently not a material consideration. In addition, four of the aforementioned projects have also committed to using a method of cable protection, which is most likely to be removable at decommissioning. Natural England have requested that an outline decommissioning plan is provided within Appendix F of our written/relevant representation and Appendix D/F of our deadline 2 response, in relation to this. We advise that it is possible that at the time of decommissioning removal of cable protection

			outside of designated sites may not be the best ecological option, however this would need to be considered in the context of permanent loss of the pre-construction habitat and presented in the assessment within the decommissioning plan. We advise that whilst this information will not be available until decommissioning, this does not hinder the ability of the Applicant to commit to use the most likely to be removable form of cable protection now based upon the current best available evidence.
BP 1.6	*HDD Cable Depth Under Beach* **The Applicant**	The Applicant has stated that it is not possible to outline a minimum depth of the cable underneath Climping Beach. However, it expects a target depth of at least 5-10m [REP1-025, Para. 1.3.14]. **The Applicant** Explain whether this mean that there would be a target of at least 5m, but for various reasons it could be less than this. **Natural England and the MMO** Provide a response as to whether this is a sufficient depth of cable depth for the lifetime of the proposed development, accounting for coastal physical changes and erosion. Explain whether there is a minimum depth of HDD cable under the surface of the intertidal area and beach that should be secured.	We advise that the advice of the Environment Agency should also be sought on this topic, given their remit in relation to coastal and seabed erosion. Natural England advises that there is insufficient information provided by the Applicant for us to understand if this is a sufficient depth, or what a sufficient depth might be. We advise it is for the Applicant to provide sufficient information to robustly answer this question. Natural England advises that we remain concerned as to whether this depth is achievable or sufficient to account for coastal change and erosion. In order to answer this question information on the geotechnical conditions would need to be provided. Additionally, we advise that the Applicant should demonstrate consideration of the most recent storm activity at Landfall and its implications for the vulnerability of buried infrastructure as well as the implications of that buried infrastructure on what is a vulnerable

			stretch of coast. We advise that the Applicant should demonstrate that they have considered very recent storm activity and coastal erosion in their predictions of vertical change in beach profile and coastal retreat throughout the lifetime of the project. We advise that without geotechnical information it is not possible to ascertain whether the 5m proposed is actually achievable at this location. See Appendix D and F of our relevant representation and Appendix D/F of our deadline 2 response, in relation to this.
BP 1.8	*Avoidance of Offshore Chalk* **Natural England** **MMO**	The Applicant has stated that taking construction risk and the maximum distance limitations of the technique into account, it is not possible to extend the HDD to the extent that all the inshore chalk area is avoided [REP1-017, Page 344]. Given the extent of chalk near the coast provide a response that HDD cannot be used to avoid impacts to chalk. Explain whether the impacts to chalk from the proposed cable corridor would be unavoidable.	Natural England advise that impacts to marine chalk from the proposed cable corridor are unlikely to be entirely avoidable. However, this habitat is protected under Section 41 of the NERC Act (2006), is a scarce resource worldwide and any damage to the physical structure of chalk is permanent (please refer to Section E of Appendix F of our written/relevant representation for further detail). Therefore, as we advised in our written/relevant representations that the Applicant should demonstrate they have considered all possible options for cable installation and selected the methodology that minimises the environmental impacts the most (including the loss of marine chalk). We specifically advised that a full appraisal of all possible nearshore installation options and routes was produced, which included consideration of the option of extending the use

			of HDD out as far as possible, as one of the options (see also point 5 of our Appendix D/F2 deadline 2 submission). Whilst HDD may not be able to avoid impacts to chalk entirely, we advise it should be considered as one of the options to minimise the loss as far as possible. We highlight that part of our written/relevant representation on this point has been omitted on page 344 of the Applicant's REP1-017 document. We advise that an updated plan/named document or a technical note should be provided by the applicant to demonstrate how the mitigation hierarchy has been adopted.
BP 1.10	*Cuttings of Chalk* **Natural England** **MMO**	The Applicant has confirmed that they would infill the cable trench with the chalk cuttings, where the cable is laid within the chalk [REP1-017, Page 348]. Explain whether the value of chalk cuttings the same as the chalk before it is cut, even if the cuttings are put back in the trench.	See point 27 of Appendix F of our written/relevant representation. Natural England supports the infilling of the cable trench with chalk cuttings as this has the potential to act as a form of cable burial protection, rather than impacting on other surrounding habitats. However, we advise that the value of the chalk cuttings is not the same as the chalk before it is cut. We advise that the cutting of the chalk does permanent damage to the physical structure of the chalk, which cannot be repaired/recover. Therefore, loss of the cut chalk represents a permanent loss of habitat protected under Section 41 of the NERC Act (2006). We advise that in order to maximise the retention of the chalk within the trench, measures should

			be put in place to ensure the clast size remains as large as possible.
BP 1.12	*Level of Geotechnical Data* **Natural England**	NE has advised that geotechnical data is provided at the consenting stage to understand how likely cable burial is and that any associated mitigation would be effective [REP2-040, Q12-2]. If this is the case, and if no more geotechnical data is submitted, can NE take account of the proposed mitigation as included in the ES when drawing its conclusions?	As stated in detail throughout Appendix F of our written/relevant representations, Natural England advises that to understand how likely cable burial is and the likely effectiveness of the mitigation measures in minimising impacts on ecological receptors, geotechnical data is provided at the consenting stage to inform a Cable Burial Risk Assessment (CBRA), and an outline Cable Specification and Installation Plan (CSIP) that both clearly take into account lessons learnt from Rampion 1. We understand that the Applicants view is that geotechnical information cannot be gathered in the marine environment within the timeframe of the examination. We advise in Q12-2 that these plans are still submitted utilising all currently available data, whilst highlighting that this still may not be sufficient to address our concerns (see our answer to Q12-2 – Appendix N2 for the full explanation on this point). We cannot draw conclusions on the ecological impacts without a full understanding of the scale and extent of what these might be, as well as an understanding of how effective the proposed mitigation measures might be. We also highlight that geotechnical information was used to inform an Outline Cable Burial Risk Assessment submitted into examination for Hornsea Project Three, Norfolk Vanguard,

			Norfolk Boreas, Dudgeon and Sheringham Shoal Extension projects.

MM	Marine Mammals		
MM 1.2	*Worst-case Piling Scenario for Marine Mammals* **Natural England** **MMO**	State whether there are any ongoing concerns with the Applicant's modelling of the worst-case scenario for piling in relation to marine mammals.	Natural England has ongoing concerns regarding the Applicant's modelling of the worst-case scenario for piling in relation to marine mammals, as outlined in comment C24 in the Risk and Issues Log.
MM 1.3	*Offshore In-principal Monitoring Plan* **The Applicant** **Natural England** **MMO**	Natural England's Risk and Issue log submitted at Deadline 2 [REP2-041] continues to include an amber concern (C40) with the marine mammal section of the Offshore In-Principle Monitoring Plan, regarding proposed post-consent monitoring only including the first 4 piles. It states there is no consideration of monitoring the effectiveness of the mitigation measures in reducing the impacts to acceptable levels. **Natural England** Provide an up-to-date statement on whether the Applicant has addressed Natural England's concerns on this matter.	Natural England await the submission of an updated Offshore In-Principle Monitoring Plan into the examination. We have provided some further advice regarding monitoring in Appendix B3.

MM 1.7	*Bottlenose Dolphin* **Natural England**	Can Natural England explain whether the updated bottlenose dolphin baseline and quantitative impact assessment provided by the Applicant at Deadline 2 [REP2-019], addresses the concerns of Natural England. If not, why not.	Please refer to Appendix C3 of Natural England's Deadline 3 Submission and summarised in the Risk and Issue Log (in response to Comment C14).
MM 1.9	*Piling Soft Start/Ramp Up* **Natural England**	Natural England has previously raised concerns in its Relevant Representations [RR-265], which remain in its Risk and Issue log at Deadline 2 [REP2-041] regarding: a) The soft-start/ramp up procedure has been modelled as worst-case. b) Where in the DCO/DML a Commitment is secured to not exceeding the worst-case soft-start/ramp up profile. State whether there are any outstanding concerns regarding piling soft start/ramp up.	The concerns raised by Natural England in its Risk and Issue Log at Deadline 2 [REP2-041] remain outstanding; they have not been addressed by the Applicant.

OR	**Offshore and Intertidal Ornithology (excluding questions involving HRA which are in the HRA section of this document)**		
OR 1.2	*Cumulative Effects on Great Black-backed Gull* **Natural England**	Comment on the revised assessment undertaken by the Applicant [REP1-038] in relation to cumulative effects on the great black-backed gull submitted at Deadline 1.	Natural England's response to the revised assessment of great black-backed gull collision risk provided by the Applicant at Deadline 1 [REP1-038] is provided in the Appendix B3 and summarised in the Risk and Issue Log.

OR 1.3	*Breeding Season Figures for Great Black-backed Gull, Guillemot, and Razorbill* **Natural England**	Provide an update on this issue, particularly stating whether Natural England has any remaining concerns regarding breeding season figures for great black-backed gull, guillemot, and razorbill.	For guillemot and razorbill, Natural England does not have concerns around the breeding season population used as a reference for EIA-scale impacts as, although the Applicant has used a method we do not agree with to calculate the population, the final figure does not vary enough from our recommended figure to make a material difference. For great black-backed gull, on further investigation into the data, we have found that, due to a quirk in how the data are presented in the original source (Furness 2015), the breeding season population calculated by the Applicant and used as a reference for EIA-scale impacts is significantly larger than it should be. This has the effect of making the Project's impacts on this species appear less significant than they would using the correct reference population. We therefore retain concerns over the cumulative impact assessment for great black-backed gull as we consider the adverse impact on the relevant population to be more significant than presented in the Environmental Statement (ES). We have provided a detailed comment on this issue in our response to the revised assessment of great black-backed gull collision risk provided by the Applicant at Deadline 1 [REP1-038] in Appendix B3. We also retain our concern that the cumulative impact assessment for great black-backed gull appears to contain multiple data gaps, and that

			therefore the cumulative impact on this species may be greater than presented.