



THE PLANNING ACT 2008
THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE)
RULES 2010

NORFOLK BOREAS OFFSHORE WIND FARM

Planning Inspectorate Reference: EN010087

Secretary of State Additional Information Request

**Natural England's advice on Haisborough Hammond and Winterton
Special Area of Conservation (HHW SAC) in principle
compensation measures**

20th August 2021

Annex I - Natural England's advice on Haisborough Hammond and Winterton Special Area of Conservation (HHW SAC) in principle compensation measures

	Section/Point	Comment
1.	12	Natural England advises that it would be prudent for BEIS to carefully review the legal compliance issues surrounding the proposal to retrospectively fit compensation to offset the actual impacts once they have arisen. It is Natural England's view that the Secretary of State is making a determination on the project as applied for under the worst case scenario in the Rochdale Envelope, and not what the final installed project may or may not include within the boundaries of a consented Envelope. Otherwise, this proposed approach by the Applicant would have been something which all previous developments would have opted for. NE continues to advise that an Adverse Effect on Integrity (AEoI) cannot be excluded for the WCS as presented as part of the Application, and accordingly that compensation is required to offset those impacts.
2.	18	Natural England advises that compensation measures which reduce/remove anthropogenic pressures impacting upon the favourable conservation status of the SAC features such as fisheries should not be wholesale discounted. Our view is fisheries management measures could have significant ecological benefit. Although it is acknowledged that this is currently challenging from a project specific perspective, and that mechanisms are required to enable delivery. In future, Natural England would be pleased to join discussions between the relevant regulators/competent authorities and interested parties to explore and resolve potential blockers to the delivery of relevant compensation measures, thereby facilitating the prompt delivery of renewable energy.
3.	Table 1.1; 136 4.4.2	We advise that where there remains uncertainty regarding the deliverability or effectiveness of compensatory measures, and/or a time lag between implementation of compensation and project installation, then a ratio greater than 1:1 is required. Whilst we note the Applicant is proposing to remove debris equivalent to the impacts rather than to the survey area, as per Hornsea Project Three; Natural England's advice remains unchanged and is consistent with advice on other projects. We are also conscious that the Hornsea Project 3 proposal was the first project to require benthic compensation, and that many lessons have been learnt.

4.	23	<p>Natural England notes that both OPRED and the Applicant believe that there are associated risks with the removal of redundant Oil and Gas infrastructure which could affect the feasibility of this option. Natural England would be pleased to join discussions between the relevant regulators/competent authorities and interested parties to explore and resolve potential blockers to the delivery of relevant compensation measures, thereby facilitating the prompt delivery of renewable energy.</p>
5.	47	<p>Natural England is disappointed that the Applicant considers the decommissioning of cable protection unnecessary if compensation measures are required. This is especially the case considering the exemplar efforts the Applicant has gone to in minimising the impacts of the project. We would therefore welcome the Applicant reconsidering this position. As advised to the SoS on 27 April 2020 for the Boreas sister project 'Norfolk Vanguard', the mitigation hierarchy should be adopted i.e. avoid, reduce, mitigate and where that is not possible then compensate.</p> <p>There was (and still is) agreement between NE and the Applicant during Examination for not decommissioning cable protection at crossing points. However, at present there is disagreement on Condition 20. Please see Annex 4 for full details. Given the current significant uncertainties we have in relation to the merits of some of the proposed compensation measures (particularly marine litter removal), we advise that the requirement for removal of cable protection at the end of the project's lifetime to be retained as a mitigation measure.</p>
6.	Table 3.1	<p>Recent discussions with OFTOs has led Natural England to believe that approximately one cable repair every 10 years within the SAC is unlikely to be sufficient. And whilst the Applicant is confident that this is the case, we highlight that further material change to the DCO/dML would be required if additional repairs are required sooner than that.</p>
7.	62, (159) Strand 1 Stage 5	<p>As per our advice during EA1N and EA2 examination, Natural England doesn't support the Hornsea Project 3 process of deferring the development of significant aspects of compensation design to the post-consent period. Natural England has compiled a compensation list with a view to it informing submission of appropriately well-developed compensatory measures into the Examination (or as is the case with current projects, prior to determination), rather than to inform the development of compensatory measures in the</p>

		<p>post-consent period. It is Natural England's view that sufficient clarity on all these matters is needed prior to determination. We refer the SoS to Annex 5 where we have appraised the proposed compensation based on that list.</p>
8.	4.4.2.2. (161 onwards) and 4.4.2.3 (169 onwards)	<p><u>Strands 2 and 3</u></p> <p>Natural England advises that we do not consider that the removal of marine litter and awareness campaign will provide compensatory measures under the Habitats Regulations for the predicted impacts of Norfolk Boreas on HHW SAC</p> <p>Whilst marine litter removal is undoubtedly useful in terms of requirements under the Marine Strategy Framework Directive, the presence of marine litter is not a factor in terms of the conservation objective status for the SACs. In addition, we are concerned that litter removal techniques could potentially further impact the conservation objectives of the site and move it further away from favourable condition.</p> <p>For Hornsea Project Three's compensation proposals, on which the Applicant has sought to rely on as a precedent, NE has advised that we do not consider the removal of marine debris and/or litter constitutes compensation for lasting/permanent habitat loss of Annex 1 habitats from the placement of cable protection within SACs over the lifetime of the project. This was our written advice on Hornsea Project 3 proposals to the Secretary of State on this matter in April 2020 and we have re-iterated this in subsequent discussions with regulators and developers.</p> <p>We do not consider these as valid compensatory measures due to the following reasons:</p> <ul style="list-style-type: none"> • we do not consider marine debris and/or litter to be a factor hindering the conservation objectives of the sites; • we do not consider that a single removal campaign would compensate for habitat loss over the lifetime of the project; • it is unclear how it could be demonstrated that the removal of litter is compensating for habitat loss; and, • it is unclear how an awareness campaign with key stakeholders will effectively compensate for habitat loss.
9.	110	<p><u>Combination of Strand 1-3</u></p> <p>Natural advises that if Strands 2 and 3 are presented to the Secretary of State in isolation, or together, we do not consider</p>

		<p>that appropriate compensatory measures would have been provided for HHW SAC. If either were to be combined with Strand 1 then Natural England believes that the impacts are mostly likely to be offset, with strands 2 and 3 offering the potential for enhancement and Net Gain.</p>
10.	4.4.1. 130 onwards	<p><u>Extension of the HHW SAC</u></p> <p>The advice provided by NE for the Vattenfall Norfolk Vanguard and Norfolk Boreas projects on the extension of Haisborough Hammond and Winterton SAC is case specific, and is unlikely to set a precedence for advice on other projects and/or MPAs.</p> <p>In this instance we feel there is sufficient scientific evidence regarding the area proposed for extension to assess the potential ecological merits of Vattenfall's compensation package. We consider that there are, currently undesignated, Annex I habitat habitats that could provide a similar ecological contribution to the MPA network to those impacted. These also have the advantage of being directly adjacent to the Haisborough Hammond and Winterton SAC and forming part of the same ecological system. Natural England therefore consider that extending the provisions of the Habitats Regulations to a contiguous, but currently unprotected area of equivalent ecological value could have the potential to address the impacts on the SAC of Norfolk Boreas and Norfolk Vanguard.</p> <p>At the time of designation, due to the expansive sandbank systems in the southern North Sea, a balance inevitably had to be sought between protecting all the Annex I habitats of equal ecological value, what was required by the Habitats Directive to be protected (representative best quality examples), and ensuring effective management of those areas in relation to anthropogenic activities. Inevitably, this has meant that some of the Annex I features in question therefore continue beyond the boundary of the HHW and North Norfolk Sandbanks & Saturn Reef (NNSSR) SACs.</p> <p>As part of site monitoring and management work following the designation of HHW SAC, the area to the south west of HHW SAC has been surveyed by Eastern IFCA and Cefas. The data collected shows that Annex I reef and Annex I sandbank systems in the location proposed for the compensatory measure are of the same ecological value to those within the boundaries of the SAC. Importantly they</p>

		<p>also lie in the same sedimentary and hydrographic system as HHW SAC.</p> <p>We also note that the developer has taken a suitably precautionary approach to compensation, which is most welcomed, by proposing a ratio of 10:1 to cover the habitat loss predicted from both of their projects (Vanguard and Boreas). The protection of this larger area would enable greater ecosystem functionality for the SAC as a whole rather than it just being an inconsequential add on.</p> <p>By extending the SAC the requirements of the Habitats Regulations would then apply to the proposed extension, including the need to put in place management measures where needed. It is the ongoing protection and management of the extension area under the Habitat Regulations, rather than the extension per se, which would seem to provide the ecological benefit.</p> <p>We do appreciate the complexity of identifying compensatory measures in the marine environment and recognise there are some reservations in relation to this proposal, not least in relation to the uncertainties relating to the designation process.</p>
11.	129	<p>Natural England advises that the 'HHW SAC compensation plan/strategy' should be provided pre-determination, including the necessary governance details. We believe that it will be challenging for the derogations requirements to be met without this. Therefore, it is not appropriate for the compensation strategy to be delivered to SoS following cable installation. In addition, we query how this will be an open and transparent process.</p>
12.	157 4.4.2.1	<p><u>Strand 1: Identification and removal of existing disused infrastructure</u></p> <p>Natural England advises that compensation measures which reduce/remove anthropogenic pressures impacting upon the favourable conservation status of the SAC features are most likely to deliver the compensation requirements from an ecological perspective. This includes the removal of redundant infrastructure which wouldn't normally be removed</p> <p>However, unless the anthropogenic infrastructure is surface laid or protected at the surface, we do not consider the</p>

		<p>removal to provide benefits to the impacted site and therefore constitute compensation.</p> <p>We recognise that there are challenges associated delivering this compensation which will have implications on the timeframes for delivering compensation. However, we are open to consideration of <u>secured</u> compensation not necessarily delivering prior to works starting, if i) confidence in the delivery and the effectiveness of the measure is provided and ii) it can be demonstrated that there would be an overall ecological benefit to the SAC over the lifetime of the project.</p>
13.	4.4.2.2 (161)	<p><u>Strand 2: Identification and retrieval of marine debris</u></p> <p>The presence and effects of marine debris i.e. litter have never been flagged as an issue affecting the condition of the site.</p> <p>In addition, as advised for Hornsea Project 3, marine litter has not been raised as a wider MPA network issue which is resulting in other marine SACs to be in unfavourable condition. In providing this advice we have focused on North Norfolk Sandbanks, Inner Dowsing, Race Bank and North Ridge and The Wash & North Norfolk Coast SACs as they have similar features and characteristics to that of HHW SAC. Therefore, we do not believe that considering further litter removal within these designated sites/the wider MPA network as constituting adaptive management.</p>
14.	4.4.2.2	<p><u>Strand 2:</u> Again, we have raised concerns with Hornsea Project 3 in relation to the available data sources not being sufficient as litter tends to move through sites and/or isn't captured in surveys for various reasons. In addition, we are also concerned about impacts to the site's features from the techniques used in litter removal.</p>
15.	4.4.2.3 169 onwards	<p><u>Strand 3: Education, Awareness and facilities to limit marine debris</u></p> <p>Again, Natural England queries how it can be demonstrated that an awareness campaign is having the desired positive outcome and is compensating for site impacts.</p> <p>NE advises that while the Applicant's proposed monitoring of what has been directly removed and/or disposed in bins is useful information to understand broader patterns marine litter in the North Sea, it doesn't specifically answer the</p>

		question ‘has the removal compensated for the amount of SAC habitat loss/change?’ In other words, has the awareness campaign helped to reduce the amount of litter entering the marine environment, and if so has it benefitted the SAC?
16.	174	<p>Natural England welcomes the proposed monitoring. However, we believe that this monitoring should also:</p> <ul style="list-style-type: none"> • Improve the evidence base for assessing the impacts of offshore windfarm cable installation and placement of cable protection i.e. improve the evidence base to remove the uncertainties in relation to designated site advice where there is ‘reasonable scientific doubt’ in relation to impacts to interest features. (Please note this relates to the evidence and analysis used to inform impact assessment more than ‘data gaps’) • Through appropriate surveys monitor the recovery of the areas within benthic SACs impacted by cable protection, post-decommissioning ideally to remove uncertainties • If specific questions relating to sediment transport evidence gaps could be resolved. For example (but not exclusively): <ul style="list-style-type: none"> – Do the mobile sandbanks continue to migrate over the cable protection? And if yes, what depth is the sediment over the cable protection, and how long does the protection remain covered? Does it therefore continue to function as a sandbank system? – Is there scouring around the cable protection and how does that change over time? Does this affect the structure and function of the site? – Does sediment composition change on the leeward side due to the presence of the protection, and does this hinder the conservation objectives of the site? – Do any changes to sediment transport impact on other features such as Annex I reef, and if so how? <p>Natural England believes that the requirement to improve the evidence base is a cross cutting one that includes improving evidence regarding several impacts, which also include sediment transportation (above) and cable protection decommissioning (below). As this requirement emerges from the uncertainties identified during an Habitats Regulation Assessment (HRA), it is our view that the improvements to the evidence base must relate to the</p>

		<p>interest features of the designated sites, and the conservation objectives relating to the structure and function of the relevant features, in order to help reduce consenting risk going forwards.</p> <p>Therefore, Natural England advises relating the improvement of the evidence base back to the conservation objectives for the SACs and the uncertainties raised during examination. As with 1) above, this would be best facilitated by developing a series of questions that could be answered as part of this work, that could be narrowed down. All questions should link back to the structure and function of the interest features and the conservation objectives of the site.</p> <p>Questions could include (but not exclusively):</p> <ul style="list-style-type: none"> – How do the communities present on the cable protection differ from the surrounding sediments that were there prior to deposition of cable protection? How far do any changes in sediment composition and infaunal communities extend? Does this change over time? Attempting to answer this question is likely to require thorough baseline sampling prior to cable deposition and then monitoring of an analogous area within MPA. – How is colonisation related to sediment transport if the sediment transport questions above show if cable protection is buried or not? I.e. if cable protection is persistently covered, do the communities function the same as unimpacted sediment communities? If the cable protection is cyclically covered and uncovered what does this mean for the communities functioning? – Are there changes to biogeochemical composition of sediment surrounding cable protection e.g. organic matter accumulation? – How does colonisation of the Annex 1 geogenic reef, and/ or the mixed sediment associated with Annex 1 sandbank within the designated site compare to the colonisation of installed cable protection? <p>One way of testing the duration of the impacts and the extent to which site features recover would be to monitor benthic communities over time to compare them with those lost through the placement of cable protection. However, we advised during the Boreas examination that while the placement of rock protection may be colonised by mobile epifaunal species found within sandbank systems, there remains uncertainty in relation to changes to the benthic communities in affected areas, and how these changes may</p>
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