



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

East Anglia TWO Offshore Wind Farm

**Appendix A5 to the Natural England Deadline 1 Submission**

**Natural England's Response to BEIS on the Review of Consents for Major Energy Infrastructure Projects and Special Protection Areas consultation dated 9<sup>th</sup> October 2020**

For:

The construction and operation of East Anglia Two Offshore Windfarm, a 900MW windfarm which could consist of up to 75 turbines, generators and associated infrastructure, located 37km from Lowestoft and 32km from Southwold.

Planning Inspectorate Reference: EN010078

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2<sup>nd</sup> November 2020



## **Appendix A5 Natural England's Review of Consents for Major Energy Infrastructure Projects and Special Protection Areas**

This document is applicable to both the East Anglia ONE North (EA1N) and East Anglia TWO (EA2) applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's (ExA) procedural decisions on document management of 23rd December 2019. Whilst for completeness of the record this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it again for the other project.

This document is a copy of the Natural England advice letter sent to BEIS on 9<sup>th</sup> October 2020 in relation to the screening consultation on the Review of Consents for Major Energy Infrastructure Projects and Special Protection Areas.



Date: 09 October 2020  
Our ref:  
Your ref:



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Dear Sophie

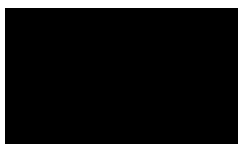
## **Review of consents for major energy infrastructure projects and Special Protection Areas**

Natural England welcomes the opportunity to comment on the above consultation.

As the Government's advisor on the natural environment in England, our purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

We have provided responses to the consultation questions in the following Annex and would be very happy to discuss further any of the points we make if that would be helpful.

Yours sincerely



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## **Annex : Natural England response to Consultation questions**

### **1. *Do you have any comments on the list of individual Special Protection Area conservation sites which have been screened as part of this review?***

Natural England is content that those SPAs subject to the screening are the appropriate sites, and reflect the discussions between BEIS and Natural England in August 2019 and again in June/July 2020.

Regarding the screening process itself, Natural England considers that the approach has resulted in some site/feature combinations being screened out that in our view require Appropriate Assessment. In particular, we are concerned that the red-throated diver features of Liverpool Bay SPA and Outer Thames Estuary SPA have been screened out, and that the Greater Wash SPA red-throated diver feature has only been screened in based on impacts from cable installation. We recognise that OWF projects within 12nm fall under the aegis of different regulations to those beyond 12nm, but nevertheless Natural England considers that for the Review of Consents to be comprehensive and authoritative there is a pressing need to consider all relevant consents that contribute to cumulative impacts on these sites.

This is principally because displacement effects on red-throated diver have been found to be significantly greater than previously assessed (Allen et al 2020, Furness 2019, Vilela et al 2020, Heinanen et al 2020). As well as the broader scientific evidence, there is also site-specific evidence in some instances, specifically Lincs/Greater Wash SPA and London Array/Outer Thames Estuary SPA. Accordingly, the ongoing cumulative impacts of operational windfarms are likely to be greater than originally predicted. There is therefore a pressing need to consider this evidence in relation to these SPAs prior to the authorisation of subsequent projects that might affect them further. This is required to ensure that all forthcoming plans and projects are appropriately assessed with respect to their contribution to cumulative impacts.

In this context, carrying out a comprehensive in-combination assessment of these site/feature combinations would facilitate the assessment of future proposals, in particular the latest East Anglia projects and the proposed extensions to Gwynt y Mor and Greater Gabbard. More generally, a fully scoped Review of Consent as regards key OWF/SPA/feature interactions could provide an invaluable 'baseline' assessment upon which future proposals could base their project-specific in-combination assessments, thereby facilitating the consenting process. At present, discussions around in-combination impacts are highly protracted and resource-intensive.

Furthermore, updated conservation advice for the Outer Thames Estuary SPA has been published, setting out new attributes against which the impacts of developments should be considered. In particular, a reduction in the availability of foraging habitat within the SPA has been identified as an important aspect affecting the integrity of the site. Previous assessments focussed on mortality impacts on red-throated divers, whereas more recently displacement impacts leading to changes in distribution of divers within the site has emerged as a key assessment consideration. Please also see our site-specific comments that follow.

We note that Northumberland Marine SPA, whilst in the original spreadsheet, and is referred to in the pre-screening stage (p19) with respect to Blyth ODL, does not appear in the LSE test section and we advise this needs justifying. Blyth ODL is the only project that could interact with this SPA, which protects the tern foraging areas and auk maintenance zones from 4 coastal SPAs – Lindisfarne, Northumbria Coast, Farne Islands, Coquet Island. We have flagged below that the latter two should be screened in on basis of impacts on non-breeding auks.



**2. Do you have comments on the list of individual project consents which have been screened as part of this review?**

Natural England are concerned that the list of projects to be considered in the in-combination assessment does not include recently consented projects (notably Norfolk Vanguard OWF) or those currently in the planning system, in particular Hornsea 3, Norfolk Boreas, East Anglia One North and East Anglia Two.

Whilst we acknowledge that the scope of the Review is energy projects, Natural England advises that permissions from other relevant sectors should also be considered in the in-combination element of the Appropriate Assessment, in particular those relating to oil and gas exploitation, aggregates and shipping.

**3. Do you have comments on the criteria used in the screening of projects for Likely Significant Effects (LSE) on individual Special Protection Area conservation sites?**

Natural England has two main concerns:

Breeding season screening - using the mean maximum foraging range (as published in Woodward et al. 2019) at the LSE stage risks some sites being excluded when they may contribute to mortality totals, and therefore is not suitably precautionary. Instead, we advise that the maximum foraging range may be a more appropriate coarse screening tool. We note that the approach taken by NIRAS in the Round 4 HRA screening process is to use mean maximum foraging range plus an additional 1 standard deviation. Examination of the Woodward database for certain key species revealed that across these species, on average 86% of colonies have maximum foraging ranges that are below the mean maximum+ 1sd. That means on average 14% of colony maximum values exceed that of the mean maximum + 1sd. This is pretty much what you would expect if the distributions of maximum foraging ranges across colonies are normally distributed (i.e. 16%). If the colonies in the database are representative, we can estimate that, on average across species, 86% of all colonies would be correctly screened in as having connectivity with a development area within that mean maximum foraging range + 1sd distance of them. However, it follows that 14% of colonies further away could be wrongly screened out i.e. 1 in 7. That is not suitably precautionary for LSE screening in isolation, and would need to be considered as just the first (generically applied) step in the process and subject to a case-by-case sense check depending upon the species, the locations of its colonies, and the location of any planned development. Therefore it may be more straight-forward to use the maximum foraging range.

Where site-specific information is available from specific SPAs e.g. tracking of gannet and kittiwake from Flamborough & Filey Coast SPA, this should be used to test whether the screening approach is suitably precautionary. It may also be valuable to refer to key consent decision HRAs that relate to particular OWF/site/feature combinations.

Impacts on non-breeding birds excluded from screening – Natural England is concerned that impacts on non-breeding birds from breeding seabird SPAs are not considered at the LSE stage, and are only referred to in the context of the Appropriate Assessment. Impacts on non-breeding birds (in the breeding season as well as in the non-breeding season) make a significant contribution to the current in-combination totals for some key receptors.

In particular, auks disperse widely in the marine environment following breeding and into the winter, and are likely to be exposed to multiple OWFs during this time. Natural England advises that the following auk SPAs are screened in: Flamborough & Filey Coast SPA for guillemot, razorbill and puffin (named assemblage component); Coquet Island SPA for puffin (named assemblage component). Similarly, gannet and kittiwake are widely distributed in the non-breeding season, bringing further OWF into scope. In particular, we recommend that BEIS review the recent in-



combination totals for these species for Flamborough & Filey Coast SPA from the Norfolk Vanguard and Norfolk Boreas examinations to identify the relevant OWF/feature combinations to screen in.

#### **4. *Comments on the projects which this review has screened in as requiring the next stage of Habitats Regulations Assessment, that is Appropriate Assessment?***

Please see our comments above regarding the three red-throated diver SPAs in English waters, and the implications of the screening approach taken as regards foraging ranges and impacts on non-breeding birds for the OWFs and SPAs screened in.

In addition, we have the following comments:

Walney Extension/Liverpool Bay SPA – the project lies adjacent to the extended Liverpool Bay SPA and has the potential to impact on little gull transiting into/out of the SPA. It is unclear why this OWF/SPA/feature combination has not been screened in.

More generally, we note that little gull is protected within the SPA irrespective of whether the species is present outside or beyond the area delineated by the species-specific maximum curvature analysis used for boundary identification (as presented in the departmental brief). This being the case – and mindful that the test of LSE is a coarse filter– we suggest other windfarms within/adjacent to Liverpool Bay SPA should also be screened in e.g. Burbo Bank extension. We advise that Gwynt y Môr OWF is included as a project to be assessed. Red throated diver should be included as one of the relevant features to assess. Although we acknowledge this is not a recently added feature, due to the fact that the evidence base relating to red throated diver displacement has evolved we advise that this feature should be assessed.

Greater Gabbard/Outer Thames Estuary SPA – whilst we recognise that this is an Electricity Act consent, it is both partly beyond 12nm and within 10km of the Outer Thames Estuary SPA. In this context it does seem somewhat perverse to not consider it at the LSE screening stage for this site, given its potential influence on red-throated diver distribution within the SPA.

Outer Thames Estuary SPA – it is of concern that OTE SPA is not proposed to be taken forward to Appropriate Assessment. Natural England already considers that AEOI cannot be ruled out for red throated diver from the Outer Thames Estuary SPA. We are concerned that the in-combination assessment does not include some projects that are currently in the planning system, for example EA1N and EA2. The evidence base around the extent of red throated diver displacement has increased considerably in the last two years, and displacement distances are much greater than previously understood. In addition, Natural England's Conservation Advice package for the Outer Thames Estuary SPA has been updated recently (September 2019). Therefore we strongly advise that this site is taken through to Appropriate Assessment.

Race Bank/Greater Wash SPA – this OWF falls within the Greater Wash SPA and has the potential to affect red-throated diver through displacement, and sandwich tern and little gull through collision. Falling partly beyond 12nm, it is unclear why these OWF/SPA/feature combinations have not been screened in: no justification for this is given in the screening report. We disagree with that conclusion, and advise that LSE cannot be ruled out and an Appropriate Assessment should be carried out for Greater Wash SPA

Natural England considers that reviewing the impacts of consented proposals on sandwich tern is of particular importance, given Natural England's ongoing concerns about the consented level of impact on this species and recent information from tracking studies<sup>1</sup> regarding sandwich tern foraging range and behaviour.

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<sup>1</sup> Ian Woodward, Chris B. Thaxter, Ellie Owen, Aonghais S. C. P. Cook (2019). Desk-based revision of seabird foraging ranges used for HRA screening. BTO Research Report No. 724



See also our comment above regarding little gull and Liverpool Bay, which is also relevant to the Greater Wash SPA.

Dudgeon/Greater Wash SPA – whilst some distance from the Greater Wash SPA, this OWF has the potential to affect sandwich tern and little gull through collision. As Dudgeon falls beyond 12nm, it is unclear why these OWF/SPA/feature combinations have not been screened in.

**5. Do you have any comments or additions to the information needs identified in the review that would make the Appropriate Assessment exercise more robust?**

Natural England has recently published the outputs of a commissioned project to develop a Population Viability Analysis (PVA) to allow users to set-up and run their own PVA models for seabird species without the need for access to specific software. The project report can be found at: <http://publications.naturalengland.org.uk/publication/4926995073073152>  
We hope this is of use where the Appropriate Assessment requires PVA modelling.

As stated above, we advise that ALL relevant existing features for those SPAs screened are assessed to ensure assessments are more robust (see table below).

Criteria for screening in Projects need to be precautionary and reflect that LSE is a coarse filter, and therefore at least mean max foraging range plus 1 SD should be used.

In-combination assessment should include recently consented projects and those in the planning system.

To summarise, Natural England considers the following additional site/feature combinations should be screened in:

<b>Site</b>	<b>Feature(s)</b>
<i>Liverpool Bay</i>	<i>Red-throated diver, little gull</i>
<i>Farne Islands</i>	<i>Guillemot, puffin (seabird assemblage component)</i>
<i>Coquet Island</i>	<i>Puffin (seabird assemblage component)</i>
<i>Flamborough &amp; Filey Coast</i>	<i>Gannet, guillemot, razorbill, puffin (seabird assemblage component)</i>
<i>Greater Wash</i>	<i>Red-throated diver, sandwich tern, little gull</i>
<i>Outer Thames Estuary</i>	<i>Red-throated diver</i>

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