East Anglia ONE North and East Anglia TWO Offshore Windfarms

Applicants' Responses to the Secretary of State's Questions of 2nd November 2021 (Items 4-7)

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Glossary of Acronyms

AIS	Automatic Identification System
CPGR	Counterfactual of Population Growth Rate
CPS	Counterfactual of Population Size
DCO	Development Consent Order
FFC	Flamborough and Filey Coast
JNCC	Joint Nature Conservation Committee
LAT	Lowest Astronomical Tide
MHWS	Mean High Water Springs
NE	Natural England
NMC	Non-Material Change
PVA	Population Viability Analysis
SoS	Sectrtary of State
SPA	Special Protection Area
SPR	ScottishPower Renewables

Glossary of Terminology

Applicant	East Anglia TWO Limited / East Anglia ONE North Limited
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia ONE North windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia TWO windfarm site	The offshore area within which wind turbines and offshore platforms will be located.

1 Introduction

1. This document has been prepared by East Anglia TWO Limited and East Anglia ONE North Limited (the Applicants) in relation to the East Anglia TWO and East Anglia ONE North Development Consent Order (DCO) applications (the Applications). It provides information in response to Parts 4 to 7 of the letters published by the Secretary of State for Business, Energy and Industrial Strategy (SoS) on 2nd November 2021 (the SoS letters).

2. Although the SoS letters relate to the East Anglia TWO and East Anglia ONE North Offshore Windfarm projects respectively, the contents of each are identical. This document is therefore applicable to both projects (the Projects).

1.1 Purpose

3. This document provides responses to parts 4 – 7 of the SoS letters. The structure of the remainder of this document is as follows:

- ***Section 2*** provides a response to Part 4 of the SoS letters regarding Badgers;
- ***Section 3*** provides a response to Part 5 of the SoS letters regarding Great Crested Newts;
- ***Section 4*** provides a response to Part 6 of the SoS letters regarding Offshore Ornithology Cumulative and In Combination Collision Risk and Displacement update;
- ***Section 5*** provides a response to Part 6 of the SoS letters regarding the Alde-Ore Estuary Special Protection Area;
- ***Section 6*** provides a response to Part 6 of the SoS letters regarding Flamborough and Filey Coast Special Protection Area;
- ***Section 7*** provides a response to Part 6 of the SoS letters regarding the Outer Thames Estuary Special Protection Area; and
- ***Section 8*** provides a response to Part 7 of the SoS letters regarding updates to key documents to be certified.

2 Badgers

4. Part 4 of the SoS letters invites comment on the following:

   The Applicant is asked to provide an update on the progress of its draft licence application to relocate one or more badger setts. Natural England is asked to provide its views on the prospect of it being able to issue a Letter of No Impediment for badgers.

5. Natural England issued a Letter of No Impediment for Badgers for the East Anglia TWO Offshore Windfarm and the East Anglia ONE North Offshore Windfarm on 4th August 2021.

6. A copy of the Letter of No Impediment for Badgers for the East Anglia TWO Offshore Windfarm (Ref. 2021-51761-NSIP1 A001030 / 10572 / 361557) is included within ***Appendix 1.***

7. A copy of the Letter of No Impediment for Badgers for the East Anglia ONE North Offshore Windfarm (Ref: 2021-51755-NSIP1 A001011 / 10571 / 361556) is included within ***Appendix 2***.

3 Great Crested Newts

8. Part 5 of the SoS letters invites comment on the following:

The Applicant is requested to provide confirmation that the preferred option to progress the draft licence applications has been agreed with Natural England in order to achieve provision of a Letter of No Impediment for Great Crested Newts.

9. The Applicants and Natural England have discussed the licensing of works associated with the East Anglia TWO and East Anglia ONE North Projects (the Projects) which could affect Great Crested Newts, and have agreed that District Level Licensing is the most appropriate process for licensing such works.

10. Natural England has confirmed that they operate a District Level Licensing scheme in Suffolk and that the Projects are eligible candidates for the scheme.

11. As stated within the Planning Inspectorate's Advice Note Eleven, Annex C – Natural England and the Planning Inspectorate[1], *"where strategic approaches such as district licensing for great crested newts are used a LONI will not be required. The developer will need to provide evidence to the ExA on how and where this approach has been used in relation to the proposal which may include a quotation from Natural England. A certificate will be issued by the habitat delivery body when compensation habitats are available."*

12. The Applicants have submitted the required District Level Licensing documents for the Projects to Natural England who are processing the information provided.

13. Natural England will then issue a separate 'Impact Assessment and Conservation Payment Certificate' for each of the Projects. Once countersigned, the Impact Assessment and Conservation Payment Certificates formalise the Projects' agreement to join the scheme and will set out the terms and conditions of the scheme and payment terms.

14. The Applicants are confident that countersigned Impact Assessment and Conservation Payment Certificates will be available for the Projects by mid-December 2021 and will forward these to the Secretary as soon as they become available.

[1] [redacted]

4 Updated Offshore Ornithology Cumulative and In Combination Collision Risk and Displacement Assessment

15. Part 6 of the SoS letters invites comment on the following:

The Secretary of State notes that at the end of the Examination there were minor discrepancies in the in-combination mortalities predicted for herring gull, greater black backed gull and gannet; however, these are unlikely to make a material difference to the conclusions of the assessment.

The Applicant is requested to issue an updated Offshore Ornithology Cumulative and In Combination Collision Risk and Displacement assessment, which includes the correct in-combination mortality figures for herring gull, greater black-backed gull and gannet.

16. The Applicants updated Offshore Ornithology Cumulative and In-Combination Collision Risk and Displacement Assessment is submitted alongside this document and presented in ***Updated Cumulative and In-Combination Collision and Displacement Assessment*** (document reference ExA.AS-3.SoSQ.V1).

17. The Applicants concur with the SoS that these discrepancies make no material difference to the conclusions of the assessment and highlight that REP13-019 took into account comments provided by Natural England (NE) at Deadline 12 (REP12-090).

18. The Applicant has only updated the tables to account for the changes requested by the SoS but notes that since the close of the Projects' examinations, the SoS granted a non-material change (NMC) application for the East Anglia ONE windfarm[2] on the 24th September 2021. The changes to the windfarm design in the NMC, reflecting the built windfarm, have very substantially reduced the predicted collision impacts[3], for example by up to 85% for kittiwake, 76% for gannet and 62% for lesser black-backed gull. In terms of the predicted mortalities of these species attributed to Special Protection Area (SPA) populations, the mortality of Flamborough and Filey Coast SPA gannets is reduced by 7.7 and of kittiwake by 10.2, and the Alde-Ore Estuary SPA lesser black-backed gull is

[2] [redacted]

[3] [redacted]

reduced by 2.3. These reductions would therefore offset almost 30% of the East Anglia ONE North and East Anglia TWO Projects' combined gannet mortality (7.7 of 26.3), all of the East Anglia ONE North and East Anglia TWO combined lesser black-backed gull mortality (2.3 compared to 1.9) and over 7 times the East Anglia ONE North and East Anglia TWO combined kittiwake mortality (10.2 compared to 1.5).

19. However, in the interests of working from a common understanding of the cumulative and in-combination collision mortality totals, the Applicant has not made changes to reflect the granting of the East Anglia ONE NMC application. The Applicants have discussed this approach with Natural England and the Applicants understand that Natural England are comfortable with the figures presented in the ***Updated Cumulative and In-Combination Collision and Displacement Assessment*** (document reference ExA.AS-3.SoSQ.V1).

5 Alde-Ore Estuary Special Protection Area

The Applicant is requested to provide details of any increases to the turbine draught height, that were not included at the time of the application or during the Examination, which could avoid or reduce adverse effects on the lesser black-backed gull feature of Alde-Ore Estuary SPA, together with an updated assessment of the impacts on this species.

20. The Applicants have not made any further increases to the turbine draught height commitment of 24m above mean high water springs (MHWS) secured within the final ***draft DCO*** (REP12-013) submitted at Deadline 12 for the reasons stated within the ***Offshore Commitments*** document (REP3-073) and expanded upon within Appendix A.1.3 of the ***Habitats Regulation Assessment Derogation Case*** (REP12-059).

6 Flamborough and Filey Coast Special Protection Area

6.1 Turbine draught height

21. Part 6 of the SoS letters invites comment on the following:

The Applicant is requested to provide details of any increases in the turbine draught height, that were not included at the time of the application or during the Examination, which could avoid or reduce adverse effects on the kittiwake feature of Flamborough and Filey Coast SPA, together with an updated assessment of the impacts on this species.

22. The Applicants have not made any further increases to the turbine draught height commitment of 24m above MHWS secured within the final ***draft DCO*** (REP12-13) submitted at Deadline 12 for the reasons stated within the ***Offshore Commitments*** document (REP3-073) and expanded upon within Appendix A.1.3 of the ***Habitats Regulation Assessment Derogation Case*** (REP12-059).

6.2 In combination effects on razorbill, gannet, and guillemot

23. Part 6 of the SoS letters invites comment on the following:

In relation to the in-combination impacts on the razorbill, gannet, and guillemot features of the Flamborough and Filey Coast SPA, the Applicant is requested to provide updated in-combination assessments for collision and/or displacement effects excluding the following projects: Hornsea Four, Dudgeon Extension and Sheringham Extension. The following information should be included: Updated mortality estimates for collision and/ or displacement effects; Population Viability Analysis (PVA) for the Flamborough and Filey Coast SPA populations; and details of the counterfactuals for the Flamborough and Filey Coast SPA populations (growth rate and population size) comparing the baseline scenario and the unimpacted scenario.

6.2.1 Methods

24. The Applicant has undertaken PVA for the gannet, guillemot and razorbill populations of the Flamborough and Filey Coast (FFC) SPA as requested. This has been conducted using the Natural England PVA tool[4]. The input parameters used for each species are provided in ***Appendix 3 – PVA input parameters***.

[4] [redacted]

6.2.1.1 Density dependence

25. The online Natural England PVA tool only provides one option for including density dependent regulation[5] in simulations, and this applies an extremely weak form of population control (the full effect only occurs with a 10-fold change in population size, e.g. an increase from 10,000 pairs to 100,000, or the opposite). The default setting, and the approach recommended by Natural England is to run density independent simulations (i.e. ones which lack any feedback between population size and demographic rates).

26. Seabird populations take considerable periods to change by such extents and therefore it is questionable how appropriate this approach is for modelling their populations. Indeed, running the Natural England PVA tool with and without density dependence for 30-year projections generates density dependent outputs which are little different from density independent ones. Thus, not only is this approach to modelling seabird population regulation very unlikely to reflect real situations, little additional insight is gained from running density dependent simulations, in terms of being able to predict how seabird populations may change in the future.

27. The adoption of this approach by Natural England is also somewhat at odds with other aspects of seabird impact assessment, which is typically described as a 'range-based' approach. By limiting the online PVA tool to density independent or very weakly density dependent simulations, the range of outputs is very constrained. Even if density dependence was modelled in a manner which was considered too strong (i.e. the feedback operated more strongly, or with a shorter time lag between population change and demographic rate change) this would at least provide a best-case (or better-case) situation to compare with the worst-case density independent one which in almost all cases provides unrealistic population predictions of unlimited growth. Effectively, in this example the two options would represent a highly resilient population (density dependent) and one with no resilience at all (density independent), with likely real behaviour falling between them. Currently, the options are between simulated populations with no resilience and very weak resilience, i.e. focussed at the density independent end of the scale of population dynamics.

28. Natural England's preference for density independent simulations is not because there is evidence that density independent growth is more appropriate, but rather because '*without having good evidence to support what form and strength of density dependence to add to a model there is no way of knowing whether the*

[5] Density dependence is the term for feedback between demographic rates (survival, reproduction, etc.) and population size by which natural populations are maintained within boundaries defined by limiting resources (e.g. food, mates or nesting space). As competition intensifies, the effects on survival or preproduction increase and population growth slows, and vice versa.

predictions from a density dependent model are robust or accurate'[6]. But in other aspects of ornithological assessment ranges of impact are presented to account for such uncertainties. For example, Natural England advice is to present auk displacement across a range from 30% displaced and 1% mortality to 70% displaced and 10% mortality, encompassing an impact range with a 23-fold difference from low to high.

29. Thus, the Applicants have only undertaken density independent simulations, but for the reasons outlined above, considers these to represent the most precautionary worst case which provide unrealistic predictions.

30. The SoS requested that two relative measures of population effect be provided, the counterfactual of population growth rate (CPGR) and the counterfactual of population size (CPS). These are calculated by dividing the metric in question (population growth rate or population size) obtained with the impact by the same metric obtained without the impact (i.e. the baseline) and are presented as proportions or percentages. The operation of density dependence and what this means for simulated populations, also affects which of these counterfactual measures is more appropriate.

31. In a density independent simulation, population growth is unconstrained, and exponential. This means that the two growth curves obtained, with and without the impact, will diverge by an ever-increasing margin (and furthermore both become increasingly unrealistic since food and space limits etc. are ignored). The CPS, as well as comparing unrealistic predictions, is therefore very sensitive to the period simulated (its value increases as simulation duration increases). However, the population growth rates of the two populations are constant (i.e. they are not sensitive to duration) and the CPGR is therefore unaffected by the duration of simulation. It is best practice, when confronted with two alternative measures, to select the one which is least sensitive to model assumptions, which in the case of density independence is the CPGR.

32. In contrast, in a density dependent simulation a simulated population will stabilise around an equilibrium level, with neither long-term growth or decline. In other words, the population has a zero growth rate. This will be the case for both the impacted and baseline scenarios, and therefore there will be no difference in growth rates and the CPGR is uninformative (when applied to two populations at equilibrium). However, in this case, the two populations will have different

[6] Natural England 21st October 2021, Norfolk Boreas – 2nd Consultation on Applicant's response to the Secretary of State's Additional Information Request

equilibrium sizes (i.e. the impacted one will be smaller), with the consequence that the CPS is a much more informative measure of the impact's effect.

33. Thus, for density independent simulations the CPGR is the better measure of impact effect, and for density dependent ones the CPS is the better measure.

34. It is important to acknowledge that the outputs from PVA discussed above, particularly the CPGR, do not represent straightforward concepts for the lay-person. A measure based on population size, such as CPS, is much more straightforward to understand and therefore may be considered more suitable. However, while ease of interpretation is clearly important, such criteria should not be the primary basis for assessing impacts, particularly if for the reasons outlined above, the measure is less appropriate and potentially misleading.

6.2.1.2 Impact scenarios

35. The impacts modelled are provided in ***Table 1***. For displacement, mortality was calculated using the rates advised by Natural England:

- Gannet - 80% displaced and 1% mortality
- Guillemot and razorbill – 30% displaced and 1% mortality (the lower advised rates); 70% displaced and 10% mortality (the upper advised rates).

36. In addition, for guillemot and razorbill, displacement at an intermediate combination of 70% displaced and 2% mortality has been included. This corresponds to the combination which Natural England has indicated they consider will result in a tolerable reduction in population growth rate of 0.5% (see REP12-090 for details). It should be stressed that presentation of this combination is provided for illustrative purposes and does not imply these rates are those advised by Natural England for displacement assessments.

Table 1 FFC SPA impacts assessed using PVA

Species	Impact	Projects	Mortality
Gannet	Collision	East Anglia ONE North & East Anglia TWO	26.8
		In-combination without East Anglia ONE North & East Anglia TWO	266.2
		In-combination with East Anglia ONE North & East Anglia TWO	293.0
	Displacement (80% displaced, 1% mortality)	East Anglia ONE North & East Anglia TWO	3.4

Species	Impact	Projects	Mortality
		In-combination without East Anglia ONE North & East Anglia TWO	58.9
		In-combination with East Anglia ONE North & East Anglia TWO	62.3
	Displacement & collision	East Anglia ONE North & East Anglia TWO	30.2
		In-combination without East Anglia ONE North & East Anglia TWO	325.1
		In-combination with East Anglia ONE North & East Anglia TWO	355.3
Guillemot	Displacement (30% displaced, 1% mortality)	East Anglia ONE North & East Anglia TWO	0.5
		In-combination without East Anglia ONE North & East Anglia TWO	74.5
		In-combination with East Anglia ONE North & East Anglia TWO	74.9
	Displacement (70% displaced, 2% mortality)	East Anglia ONE North & East Anglia TWO	2.2
		In-combination without East Anglia ONE North & East Anglia TWO	347.5
		In-combination with East Anglia ONE North & East Anglia TWO	349.7
	Displacement (70% displaced, 10% mortality)	East Anglia ONE North & East Anglia TWO	11.0
		In-combination without East Anglia ONE North & East Anglia TWO	1737.3
		In-combination with East Anglia ONE North & East Anglia TWO	1748.3

Species	Impact	Projects	Mortality
Razorbill	Displacement (30% displaced, 1% mortality)	East Anglia ONE North & East Anglia TWO	0.1
		In-combination without East Anglia ONE North & East Anglia TWO	18.6
		In-combination with East Anglia ONE North & East Anglia TWO	18.7
	Displacement (70% displaced, 2% mortality)	East Anglia ONE North & East Anglia TWO	0.3
		In-combination without East Anglia ONE North & East Anglia TWO	86.7
		In-combination with East Anglia ONE North & East Anglia TWO	87.1
	Displacement (70% displaced, 10% mortality)	East Anglia ONE North & East Anglia TWO	1.7
		In-combination without East Anglia ONE North & East Anglia TWO	433.7
		In-combination with East Anglia ONE North & East Anglia TWO	435.4

6.2.2 Results

6.2.2.1 Gannet

22. The annual mortalities entered into the PVA and the counterfactual outputs (CPS and CPGR) for the total in-combination FFC SPA gannet collision and displacement estimates (separately and combined) are provided in ***Table 2***.

Table 2 FFC SPA gannet impacts assessed using PVA

Impact	Projects	Mortality	Counterfactual	
			Growth rate (CPGR)	Population size (CPS)
Collision	East Anglia ONE North & East Anglia TWO	26.8	0.9988	0.9641
	In-combination without East Anglia	266.2	0.9882	0.6915

Impact	Projects	Mortality	Counterfactual	
			Growth rate (CPGR)	Population size (CPS)
	ONE North & East Anglia TWO			
	In-combination with East Anglia ONE North & East Anglia TWO	293.0	0.9870	0.6661
Displacement (80% displaced, 1% mortality)	East Anglia ONE North & East Anglia TWO	3.4	0.9999	0.9954
	In-combination without East Anglia ONE North & East Anglia TWO	58.9	0.9974	0.9221
	In-combination with East Anglia ONE North & East Anglia TWO	62.3	0.9972	0.9180
Displacement & collision	East Anglia ONE North & East Anglia TWO	30.2	0.9987	0.9593
	In-combination without East Anglia ONE North & East Anglia TWO	325.1	0.9856	0.6371
	In-combination with East Anglia ONE North & East Anglia TWO	355.3	0.9842	0.6108

37. The density independent PVA results indicate that the maximum reduction in growth rate was 1.58% (0.9842) for an in-combination collision and displacement mortality of 355.3 (including the Projects). At this mortality the CPS indicates the gannet population after 30 years would be 61% (0.6108) of the baseline (unimpacted) size.

38. Comparing the in-combination collision mortality results with and without the Projects, the population growth rate was reduced by 0.12% (0.9882-0.9870) with the projects included and the population size was reduced by 2.54%.

39. Comparing the in-combination displacement mortality results with and without the Projects, the population growth rate was reduced by 0.014% (0.9974-0.9972) and the population size was reduced by 0.4%.

40. Comparing the in-combination collision and displacement mortality results with and without the Projects, the population growth rate was reduced by 0.13% (0.9856-0.9842) and the population size was reduced by 2.62% (0.6371-0.6108).

41. The FFC SPA population has grown at a rate of at least 10% per year for the last 25 years. A reduction in this growth rate of 1.6% would have very little effect on the population. Natural England (REP12-090) has suggested that they consider the colony growth rate will decline over the coming decades, on the assumption it will follow the trends observed at other colonies of a similar age. Natural England (REP12-090) does not provide a discussion for either the observed trends at other colonies nor why this would be expected to apply to the FFC SPA population. However, such patterns are typically the result of increasing levels of competition between individuals for resources (food, space, mates) which cause reduced survival and/or productivity. In other words, a density dependent response. On this basis it would be expected that the results from a density dependent PVA would be more appropriate to consider. However, as discussed above there is no means at present for realistic levels of density dependence to be simulated using the Natural England online PVA tool. This means the current predictions almost certainly represent an unrealistic worst case scenario and are highly precautionary.

42. The relevant conservation objective is to maintain favourable conservation status of the gannet population, subject to natural change. Each count of the gannet breeding numbers at the FFC SPA has been higher than the preceding one and the gannet population is therefore clearly in favourable conservation status.

43. On the basis of the population model predictions, the number of predicted collision and displacement mortalities at the projects alone and in-combination with other offshore windfarms with potential connectivity to the FFC SPA is not at a level which would trigger a risk of population decline but would only result in a slight reduction in the growth rate currently seen at this colony.

44. The contribution of the Projects to the in-combination totals is also very small, making an additional reduction to the growth rate of no more than 0.12% and an additional reduction in CPS of 2.54%, which means that the population size would be 2.54% smaller than the size it would reach without the projects.

45. Therefore, the impacts will only slightly reduce the population growth rate, which will remain positive (even when assessed using precautionary methods) and the gannet population has favourable status. It can therefore be concluded that, even

with the high degree of precaution in the assessment (as discussed in the **Offshore Ornithology Precaution Note** (AS-041)), there will be no adverse effect on the integrity of FFC SPA from impacts on gannet due to in-combination collision mortality, in-combination displacement mortality and the two sources of impact combined.

6.2.2.2 Guillemot

46. The annual mortalities entered into the PVA and the counterfactual outputs (CPS and CPGR) for the total in-combination FFC SPA guillemot displacement estimates are provided in ***Table 3***.

Table 3 FFC SPA guillemot impacts assessed using PVA

Impact	Projects	Mortality	Counterfactual	
			Growth rate (CPGR)	Population size (CPS)
Displacement (30% displaced, 1% mortality)	East Anglia ONE North & East Anglia TWO	0.5	1.0000	1.0000
	In-combination without East Anglia ONE North & East Anglia TWO	74.5	0.9993	0.9790
	In-combination with East Anglia ONE North & East Anglia TWO	74.9	0.9993	0.9788
Displacement (70% displaced, 2% mortality)	East Anglia ONE North & East Anglia TWO	2.2	1.0000	0.9994
	In-combination without East Anglia ONE North & East Anglia TWO	347.5	0.9968	0.9052
	In-combination with East Anglia ONE North & East Anglia TWO	349.7	0.9968	0.9046
Displacement (70% displaced, 10% mortality)	East Anglia ONE North & East Anglia TWO	11.0	0.9999	0.9969
	In-combination without East Anglia	1737.3	0.9839	0.6054

Impact	Projects	Mortality	Counterfactual	
			Growth rate (CPGR)	Population size (CPS)
	ONE North & East Anglia TWO			
	In-combination with East Anglia ONE North & East Anglia TWO	1748.3	0.9838	0.6033

47. The density independent PVA results indicate that the maximum reduction in growth rate was 1.62% (0.9838) for an in-combination displacement mortality of 1748.3 (including the projects and at 70% displaced and 10% mortality). At this mortality the CPS indicates the guillemot population after 30 years would be 60% (0.6033) of the baseline (unimpacted) size.

48. At the other end of the range, 30% displaced and 1% mortality, a maximum reduction in growth rate of 0.07% (0.9993) was obtained for an in-combination displacement mortality of 74.9. The CPS at this mortality indicates the guillemot population after 30 years would be 98% (0.9788) of the baseline (unimpacted) size.

49. At the intermediate rates of 70% displaced and 2% mortality (which correspond to keeping the decrease in growth rate below 0.5%, as discussed by Natural England REP12-090), a maximum reduction in growth rate of 0.32% (0.9968) was obtained for an in-combination displacement mortality of 349.7. The CPS at this mortality indicates the guillemot population after 30 years would be 90% (0.9046) of the baseline (unimpacted) size.

50. The maximum contribution from the Projects for a mortality of 11 to these in-combination totals is an addition of 0.011% to the CPGR and 0.21% to the CPS (at 70% displaced and 10% mortality).

51. The guillemot population at FFC SPA has increased at an annual rate over the last 50 years of 4%, and the most recent census gave a population estimate of 121,754 individuals in 2017 (Lloyd et al. 2019). Applying the 70% displacement and 2% mortality rates, a maximum reduction in this of 0.32% would almost certainly be undetectable. Furthermore, the contribution from the Projects is only 0.002% (i.e. a difference between a growth rate reduction of 0.323% and 0.321%).

52. On the basis of the population model predictions, the number of predicted displacement mortalities at the projects in-combination with other offshore

windfarms with potential connectivity to the FFC SPA would only cause a slight reduction in the growth rate currently seen at this colony and this is far below the level which might trigger a risk of population decline.

53. Therefore, it can be concluded that, even with the high degree of precaution in the assessment ((as discussed in the **Offshore Ornithology Precaution Note** AS-041)) there is no risk of an adverse effect on the integrity of FFC SPA from impacts on guillemot due to in-combination displacement mortality.

6.2.2.3 Razorbill

54. The annual mortalities entered into the PVA and the counterfactual outputs (CPS and CPGR) for the total in-combination FFC SPA razorbill displacement estimates are provided in ***Table 4***.

Table 4 FFC SPA razorbill impacts assessed using PVA

Impact	Projects	Mortality	Counterfactual	
			Growth rate (CPGR)	Population size (CPS)
Displacement (30% displaced, 1% mortality)	East Anglia ONE North & East Anglia TWO	0.1	1.0000	1.0001
	In-combination without East Anglia ONE North & East Anglia TWO	18.6	0.9995	0.9836
	In-combination with East Anglia ONE North & East Anglia TWO	18.7	0.9995	0.9835
Displacement (70% displaced, 2% mortality)	East Anglia ONE North & East Anglia TWO	0.3	1.0000	0.9999
	In-combination without East Anglia ONE North & East Anglia TWO	86.7	0.9975	0.9244
	In-combination with East Anglia ONE North & East Anglia TWO	87.1	0.9975	0.9243

Impact	Projects	Mortality	Counterfactual	
			Growth rate (CPGR)	Population size (CPS)
Displacement (70% displaced, 10% mortality)	East Anglia ONE North & East Anglia TWO	1.7	1.0000	0.9986
	In-combination without East Anglia ONE North & East Anglia TWO	433.7	0.9873	0.6732
	In-combination with East Anglia ONE North & East Anglia TWO	435.4	0.9873	0.6722

55. The density independent PVA results indicate that the maximum reduction in growth rate was 1.27% (0.9873) for an in-combination displacement mortality of 435.4 (including the projects and at 70% displaced and 10% mortality). At this mortality the CPS indicates the razorbill population after 30 years would be 67% (0.6722) of the baseline (unimpacted) size.

56. At the other end of the range, 30% displaced and 1% mortality, a maximum reduction in growth rate of 0.05% (0.9995) was obtained for an in-combination displacement mortality of 18.7. The CPS at this mortality indicates the guillemot population after 30 years would be 98% (0.9835) of the baseline (unimpacted) size.

57. At the intermediate rates of 70% displaced and 2% mortality (which correspond to keeping the decrease in growth rate below 0.5%, as discussed by Natural England in REP12-090), a maximum reduction in growth rate of 0.25% (0.9975) was obtained for an in-combination displacement mortality of 87.1. The CPS at this mortality indicates the razorbill population after 30 years would be 92% (0.9243) of the baseline (unimpacted) size.

58. The maximum contribution from the projects for a mortality of 1.7 to these in-combination totals is an addition of 0.004% to the CPGR and 0.09% to the CPS (at 70% displaced and 10% mortality).

59. The razorbill population at FFC SPA has increased at an annual rate over the last 50 years of 6%, and the most recent census gave a population estimate of 40,506 individuals in 2017 (Lloyd et al. 2019). Applying the 70% displacement and 2% mortality rates, a maximum reduction in this of 0.25% would almost certainly be

undetectable. Furthermore, the contribution from the Projects is only 0.0002% (i.e. a difference between a growth rate reduction of 0.2535% and 0.2533%).

60. On the basis of the population model predictions, the number of predicted displacement mortalities at the Projects in-combination with other offshore windfarms with potential connectivity to the FFC SPA would only cause a slight reduction in the growth rate currently seen at this colony and this is far below the level which might trigger a risk of population decline.

61. Therefore, it can be concluded that, even with the high degree of precaution in the assessment (as discussed in the ***Offshore Ornithology Precaution Note*** (AS-041)) there is no risk of an adverse effect on the integrity of FFC SPA from impacts on razorbill due to in-combination displacement mortality.

7 Outer Thames Estuary Special Protection Area

62. Part 6 of the SoS letters invites comment on the following:

In relation to the red-throated diver feature of the Outer Thames Estuary SPA and in addition to the information provided in the Offshore Ornithology Without Prejudice Compensation Measures report, the Applicant is requested to provide information on specific areas of the SPA where red-throated divers are known to be displaced by vessel movements; evidence that the Applicant could secure a reduction in vessel movements to reduce the displacement of red-throated divers in these areas; and provide evidence that this would be sufficient to compensate for red-throated divers displaced by the turbines.

7.1 Information on specific areas of the SPA where red-throated divers are known to be displaced by vessel movements

63. Red-throated diver are among the most sensitive species of marine birds to anthropogenic disturbances such as those from shipping. As highlighted in ***Table 12.13*** of ***Chapter 12 - Offshore Ornithology*** (APP-060), together with the black-throated diver, the species is ranked highest in sensitivity indices for seabirds (Garthe and Hüppop, 2004; Furness et al., 2013; Bradbury et al., 2014; Fliessbach et al., 2019). For seabirds the visual cue of an approaching ship is the major factor leading to behavioural or physiological disturbance responses (Bellebaum et al., 2006; Kaiser et al., 2006; Velando and Munilla, 2011). The reported responses suggest that ships are perceived by sensitive seabird species in a similar manner to predation risk, which triggers the observed avoidance behaviour (e.g. flushing or diving) (Burger et al, 2019).

64. Only a few studies exist on bird disturbance by ships, mainly due to the difficulty of studying these interactions. Using research vessels as observation platforms, large response distances from approaching vessels have been recorded for divers (Bellebaum et al., 2006; Schwemmer et al., 2011; Fliessbach et al., 2019). Mendel et al. (2019) found the strongest impact of ships on red-throated divers occurred within a radius of up to 5km from the vessel, with an estimate that one third of birds present would leave the area at the approach of a vessel. Schwemmer et al. (2011) suggest that the repeated use of the same routes by high-speed vessels could lead to a permanent displacement of birds. Note that these studies were all undertaken in the German Bight, and no dedicated work on vessel responses has been undertaken in the Outer Thames Estuary. Consequently there are no studies that have mapped areas of the Outer Thames Estuary SPA where divers are displaced by vessel movements. Given that shipping has a long history within the Thames Estuary, it must be assumed that

the available red-throated diver distribution maps (i.e. covering approximately the last 20 years) already reflect these behavioural responses, along with other ecological preferences of the species. There is no historic baseline information showing an unimpacted distribution (this would need to be from the pre-industrial epoch) from which it would be possible to extrapolate a 'natural' or non-impacted distribution.

65. There is mapping of vessel traffic derived from data collected by automatic identification system of ships (AIS)[7] in the Outer Thames, which when suitably buffered (to account for the species' estimated disturbance ranges), could be used to show the regions where vessel disturbance would be expected to occur. But crucially, because of the lack of an unimpacted baseline and the fact that the observed red-throated diver distribution is a function of several factors (ecological and anthropogenic), these data cannot be used to extrapolate the level of displacement from shipping in a robust way.

66. The information used to designate the SPA (Natural England and JNCC, 2010) also does not provide any explanation for the distribution patterns seen (which will have been influenced by shipping) and which were used to define the boundary of the SPA. It is merely stated that:

"The boundary has been drawn in order to optimise the number of birds within the site in relation to the size of the sea area. To encompass all of the sea areas that have been shown by the aerial surveys to support any birds would have resulted in an even larger site. As it stands, the boundary represents an attempt to maximise population afforded protection while excluding additional areas where bird density is lower and the conservation gain from affording protection is less clear"

67. Therefore, all it is possible to state is that the evidence shows that as a highly sensitive species, red-throated diver are disturbed by vessel traffic within and around the SPA and that, although there are mapped shipping traffic data which show consistent routeing, in the absence of a shipping-free baseline, it is not feasible to extrapolate from these two data sources to generate a robust quantified 'shipping disturbance map'.

[7] AIS is a system that transmits information on vessel identity, position and speed (among other attributes) to receivers on other ships or land-based receiving stations. AIS is a mandatory system under provisions of the International Maritime Organization. Many small seagoing vessels like fishing vessels and pleasure crafts are equipped with this system. Since 2014, all EU fishing vessels>15m in length have to be equipped with an AIS Class A transmitter

7.2 Evidence that the Applicants could secure a reduction in vessel movements to reduce the displacement of red-throated divers in these areas

68. As explained above, since there is no robust means of understanding the extent and distribution of shipping related displacement effects within the Outer Thames Estuary SPA (due to the absence of a shipping free baseline), there is no basis on which the Applicants can try to reduce *existing* vessel traffic within the SPA and demonstrate a reduction in effects or quantify the benefit even if this could be achieved. Furthermore, the Applicant does not consider that it is appropriate to assess on-going activities from industries unrelated to the Projects, using data which were not intended for the proposed purpose and where such an assessment could have significant implications for those industries.

69. In addition, restricting vessel movements by unrelated third parties is beyond the means of the Applicants (and its parent company, ScottishPower Renewables (SPR)) to deliver and would require action from Government. The Applicants note that Burger et al (2019) suggest that either 'bundled ship traffic' (presumably enforced routeing measures) and speed limits are potential management measures that could be used to reduce shipping impacts within protected sites if the Government is seeking to address existing effects.

70. The Applicants can however secure a reduction in vessel movements relating to the construction, operation and maintenance and decommissioning of the East Anglia THREE offshore wind farm as proposed in ***EA1N Offshore Ornithology Without Prejudice Compensation Measures (REP12-060)*** and ***EA2 Offshore Ornithology Without Prejudice Compensation Measures (REP12-060)***.

71. The Applicants have entered into legal agreements with East Anglia THREE to secure the following measures in the event that there is an obligation included in the Development Consent Orders for either or both Projects to provide compensatory measures in respect of the red-throated diver feature of the Outer Thames Estuary SPA:

    a. all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the East Anglia THREE offshore works (excluding works within the Outer Thames Estuary SPA) will avoid the northern component of the Outer Thames Estuary SPA from 1 November to 1 March inclusive (this is the area of the SPA that is outlined and hatched in blue and shaded green on the figure appended to the agreement);

    b. all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the East Anglia THREE offshore works will avoid the Outer Thames Estuary SPA and the area of sea within 2km of the

boundary of the Outer Thames Estuary SPA (the "SPA Buffer") from 1 November to 1 March inclusive. Again, this excludes vessels engaged in works within the Outer Thames Estuary SPA or the SPA Buffer;

c. East Anglia THREE will participate in the red-throated diver compensation steering group referred to in Part 6 of Schedule 18 to the draft DCO if invited to attend;

d. East Anglia THREE will comply with the measures set out in the red-throated diver implementation and monitoring plan referred to in Part 6 of Schedule 18 to the draft DCO to the extent that the measures relate to the relevant East Anglia THREE offshore works; and

e. East Anglia THREE will provide monthly reports to the Applicant(s) to demonstrate compliance with the obligations referred to in paragraphs a and b above.

72. The above measures are subject to some practical limited exceptions which are set out within the agreements, for example:

a. the commitments in paragraphs a and b above would not apply in the case of an emergency or where there are health and safety grounds requiring a direct route to be taken through the Outer Thames Estuary SPA or the SPA Buffer, including for example, due to inclement weather; and

b. the commitment in paragraph b would not apply to vessel traffic accessing ports and harbours within the Outer Thames Estuary SPA or SPA Buffer where any part of that port or harbour or its approaches are located within the Outer Thames Estuary SPA and/or SPA Buffer. This exception is required as vessel(s) would need to go through the Outer Thames Estuary SPA or the SPA Buffer to access the relevant port or harbour.

73. The commitment to avoid the SPA Buffer is also subject to some practical exceptions due to the fact that there are areas of sea where the gap between the northern component of the SPA and the remainder of the SPA is not sufficiently wide to enable a vessel to transit through the gap, or indeed pass another vessel going in the opposite direction, whilst maintaining a 2km buffer from the SPA on either side. These exceptions therefore apply:

a. where the gap between the components of the SPA is 6km or less and vessels are in that area travelling in opposite directions; and

b. to all other vessels in areas where the distance between the two components of the SPA is 4.2km or less.

74. In such areas a commitment has been included in the agreements that vessel traffic will traverse between the northern component of the SPA and the remainder of the SPA as close to the midpoint between the two components as is reasonably practicable whilst allowing for an appropriate separation distance between passing vessels.

75. The reason a distance of 4.2km is specified and not 4km (i.e. 2km plus 2km) is because if the distance between the two components of the SPA is 4km then a vessel will need to transit exactly at the midpoint. Failure to do so will result in a breach of the agreement for not maintaining a distance of 2km from the SPA on either side of the vessel. However even if the vessel is transiting exactly at the midpoint, it will still not be able to maintain a distance of 2km from the SPA on either side of the vessel as the vessel itself will be a certain width and specifying a 4km distance between the SPA components for the exception would not allow for a vessel's width, plus 2km either side. It also would not account for the impact of oceanographic conditions on the ability of a vessel to hold its line. For that reason, a distance of 4.2km is specified to provide a 0.2km allowance for the impact of oceanographic conditions on the ability of a vessel to hold its line and to account for the width of the vessel.

76. For vessels travelling in opposite directions between the two components of the Outer Thames Estuary SPA, the distance of 6km specified provides for the 0.2km allowance referred to above, plus a separation distance of 1.8km between vessels to allow them to pass safely.

77. A copy of the legal agreements entered into with East Anglia THREE in order to secure these compensatory measures are contained within ***Appendix 4*** and ***Appendix 5***.

7.3 Provide evidence that this would be sufficient to compensate for red-throated divers displaced by the turbines

78. It is for the reasons above (**section 7.2**) that the Applicants proposed the compensation measure in REP12-060, the measure pertained to an effect that could be quantified and was fully in the control of the Applicant. **Section 10.4.1.1** of REP12-060 provides the rationale for the proposed measure together with the estimated effectiveness when applied to the East Anglia THREE vessel movements. Key points being:

- *The northern component of the SPA is approximately 20km at its widest point in the south and approximately 12km at its narrowest point in the north. The direct route between the operation and maintenance port at Lowestoft and the East Anglia THREE windfarm site passes through the widest part of the northern component as shown in Figure 10.1. Assuming a 4km displacement area centred on the direct route gives an area of approximately 80km^2 that*

would be avoided on a daily basis by operation and maintenance vessels taking the direct route.

- *For East Anglia TWO, this [the 80km^2 area that would be avoided] compares with a total effective area of the SPA estimated to be subject to displacement of 0km^2 (using the Applicant's model results[8]) or between 0.1 and 3km^2 (using the NE approach[9]). For East Anglia ONE North, this [the 80km^2 area that would be avoided] compares with a total effective area of the SPA estimated to be subject to displacement of between 16km^2 and 19km^2 (using the Applicant's model results) or 54km^2 (using the NE approach).*
- *Whilst the displacement impact of vessel movements on red-throated diver is a temporary effect in comparison to the permanent effect of the Projects, a maximum of 4,052 vessel movements per annum, or approximately 11 movements per day are predicted for East Anglia THREE during the operation. Therefore, the vessel routeing measure would reduce a fairly consistent temporary pressure*

79. With regard to the Applicants' statement that *"the vessel routeing measure would reduce a fairly consistent temporary pressure"* this is supported by Burger et al (2019) who concluded that disturbance distance and subsequent resettlement were related to vessel speed, with 'higher speed' vessel passages leading to longer resettlement times[10].

80. Using the spatial approach for each of the Projects alone, it can be seen that the area of disturbance (80km^2) avoided by the measure is in excess of the area of displacement from the operational turbines even using NE's precautionary approach. When considering both East Anglia TWO and East Anglia ONE North together, the worst case would result in a total effective area of the SPA estimated to be subject to displacement of 57km^2. Again, this is much lower than the area of disturbance avoided by the compensation measure.

81. Alternatively, using a non-spatial metric it can be seen that the reduction of East Anglia THREE vessel movements would be significant compared with the total

[8] As presented in Displacement of red-throated divers in the Outer Thames Estuary (Clean) - Version 05 (REP11-026)

[9] NE advised that assessment should also be presented on the assumption of a displacement distance of up to 12km and a within windfarm displacement rate of up to 100%, declining to 0% at 12km, see Deadline 4 Submission - Late Submission - Appendix A12 - Advice on RTD in the OTE SPA (REP4-087)

[10] Burger et al (2019) categorize vessels as follows 'high speed vessels' - ships sailing at speeds > 40 km/h (often offshore wind farm crew vessels (usually catamaran-type)); 'medium speed vessels' - ships sailing between 20 and 40 km/h (mostly cargo ships) and 'low-speed vessels' ships sailing at < 20 km/h (mostly fishing vessels).

number of vessel movements within the SPA annually (see **paragraph 265** of REP12-060):

It was estimated that there are 75,000 annual movements through the SPA. Adding the East Anglia THREE operation and maintenance phase vessel movements would result in 79,052 annual movements where the East Anglia THREE vessels would represent approximately 5% of the total. The compensation measure would therefore provide a significant reduction in the annual vessel movements in the SPA and a significant reduction in the potential for disturbance of red-throated diver.

82. Given the above the Applicants consider that, if required, the measure would be effective to compensate for the in-combination displacement effect of both Projects, even using the worst-case assumptions of Natural England.

83. The Applicants reiterate that, as detailed in **section 5** of **Displacement of red-throated divers in the Outer Thames Estuary** (REP11-026) (and summarised in **Table 11** of that document), the Projects will not result in an adverse effect on the integrity of the Outer Thames Estuary SPA either alone or in-combination with other plans and projects. There is potential for a small redistribution effect, but even in-combination this will only affect approximately 5% of the SPA (derived as area multiplied by displacement percentage). There is evidence that divers already avoided the location of largest contributor to the disturbance effect (London Array) prior to its construction so this is not a complete redistribution. The in-combination effect is almost exclusively due to existing windfarms within the SPA, but even these do not appear to have had a significant effect since the population has shown no indication of decline following construction of these projects. In addition to the ecological arguments summarised above, the legal discussion of the position is covered in **Applicants' Response to Natural England's Legal Submissions Concerning Displacement of Red-Throated Divers** (REP6-020) and **Appendix 1** of **Applicants' Responses to Hearings Action Points (CAH3, ISH10, ISH11, ISH12, ISH13, ISH14, ISH15)** (REP8-093).

8 Key Documents to be Certified

84. Part 7 of the SoS letters invites comment on the following:

The Applicant submitted updated versions of documents to be certified at Deadline 13, with the consequence that key parties were unable to provide comments on them before the Examination closed. The Secretary of State requests observations on the following documents from the listed parties and, where identified, restricted to the issues listed:

i. Outline Code of Construction Practice: East Suffolk Council are asked to comment on matters in relation to water quality and flood measures; Suffolk County Council are asked to comment on flood measures.

ii. Outline Landscape and Ecological Management Strategy: Natural England, East Suffolk Council, and Suffolk County Council.

iii. Outline Operational Drainage Management Plan: East Suffolk Council and Suffolk County Council.

85. This section provides a tabulated list indexing changes made to the following certified documents submitted at Deadline 13 and explains why the change was necessary:

- ***Outline Code of Construction Practice*** (REP13-005);
- ***Outline Landscape and Ecological Management Strategy*** (REP13-007); and
- ***Outline Operational Drainage Management Plan*** (REP13-020).

86. All changes made to the above documents at Deadline 13 were based on consultation and discussion with key stakeholders prior to submission of the documents, or were editorial in nature to update cross references. Track changed versions of the above documents were also submitted at Deadline 13 for ease of reference.

Table 5 Description of Changes to Certified Documents Submitted at Deadline 13

Project		Reference	Document / Plan Title	Date of Change	Revision	Examination Library No.	Description of Change	Update requested by
EA1N	EA2	**8.1**	**Outline Code of Construction Practice**	05 July 2021	9	REP13-005 (clean) REP13-006 (tracked)	a. Updating of various cross references to reflect the final wording of the Outline Code of Construction Practice; to reflect the final wording of other documents; and updating of cross references to other documents. b. Typographical error corrected in paragraph 179 and confirmation that Table 11.1 relates to a 1 in 15-year storm return period.	a. The Applicants b. The Applicants
EA1N	EA2	**8.7**	**Outline Landscape and Ecological Management Strategy**	05 July 2021	7	REP13-007 (clean) REP13-008 (tracked)	a. Updating of various cross references to reflect the final wording of the Outline Landscape and Ecological Management Strategy; to reflect the final wording of other documents; and updating of cross references to other documents. b. Paragraph 39 amended for clarity regarding planting and landscaping scheme, reflecting evidence provided at Examination. c. New paragraph 145 confirming that trees or shrubs will not be planted inside or within 5m of the functional footprint of the operational SuDS basins.	a. The Applicants b. The Applicants c. Suffolk County Council d. Raised by community stakeholders during hearings e. Suffolk County Council

Project		Reference	Document / Plan Title	Date of Change	Revision	Examination Library No.	Description of Change	Update requested by
							d. New paragraph 200 to confirm that along the western bank of the Hundred River outside the area in which the onshore cables are to be installed, trees will not be removed unless for safety reasons. e. Figures within Appendix 2 updated to reflect SuDS layout presented within final Outline Operational Drainage Management Plan (REP13-020) and to remove pockets of wet woodland.	
EA1N	EA2	**ExA.AS-13.D13.V7**	**Outline Operational Drainage Management Plan**	05 July 2021	7	REP13-020 (clean) REP13-021 (tracked)	a. Text confirming that trees or shrubs will not be planted inside or within 5m of the footprint of the operational SuDS basins moved to separate paragraph for emphasis. b. Paragraph 139 amended to remove text regarding maintenance of trees in the wet woodland area of the SuDs basins (as wet woodland has been removed from the scheme at the request of Suffolk County Council). c. Typographical error corrected in Table 6.2.	a. Suffolk County Council b. Suffolk County Council c. The Applicants

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Appendix 1 East Anglia TWO Letter of No Impediment for Badgers

Date: 04 August 2021
Our ref: 2021-51761-NSIP1
A001030 / 10572 / 361557
(NATIONALLY SIGNIFICANT INFRASTRUCTURE

Brian McGrellis,
Onshore Consents Manager,
Scottish Power Renewables (SPR)
Sent by e-mail only

Wildlife licensing
Natural England
Horizon House
Deanery Road
Bristol
BS1 5AH
Email:
wildlife@naturalengland.org.uk
Tel: [redacted]

Dear Brian McGrellis.

Cc Gordon Campbell (Senior Environmental Consultant, Royal HaskoningDHV) and Darren Jameson (Project Manager, SPR)

DRAFT MITIGATION LICENCE APPLICATION STATUS: SUBSEQUENT DRAFT APPLICATION
LEGISLATION: THE PROTECTION OF BADGERS ACT 1992 (as amended)
NSIP: EAST Anglia TWO (EA2) Offshore Windfarm, Suffolk
SPECIES: Badger

Thank you for your subsequent draft badger mitigation licence application in association with the above NSIP site, received in this office on 28 June 2021. As stated in our published guidance, once Natural England is content that the draft licence application is of the required standard, we will issue a 'letter of no impediment'. This is designed to provide the Planning Inspectorate and the Secretary of State with confidence that the competent licensing authority sees no impediment to issuing a licence in future, based on information assessed to date in respect of these proposals.

Assessment

Following our assessment of the resubmitted draft application documents, I can now confirm that, on the basis of the information and proposals provided, Natural England sees no impediment to a licence being issued, should the DCO be granted.

However, please note the following issues have been identified within the current draft of the method statement that will need to be addressed before the licence application is formally submitted. Our wildlife adviser, Daniel Weightman, discussed this matter with the named ecologist Gordon Campbell via e-mail correspondence on 28 July 2021, after which it was confirmed on 04 August 2021 that the necessary amendments would be made. Please do ensure that the Method Statement is revised to include these changes prior to formal submission. For clarity these include:

- Evidence of the named ecologist's experience in relation to artificial sett construction.
- Updated badger surveys of the site, including previously un-surveyed land within and abutting the DCO boundary, which will be impacted by the development.

- In the event main sett 33b will be lost, additional details regarding the final location of an artificial sett, including supporting information from any bait survey conducted, will be required.

- Details of the location of the proposed two-way badger gates along the perimeter fence, in relation to badger runs / pathways identified during surveys.

- Consideration must be given to the additional recommended mitigation, set out in points 5.2. to 5.4. in the accompanying advice letter, in relation to the location of soil storage areas, clearance of vegetation and the presence of livestock susceptible to badger borne disease within 2km of the project.

Next Steps

Should the DCO be granted then the mitigation licence application must be formally submitted to Natural England. At this stage any modifications to the timings of the proposed works, e.g. due to ecological requirements of the species concerned, must be made and agreed with Natural England before a licence is granted.
If other minor changes to the application are subsequently necessary, e.g. amendments to the work schedule/s then these should be outlined in a covering letter and must be reflected in the formal submission of the licence application. These changes must be agreed by Natural England before a licence can be granted. If changes are made to proposals or timings which do not enable us to meet reach a 'satisfied' decision, we will issue correspondence outlining why the proposals are not acceptable and what further information is required. These issues will need to be addressed before any licence can be granted.

Full details of Natural England's licensing process with regards to NSIP's can be found at the following link:

[redacted]

As stated in the above guidance note, I should also be grateful if an open dialogue can be maintained with yourselves regarding the progression of the DCO application so that, should the Order be granted, we will be in a position to assess the final submission of the application in a timely fashion and avoid any unnecessary delay in issuing the licence.

I hope the above has been helpful. However, should you have any queries then please do not hesitate to contact me.

Yours sincerely

Daniel Weightman
Wildlife Lead Adviser
Natural England Wildlife Licensing Service
Tel: [redacted]
[redacted]@naturalengland.org.uk

Cc commercialservices@naturalengland.org.uk

Annex - Guidance for providing further information or formally submitting the licence application.

Important note: when submitting your formal application please mark all correspondence 'FOR THE ATTENTION OF (Daniel Weightman, Helen Mann, Louise Burton and Lydia Tabrizi**)**.

Submitting Documents.

Documents must be sent to the Natural England Wildlife Licensing Service (postal and email address at the top of this letter).

Changes to Documents –Reasoned Statement/Method Statement.

Changes must be identified using one or more of the following methods:

- underline new text/strikeout deleted text;
- use different font colour;
- block-coloured text, or all the above.

Method Statement

When submitting a revised Method Statement please send us one copy on CD, or by e-mail if less than 5MB in size, or alternatively three paper copies. The method statement should be submitted in its entirety including all figures, appendices, supporting documents. Sections of this document form part of the licence; please do not send the amended sections in isolation.

Customer Feedback – Wildlife Licensing

To help us improve our service please complete the following questionnaire and return to:

Wildlife Licensing Natural England, Horizon House, Deanery Road, Bristol, BS1 5AH.

or email to wildlife@naturalengland.org.uk

[redacted]

Natural England Reference Number (optional):	Please tick to indicate your role:	Consultant Developer (Applicant/Licensee)	☐ ☐

1. How easy was it to get in contact with the Wildlife Management & Licensing team of Natural England?

Difficult (1) ☐ *OK (2)* ☐ *Easy (3)* ☐ *Very Easy (4)* ☐

If 1 please specify who you initially contacted in relation to your issue/enquiry?

2. Please tell us how aware you were (BEFORE you contacted us) of wildlife legislation and what it does/does not permit in relation to your enquiry?

Unaware (1) ☐ *Very Limited Awareness (2)* ☐ *Partially Aware (3)* ☐ *Fully Aware (4)* ☐

3. How would you rate the service provided by Natural England?

	Poor 1	*Fair* 2	*Good* 3	*Excellent* 4	*Not applicable*
Ease of completion of application	☐	☐	☐	☐	☐
Advice provided by telephone (if applicable)	☐	☐	☐	☐	☐
Our web site (if applicable)	☐	☐	☐	☐	☐
Clarity and usefulness of published guidance	☐	☐	☐	☐	☐
Helpfulness and politeness of staff	☐	☐	☐	☐	
Advice and clarity of explanations provided during Method Statement assessment	☐	☐	☐	☐	☐
Advice and clarity of explanations provided during Reasoned Statement assessment	☐	☐	☐	☐	☐
Speed of process	☐	☐	☐	☐	
Overall service	☐	☐	☐	☐	

If 1 or 2 to any of the above please specify why:

4. Was your issue/enquiry resolved by the activity authorised under licence or advice provided by us?

Fully ☐ *Partially* ☐ *Unresolved* ☐

If not fully resolved please state what you think could have been done instead (note legislation affects which actions can be licensed):

5. Was there a public reaction to any action taken under the licence or as a result of our advice?

Positive support ☐ *No reaction* ☐ *Negative reaction* ☐

6. Would you use a fully online licensing service if it could be made available in the future?

Definitely ☐ *Possibly* ☐ *Unlikely* ☐ *No* ☐

7. Do you have any further comments to make or suggestions for improving our service, if yes please specify (continue comments on an additional sheet if necessary). *If you are happy to be contacted at a later date to explore possible improvement options, please tick this box* ☐ *and ensure your Natural England reference number is at the top of this page.*

Appendix 2 East Anglia ONE North Letter of No Impediment for Badgers

Date: 04 August 2021
Our ref: 2021-51755-NSIP1
A001011 / 10571 / 361556
(NATIONALLY SIGNIFICANT INFRASTRUCTURE

Brian McGrellis,
Onshore Consents Manager,
Scottish Power Renewables (SPR)
Sent by e-mail only

Wildlife licensing
Natural England
Horizon House
Deanery Road
Bristol
BS1 5AH
Email:
wildlife@naturalengland.org.uk
Tel: [redacted]

Dear Brian McGrellis.

Cc Gordon Campbell (Senior Environmental Consultant, Royal HaskoningDHV) and Darren Jameson (Project Manager, SPR)

DRAFT MITIGATION LICENCE APPLICATION STATUS: SUBSEQUENT DRAFT APPLICATION
LEGISLATION: THE PROTECTION OF BADGERS ACT 1992 (as amended)
NSIP: EAST Anglia ONE North (EA1N) Offshore Windfarm, Suffolk
SPECIES: Badger

Thank you for your subsequent draft badger mitigation licence application in association with the above NSIP site, received in this office on 28 June 2021. As stated in our published guidance, once Natural England is content that the draft licence application is of the required standard, we will issue a 'letter of no impediment'. This is designed to provide the Planning Inspectorate and the Secretary of State with confidence that the competent licensing authority sees no impediment to issuing a licence in future, based on information assessed to date in respect of these proposals.

Assessment

Following our assessment of the resubmitted draft application documents, I can now confirm that, on the basis of the information and proposals provided, Natural England sees no impediment to a licence being issued, should the DCO be granted.

However, please note the following issues have been identified within the current draft of the method statement that will need to be addressed before the licence application is formally submitted. Our wildlife adviser, Daniel Weightman, discussed this matter with the named ecologist Gordon Campbell via e-mail correspondence on 28 July 2021, after which it was confirmed on 04 August 2021 that the necessary amendments would be made. Please do ensure that the Method Statement is revised to include these changes prior to formal submission. For clarity these include:

- Evidence of the named ecologist's experience in relation to artificial sett construction.
- Updated badger surveys of the site, including previously un-surveyed land within and abutting the DCO boundary, which will be impacted by the development.

- In the event main sett 33b will be lost, additional details regarding the final location of an artificial sett, including supporting information from any bait survey conducted, will be required.

- Details of the location of the proposed two-way badger gates along the perimeter fence, in relation to badger runs / pathways identified during surveys.

- Consideration must be given to the additional recommended mitigation, set out in points 5.2. to 5.4. in the accompanying advice letter, in relation to the location of soil storage areas, clearance of vegetation and the presence of livestock susceptible to badger borne disease within 2km of the project.

Next Steps

Should the DCO be granted then the mitigation licence application must be formally submitted to Natural England. At this stage any modifications to the timings of the proposed works, e.g. due to ecological requirements of the species concerned, must be made and agreed with Natural England before a licence is granted.
If other minor changes to the application are subsequently necessary, e.g. amendments to the work schedule/s then these should be outlined in a covering letter and must be reflected in the formal submission of the licence application. These changes must be agreed by Natural England before a licence can be granted. If changes are made to proposals or timings which do not enable us to meet reach a 'satisfied' decision, we will issue correspondence outlining why the proposals are not acceptable and what further information is required. These issues will need to be addressed before any licence can be granted.

Full details of Natural England's licensing process with regards to NSIP's can be found at the following link:

[redacted]

As stated in the above guidance note, I should also be grateful if an open dialogue can be maintained with yourselves regarding the progression of the DCO application so that, should the Order be granted, we will be in a position to assess the final submission of the application in a timely fashion and avoid any unnecessary delay in issuing the licence.

I hope the above has been helpful. However, should you have any queries then please do not hesitate to contact me.

Yours sincerely

Yours sincerely

Daniel Weightman
Wildlife Lead Adviser
Natural England Wildlife Licensing Service
Tel: [redacted]
[redacted]@naturalengland.org.uk

Cc commercialservices@naturalengland.org.uk

Annex - Guidance for providing further information or formally submitting the licence application.

Important note: when submitting your formal application please mark all correspondence 'FOR THE ATTENTION OF (Daniel Weightman, Helen Mann, Louise Burton and Lydia Tabrizi**)**.

Submitting Documents.

Documents must be sent to the Natural England Wildlife Licensing Service (postal and email address at the top of this letter).

Changes to Documents –Reasoned Statement/Method Statement.

Changes must be identified using one or more of the following methods:

- underline new text/strikeout deleted text;
- use different font colour;
- block-coloured text, or all the above.

Method Statement

When submitting a revised Method Statement please send us one copy on CD, or by e-mail if less than 5MB in size, or alternatively three paper copies. The method statement should be submitted in its entirety including all figures, appendices, supporting documents. Sections of this document form part of the licence; please do not send the amended sections in isolation.

Customer Feedback – Wildlife Licensing

To help us improve our service please complete the following questionnaire and return to:

Wildlife Licensing Natural England, Horizon House, Deanery Road, Bristol, BS1 5AH.

or email to wildlife@naturalengland.org.uk

[redacted]

Natural England Reference Number (optional):	Please tick to indicate your role:	Consultant Developer (Applicant/Licensee)	☐ ☐

1. How easy was it to get in contact with the Wildlife Management & Licensing team of Natural England?

Difficult (1) ☐ *OK (2)* ☐ *Easy (3)* ☐ *Very Easy (4)* ☐

If 1 please specify who you initially contacted in relation to your issue/enquiry?

2. Please tell us how aware you were (BEFORE you contacted us) of wildlife legislation and what it does/does not permit in relation to your enquiry?

Unaware (1) ☐ *Very Limited Awareness (2)* ☐ *Partially Aware (3)* ☐ *Fully Aware (4)* ☐

3. How would you rate the service provided by Natural England?

	Poor 1	*Fair* 2	*Good* 3	*Excellent* 4	*Not applicable*
Ease of completion of application	☐	☐	☐	☐	☐
Advice provided by telephone (if applicable)	☐	☐	☐	☐	☐
Our web site (if applicable)	☐	☐	☐	☐	☐
Clarity and usefulness of published guidance	☐	☐	☐	☐	☐
Helpfulness and politeness of staff	☐	☐	☐	☐	
Advice and clarity of explanations provided during Method Statement assessment	☐	☐	☐	☐	☐
Advice and clarity of explanations provided during Reasoned Statement assessment	☐	☐	☐	☐	☐
Speed of process	☐	☐	☐	☐	
Overall service	☐	☐	☐	☐	

If 1 or 2 to any of the above please specify why:

4. Was your issue/enquiry resolved by the activity authorised under licence or advice provided by us?

Fully ☐ *Partially* ☐ *Unresolved* ☐

If not fully resolved please state what you think could have been done instead (note legislation affects which actions can be licensed):

5. Was there a public reaction to any action taken under the licence or as a result of our advice?

Positive support ☐ *No reaction* ☐ *Negative reaction* ☐

6. Would you use a fully online licensing service if it could be made available in the future?

Definitely ☐ *Possibly* ☐ *Unlikely* ☐ *No* ☐

7. Do you have any further comments to make or suggestions for improving our service, if yes please specify (continue comments on an additional sheet if necessary). *If you are happy to be contacted at a later date to explore possible improvement options, please tick this box* ☐ *and ensure your Natural England reference number is at the top of this page.*

Appendix 3 PVA input parameters

Gannet

Population Viability Analysis Parameter log

Set up

The log file was created on: 2021-11-09 15:25:56 using Tool version 2, with R version 3.5.1, PVA package version: 4.17 (with UI version 1.7)

```
##              Package         Version
## popbio        "popbio"        "2.4.4"
## shiny         "shiny"         "1.1.0"
## shinyjs       "shinyjs"       "1.0"
## shinydashboard "shinydashboard" "0.7.1"
## shinyWidgets   "shinyWidgets"   "0.4.5"
## DT            "DT"            "0.5"
## plotly        "plotly"        "4.8.0"
## rmarkdown     "rmarkdown"     "1.10"
## dplyr         "dplyr"         "0.7.6"
## tidyr         "tidyr"         "0.8.1"
```

Basic information

This run had reference name "Gannet.DI.FFC.SPA1_9".
PVA model run type: simplescenarios.
Model to use for environmental stochasticity: betagamma.
Model for density dependence: nodd.
Include demographic stochasticity in model?: Yes.
Number of simulations: 5000.
Random seed: 14.
Years for burn-in: 0.
Case study selected: None.

Baseline demographic rates

Species chosen to set initial values: Northern Gannet.
Region type to use for breeding success data: Country.
Available colony-specific survival rate: National. Sector to use within breeding success region: England.
Age at first breeding: 5.
Is there an upper constraint on productivity in the model?: Yes, constrained to 1 per pair.
Number of subpopulations: 1.
Are demographic rates applied separately to each subpopulation?: No.
Units for initial population size: breeding.adults
Are baseline demographic rates specified separately for immatures?: Yes.

Population 1

Initial population values: Initial population 26782 in 2025

Productivity rate per pair: mean: 0.823 , sd: 0.038

Adult survival rate: mean: 0.919 , sd: 0.042

Immatures survival rates:

Age class 0 to 1 - mean: 0.424 , sd: 0.045 , DD: NA

Age class 1 to 2 - mean: 0.829 , sd: 0.026 , DD: NA

Age class 2 to 3 - mean: 0.891 , sd: 0.019 , DD: NA

Age class 3 to 4 - mean: 0.895 , sd: 0.019 , DD: NA

Age class 4 to 5 - mean: 0.919 , sd: 0.042 , DD: NA

Impacts

Number of impact scenarios: 9.

Are impacts applied separately to each subpopulation?: No

Are impacts of scenarios specified separately for immatures?: No

Are standard errors of impacts available?: No

Should random seeds be matched for impact scenarios?: No

Are impacts specified as a relative value or absolute harvest?: relative

Years in which impacts are assumed to begin and end: 2026 to 2056

Impact on Demographic Rates

Scenario A - Name: mort26.8

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.001000672 , se: NA

Scenario B - Name: mort266.2

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.00993914 , se: NA

Scenario C - Name: mort293

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.01093937 , se: NA

Scenario D - Name: mort3.4
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.000126937 , se: NA

Scenario E - Name: mort58.9
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.00219891 , se: NA

Scenario F - Name: mort62.3
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.002325755 , se: NA

Scenario G - Name: mort30.2
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.00112737 , se: NA

Scenario H - Name: mort325.1
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.01213558 , se: NA

Scenario I - Name: mort355.3
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.01326241 , se: NA

Output:

First year to include in outputs: 2026
Final year to include in outputs: 2056
How should outputs be produced, in terms of ages?: whole.population
Target population size to use in calculating impact metrics: NA
Quasi-extinction threshold to use in calculating impact metrics: NA

Guillemot

Population Viability Analysis Parameter log

Set up

The log file was created on: 2021-11-09 15:41:21 using Tool version 2, with R version 3.5.1, PVA package version: 4.17 (with UI version 1.7)

```
##              Package         Version
## popbio        "popbio"        "2.4.4"
## shiny         "shiny"         "1.1.0"
## shinyjs       "shinyjs"       "1.0"
## shinydashboard "shinydashboard" "0.7.1"
## shinyWidgets   "shinyWidgets"   "0.4.5"
## DT            "DT"            "0.5"
## plotly        "plotly"        "4.8.0"
## rmarkdown     "rmarkdown"     "1.10"
## dplyr         "dplyr"         "0.7.6"
## tidyr         "tidyr"         "0.8.1"
```

Basic information

This run had reference name "Guillemot.DI.FFC.SPA1_9".
PVA model run type: simplescenarios.
Model to use for environmental stochasticity: betagamma.
Model for density dependence: nodd.
Include demographic stochasticity in model?: Yes.
Number of simulations: 5000.
Random seed: 14.
Years for burn-in: 0.
Case study selected: None.

Baseline demographic rates

Species chosen to set initial values: Common Guillemot.
Region type to use for breeding success data: Country.
Available colony-specific survival rate: National. Sector to use within breeding success region: England.
Age at first breeding: 6.
Is there an upper constraint on productivity in the model?: Yes, constrained to 1 per pair.
Number of subpopulations: 1.
Are demographic rates applied separately to each subpopulation?: No.
Units for initial population size: breeding.adults
Are baseline demographic rates specified separately for immatures?: Yes.

Population 1

Initial population values: Initial population 121758 in 2025

Productivity rate per pair: mean: 0.716 , sd: 0.076

Adult survival rate: mean: 0.94 , sd: 0.025

Immatures survival rates:

Age class 0 to 1 - mean: 0.56 , sd: 0.058 , DD: NA

Age class 1 to 2 - mean: 0.792 , sd: 0.152 , DD: NA

Age class 2 to 3 - mean: 0.917 , sd: 0.098 , DD: NA

Age class 3 to 4 - mean: 0.938 , sd: 0.107 , DD: NA

Age class 4 to 5 - mean: 0.94 , sd: 0.025 , DD: NA

Age class 5 to 6 - mean: 0.94 , sd: 0.025 , DD: NA

Impacts

Number of impact scenarios: 9.

Are impacts applied separately to each subpopulation?: No

Are impacts of scenarios specified separately for immatures?: No

Are standard errors of impacts available?: No

Should random seeds be matched for impact scenarios?: No

Are impacts specified as a relative value or absolute harvest?: relative

Years in which impacts are assumed to begin and end: 2026 to 2056

Impact on Demographic Rates

Scenario A - Name: mort0.5

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 3.864e-06 , se: NA

Scenario B - Name: mort74.5

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.000611514 , se: NA

Scenario C - Name: mort74.9

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.000615373 , se: NA

Scenario D - Name: mort2.2

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 1.8029e-05 , se: NA

Scenario E - Name: mort347.5
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.002853662 , se: NA

Scenario F - Name: mort349.7
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.002871668 , se: NA

Scenario G - Name: mort11
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 9.0145e-05 , se: NA

Scenario H - Name: mort1737.3
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.01426796 , se: NA

Scenario I - Name: mort1748.3
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.01435799 , se: NA

Output:

First year to include in outputs: 2026
Final year to include in outputs: 2056
How should outputs be produced, in terms of ages?: whole.population
Target population size to use in calculating impact metrics: NA
Quasi-extinction threshold to use in calculating impact metrics: NA

Razorbill

Population Viability Analysis Parameter log

Set up

The log file was created on: 2021-11-09 15:56:09 using Tool version 2, with R version 3.5.1, PVA package version: 4.17 (with UI version 1.7)

```
##              Package         Version
## popbio        "popbio"        "2.4.4"
## shiny         "shiny"         "1.1.0"
## shinyjs       "shinyjs"       "1.0"
## shinydashboard "shinydashboard" "0.7.1"
## shinyWidgets   "shinyWidgets"   "0.4.5"
## DT            "DT"            "0.5"
## plotly        "plotly"        "4.8.0"
## rmarkdown     "rmarkdown"     "1.10"
## dplyr         "dplyr"         "0.7.6"
## tidyr         "tidyr"         "0.8.1"
```

Basic information

This run had reference name "Razorbill.DI.FFC.SPA1_9".
PVA model run type: simplescenarios.
Model to use for environmental stochasticity: betagamma.
Model for density dependence: nodd.
Include demographic stochasticity in model?: Yes.
Number of simulations: 5000.
Random seed: 14.
Years for burn-in: 0.
Case study selected: None.

Baseline demographic rates

Species chosen to set initial values: Razorbill.
Region type to use for breeding success data: Country.
Available colony-specific survival rate: National. Sector to use within breeding success region: England.
Age at first breeding: 5.
Is there an upper constraint on productivity in the model?: Yes, constrained to 1 per pair.
Number of subpopulations: 1.
Are demographic rates applied separately to each subpopulation?: No.
Units for initial population size: breeding.adults
Are baseline demographic rates specified separately for immatures?: Yes.

Population 1

Initial population values: Initial population 40506 in 2025

Productivity rate per pair: mean: 0.641 , sd: 0.068

Adult survival rate: mean: 0.895 , sd: 0.067

Immatures survival rates:

Age class 0 to 1 - mean: 0.63 , sd: 0.067 , DD: NA

Age class 1 to 2 - mean: 0.63 , sd: 0.067 , DD: NA

Age class 2 to 3 - mean: 0.895 , sd: 0.067 , DD: NA

Age class 3 to 4 - mean: 0.895 , sd: 0.067 , DD: NA

Age class 4 to 5 - mean: 0.895 , sd: 0.067 , DD: NA

Impacts

Number of impact scenarios: 9.

Are impacts applied separately to each subpopulation?: No

Are impacts of scenarios specified separately for immatures?: No

Are standard errors of impacts available?: No

Should random seeds be matched for impact scenarios?: No

Are impacts specified as a relative value or absolute harvest?: relative

Years in which impacts are assumed to begin and end: 2026 to 2056

Impact on Demographic Rates

Scenario A - Name: mort0.1

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 1.778e-06 , se: NA

Scenario B - Name: mort18.6

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.000458895 , se: NA

Scenario C - Name: mort18.7

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.000460672 , se: NA

Scenario D - Name: mort0.3

All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 8.295e-06 , se: NA

Scenario E - Name: mort86.7
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.00214151 , se: NA

Scenario F - Name: mort87.1
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.002149805 , se: NA

Scenario G - Name: mort1.7
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 4.1475e-05 , se: NA

Scenario H - Name: mort433.7
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.01070755 , se: NA

Scenario I - Name: mort435.4
All subpopulations

Impact on productivity rate mean: 0 , se: NA

Impact on adult survival rate mean: 0.01074903 , se: NA

Output:

First year to include in outputs: 2026
Final year to include in outputs: 2056
How should outputs be produced, in terms of ages?: whole.population
Target population size to use in calculating impact metrics: NA
Quasi-extinction threshold to use in calculating impact metrics: NA

Appendix 4 Legal agreement between East Anglia TWO Limited and East Anglia THREE Limited regarding vessel traffic within the Outer Thames Estuary SPA

SHEPHERD+ WEDDERBURN

AGREEMENT

between

East Anglia TWO Limited

and

East Anglia THREE Limited

Relating to: the East Anglia TWO Offshore Windfarm Development Consent Order

Shepherd and Wedderburn LLP
Condor House
10 St. Paul's Churchyard
London EC4M 8AL
DX 98945 Cheapside 2
[redacted]

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CONSENT AGREEMENT

Dated 30 November **2021**

between

EAST ANGLIA TWO LIMITED (Company Registration Number 11121842) whose registered office is at 3rd Floor, 1 Tudor Street, London, EC4Y 0AH (**"EA2"** which expression shall include its successors in title and assigns); and

EAST ANGLIA THREE LIMITED (Company Registration Number 08141208) whose registered office is at 3rd Floor, 1 Tudor Street, London, EC4Y 0AH (**"EA3"** which expression shall include its successors in title and assigns).

BACKGROUND

(A) EA2 wishes to carry out the East Anglia TWO Offshore Windfarm (the **"EA2 Project"**) and has made an application on 25 October 2019 for a Development Consent Order to authorise the works for the EA2 Project (the **"EA2 Order"**).

(B) EA3 wishes to carry out the East Anglia THREE Windfarm (the "**EA3 Project**") and was granted a Development Consent Order on 7 August 2017 authorising the work for the EA3 Project.

(C) EA2 maintains that there will be no adverse effect on the integrity ("**AEoI**") of the Outer Thames Estuary Special Protection Area ("**OTE SPA**") as a result of the EA2 Project alone or in combination. However, without prejudice to EA2's position, EA2 has proposed in-principle compensatory measures that could be progressed should the Secretary of State conclude an AEoI on the red throated diver feature of the OTE SPA. The in-principle compensatory measures proposed requires vessel traffic associated with the EA3 Project to avoid the OTE SPA (excluding vessel traffic associated with works within the OTE SPA and vessels accessing ports and harbours where any part of that port or harbour or its approaches are located within the OTE SPA).

OPERATIVE PROVISIONS

1. Definitions and interpretation

1.1 In this Deed the following expressions shall have the following meanings and references to clauses are references to the clauses of this Deed:

"EA2 Offshore Works"	means Work Nos. 1 to 6 as described in Schedule 1 of the EA2 Order;
"EA2 Order"	means the East Anglia TWO Offshore Windfarm Development Consent Order as it is made by the Secretary of State;
"EA3 Order"	means the East Anglia THREE Offshore Wind Farm Order 2017, as amended;
"Northern Component of the OTE SPA"	means the part of the OTE SPA outlined and hatched in blue and shaded green shown on Figure 1 in Appendix 1;
"OTE SPA Buffer"	means the area of sea within 2km of the boundary of the OTE SPA;
"Relevant EA3 Works"	means Work Nos. 1, 2, 3 and 4 and Work No. 5A to the extent that the works are located outside the OTE SPA

	and the OTE SPA Buffer, all as described in Schedule 1 of the EA3 Order;
"Secretary of State"	means the Secretary of State for Business, Energy and Industrial Strategy;
"Undertaker"	means the undertaker or undertakers as defined in the EA2 Order or the EA3 Order, as the case may be, and appointed for time to time.

1.2 The headings in this Deed are for convenience only and shall not be taken into account in the construction and interpretation of this Deed.

1.3 References in this Deed to clauses are (unless otherwise expressly provided) references to relevant clauses contained in this Deed.

2. Conditionality

2.1 Save in respect of clause 13, this Deed is conditional upon:

2.1.1 the making of the EA2 Order by the Secretary of State; and

2.1.2 an obligation being included in the EA2 Order for EA2 to provide compensatory measures in respect of the red throated diver feature of the OTE SPA.

2.2 EA3 shall no longer be required to carry out its duties and obligations under this Deed and shall have no further liability to EA2 in respect thereof upon the date determined by the Secretary of State as being the date on which compensatory measures are no longer required or, where no such date is determined, upon the decommissioning of the EA2 Offshore Works.

3. Covenants of EA3

3.1 EA3 HEREBY UNDERTAKES AND AGREES on the coming into force of the EA2 Order:

3.1.1 that, subject to clause 3.2, all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the Relevant EA3 Works will avoid the Northern Component of the OTE SPA from 1 November to 1 March inclusive;

3.1.2 that, subject to clauses 3.2, 3.3 and 3.4, all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the Relevant EA3 Works will avoid the OTE SPA and the OTE SPA Buffer from 1 November to 1 March inclusive;

3.1.3 that EA3 will participate in the red-throated diver compensation steering group if invited to attend;

3.1.4 that EA3 will comply with the measures set out in the red-throated diver implementation and monitoring plan to the extent that they relate to the Relevant EA3 Works;

3.1.5 that EA3 will provide monthly reports to EA2 to demonstrate compliance with clauses 3.1.1 and 3.1.2.

3.2 Clauses 3.1.1 and 3.1.2 do not apply in the case of an emergency or where there are health and safety grounds (including, but not limited to, due to inclement weather) requiring a direct route to be taken through the OTE SPA or the OTE SPA Buffer;

3.3 Clause 3.1.2 does not apply to vessel traffic accessing ports and harbours within the OTE SPA or OTE SPA Buffer where any part of that port or harbour or its approaches are located within the OTE SPA and/or OTE SPA Buffer.

3.4 The requirement to avoid the OTE SPA Buffer within clause 3.1.2 does not apply:

3.4.1 to vessels travelling in opposite directions in areas between the Northern Component of the OTE SPA and the remainder of the OTE SPA where the distance between the two components of the OTE SPA is 6km or less; and

3.4.2 to all other vessels in areas between the Northern Component of the OTE SPA and the remainder of the OTE SPA where the distance between the two components of the OTE SPA is 4.2km or less,

but in such areas vessel traffic will traverse between the Northern Component of the OTE SPA and the remainder of the OTE SPA as close to the mid point between the two components of the OTE SPA as is reasonably practicable whilst allowing for an appropriate separation distance between passing vessels in the case of 3.4.1.

4. Covenants of EA2

4.1 EA2 hereby covenants with EA3 to consult with EA3 in the preparation of the red-throated diver implementation and monitoring plan.

5. Good faith and co-operation

5.1 The parties to this Deed shall act towards each other at all times in good faith and shall co-operate and fully consult with each other regarding their respective obligations under the terms of this Deed.

6. Partial invalidity

6.1 If any provision of this Deed is or becomes or is declared invalid unlawful illegal or unenforceable it shall not affect the validity, legality or enforceability of the remainder of this Deed.

6.2 If any part of a provision of this Deed is or becomes or is declared invalid unlawful illegal or unenforceable but the rest of such provision would remain valid lawful or enforceable if part of the wording were deleted, the provision shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable but without affecting the meaning or legality validity or enforceability of any other provision of this Deed.

7. Variation of Agreement

7.1 No amendment or modification of this Deed shall be valid or binding on the parties to this Deed unless the same:

7.1.1 is made in writing;

7.1.2 refers expressly to this Deed; and

7.1.3 is executed on behalf of EA2 and EA3.

8. Counterparts

8.1 This Deed may be executed in any number of counterparts, each of which when executed and delivered shall constitute a duplicate original, but all the counterparts shall together constitute the one agreement.

8.2 No counterpart shall be effective until each party has executed and delivered at least one counterpart.

9. Third Party Rights

9.1 Only the parties to the agreement may enforce the terms of this Deed and no third party may enforce such a term under the Contracts (Rights of Third Parties) Act 1999 provided always that any successors to the business of EA2 shall be entitled to the benefit of this Deed.

10. Transfer of Powers

10.1 In the event that:

10.1.1 any person other than EA3 is defined as the "Undertaker" for the purposes of the EA3 Order in respect of the Relevant EA3 Works, and/or

10.1.2 the powers of the "Undertaker" under the EA3 Order in respect of the Relevant EA3 Works are transferred or leased to any other person; and

10.1.3 the provisions of this Deed are not otherwise made directly enforceable against any such person (the "Transferee"),

EA3 will without delay require the Transferee to enter into a deed of covenant in favour of EA2 that the Transferee shall observe and perform such of the obligations of and restrictions on EA3 under this Deed as relate to the exercise of the powers which have been transferred as though the Transferee had been an original party to this Deed.

10.2 EA3 shall remain liable to EA2 under this Deed until EA3 has complied with clause 10.1.

10.3 Upon compliance with clause 10.1, EA3 shall no longer owe any duty or obligation to EA2 in respect of the powers which have been transferred (save in respect of any pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers) and EA2 shall release and discharge EA3 from all claims, demands and other liabilities whatsoever in respect of those transferred powers (provided that there is no pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers).

10.4 In the event that:

10.4.1 any person other than EA2 is defined as the "Undertaker" for the purposes of the EA2 Order in respect of the EA2 Offshore Works, and/or

10.4.2 the powers of the "Undertaker" under the EA2 Order in respect of the EA2 Offshore Works are transferred or leased to any other person; and

10.4.3 the provisions of this Deed are not otherwise made directly enforceable against any such person (the "Transferee"),

EA2 will without delay require the Transferee to enter into a deed of covenant in favour of EA3 that the Transferee shall observe and perform such of the obligations of and restrictions on EA2 under this Deed as relate to the exercise of the powers which have been transferred as though the Transferee had been an original party to this Deed.

10.5 EA2 shall remain liable to EA3 under this Deed until EA2 has complied with clause 10.4.

10.6 Upon compliance with clause 10.4, EA2 shall no longer owe any duty or obligation to EA3 in respect of the powers which have been transferred (save in respect of any pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers) and EA3 shall release and discharge EA2 from all claims, demands and other liabilities whatsoever in respect of those transferred powers (provided that there is no pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers).

11. Notices

11.1 Any notice given under or in relation to this Deed shall be in writing and shall refer to this Deed and shall be deemed to be sufficiently served if addressed to EA2 or EA3, as the case may be, and sent by recorded delivery or registered post to the address of the Parties given in this Deed or to such other address as they may from time to time designate by written notice to the other.

11.2 Any notice sent in accordance with clause 11.1 shall be deemed, in the absence of evidence of earlier receipt, to have been delivered two days after costing or despatch, exclusive of the day of posting.

12. Governing Law and Jurisdiction

12.1 This Deed and any non-contractual obligations arising in connection with it (and, unless provided otherwise, any document entered into in connection with it) are governed by and construed in accordance with English law.

12.2 The English courts have exclusive jurisdiction to determine any dispute arising in connection with this Deed (and, unless provided otherwise, any document entered into in connection with it), including disputes relating to any non-contractual obligations.

13. Confidentiality

13.1 EA2 and EA3 Energy agree to keep confidential and not disclose to any third party the content of this Deed.

13.2 Either party may disclose the fact and details of this Deed, or its terms:

13.2.1 pursuant to an order of the Court, or by compulsion of law or the rules of any competent regulator;

13.2.2 to any of their auditors, professional legal advisers or insurers;

13.2.3 to:

(i) any bona fide potential purchaser of shares in (or the assets of) EA2 or EA3 and its external professional consultants and advisers;

(ii) any bona fide bank or financial institution (and its external professional consultants and advisers) from whom EA2 or EA3 is seeking or obtaining finance or financial advice

provided that in the case of disclosure under clause 13.2.3(i) and 13.2.3(ii) such third party is either bound by a professional duty of confidence or has first executed a confidentiality agreement containing confidentiality provisions no less onerous than those set out herein;

13.2.4 with the prior written consent of the other Party; or

13.2.5 to respond to a question or request for information from the Secretary of State.

13.3 In the event that any party considers that it is required by law or by the rules of any competent regulator to disclose any terms of this Deed such party will provide the other party with such prompt written notice of such requirement as is reasonably practicable, so that the other party may seek appropriate injunctive relief. If no such relief is granted, or a waiver is not obtained from the other party, and if the first party is nonetheless, in the opinion of its legal advisers required to do so by law or the rules of any competent regulator, such party may disclose that portion only of the terms of this Deed which that party is advised by its legal advisers is required to be disclosed. Such party will use its reasonable endeavours to obtain assurance that confidential treatment will be accorded to any information disclosed.

13.4 If any party discloses the terms of this Deed to a person within clause 13.2 (excluding in accordance with clause 13.2.5) that Party will use its reasonable endeavours to obtain assurances that any information relating to the terms of this Deed will be treated by that person as confidential.

Delivered as a deed on the date of this document.

EXECUTION PAGE

Executed as a deed by **EAST ANGLIA TWO LIMITED** acting by [redacted] ..... *[name of second director or secretary]*

)
)
)

..... Director

..... Director/~~Secretary~~

Executed as a deed by **EAST ANGLIA THREE LIMITED** acting by [redacted] ..... *[name of second director or secretary]*

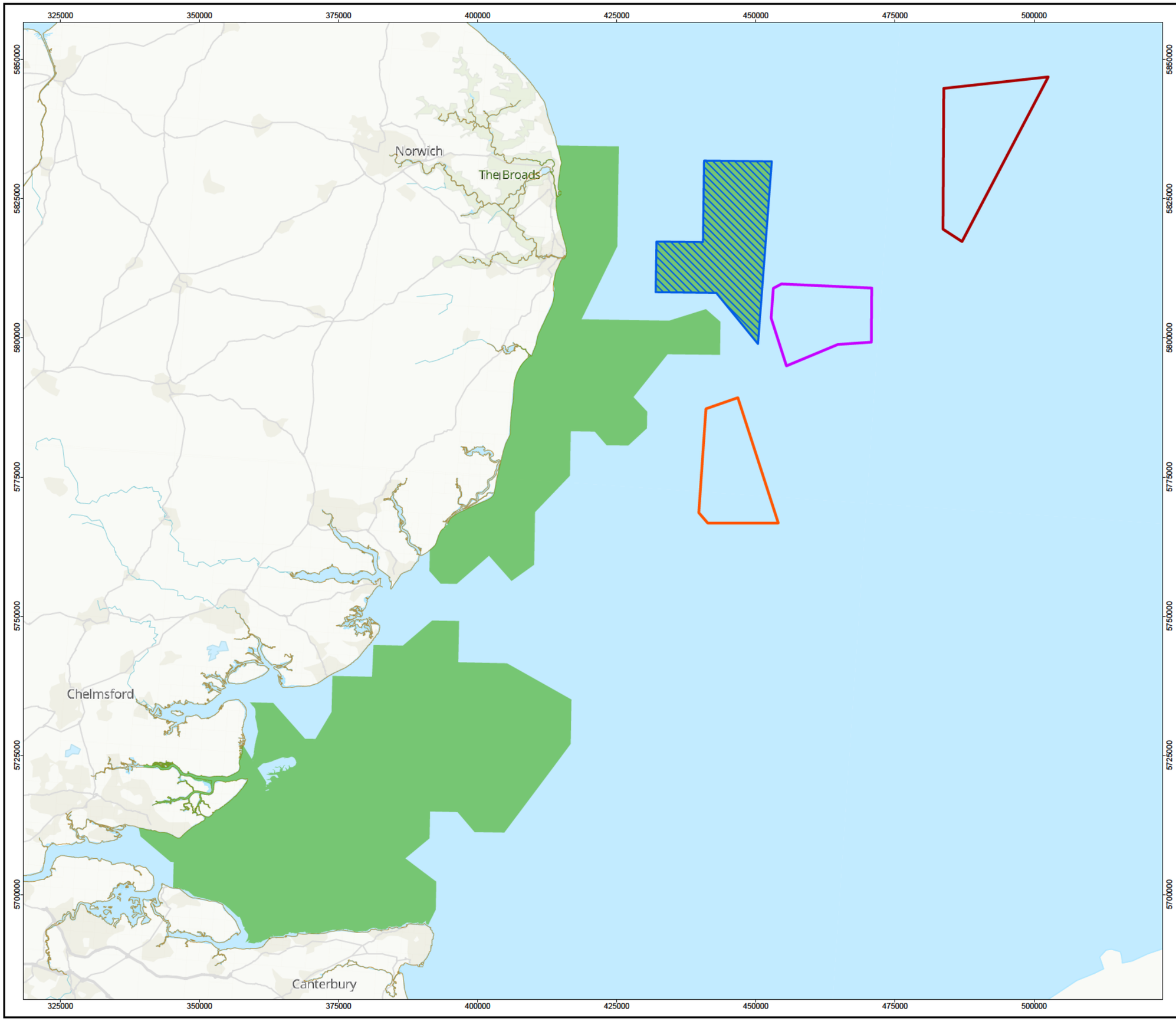
)
)
)

..... Director

..... Director/~~Secretary~~

Appendix 1

Figure 1



EA1N Windfarm DCO Boundary

EA2 Windfarm DCO Boundary

EA3 Windfarm DCO Boundary

Outer Thames Estuary SPA (OTE SPA)

Northern Component of the OTE SPA

Coastal Boundary

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Notes:
DCO Boundaries correct as of 23/11/2021.
SPA designations © Natural England copyright.
Contains Ordnance Survey data © Crown copyright and database right 2020.

0 5 10 15 20 25 30 Kilometres

REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
2	24/11/2021	TG	JB	GV	GV

DRAWING NUMBER	EAH-GEN-GIS-DRG-IBR-000416		
DATUM	WGS84	PROJECTION	UTM Zone 31N
SCALE	1:650,000	PAGE SIZE	A3
PROJECT TITLE	East Anglia HUB		
DRAWING TITLE	**Figure 1**		

SCOTTISHPOWER RENEWABLES

Name EAH-GEN-GIS-DRG-IBR-000416 Rev 2 Outer Thames Estuary SPA

Appendix 5 Legal agreement between East Anglia ONE North Limited and East Anglia THREE Limited regarding vessel traffic within the Outer Thames Estuary SPA

SHEPHERD+ WEDDERBURN

AGREEMENT

between

East Anglia ONE NORTH Limited

and

East Anglia THREE Limited

Relating to: the East Anglia ONE North Offshore Windfarm Development Consent Order

Shepherd and Wedderburn LLP
Condor House
10 St. Paul's Churchyard
London EC4M 8AL
DX 98945 Cheapside 2
[redacted]
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CONSENT AGREEMENT **Dated** 30 November **2021**

between

EAST ANGLIA ONE NORTH LIMITED (Company Registration Number 11121800) whose registered office is at 3rd Floor, 1 Tudor Street, London, EC4Y 0AH (**"EA1N"** which expression shall include its successors in title and assigns); and

EAST ANGLIA THREE LIMITED (Company Registration Number 08141208) whose registered office is at 3rd Floor, 1 Tudor Street, London, EC4Y 0AH (**"EA3"** which expression shall include its successors in title and assigns).

BACKGROUND

(A) EA1N wishes to carry out the East Anglia ONE North Offshore Windfarm (the **"EA1N Project"**) and has made an application on 25 October 2019 for a Development Consent Order to authorise the works for the EA1N Project (the **"EA1N Order"**).

(B) EA3 wishes to carry out the East Anglia THREE Windfarm (the "**EA3 Project**") and was granted a Development Consent Order on 7 August 2017 authorising the work for the EA3 Project.

(C) EA1N maintains that there will be no adverse effect on the integrity ("**AEoI**") of the Outer Thames Estuary Special Protection Area ("**OTE SPA**") as a result of the EA1N Project alone or in combination. However, without prejudice to EA1N's position, EA1N has proposed in-principle compensatory measures that could be progressed should the Secretary of State conclude an AEoI on the red throated diver feature of the OTE SPA. The in-principle compensatory measures proposed requires vessel traffic associated with the EA3 Project to avoid the OTE SPA (excluding vessel traffic associated with works within the OTE SPA and vessels accessing ports and harbours where any part of that port or harbour or its approaches are located within the OTE SPA).

OPERATIVE PROVISIONS

1. Definitions and interpretation

1.1 In this Deed the following expressions shall have the following meanings and references to clauses are references to the clauses of this Deed:

"EA1N Offshore Works"	means Work Nos. 1 to 6 as described in Schedule 1 of the EA1N Order;
"EA1N Order"	means the East Anglia ONE North Offshore Windfarm Development Consent Order as it is made by the Secretary of State;
"EA3 Order"	means the East Anglia THREE Offshore Wind Farm Order 2017, as amended;
"Northern Component of the OTE SPA"	means the part of the OTE SPA outlined and hatched in blue and shaded green shown on Figure 1 in Appendix 1;
"OTE SPA Buffer"	means the area of sea within 2km of the boundary of the OTE SPA;
"Relevant EA3 Works"	means Work Nos. 1, 2, 3 and 4 and Work No. 5A to the extent that the works are located outside the OTE SPA

	and the OTE SPA Buffer, all as described in Schedule 1 of the EA3 Order;
"Secretary of State"	means the Secretary of State for Business, Energy and Industrial Strategy;
"Undertaker"	means the undertaker or undertakers as defined in the EA1N Order or the EA3 Order, as the case may be, and appointed for time to time.

1.2 The headings in this Deed are for convenience only and shall not be taken into account in the construction and interpretation of this Deed.

1.3 References in this Deed to clauses are (unless otherwise expressly provided) references to relevant clauses contained in this Deed.

2. Conditionality

2.1 Save in respect of clause 13, this Deed is conditional upon:

2.1.1 the making of the EA1N Order by the Secretary of State; and

2.1.2 an obligation being included in the EA1N Order for EA1N to provide compensatory measures in respect of the red throated diver feature of the OTE SPA.

2.2 EA3 shall no longer be required to carry out its duties and obligations under this Deed and shall have no further liability to EA1N in respect thereof upon the date determined by the Secretary of State as being the date on which compensatory measures are no longer required or, where no such date is determined, upon the decommissioning of the EA1N Offshore Works.

3. Covenants of EA3

3.1 EA3 HEREBY UNDERTAKES AND AGREES on the coming into force of the EA1N Order:

3.1.1 that, subject to clause 3.2, all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the Relevant EA3 Works will avoid the Northern Component of the OTE SPA from 1 November to 1 March inclusive;

3.1.2 that, subject to clauses 3.2, 3.3 and 3.4, all vessel traffic engaged in the construction, operation, maintenance and decommissioning of the Relevant EA3 Works will avoid the OTE SPA and the OTE SPA Buffer from 1 November to 1 March inclusive;

3.1.3 that EA3 will participate in the red-throated diver compensation steering group if invited to attend;

3.1.4 that EA3 will comply with the measures set out in the red-throated diver implementation and monitoring plan to the extent that they relate to the Relevant EA3 Works;

3.1.5 that EA3 will provide monthly reports to EA1N to demonstrate compliance with clauses 3.1.1 and 3.1.2.

3.2 Clauses 3.1.1 and 3.1.2 do not apply in the case of an emergency or where there are health and safety grounds (including, but not limited to, due to inclement weather) requiring a direct route to be taken through the OTE SPA or the OTE SPA Buffer;

3.3 Clause 3.1.2 does not apply to vessel traffic accessing ports and harbours within the OTE SPA or OTE SPA Buffer where any part of that port or harbour or its approaches are located within the OTE SPA and/or OTE SPA Buffer.

3.4 The requirement to avoid the OTE SPA Buffer within clause 3.1.2 does not apply:

3.4.1 to vessels travelling in opposite directions in areas between the Northern Component of the OTE SPA and the remainder of the OTE SPA where the distance between the two components of the OTE SPA is 6km or less; and

3.4.2 to all other vessels in areas between the Northern Component of the OTE SPA and the remainder of the OTE SPA where the distance between the two components of the OTE SPA is 4.2km or less,

but in such areas vessel traffic will traverse between the Northern Component of the OTE SPA and the remainder of the OTE SPA as close to the mid point between the two components of the OTE SPA as is reasonably practicable whilst allowing for an appropriate separation distance between passing vessels in the case of 3.4.1.

4. Covenants of EA1N

4.1 EA1N hereby covenants with EA3 to consult with EA3 in the preparation of the red-throated diver implementation and monitoring plan.

5. Good faith and co-operation

5.1 The parties to this Deed shall act towards each other at all times in good faith and shall co-operate and fully consult with each other regarding their respective obligations under the terms of this Deed.

6. Partial invalidity

6.1 If any provision of this Deed is or becomes or is declared invalid unlawful illegal or unenforceable it shall not affect the validity, legality or enforceability of the remainder of this Deed.

6.2 If any part of a provision of this Deed is or becomes or is declared invalid unlawful illegal or unenforceable but the rest of such provision would remain valid lawful or enforceable if part of the wording were deleted, the provision shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable but without affecting the meaning or legality validity or enforceability of any other provision of this Deed.

7. Variation of Agreement

7.1 No amendment or modification of this Deed shall be valid or binding on the parties to this Deed unless the same:

7.1.1 is made in writing;

7.1.2 refers expressly to this Deed; and

7.1.3 is executed on behalf of EA1N and EA3.

8. Counterparts

8.1 This Deed may be executed in any number of counterparts, each of which when executed and delivered shall constitute a duplicate original, but all the counterparts shall together constitute the one agreement.

8.2 No counterpart shall be effective until each party has executed and delivered at least one counterpart.

9. Third Party Rights

9.1 Only the parties to the agreement may enforce the terms of this Deed and no third party may enforce such a term under the Contracts (Rights of Third Parties) Act 1999 provided always that any successors to the business of EA1N shall be entitled to the benefit of this Deed.

10. Transfer of Powers

10.1 In the event that:

10.1.1 any person other than EA3 is defined as the "Undertaker" for the purposes of the EA3 Order in respect of the Relevant EA3 Works, and/or

10.1.2 the powers of the "Undertaker" under the EA3 Order in respect of the Relevant EA3 Works are transferred or leased to any other person; and

10.1.3 the provisions of this Deed are not otherwise made directly enforceable against any such person (the "Transferee"),

EA3 will without delay require the Transferee to enter into a deed of covenant in favour of EA1N that the Transferee shall observe and perform such of the obligations of and restrictions on EA3 under this Deed as relate to the exercise of the powers which have been transferred as though the Transferee had been an original party to this Deed.

10.2 EA3 shall remain liable to EA1N under this Deed until EA3 has complied with clause 10.1.

10.3 Upon compliance with clause 10.1, EA3 shall no longer owe any duty or obligation to EA1N in respect of the powers which have been transferred (save in respect of any pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers) and EA1N shall release and discharge EA3 from all claims, demands and other liabilities whatsoever in respect of those transferred powers (provided that there is no pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers).

10.4 In the event that:

10.4.1 any person other than EA1N is defined as the "Undertaker" for the purposes of the EA1N Order in respect of the EA1N Offshore Works, and/or

10.4.2 the powers of the "Undertaker" under the EA1N Order in respect of the EA1N Offshore Works are transferred or leased to any other person; and

10.4.3 the provisions of this Deed are not otherwise made directly enforceable against any such person (the "Transferee"),

EA1N will without delay require the Transferee to enter into a deed of covenant in favour of EA3 that the Transferee shall observe and perform such of the obligations of and restrictions on EA1N under this Deed as relate to the exercise of the powers which have been transferred as though the Transferee had been an original party to this Deed.

10.5 EA1N shall remain liable to EA3 under this Deed until EA1N has complied with clause 10.4.

10.6 Upon compliance with clause 10.4, EA1N shall no longer owe any duty or obligation to EA3 in respect of the powers which have been transferred (save in respect of any pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers) and EA3 shall release and discharge EA1N from all claims, demands and other liabilities whatsoever in respect of those transferred powers (provided that there is no pre-existing claim and/or proceedings ongoing under this Deed in respect of those powers).

11. Notices

11.1 Any notice given under or in relation to this Deed shall be in writing and shall refer to this Deed and shall be deemed to be sufficiently served if addressed to EA1N or EA3, as the case may be, and sent by recorded delivery or registered post to the address of the Parties given in this Deed or to such other address as they may from time to time designate by written notice to the other.

11.2 Any notice sent in accordance with clause 11.1 shall be deemed, in the absence of evidence of earlier receipt, to have been delivered two days after costing or despatch, exclusive of the day of posting.

12. Governing Law and Jurisdiction

12.1 This Deed and any non-contractual obligations arising in connection with it (and, unless provided otherwise, any document entered into in connection with it) are governed by and construed in accordance with English law.

12.2 The English courts have exclusive jurisdiction to determine any dispute arising in connection with this Deed (and, unless provided otherwise, any document entered into in connection with it), including disputes relating to any non-contractual obligations.

13. Confidentiality

13.1 EA1N and EA3 Energy agree to keep confidential and not disclose to any third party the content of this Deed.

13.2 Either party may disclose the fact and details of this Deed, or its terms:

13.2.1 pursuant to an order of the Court, or by compulsion of law or the rules of any competent regulator;

13.2.2 to any of their auditors, professional legal advisers or insurers;

13.2.3 to:

(i) any bona fide potential purchaser of shares in (or the assets of) EA1N or EA3 and its external professional consultants and advisers;

(ii) any bona fide bank or financial institution (and its external professional consultants and advisers) from whom EA1N or EA3 is seeking or obtaining finance or financial advice

provided that in the case of disclosure under clause 13.2.3(i) and 13.2.3(ii) such third party is either bound by a professional duty of confidence or has first executed a confidentiality agreement containing confidentiality provisions no less onerous than those set out herein;

13.2.4 with the prior written consent of the other Party; or

13.2.5 to respond to a question or request for information from the Secretary of State.

13.3 In the event that any party considers that it is required by law or by the rules of any competent regulator to disclose any terms of this Deed such party will provide the other party with such prompt written notice of such requirement as is reasonably practicable, so that the other party may seek appropriate injunctive relief. If no such relief is granted, or a waiver is not obtained from the other party, and if the first party is nonetheless, in the opinion of its legal advisers required to do so by law or the rules of any competent regulator, such party may disclose that portion only of the terms of this Deed which that party is advised by its legal advisers is required to be disclosed. Such party will use its reasonable endeavours to obtain assurance that confidential treatment will be accorded to any information disclosed.

13.4 If any party discloses the terms of this Deed to a person within clause 13.2 (excluding in accordance with clause 13.2.5) that Party will use its reasonable endeavours to obtain assurances that any information relating to the terms of this Deed will be treated by that person as confidential.

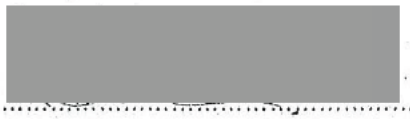
Delivered as a deed on the date of this document.

EXECUTION PAGE

Executed as a deed by **EAST ANGLIA ONE NORTH LIMITED** acting by [redacted] ..... *[name of second director or secretary]*

)
)
)

Director



Director/Secretary

Executed as a deed by **EAST ANGLIA THREE LIMITED** acting by [redacted] ..... *[name of second director or secretary]*

)
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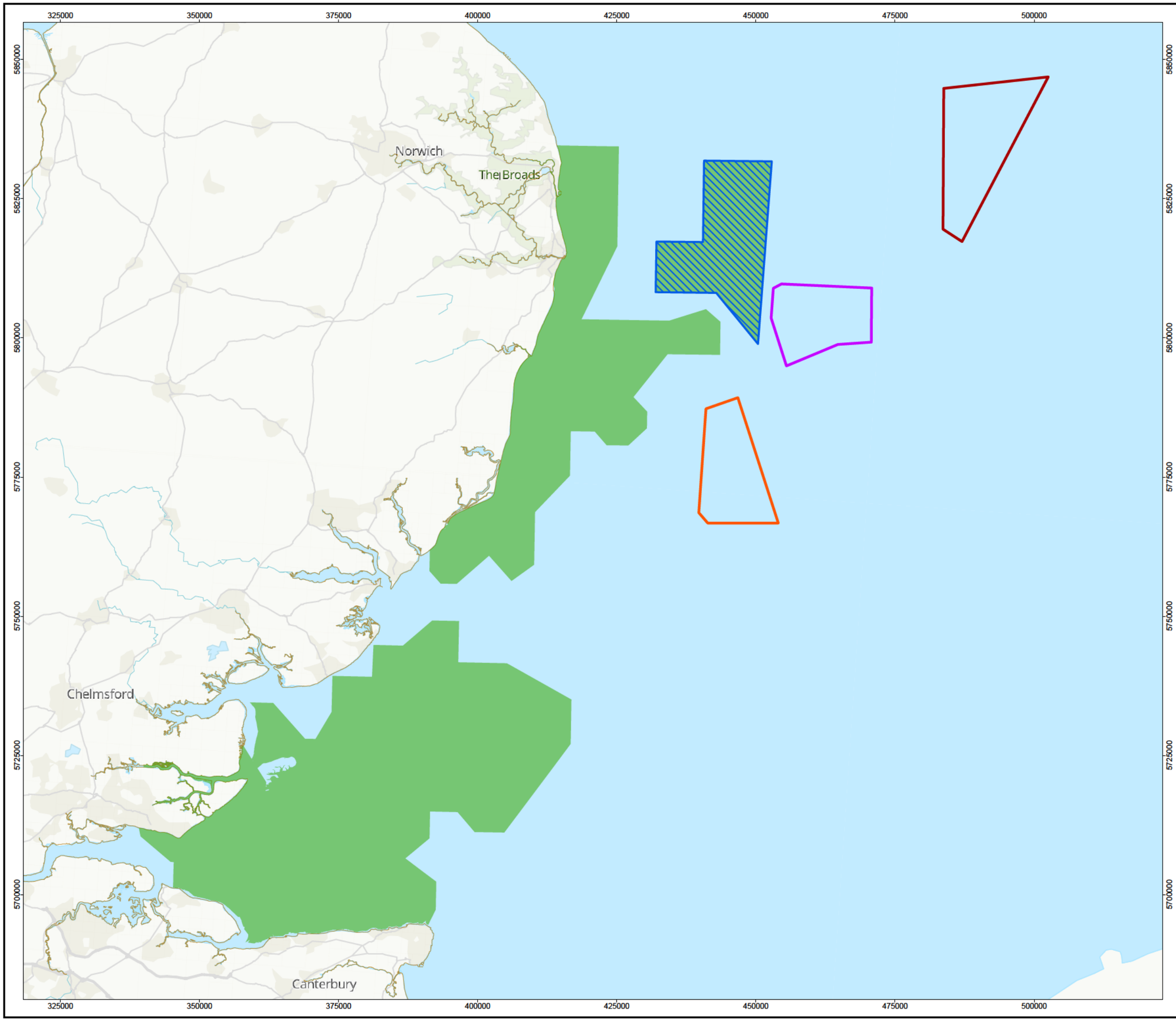
)

Director

Director/Secretary

Appendix 1

Figure 1



EA1N Windfarm DCO Boundary

EA2 Windfarm DCO Boundary

EA3 Windfarm DCO Boundary

Outer Thames Estuary SPA (OTE SPA)

Northern Component of the OTE SPA

Coastal Boundary

N

Notes:
DCO Boundaries correct as of 23/11/2021.
SPA designations © Natural England copyright.
Contains Ordnance Survey data © Crown copyright and database right 2020.

0 5 10 15 20 25 30 Kilometres

REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
2	24/11/2021	TG	JB	GV	GV

DRAWING NUMBER	EAH-GEN-GIS-DRG-IBR-000416		
DATUM	WGS84	PROJECTION	UTM Zone 31N
SCALE	1:650,000	PAGE SIZE	A3
PROJECT TITLE	East Anglia HUB		
DRAWING TITLE	**Figure 1**		

SCOTTISHPOWER RENEWABLES

Name EAH-GEN-GIS-DRG-IBR-000416 Rev 2 Outer Thames Estuary SPA