

**SCOTTISHPOWER
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East Anglia ONE North and East Anglia TWO Offshore Windfarms

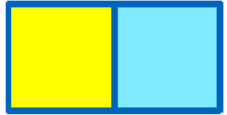
Written Summary of Oral Case

**Issue Specific Hearing 14 on 16th and 17th March
2021: Biodiversity and Habitats Regulations
Assessment (HRA)**

Applicants: East Anglia TWO Limited and East Anglia ONE North Limited
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Applicable to East Anglia ONE North and East Anglia TWO



Revision Summary				
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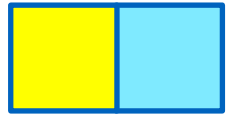


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Glossary of Acronyms

AEol	Adverse Effect on Integrity
AIS	Automatic Identification System
AONB	Area of Outstanding Natural Beauty
BCT	Bat Conservation Trust
DCO	Development Consent Order
ESC	East Suffolk Council
ExA	Examining Authority
ILE	Institute of Lighting Engineers
IPMP	In-principle Monitoring Plan
IROPI	Imperative Reasons of Overriding Public Interest
ISH	Issue Specific Hearing
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
NE	Natural England
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PAM	Passive acoustic monitoring
PTS	Permanent Threshold Shift
RIES	Report on the Implications for European Sites
RSPB	Royal Society for the Protection of Birds
RTD	Red-Throated Diver
SAC	Special Area of Conservation
SCC	Suffolk County Council
SSSI	Site of Special Scientific Interest
SIP	Site Integrity Plan
SoCG	Statement of Common Ground
SPA	Special Protection Area
UXO	Unexploded ordnance



Glossary of Terminology

Applicants	East Anglia ONE North Limited and East Anglia TWO 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 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.
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia TWO project Development Consent Order but will be National Grid owned assets.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia TWO / East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO project Development Consent Order.
Projects	The East Anglia ONE North project and the East Anglia TWO project.



1 Introduction

1. This document is applicable to both the East Anglia ONE North and East Anglia TWO Development Consent Order (DCO) applications (the Applications), and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's (ExA) procedural decisions on document management of 23 December 2019. Whilst for completeness of the record this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it again.
2. The Issue Specific Hearing 14 for the Applications were run jointly and took place virtually on 16th and 17th March 2021 at 10:00am each day (Hearings).
3. The Hearings ran through the items listed in the agendas published by the ExA on 9th March 2021. The Applicants gave substantive oral submissions at the Hearings and these submissions are set out within this note.
4. Speaking on behalf of the Applicants were:
 - ██████████, partner at Shepherd and Wedderburn LLP;
 - ██████████, senior associate at Shepherd and Wedderburn LLP;
 - ██████████ QC, Francis Taylor Building;
 - ██████████, project director for EIA and consenting at Royal HaskoningDHV;
 - ██████████, offshore consents manager for the Projects;
 - ██████████, principal ornithologist at MacArthur Green;
 - Professor ██████████, published academic in ornithology and board member of NatureScot, Chair of NatureScot's Scientific Advisory Committee and member of NatureScot's Protected Areas Committee;
 - ██████████, onshore consents manager for the Projects; and
 - ██████████ ██████████ ██████████, principal environmental consultant at Royal HaskoningDHV.



2 Agenda Item 2: Overarching HRA Matters

2.1 Reports on the Implications for European Sites (RIES)

5. The Applicants provided comments on the RIES, as set out in the sections below.

2.1.1 Lesser Black-Backed Gull

6. There are several references to the absence of Hornsea Project Three's collision totals adding uncertainty to lesser black-backed gull in-combination collision totals. This is not the case. Given the distance of Hornsea Project Three from the Alde Ore Estuary SPA, it is not relevant. NE are in agreement with the Applicants on this.

2.1.2 Collision Risk Methodological Issues

7. The Applicants wish to highlight that they do not believe that it is representative of the positions of the parties to state that there are outstanding methodology issues with regard to collision risk. The Applicants note that NE agreed with the use of Band option 2 in Point 13 of their Deadline 1 submission **Appendix A1b – Comments to the Applicant Comments on Natural England's Relevant and Written Representation [AS-036] Offshore Ornithology** (REP1-171). In addition, the Applicants adopted the Norfolk Boreas' Deadline 8 cumulative and in-combination totals to avoid the kinds of methodological discussions that have been a feature of previous examinations. Notwithstanding the Applicants' position on precaution, the Applicants considered it pragmatic to accept a 'common currency' approach. In any event the interpretation of the totals in terms of effects is unchanged from the Applications as submitted.

2.1.3 East Anglia TWO Project Alone Effects

8. The Applicants believe that Table 4 of the RIES accurately reflects NE's position as stated in their summary table on AEoI in their Deadline 7 submission **Appendix A15b – Response to Offshore Ornithology Compensation and Derogation Documents** (REP7-071), i.e. there are no project alone issues with the East Anglia TWO project for red-throated diver. Whilst the Applicants consider this to be a sensible and appropriate conclusion, the Applicants note that NE also state in their Appendix A15b (REP7-071) that

“As there is evidence from London Array that displacement within the Outer Thames Estuary extends out to 11.5km we maintain that EA2 should be included in the in-combination assessment.”



9. The Applicants also note that NE state that their '*position remains fluid*' due to disagreements over modelling and therefore highlight an inconsistency in NE's stated conclusion on the East Anglia TWO project and red-throated diver.
10. The Applicants do not believe that the East Anglia TWO project makes a material contribution to the in-combination totals. The Applicants have updated the East Anglia TWO project alone section of the ***Displacement of Red-Throated Divers in the Outer Thames Estuary SPA*** (XXX) to address comments made by NE. The Applicants have therefore added NE's approach to effective area of displacement and the conclusions of that which show that the East Anglia TWO project will make no material contribution to the in-combination effect. The Applicants consider that NE's position on uncertainty on the East Anglia TWO project alone effects is not credible given that even using their methods the effects are nugatory.
11. The Applicants consider that by updating this document once again at Deadline 8 (***Displacement of Red-Throated Divers in the Outer Thames Estuary SPA*** (XXX)) reduces the need for parties to cross refer between reports and responses.

2.2 Use of Time Remaining in Examinations

12. The Applicants confirm that no further material changes will be made to their assessment and they do not intend to make any further changes to the Projects' Rochdale Envelopes to provide additional mitigation.
13. Following an Order of the High Court, the decision of the Secretary of State to grant the application by Norfolk Vanguard Limited for development consent for Norfolk Vanguard has been quashed.
14. Natural England has advised that cumulative/in-combination totals should be presented with and without Norfolk Vanguard as a result of this decision. There are no changes to the estimated collisions from this project, but contrary to the position stated by the Applicants in the hearing the numbers for Norfolk Vanguard have now been presented separately from the confirmed cumulative/in-combination totals in line with Natural England's advice.



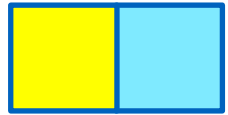
3 Agenda Item 3: Red-Throated Diver (RTD) of the Outer Thames Estuary SPA

3.1 Project Alone Effects

15. The Applicants confirm their understanding of the position from NE, that for East Anglia ONE North the concern was potential for AEOI from project alone and for East Anglia TWO, as noted above, NE need to confirm their project alone position.
16. The Applicants confirm their position that following the modelling presented (***Displacement of Red-Throated Divers in the Outer Thames Estuary SPA (XXX)***) there are no project alone concerns for either project based upon the effective area of displacement within the SPA. Based upon NE's preferred approach (assuming 100% displacement within the wind farm and extending the effect to 11.5km) there are no project alone concerns for East Anglia TWO based upon the effective area of displacement within the SPA. Whilst for East Anglia ONE North the effective area of displacement within the SPA using the NE approach would be greater than 1% of the SPA, the Applicants maintain that, this is not leading to an ecological consequence and as stated by NE (***Appendix 14b – Comments on Legal Submissions Concerning Displacement of Red-Throated Diver*** (REP7-070 "*the simple fact of an element of disturbance is not of itself enough to prove adverse effect on site integrity*").

3.2 In-Combination Effects

17. The Applicants confirm their understanding of the position from NE, that for both projects NE considers that there is potential for AEOI in-combination.
18. The Applicants confirm their position that following the modelling presented (***Displacement of Red-Throated Divers in the Outer Thames Estuary SPA (XXX)***) there are no project alone concerns for either project based upon the effective area of displacement within the SPA. The Applicants consider that East Anglia TWO is too far from the SPA boundary to have any effect at all and even using NE's precautionary approach, given the distance of the project from the SPA, the effect does not materially add to the in-combination totals. This position is also applied by the Applicants to those projects outside of the SPA boundary which NE had previously suggested should also be included in the in-combination assessment (i.e. Greater Gabbard, Galloper and Thanet).
19. The Applicants have questioned whether it is appropriate to include some or all of Kentish Flats, Gunfleet Sands and London Array within the in-combination

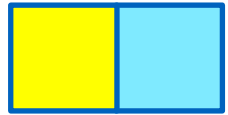


assessment, given the fact that some of these were operational prior to designation of the SPA and all were operation when the latest data on abundance and distribution upon which NE has based its latest advice were collected. Notwithstanding, the Applicant has included all of these projects in the in-combination assessment and provided both the results based on the Applicants' modelling and NE's approach. The Applicants conclude, on the basis of the modelling and information on ecological consequence, that there is no AEOI from East Anglia ONE North in-combination with the existing projects.

20. The Applicants and NE are in disagreement on the condition (or status) of the SPA and the red-throated diver population. The Applicants consider that the population is either stable or has greatly increased since designation and therefore the site appears to be performing well. NE consider that there is an existing AEOI from disturbance.
21. The Applicants note that the typical lifespan of red throated-divers is around 8 years and the operational windfarms have been present since 2005 so adverse effects would have begun showing up in the 2018 surveys (Irwin et al, 2019¹) (e.g. through reduced numbers of birds) but in fact they show the highest population estimates to date.
22. The Applicants contend that, at a minimum, the maintenance of the population at current size (if assumed that the original visual aerial surveys missed two-thirds of birds) or increased by up to three times (if assumed that the original visual aerial surveys recorded all birds present) indicates the SPA is in favourable status. Indeed, it is unclear on what basis this could reach the alternative conclusion (i.e. unfavourable status) given the positive population trend (or maintenance thereof).
23. Also of note is that the EU define red-throated diver population as 'secure' (green). The breeding population in the EU is described as stable in the short term and increasing in long term and the winter population in the EU is described as increasing in the short term although the trend long term is not measured².
24. The Applicants are in agreement with NE that the assessment of whether or not the RTD enjoys favourable conservation status is a matter for evidence and determination by the decision maker (**Appendix 14b – Comments on Legal Submissions Concerning Displacement of Red-Throated Diver** (REP7-070)).

¹ Irwin, C., Scott, M., S., Humphries, G. & Webb, A. 2019. HiDef report to Natural England - Digital video aerial surveys of red-throated diver in the Outer Thames Estuary Special Protection Area 2018. Natural England Commissioned Reports, Number 260

² EU 2021. <https://eunis.eea.europa.eu/species/Gavia%20stellata>



3.3 Matters Raised in Legal Submissions Relating to Displacement of RTD

25. See *Red-Throated Diver of the Outer Thames Estuary SPA: Concluding Legal Submissions* (REF).

3.4 Mitigation

26. The *Best Practice Protocol for Minimising Disturbance to Red-Throated Diver* was first submitted into the Examination at Deadline 3 (REP3-074) and committed the Applicants to a number of measures to reduce potential displacement impacts on red-throated diver.
27. In response to REP3-074, the NE submission at Deadline 4 (**Appendix A12 – Advice on RTD in the OTE SPA** (REP4-087)) queried how the Applicants will demonstrate that planned works during the construction and operation phases avoid the sensitive periods between November and end of February and where it is not possible to avoid works during the sensitive period how will vessel movements be managed to minimize disturbance to SPA features. Additionally, NE requested that the best practice protocol address the potential use of helicopters.
28. At this stage, the construction and operation and maintenance ports have not been confirmed but are anticipated to include Great Yarmouth for construction and the existing ScottishPower Operations and Maintenance base at Lowestoft. To address the comments made by NE, the Applicants commissioned Anatec Limited to establish vessel transit routes from both ports to the windfarm site avoiding, as far as possible, the SPA with a buffer either side of the route of 2km to account for the range over which red-throated diver are known to flush from vessels in transit.
29. The main component of the SPA overlaps the approaches to both ports and therefore it is not possible to avoid transiting through this part of the SPA. However, the mitigation routes have been specifically created to follow the navigation approaches to both ports, and thus limit the impact of the Projects' vessel movements to areas of existing navigation routes associated with the ports, where the densities of red-throated diver are typically relatively low. Once beyond the main components of the SPA, vessel traffic from either port has been routed through the gap between the main component and northern component of the SPA.
30. The Best Practice Protocol makes the point that all vessels associated with the Projects will use an automatic identification system (AIS) which broadcasts the location of the vessel and is monitored by the Projects' Marine Co-ordination Centre. The final Best Practice Protocol will include details of how the mitigation



route (or any alternate mitigation routes) will be communicated, enforced and monitored.

31. The Best Practice Protocol has also been updated at to address the use of helicopters which notes that the minimum safe altitude for helicopters operating offshore is 1000 feet above the highest known obstacle within 5nm. At this minimum altitude it is considered that any disturbance caused by the visual presence or noise of helicopters will be minimal and will not result in significant disturbance of red-throated diver. The Applicants confirm that there is potential for helicopters to be used during construction and/or operation.
32. The Examining Authority noted that the use of the ports at Great Yarmouth and Lowestoft is not confirmed and asked the Applicant whether the commitments made within the Best Practice Protocol would apply should the final ports selected be located elsewhere. The Examining Authority also queried whether the Applicant could revise the Best Practice Protocol document to commit to operating helicopters at the minimum flight altitudes specified. The Best Practice Protocol has been revised and submitted at Deadline 8 to include a commitment for its application to the final construction and operation and maintenance port(s), as required, and confirmation that helicopters, if used, will adhere to the minimum altitudes specified.

3.5 Monitoring

33. The Applicants have committed to undertake monitoring in respect of RTD and this is secured through the **Offshore In-principle Monitoring Plan (IPMP)** and associated conditions of the DMLs (conditions 17(1)(c), 20(2)(d) and 22(2)(e) of the Generation DML and conditions 13(1)(c), 16(2)(d) and 18(2)(e) of the Transmission DML).



4 Agenda Item 4: Kittiwake, Gannet, Razorbill, Guillemot and Seabird Assemblage of the Flamborough and Filey Coast SPA

4.1 In-Combination Effects

34. The Applicants are not aware of a change in NE's position since Deadline 5. The only remaining caveat from NE appears to be in relation to the final figures for Hornsea Project Four which are not expected within the Examination period. There will be no further changes to the Applicants' figures.

4.2 Monitoring

35. It is intended that monitoring/survey work already proposed to be undertaken at the East Anglia THREE project to monitor potential collision risk impacts on seabird species will be widened to incorporate the Projects. The final details of this are still to be agreed with NE and will be included in the final Monitoring Plan post consent however reference to such monitoring has been incorporated into the IPMP.



5 Agenda Item 5: Lesser Black-Backed Gull of the Alde Ore Estuary SPA

5.1 In-Combination Effects

36. The Applicants are not aware of a change in NE's position since Deadline 5.

5.2 Monitoring

37. The Applicants note this was discussed at the Hearings under previous agenda items and was therefore not discussed under agenda item 5.



6 Agenda Item 6: The Applicants’ ‘Without Prejudice’ HRA Derogation Case

6.1 Alternative Solutions

38. The Alternatives design question is addressed in the updated **HRA Derogation Case** (ExA.AS-7.D8.V3) and the Applicants responses to the ExAs second questions (REP6-061). Information previously presented in the Offshore Commitments document (REP3-073) were incorporated into the derogation case.
39. The Applicants consider that reduction of the capacity of East Anglia ONE North (as proposed by NE to move the windfarm further from the Outer Thames Estuary SPA) would reduce the contribution of the project to delivering the 2030 targets which would undermine the project objectives.
40. The Applicants have updated the figures presented within the HRA Derogation Case in line with the comments received from the ExA.

6.2 Imperative Reasons of Overriding Public Interest (IROPI)

41. A question arose in the Hearings during discussion of the Applicants’ without prejudice derogation case as to whether or not the extent of any harm to the SPA would affect the weight of public interest which would be required to establish IROPI.
42. The Applicants submit that as a matter of basic planning law, the extent of any harm must affect the weight of public interest required. Any matter within a planning judgement is a matter of balance, whereby benefit must overcome harm. In any such scenario, therefore, the extent of benefit which is required in order to secure a consent is entirely dependent upon the extent of the harm which must be overcome (and vice versa if a consent is to be refused). Such considerations necessarily apply to the IROPI balancing exercise.
43. Indeed, even the very title of the concept of Imperative Reasons of Overriding Public Interest encapsulates at this point. If something is to be “*overriding*” it must follow that the extent of what is required to be overridden must be considered.
44. Although the question as formulated by the ExA does not seem to have been a direct consideration in relevant caselaw, it is plain from such case law as does exist surrounding IROPI that the existence of a balancing exercise is integral to the process. Thus in *Commission v Italian Republic C-304/05 [2007] ECR I-7495*, it was adjudged that the Italian Republic, which wished to develop a skiing area



which would have adverse effects on an SPA, had not performed an adequate appropriate assessment. Accordingly the court considered that it was impossible for the Italian Republic to have adequately weighed up the damage to the site against any imperative reasons of overriding public interest. Clearly then, this case encapsulated the principle that, in order to perform the IROPI balancing exercise, the extent of the harm done to the European site has to be identified.

45. The Applicants consider that the **HRA Derogation Case** (ExA.AS-7.D8.V3) states the level of effect and that this will not change in scale irrespective of whether or not this effect is deemed to cause adverse effect on integrity. The Applicants do not consider that there would be any material change to the derogation case if the starting point was the assumption of AEol rather than the Applicants' current position.

7 Agenda Item 7: Compensatory Measures

7.1 Content

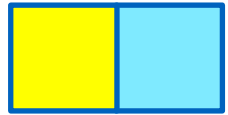
46. The Applicants submitted the **Offshore Ornithology Without Prejudice Compensation Measures** (REP6-045) at Deadline 6 which presented compensation measures for SPA sites and features for which NE has concluded AEol or is unable to rule out AEol. The measures include for provision of nesting structures for kittiwake and gannet, rat eradication at razorbill and guillemot colonies, predator fencing at the Alde Ore Estuary SPA for lesser black-backed gull and vessel routing measures in respect of red-throated diver. In response to this, NE provided comments and advice at Deadline 7 (**Appendix 15b – Response to Offshore Ornithology Compensation and Derogation Documents** (REP7-071)). Following this, the Applicants, MMO and NE discussed each of the proposed measures at a workshop on the 10th March 2021. In addition to the 'direct measures' included within the **Offshore Ornithology Without Prejudice Compensation Measures** (REP6-045), the Applicants presented several 'indirect measures'. It was agreed at the workshop that the Applicants would update the Offshore Ornithology Without Prejudice Compensation Measures addressing the comments made by NE at Deadline 7 and actions taken in the workshop as far as possible in addition to further exploring an indirect measure to reduce ornithological bycatch in some types of fishing gear.
47. The updated version has been submitted at Deadline 8 (ExA.AS-8.D8.V2) and includes:
 - Inclusion of the 95% confidence intervals;



- An 'indirect' compensation measure covering by-catch which is relevant to several species;
 - Further detail on potential sites for rat eradication;
 - Acknowledgement of ongoing discussion between the Applicants, Defra and NE regarding the potential for strategic or collaborative compensation (covering kittiwake and lesser-black backed gull);
 - Further detail on the red-throated diver compensation accounting for ExA comments in the Hearings relating to what proportion of vessel traffic within the SPA that the vessel routing measures for East Anglia THREE would account for and regarding inclusion of a figure describing the vessel routing measures identified for East Anglia THREE.
48. The Applicants maintain that given the lack of any definitive guidance from Government and the evolving nature of discussions with Defra and Natural England, there needs to be a pragmatic approach to the level of detail required at this stage in the compensation measures proposed. The Applicants have provided an outline measure for each feature and a mechanism for taking this forward if required. In addition, the Applicants reiterate that the scale of their contribution to in-combination effects are small and the approach taken and level of detail at this stage are proportionate.

7.2 DCO/DML Security

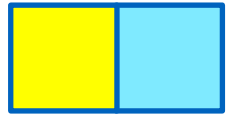
49. The Applicants submitted an updated **draft DCO** at Deadline 7 (REP7-006) (which has been further updated at Deadline 8 (document reference 8.1)). Square bracketed within that is a new Article (Article 44) which would give effect to a new square bracketed schedule (Schedule 18 – compensatory measures).
50. The Applicants consider that, given that the potential impacts relate to the operation of the generating station, which is being authorised by the DCO, it is appropriate that any requirement for compensation is secured as part of the DCO. On that basis it is also considered appropriate that any further approval of compensation details in terms of Schedule 18 fall to the Secretary of State (with appropriate prior consultation). On that basis it is not considered that any further provisions within the deemed marine licences are necessary or appropriate.
51. Schedule 18 is separated into different parts, with each part securing the submission and approval of a species specific compensation and monitoring plan (which plan will be in accordance with the relevant Appendix of the **Offshore Ornithology Without Prejudice Compensation Measures** (ExA.AS-8.D8.V2) which is to be certified in due course, should the Secretary of State consider compensation measures are required).



52. The Applicants' position remains that there will be no adverse effect on the integrity of any European Site as a result of the Projects alone or in combination. And so the Applicants submit that this Schedule should be removed wholesale from the Development Consent Orders as made. However, if the Secretary of State takes a different view, the proposed structure of the schedule would allow the compensation measures for one species to be changed or removed without affecting the operation of compensation for other species.
53. The drafting within the Schedule is based on and is very similar to that approved by the Secretary of State for the Hornsea Project Three DCO (the only offshore wind DCO to require to provide compensation as part of its consent to date).
54. The drafting, in our submission, strikes an appropriate balance between detailing the required compensation whilst leaving room (and a clear mechanism) for further refinement and development along with relevant stakeholders and as ultimately approved by the Secretary of State.
55. Article 44 and Schedule 18, if incorporated into the DCO, therefore secures the delivery of compensation measures in advance of any possible contribution to an adverse effect from the Projects.
56. Looking in a little more detail at the structure of Schedule 18, for each species the Applicants have proposed:
- The establishment of a compensation steering group prior to commencement of the authorised development;
 - Preparation and approval of an implementation and monitoring plan by the Secretary of State which will be based on the relevant Appendices of the **Offshore Ornithology Without Prejudice Compensation Measures** (ExA.AS-8.D8.V2) document and with the benefit of input from the steering group in the plan's preparation;
 - Provision for adaptive management measures if required;
 - A requirement to implement the compensation measures as approved under the implementation and monitoring plan.
57. On timing of delivery the Applicants would explain the proposed approach as follows:
- The Applicants consider it has identified appropriate compensation for each potential adverse effect (without prejudice and contingent on the Secretary of State identifying the need for compensation);



- The Applicants further submit that the mechanism in Schedule 18 secures the delivery of that compensation;
 - On the basis that the appropriate juncture by which that compensation should ideally be in place is prior to the alleged adverse effect occurring. That is what is secured by the various parts of Schedule 18. It is noted that this is not dissimilar to the staged approach to securing the delivery of mitigation commonly used in planning permissions and DCOs to address other environmental impacts (for example, in the context of radar mitigation requirements).
58. For some species, there will be a time lag between (i) the Applicants' works to put in place the agreed compensation measures and (ii) those efforts then translating into additional birds within a SPA population. In particular looking at the proposed compensation measures for kittiwake and gannet, the establishment of artificial nesting structures is predicted to result in increased fledglings, some of whom will subsequently be recruited into the Flamborough and Filey Coast SPA, providing compensation of any birds lost as a result of the windfarm's operation. There is likely to be a delay, therefore, between establishing the nesting site and the full ecological benefit being realised at the SPA.
59. For that reason, in the context of its project, Hornsea Project Three's compensation proposals for kittiwake have incorporated a requirement for the structure to be available for initial colonisation at least four years prior to the commencement of windfarm operation. That was in response to a suggestion that, otherwise, for each year of delay the windfarm would accrue a mortality debt which would need to be paid off over the course of the compensation's operation.
60. In the case of these Projects, however, (and very different to the findings in Hornsea Project Three), the very small numbers of kittiwake potentially affected means that the size of any debt which may be accrued in the early years of turbine operation is also very small. Given the levels of compensation predicted once compensation measures are delivering to full effect, the need for that lead in period does not exist for these Projects.
61. For gannet, given that the 'compensation' would be feeding into an already growing (not declining) population, there is arguably no need for a measure to start to function immediately. For the auks and lesser black backed gull, removal of predator pressure would have very quick effects (after the first season) and again no long lead-in is required given the small percentage of contribution to the in-combination totals.



62. Finally, for RTD, given that NE says that disturbance is the issue, removal of that disturbance is considered to be adequate. In addition, given that no ecological consequence has been proven and NE cannot point to any evidence of this, it is likely that any monitoring would be compliance monitoring of transit routes and therefore not required ahead of construction.

7.3 Securing funding for compensation

63. The Applicants have submitted an ***Offshore Ornithology Compensation Measures Funding Statement*** [REF] at Deadline 8 providing details of how the compensation measures will be funded.
64. The Applicants have also updated the draft DCO to include a provision within each part of Schedule 18 requiring that prior to commencement, the undertaker must provide a reasonable estimate of the cost of delivery of the relevant compensation measure(s) to the Secretary of State and must demonstrate how funding is secured, which must be to the reasonable satisfaction of the Secretary of State.



8 Agenda Item 11: Marine Mammals

8.1 Harbour Porpoise of the Southern North Sea SAC: Project Alone Effects

8.1.1 UXO 'Close Out Report'

65. The Applicants updated the **draft DCO** (REP7-007) at Deadline 7 to secure submission of a UXO 'close out report' in condition 16 of Schedule 13 and condition 12 of Schedule 14. This was in response to comments from the Marine Management Organisation (MMO) at Deadline 4 (REP4-081).
66. Conditions 16(6) and 13(6) state that should there be more than one UXO clearance activity, the UXO 'close out report' may be provided at intervals agreed with the MMO. The Applicants have submitted an updated **draft DCO** (XXX) at Deadline 8 which replaces 'may' with 'will' as agreed with the MMO at a meeting on the 11th March 2021.
67. The MMO also requested the inclusion of a time period for submission of the close out report in paragraph (5) of each condition and this has been included in the updated **draft DCO** at Deadline 8.
68. It is understood that with these changes, the 'close out report' condition is acceptable to the MMO.

8.1.2 Control of piling and UXO detonations

69. The Applicants updated the **draft DCO** (REP7-007) at Deadline 7 with the addition of condition 27 of Schedule 13 and condition 23 of Schedule 14 to control piling and UXO detonations. These conditions prevent concurrent piling, concurrent UXO detonations or a combination of the two, and restrict the number of noisy events to a single event within a 24-hour period during the Southern North Sea Special Area of Conservation (SNS SAC) winter period.

8.1.3 Inclusion of Unexploded Ordnance (UXO) Clearance Activities within the DMLs

70. At the Hearings the MMO confirmed that they maintain their position that UXO clearance activities should be licenced through a separate Marine Licence. However, the MMO has advised that without prejudice to this position, if UXO clearance activities were to be included within the DMLs, they would want to see conditions addressing the following matters included within the DMLs:
 - Timings for submission of UXO clearance documents – the MMO confirmed that the timescales included in the draft DCO at Deadline 5 were acceptable at ISH7 and in REP6-104 (also, see section 9.5.1 below);
 - Inclusion of an updated SIP condition (see section 9.2.2 below); and



- Inclusion of a UXO close out report (see section 9.1.1 above).

71. The Applicants' position is that all of the matters raised by the MMO have been addressed and the Applicants consider that UXO clearance activities are therefore sufficiently controlled within the DMLs and for the reasons set out in previous submissions, the Applicants consider that it is appropriate for the DMLs to include UXO clearance activities.

8.2 Harbour Porpoise of the Southern North Sea SAC: In-Combination Effects

8.2.1 In-Principle Site Integrity Plans

72. The Applicants updated the ***In-Principle Southern North Sea Special Area of Conservation Site Integrity Plan*** (IPSIP) (REP7-032) at Deadline 7 to address comments from the MMO (REP6-104) and NE regarding the use of the Site Integrity Plan (SIP) to manage project-alone effects. As a result, the Applicants removed references to 'project-alone' from the document as well as the project-alone commitments in section 4.1 of the document. The scope of the IPSIP is therefore focused solely on setting out the approach to deliver mitigation measures to ensure the avoidance of AEoI of the designated features of the SNS SAC in-combination with other plans or projects.

8.2.2 Southern North Sea SAC Site Integrity Plan

73. Alongside the updates made to the IPSIP, the Applicants updated the ***draft DCO*** (REP7-007) to include a new condition 26 of Schedule 13 and condition 22 of Schedule 14 with respect to a SNS SAC Site Integrity Plan following a request from the MMO in REP5-075. The wording of the condition was agreed with the MMO at a meeting on the 2nd March 2021.

74. The MMO has since requested that the DMLs include separate SIP conditions for piling activities and UXO activities and so the Applicants have removed reference to UXO clearance activities from the current SIP condition and have inserted a new SIP condition in the same terms for UXO clearance activities. This is reflected in the draft DCO submitted at Deadline 8.

75. The ExA requested submission of the guidance referred to in the condition (Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs Joint Nature Conservation Committee Report No.654, May 2020 published in June 2020). This was submitted into the Examination previously (AS-045).

8.3 Draft Marine Mammal Mitigation Protocols

76. The Applicants updated the ***Draft Marine Mammal Mitigation Protocol*** (REP7-029) at Deadline 7. Section 5.2.2 of the main report and Appendix 1 were updated to amend the marine mammal swim speed in response to comments made by



NE (**Appendix B3 – Comments on MMMP** REP4-090)). A swimming speed of 1.8m/s was used in the previous draft (REP3-043) as a precautionary, yet realistic swimming speed for marine mammals fleeing an area in response to acoustic deterrent device (ADD) activation and soft-start. As outlined in **Chapter 11 Marine Mammals** (APP-059) of the Application, a swimming speed of 1.5m/s is highly conservative and based on an average swimming speed for harbour porpoise mother calf pairs. Harbour porpoise have been recorded swimming at speeds of up to 4.3m/s and during playbacks of pile driving sounds, harbour porpoise swimming speed was 1.97m/s. However, following comments from NE, the Applicants have reverted back to a 1.5m/s swim speed within the **Draft Marine Mammal Mitigation Protocol** (REP7-029).

8.4 Offshore In-Principle Monitoring Plan

77. The Applicants updated the **Offshore In-principle Monitoring Plan** (IPMP) (REP6-015) at Deadline 6 to secure the following commitments:
- Inclusion of a location during installation of the first four foundations of each foundation type where underwater noise levels are predicted to be the loudest (based on the results of the pre-construction site investigation); and
 - Inclusion of the marine mammal monitoring programme using passive acoustic monitoring (PAM) buoys to monitor the behaviour of harbour porpoise to underwater noise.
78. NE's Deadline 7 submission (**Appendix F9 – All Other Matters Update** (REP7-074)) welcomed these commitments but made a comment against the inclusion of the word '(statistically)' in the sentence "*In the event that the monitoring shows noise levels which are significantly (statistically) different to those assessed in the ES*" (Table 4, Row 1 of the **Offshore In-principle Monitoring Plan** (REP6-015)). NE advised that the word '(statistically)' should be removed.
79. The Applicants had agreed to include the word 'statistically' through engagement with the MMO to clarify the reference to 'significant'. However, at ISH15 on 19th March 2021, the MMO confirmed that they agreed to the word 'statistically' being removed.

8.5 DCO/DML Matters

8.5.1 Timescales for Discharge of Documents Relating to UXO Clearance Activities

80. The timescales for discharge of documents relating to UXO clearance activities have been agreed with the MMO and NE.



8.5.2 'Co-operation' Condition

81. The Applicants updated the co-operation condition at Deadline 7 (Condition 25 of the Generation DML and condition 21 of the Transmission DML) to address comments raised by the ExA. The MMO confirmed at the Hearings that this condition is agreed.

8.6 Any Other Marine Mammal Matters

82. The Applicants noted that there was an outstanding comment from MMO regarding updated noise modelling to consider the number of piles that are likely to be installed in a 24-hour period, and then base the cumulative noise exposure assessment on this. The Applicants have previously responded that whilst there is the potential that more than one pile could be installed in the same 24-hour period (i.e. sequentially), there would be no further (or limited) cumulative noise exposure. Marine mammals would have been disturbed from the area during the first piling event and therefore would not be at further risk of injury (including PTS SELcum) from the installation of the second pile as the marine mammals would have been disturbed already beyond the potential impact range of PTS.
83. Given that this has continued to be a point of disagreement, the Applicants have undertaken the modelling requested and submitted this (ExA.AS-15.D8.V1). The modelling supports the position of the Applicants as it shows that there is a negligible increase in effect with the consideration of sequential piling.

9 Agenda Item 12: Terrestrial Ecology

9.1 Nightjar and Woodlark of the Sandlings SPA

9.1.1 Outline SPA Crossing Method Statement

84. The Applicants have sought to address NE's representation on the open trench method for crossing the Sandlings SPA, including the provision of a 10-year habitat management plan at Work No. 12A (which excludes the horse paddock area which is subject to a 5 year management plan); annual monitoring of mitigation; and a seasonal restriction on works within Work No. 12 and its associated 200m SPA crossing buffer.
85. It is understood that NE's updated advice on terrestrial ecology will be provided at Deadline 8.
86. The Applicants note that, as per NE's Deadline 5 submission: **Appendix C7 - NE Terrestrial Ecology Update** (REP5-084), NE advise that an AEol of the Sandlings SPA is unlikely to occur from an open cut trench option.
87. Subject to NE's Deadline 8 submission being made available, the Applicants consider the only matter to be currently outstanding is NE's request for the



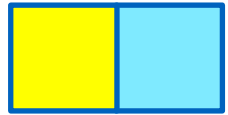
inclusion of a requirement which ensures that the proposed mitigation measures in the form of planting must be functioning as nesting habitats before any works can commence within the boundary of the SPA.

88. Whilst the Applicants can control how this mitigation habitat is prepared, it cannot control the extent to which avian species use this mitigation area. Such a requirement is therefore inappropriate and unacceptable to the Applicants. It should be noted that the preparation of the mitigation habitat will consist of the cutting back of scrub rather than planting of new areas.

9.1.2 Outline Watercourse Method Statement

9.1.2.1 Classification of the woodland at the Hundred River

89. The Applicants are disappointed that NE continues to question the classification of the woodland at the Hundred River crossing in spite of the evidence provided by the Applicants and supported by the Councils at ISH7.
90. All surveys undertaken to date have been done so in accordance with the 'Extended Phase 1' methodology as set out in Guidelines for Baseline Ecological Assessment (Institute of Environmental Assessment, 1995) and by suitably qualified professional ecological surveyors. Across the ecological profession, it is accepted that Phase 1 habitat surveys can be conducted all year round. However, the Applicants acknowledge that the optimum time to have undertaken the February 2021 survey would have been between April and September. The Applicants also acknowledge that follow-up botanical surveys can be required to supplement Phase 1 habitat surveys undertaken at sub-optimal times of year, but this is subject to the findings of the Phase 1 and whether the surveying ecologist deems further data is necessary to reach a robust conclusion. The ExA should note that the primary aim of the February 2021 survey was to verify the habitat classification assessment of the area already undertaken in April 2018.
91. Whilst the Applicants are not aware if NE has visited this area, it is understood that it agrees with SEAS' conclusion that the woodland onsite should be classified as 'wet woodland'. The information submitted by SEAS to support its conclusion was obtained from a visit undertaken in January 2021 (as stated in their **Post Hearing Submission (ISH3)** (REP5-108)). With this in mind, NE's assertion (**Appendix C8 – Comments to the Ecology Survey Results** (REP7-073)) that the Applicants' survey did not follow standard best practice in relation to timing and ground conditions should certainly apply to SEAS' submission also, and in any event also fails to recognise that the Applicants' survey was undertaken as a result of the SEAS information being submitted.
92. The Applicants' full survey details are reported within **Ecology Survey Results – February 2021** (REP6-035). As stated, acknowledging the limitations associated with the February 2021 survey, the surveyors were still able to make



a robust assessment using winter species identification guidance and professional expertise to confirm the classification from the original extended Phase 1 habitat survey undertaken in 2018.

93. As stated at ISH7, the Applicants concluded that the area of woodland and grazing pasture adjacent to the proposed Hundred River crossing location is semi-natural broadleaved woodland (and not wet woodland), running water (the Hundred River) and poor semi-improved grassland.
94. This conclusion was also supported by the independent survey undertaken by ESC and SCC ecologists, as confirmed verbally to the ExA at ISH7 and subsequently supported by ESC written submission at Deadline 6 (**Summary of Oral Case Issue Specific Hearing 7** (REP6-075)). ESC states

“we agree with the habitat characterisation of area as set out in the ES. We do not consider that the area within the red line boundary is wet woodland as defined by the JNCC”.

95. The Applicants have committed to undertaking a pre-construction survey (within the optimal survey window) entire onshore development area, including the areas subject to the February 2021 survey. The findings of which, should they differ from those recorded to date, will be used to inform the requirement for mitigation measures and/or licensing requirements. The commitment to preconstruction surveys is specified within the **Outline Landscape and Ecological Management Strategy** (REP6-007).

9.1.2.2 Accesses 5 and 6

96. The Applicants confirmed that as a result of further engagement with potential suppliers and the transport and traffic specialists, the access required at access 5 and 6 (**Figure 26.2** of the ES (**Access Locations and Associated Onshore Infrastructure** (APP-307))) can be narrowed to reduce the extent of vegetation to be removed. This is achieved through the primary use of access 9 at Snape Road and the temporary haul road to access the wooded area to the west of Aldeburgh Road and to access the wooded area between Aldeburgh Road and the Hundred River; and the use of temporary traffic signals to manage traffic at this interface with the Aldeburgh Road.

9.1.2.3 Working width at Hundred River

97. The Applicants confirmed that the onshore cable route could not be reduced to 16.1m at the Hundred River for a number of reasons, including:
- The need to divert the river to allow safe and efficient construction through the Hundred River (as described in the Outline Watercourse Crossing Method Statement);



- As vehicles cannot pass over the Hundred River, vehicles, in particular HGVs, approaching from the west must be provided with a safe area for reversing/manoeuvring, allowing the vehicle to 'drive forward' when exiting the works and travelling westward;
- Working around water requires additional safety considerations for the construction workforce.

9.1.2.4 SSSI/SPA data

98. The Applicants highlighted that the data used to inform the EIA were not solely from the site-specific survey undertaken by the Applicants. As stated in Chapter 23 Onshore Ornithology (APP-071) the Applicants used several long term data sets provided by the RSPB (Woodlark Observations 2009-2018, Nightjar Observations 2009-2012, 2014, 2016-2018, Turtle Dove Observations 2012-2013, 2015-2018, Nightingale Observations 2009-2018 and Dartford Warbler Observations 2009-201) as well as records within, and up to 2km from, the onshore ornithology study area from the Suffolk Biodiversity Information Service. Barn owl monitoring information from 2018 was provided The Suffolk Community Barn Owl Project, for the onshore ornithology study area. It is standard practice to base the ecological assessments on as wide a range of evidence as possible and not just rely on dedicated survey.

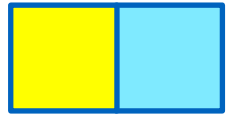
9.1.2.5 Air quality

99. Regarding SEAS' statements on air quality, including emissions of ammonia from vehicles and plant, the Applicants' position is set out in their Deadline 6 submission (***Applicants' Comments on Suffolk Energy Action Solutions (SEAS) Deadline 5 Submissions*** (REP6-032)).

10 Agenda Item 13: Any Other Business

10.1 Artificial lighting and Bats

100. All lighting requirements associated with the Projects will accord with industry accepted guidance such as, but not limited to the Bat Conservation Trust (BCT) and the Institute of Lighting Engineers (ILE). Mitigation measures to reduce the effects of lighting on roosting and commuting bats are presented within the ***Outline Landscape and Ecological Management Strategy*** (REP6-007). Following application of this mitigation, impacts upon bats are predicted to be moderate adverse in the short term, and minor adverse in the medium term (para. 225, APP-070).



10.2 Onshore Substation Site

101. The onshore substation locations have been surveyed by suitably qualified ecologists and in accordance with industry guidance. All habitats present at the time of the survey have been recorded and mapped, as presented in **Chapter 22** of the Environmental Statement (APP-070). Preliminary assessments of all habitats and their suitability to support legally protected and/or notable species have been undertaken and where suitable habitat has been noted, further species-specific surveys (e.g. bat activity surveys, badger presence/absence surveys) have been undertaken. Full details and survey findings are presented in **Chapter 22** (APP-070) and/or accompanying technical appendices.
102. Where the presence of species has been recorded, these are presented in **Chapter 22** (APP-070) and appropriate mitigation measures identified.
103. [REDACTED]
and a Letter of No Impediment (LONI) from Natural England is currently being sought. All badger mitigation works will be undertaken in accordance with an approved method statement and badger mitigation licence obtained from Natural England.
104. The badger mitigation measures are secured in the same way as the other onshore ecological commitments in the **Outline Landscape and Ecological Management Strategy** (REP6-007), which is that under Requirement 21 of the DCO an Ecological Management Plan must be produced which accords with the **Outline Landscape and Ecological Management Strategy**, and which must be carried out as approved.
105. All habitats which support legally protected and notable species will be reinstated as far as possible, or replanted where reinstatement cannot be undertaken. Additional habitat is also being created as part of the Outline Landscape Mitigation Plan. This includes the creation of new areas of native woodland, species-rich hedgerow and species-rich and wet grassland.
106. The Ecological Clerk of Works will have responsibility for ensuring that all measures that are set out within the Ecological Management Plan are adhered to during construction.