

Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects

Habitats Regulations Assessment Updates Signposting Note

Revision A Deadline 4 May 2023 Document Reference: 5.4.4









Title:					
Sheringham Shoal and Dudgeon Offshore Wind Farm Extension Projects Examination submission Habitats Regulations Assessment Signposting Note					
PINS document no.: 5.4.4					
Document no.: C282-RH-Z-GA-00287					
Date:	Classification				
May 2023	Final				
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Glossary of Acronyms

DCO	Development Consent Order	
DEL	Dudgeon Extension Limited	
DEP	Dudgeon Offshore Wind Farm Extension Project	
FFC	Flamborough and Filey Coast	
HRA	Habitats Regulations Assessment	
LSE	Likely Significant Effect	
PVA	Population Viability Analysis	
RIAA	Report to Inform Appropriate Assessment	
SAC	Special Area of Conservation	
SEL	Scira Extension Limited	
SEP	Sheringham Offshore Wind Farm Extension Project	
SPA	Special Protection Area	



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Glossary of Terms

Dudgeon Offshore Wind Farm Extension Project (DEP)	The Dudgeon Offshore Wind Farm Extension onshore and offshore sites including all onshore and offshore infrastructure.	
Sheringham Shoal Offshore Wind Farm Extension Project (SEP)	The Sheringham Shoal Offshore Wind Farm Extension onshore and offshore sites including all onshore and offshore infrastructure.	
The Applicant	Equinor New Energy Limited. As the owners of SEP and DEP, Scira Extension Limited and Dudgeon Extension Limited are the named undertakers that have the benefit of the DCO. References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of SEL and DEL as the undertakers of SEP and DEP.	



1 Introduction

- 1. This document signposts to the Applicant's Examination submissions which provide updates to the assessments presented within the **Report to Inform Appropriate Assessment (RIAA)** [APP-059]. This is intended to assist stakeholders and the Examining Authority in identifying the most recent material upon which to review and comment. This document has been produced for submission into examination at Deadline 4.
- 2. As the owners of the Sheringham Shoal Offshore Wind Farm Extension Project (SEP) and Dudgeon Offshore Wind Farm Extension Project (DEP), Scira Extension Limited (SEL) and Dudgeon Extension Limited (DEL) are the named undertakers that have the benefit of the Development Consent Order (DCO). References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of SEL and DEL as the undertakers of SEP and DEP.

1.1 Offshore Ornithology

- 3. The Applicant submitted an **Apportioning and Habitats Regulations Assessment** (HRA) Updates Technical Note at Deadline 1 [REP1-057]. This was undertaken at the request of Natural England, who in a Discretionary Advice Service letter dated 16/09/2022 and subsequently in Appendix B of their Relevant Representation [RR-063], indicated that potential impacts should be re-estimated for the following populations:
 - Alde-Ore Estuary SPA lesser black-backed gull (operational phase collision)
 - FFC SPA gannet (operational phase displacement and collision)
 - FFC SPA guillemot (operational phase displacement)
 - FFC SPA kittiwake (operational phase collision)
 - FFC SPA puffin (operational phase displacement)
 - FFC SPA razorbill (operational phase displacement)
 - Greater Wash SPA red-throated diver (construction phase displacement / barrier effects and operational phase displacement)
 - Greater Wash SPA Sandwich tern (operational phase collision)
 - North Norfolk Coast SPA Sandwich tern (operational phase collision)
 - Greater Wash SPA little gull (operational phase collision)
- 4. In addition to these updates, the Deadline 1 version [REP1-057] included:
 - Updated FFC SPA razorbill calculations following the identification of an error in the **RIAA** [APP-059]; and
 - Presentation of revised Population Viability Analysis (PVA) results for gannet, kittiwake, guillemot and razorbill in respect of FFC SPA.
- 5. The Apportioning and Habitats Regulations Assessment (HRA) Updates Technical Note was subsequently updated to Revision B at Deadline 2 [REP2-036] to include an assessment of the seabird assemblage feature of the FFC SPA which was requested by Natural England at a meeting on 15/11/2022 and which concludes



that there will be no adverse effect on integrity from the project alone or incombination.

6. The Applicant is intending to update the **Apportioning and HRA Updates Technical Note** at Deadline 5 to seek to address comments received from Natural England in REP3-143.

1.2 Marine Mammals

- 7. The Applicant has submitted a Marine Mammals Technical Note and Addendum [REP3-115] at Deadline 3. This document provides updated assessments to address comments received from Natural England within their Relevant Representation [RR-063]. The key updates requested by Natural England were as follows:
 - Updates to both grey seal and harbour seal baseline information (including updated density estimates and SAC population estimates);
 - Updates to the assessment for disturbance to (a) provide a review of the potential for disturbance to all assessed marine mammal species; (b) take account of the worst-case disturbance ranges provided within the literature; (c) update the assessment of disturbance against the spatial (20%) thresholds for the harbour porpoise Southern North Sea SAC (d) provide population modelling to determine population level consequences of disturbance from piling; (d) determine requirements for mitigation of disturbance; and (e) provide updates to the assessment of disturbance from Acoustic Deterrent Devices (ADD) to incorporate actual required durations (f) provide an updated assessment for the potential for barrier effects to grey seal and harbour seal; and
 - Updates to the in-combination assessment to include (a) project specific data where it is available; (b) an assessment of both geophysical and seismic surveys as a moving noise source; (c) an update to the assessment against the harbour porpoise Southern North Sea SAC seasonal (10%) thresholds (ed) an assessment of the corrected number of vessels for the SEP and DEP construction scenario; (e) population modelling to determine population level consequences of disturbance from piling at all included offshore wind farms; (f) further consideration of the potential for cumulative disturbance at seal haul-out sites.
- 8. The note also addresses a request made by the Marine Management Organisation within their Relevant Representation [RR-053], regarding an updated assessment of disturbance using the dose response curve approach.
- 9. The marine mammal updates have not resulted in any changes to the screening or appropriate assessment outcomes however for the Southern North Sea, Humber Estuary and The Wash and North Norfolk Coast SACs, updates to the assessment / adverse effect conclusion text and related cross references within the HRA Integrity Matrices (Revision B) [document reference 5.4.3] have been undertaken to reflect the updates in the Marine Mammals Technical Note and Addendum [REP3-115].



1.3 Onshore Ecology

10. The Applicant submitted at Deadline 2 the Report to Inform the Appropriate Assessment (RIAA) (onshore) Technical Note [REP2-050] which provides an updated assessment for the white-clawed crayfish, brook lamprey and bullhead features of the River Wensum SAC. These three features were originally screened out for indirect effects but following consultation with Natural England they were screened in on a precautionary basis because of the potential risk to these species should there be a 'bentonite break out', that is release of the drilling fluid into the river. The assessment concluded that, accounting for the mitigation measures secured in the updated Outline Ecological Management Plan (Revision C) [REP3-068] and the updated Outline Code of Construction Practice (Revision D) [document reference 9.17], there would not be any adverse effects on any of the three features.

1.4 Screening and Integrity Matrices Updates

- 11. The Habitats Regulations Assessment (HRA) Screening Matrices (Revision B) [document reference 5.4.2] have been updated at Deadline 4 as follows:
 - Greater Wash Special Protection Area (SPA) Common Scoter screening assessment provided (concludes no potential for likely significant effect (LSE));
 - Flamborough and Filey Coast (FFC) SPA seabird assemblage screened in and assessed (Section 1.1);
 - Greater Wash SPA and North Norfolk Coast SPA Sandwich tern displacement effects: Following agreement with Natural England that a displacement assessment for Sandwich tern is not required (see ID 15 of the Draft Statement of Common Ground with Natural England (Offshore Ornithology) [REP2-045]), the Greater Wash SPA and North Norfolk Coast SPA screening matrix tables have been updated to screen out displacement effects for Sandwich tern; and
 - River Wensum Special Area of Conservation (SAC) additional features (whiteclawed crayfish, brook lamprey and bullhead) screened in and then assessed (Section 1.3) for potential adverse effect on integrity.
- 12. The **HRA Integrity Matrices (Revision B)** [document reference 5.4.3] have been updated at Deadline 4 as follows:
 - Updates to the River Wensum SAC integrity matrix to add the three qualifying features previously screened out;
 - Updates to the FFC SPA integrity matrix to add the seabird assemblage feature previously screened out; and
 - For other relevant integrity matrices (i.e. those sites / species which have been subject to updated assessments), updates to the assessment / adverse effect conclusion text (including predicted mortality numbers) and related cross references, have been provided to reflect the updated assessments submitted during the Examination phase.



2 Summary

13. **Table 1** provides a summary of the SEP and DEP HRA documents and their update status.

Table 1: Submitted SEP and DEP HRA documents with a description of their updates and
a reference to the most recent revision

Document Title	Deadline(s) at which Document was Submitted	Reason for Update	PINS Document Reference for Most Recent Revision
RIAA	N/A (submitted with DCO application)	N/A	APP-059
Apportioning and HRA Updates Technical Note	Deadline 1 and Deadline 2. Update planned for Deadline 5	 Address stakeholder comments Correct errors 	Revision B [REP2- 036]
Marine Mammals Technical Note and Addendum	Deadline 3	Address stakeholder comments	REP3-115
RIAA (onshore) Technical Note	Deadline 2	Address stakeholder comments	REP2-050
HRA Screening Matrices	Deadline 4	Address stakeholder comments	Revision B [document reference 5.4.2]
HRA Integrity Matrices	Deadline 4	Reflect updated screening outcomes and assessments	Revision B [document reference 5.4.3]