

REPORT

Boston Alternative Energy Facility

Fifth Report on Outstanding Submissions

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Glossary of Acronyms

Term	Definition
AEOI	Adverse Effect on Integrity
BAEF	Boston Alternative Energy Facility
BEIS	Business, Energy and Industrial Strategy
BFFS	Boston and Fosdyke Fishing Society
BNG	Biodiversity Net Gain
CCGT	Combined Cycle Gas Turbine
CEMP	Construction Environmental Management Plan
DBBG	Dark-Bellied Brent Goose
DCO	Development Consent Order
DML	Deemed Marine Licence
EA	Environment Agency
EIA	Environmental Impact Assessment
ES	Environmental Statement
ExA	Examining Authority
FLL	Functionally Linked Land
GHG	Greenhouse Gas
HMA	Habitat Mitigation Area
HRA	Habitats Regulations Assessment
IFCA	Eastern Inshore Fisheries and Conservation Authority
LEMS	Landscape and Ecological Mitigation Strategy
LNR	Local Nature Reserve
MCA	Maritime and Coastguard Agency
MHWS	Mean High Water Springs
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MOTH	Mouth Of The Haven
NE	Natural England
NMP	Navigation Management Plan
NRA	Navigation Risk Assessment
OCIMP	Ornithology Compensation Implementation and Monitoring Plan
OEG	Ornithology Engagement Group
OLEMS	Outline Landscape and Ecological Mitigation Strategy

Term	Definition
PoB	Port of Boston
PTS	Permanent Threshold Shift
RDF	Refuse Derived Fuel
SAC	Special Area of Conservation
SPA	Special Protection Area
SNCB	Statutory Nature Conservation Body
SoS	Secretary of State
SPA	Special Protection Areas
SOCG	Statement of Common Ground
SSSI	Site of Special Scientific Interest
UKWIN	United Kingdom Without Incineration Network

1 Introduction

- 1.1.1 This ‘Fifth Report on Outstanding Submissions’ is for the Boston Alternative Energy Facility (the Facility). This report is on behalf of Alternative Use Boston Projects Limited (the Applicant), to support the application for a Development Consent Order (DCO) (the DCO application) that has been made to the Planning Inspectorate under Section 37 of the Planning Act 2008 (the Act).
- 1.1.2 This report responds to any outstanding comments raised by Interested Parties at Deadline 8.
- 1.1.3 In order to assist the Examining Authority, we have provided a summary of all the documents submitted by Interested Parties at Deadline 8 and whether a response is considered required and if so where it is provided (see **Table 1-1**).

Table 1-1 Deadline 8 Submissions

Stakeholder	Document	Response Status
Environment Agency	Update on Environment Agency Position on outstanding issues (REP8-019)	The Applicant has provided a response below in Table 2-1 .
Marine Management Organisation (MMO)	Deadline 8 Submission - Comments on responses to Third Written Questions (ExQ3), revised draft DCO and information submitted by the Applicant or Interested Parties at Deadline 6 (REP8-020)	The Applicant has provided a response below in Table 2-2 .
Natural England (NE)	Deadline 8 Submission - Cover Letter (REP8-021)	The Applicant has provided a response below in Table 2-6 .
	Deadline 8 Submission - Appendix B4 - Comments on HRA Assessment Update [REP5-006] (updated) (REP8-022)	The Applicant responded to these points at Deadline 8 within the Fourth Report on Outstanding Submission (document reference 9.90, REP8-017).
	Deadline 8 Submission - Appendix B5 - Comments on Without Prejudice Habitats Regulations Assessment Derogation Case – Compensation Measures [REP6-026] (REP8-023)	The Applicant has provided a response below in Table 2-7 .
	Deadline 8 Submission - Appendix B6 - Comments on Change in Waterbird Behaviour Report [REP6-034] and Technical Note for Navigation Management and Ornithology [REP6-033] (REP8-024)	The Applicant has provided a response below in Table 2-3 .
	Deadline 8 Submission - Appendix C4 - Comments on Outline Marine Mammal Mitigation Protocol [REP7-004] (REP8-025)	The Applicant has provided a response below in Table 2-5 .

Stakeholder	Document	Response Status
	Deadline 8 Submission - Appendix F5 - Comments on Development Consent Order and Schedule of Changes [REP6-003,REP6-031] (REP8-026)	The Applicant has provided a response below in Table 2-4 .
	Deadline 8 Submission - Appendix H7 - Risk and Issues Log Deadline 8 (REP8-027)	The Applicant notes Natural England's updated Risk and Issues log however no response is required.
RSPB	Deadline 8 Submission - Cover Letter (REP8-028)	The Applicant has provided a response below in Table 2-8 .
	Deadline 8 Submission - Comments on responses to Third Written Questions (ExQ3) (REP8-029)	The Applicant notes this response however a response is not required from the Applicant.
UKWIN	Deadline 8 Submission - Comments on the Applicant's Deadline 7 response to United Kingdom Without Incineration Network (UKWIN) Deadline 6 submission (REP8-030)	The Applicant has provided a response below in Table 2-9 .

2 Responses to Unanswered Points

2.1 Environment Agency

Table 2-1 Update on Environment Agency Position on outstanding issues (REP8-019)

No.	Comment	The Applicant's Response
Protective Provisions and Side Legal Agreement (EA 1.3, EA 11.1, EA 11.4, EA 11.5 and EA 12.1)		
2.1	We continue to be in discussions with the applicant regarding the final wording of the Protective Provisions set out in REP6-002 (Draft Development Consent Order), Schedule 8, Part 4. Subject to agreement on final wording, we anticipate that these could be agreed by Deadline 9.	The Applicant has agreed the protective provisions with the Environment Agency (EA) and a final version is included in the final draft DCO submitted at Deadline 9.
2.2	We also remain in discussions with the applicant regarding a side legal agreement in relation to works affecting flood defences.	Discussions on the legal agreement are ongoing and significant progress has been made. The Applicant is working towards reaching agreement on the legal agreement by close of examination or shortly after.
2.3	Until both pieces of work are complete we cannot approve the disapplication of the legislation as proposed in document ref REP6-002 (Draft Development Consent Order), Part 6, Article 40 (1) (d).	Noted
Flood Risk (EA 1.1)		
2.4	We have reviewed document ref REP7-009 (Worst Case Assessment for Land Raising). We consider the document is a reasonable assessment of the possible impacts on flood flows as a result of land raising and has addressed some of our concerns. However, the assessment does not include an assessment of works taking place in the area between the proposed wharf and Roman Bank. The assessment must be updated to see what impact (if any) may arise as a result of works in this area.	It is acknowledged that the assessment set out in the Worst Case Assessment for Land Raising (document reference 9.77, REP7-009) was only undertaken for part of the Principal Application Site i.e. to the rear of the Roman Bank secondary defence. It is also noted that the Environment Agency has requested the same assessment be undertaken for the land between the proposed wharf and the Roman Bank. However, this part of the site has been omitted from the assessment on the basis that the land in this location will not be subject to the same cut and fill exercise as the rest of the Principal Application Site. Whilst it is

No.	Comment	The Applicant's Response
		<p>acknowledged that the undeveloped site, comprising mainly agricultural land, may have some minor localised variations in topography (noting it is currently a relatively flat site) there is no proposal for a comprehensive cut and fill exercise to adjust the level of the site up or down in this area, such as that proposed for the rest of the Principal Application Site.</p> <p>For clarification, the proposed wharf is to be located to the riverward side and in line with the footprint of the existing defence extending inland only as far as the rear of the existing embankment. After this point there will be a drop in the level from the wharf to the development behind so that it matches the existing ground levels to the rear of the existing defence.</p> <p>Hence, it was on the basis of the above that the land between the proposed wharf and Roman Bank were omitted from the assessment as no change in ground levels means there will be no reduction in flood storage post-development compared with the existing scenario. The Technical Note entitled Worst Case Assessment for Land Raising (document reference 9.77(1)), has been updated at Deadline 9 to confirm this.</p>
Effect of Ship Wash (EA 1.2 and EA 2.3)		
2.5	We are concerned to note that Paragraphs 3.3.5 and 3.3.6 in document ref REP7-003 (Outline Mammal Mitigation Protocol) states that the speed of ships cannot be effectively regulated to 4-6 knots as stated in document ref REP3-020 (Response to Environment Agency's Queries on Estuarine Processes), and is more likely to be in the order of 12 knots in places along the Haven.	<p>The Response to Environment Agency's Queries on Estuarine Processes has been updated and submitted to the Examination at Deadline 9 (document reference 9.44(1)).</p> <p>The vessel speed change does not affect the conclusions of the assessment, because the Applicant does not quantify the wave heights created by the vessels based on their speeds. It is a conceptual view with the critical element being whether an</p>
2.6	We consider that the evidence in document REP3-020 is therefore out of date and must be revised to demonstrate that the impact of ship	

No.	Comment	The Applicant's Response
	wash at these speeds will not lead to increased rates of erosion affecting the ecological quality of the water body and/or undermining the toe of the flood defences.	increase in ship wash (which the Applicant accepts) leads to a significant (in Environmental Impact Assessment (EIA) terms) increase in erosion. The Applicant's position is that it does not, and this remains the case regardless of any restrictions on speed.
Habitat Mitigation (EA 3.1 and EA 7.1)		
2.9	We note that Requirement 24 of the updated DCO (REP6-002) allows for an increase in energy output beyond 300MW subject to an assessment of the impacts by the relevant planning authority. Please note that this would not supersede the need for any amendments to the Environmental Permit, should one be granted.	The Applicant understands the need to seek an amendment to the Environmental Permit if it sought to increase the energy output beyond the terms of the Environmental Permit.

2.2 Marine Management Organisation

Table 2-2 Comments on responses to Third Written Questions (ExQ3), revised draft DCO and information submitted by the Applicant or Interested Parties at Deadline 6 (REP8-020)

No.	Comment	The Applicant's Response
Development Consent Order (DCO)		
Sch 2, 22(1)	Reference to a decommissioning plan approved under the deemed marine licence should be referred to as a decommissioning "scheme" for consistency with the deemed marine licence.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
Part 1		
1(1)	"Authorised development" This should read as "paragraph 4" and not "condition 5"– the paragraph reference is incorrect, and all references should be to paragraphs except where there is a reference to the licence conditions contained within PART 3 CONDITIONS (Conditions 5 – 26).	The Applicant made these amendments in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
Part 2		
4(1)(k)	"materially new or materially different" The MMO have previously stated that we do not agree with the wording of "materially new or materially different".	The Applicant considers use of materially in the phrase "[do/does] not give rise to any materially new or materially different effects than those assessed in the environmental statement" in the Deemed Marine Licence (DML) and DCO both necessary and appropriate. An effect which is 'materially new' relates to an effect which was not reported in the Environmental Statement (ES) certified by the Secretary of State, but which is significant in EIA terms. An effect which is 'materially different' relates to an effect which was reported in the ES but in respect of which there is a change in the significance attributed to the effect from that

No.	Comment	The Applicant's Response
		<p>reported in the ES. The Secretary of State for Transport on the A19/A184 Testo's Junction Alteration DCO considered the phrase would allow the necessary scope for changes that are better for the environment providing such changes do not result in significant effects that have not already been previously identified and assessed in the ES (Correction Notice dated 14 May 2019). The use of the word "materially" is necessary to provide a proportionate level of flexibility during the detailed design of the scheme, which is necessary and appropriate in the delivery of complex major infrastructure projects.</p> <p>The Applicant does not consider there should be a difference in approach to the wording of that phrase between the body of the DCOs and DMLs included in a DCO and the exclusion of the word materially from that phrase would be inconsistent with the well precedented usage of the phrase which appears in almost all recently made DCOs (for example the Norfolk Boreas Offshore Wind Farm Order 2021, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Lake Lothing (Lowestoft) Third Crossing Order 2020).</p>
4(1)(k)(iii)	<p>"necessary or convenient" As previously stated, the MMO do not agree with the phrase "necessary or convenient".</p>	<p>This wording is used in both the Lake Lothing (Lowestoft) Third Crossing Order 2020 and the Great Yarmouth Third River Crossing Development Consent Order 2020. The scope of the works authorised by paragraph 4(1)(k)(iii) is heavily constrained by the inclusion of the words "which do not give rise to any materially new or materially different environmental effects from those assessed" in paragraph 4(1)(k), and the fact that they must be contained within the area defined in paragraph 4(2) and (3) and carried out in compliance with the full suite of Conditions in the DML. This</p>

No.	Comment	The Applicant's Response
		makes clear that the works must be covered by the assessment in the ES. The Applicant therefore considers this drafting is appropriate.
4(1)(l)	The formatting of this provision should be checked.	The Applicant can confirm that the formatting of this provision is correct.
Part 3		
12(4)	“Unless otherwise agreed by the MMO” After this phrase, “in writing” should be inserted for consistency throughout the document and with the other conditions.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
13(1)	“operations consisting of piling” is “operations” the correct term? Should this refer to “licensed activities consisting of piling”? In addition, the remainder of the paragraph “and piling operations must not commence until written approval is provided by the MMO” should be deleted and instead a new sub-paragraph (3) should be inserted to read: - “The undertaker must not commence the licensed activities until the MMO has approved in writing the submitted piling method plan” - this provision would provide consistency with the other conditions within the DML.	The Applicant made these amendments in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
14(4)	This should read “licensed” rather than “licenced”.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
14(5)	“in writing” should be inserted after the first instance of “MMO”.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
15(3)	For consistency with other provisions, “, as approved by the MMO” should be inserted at the end of the paragraph.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).

No.	Comment	The Applicant's Response
16(4)	Insert "in writing" after the first instance of "MMO". Insert ", as approved by the MMO" at the end of the paragraph. Both for consistency with other provisions.	The Applicant made these amendments in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
17(1)	On the first line, "in writing" should be inserted after "mammal mitigation protocol".	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
17(4)	"in writing" should be inserted after the first instance of "MMO".	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
22(3)	The MMO consider that "the MMO or" should be added in front of "the harbour authority may require obstructions to be removed".	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
25(1)	The 'scheme' detailed in this paragraph is referred to at paragraph 27(g) as "a decommissioning scheme", if this term is to be adopted for consistency it should be adopted in this condition. Insert "Decommissioning" before "scheme" at line 2. Insert "in writing" after "in situ" at line 3. Insert "in writing" after "approval" in the final line. These recommended amendments are for consistency with other provisions.	The Applicant made these amendments in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
25(3)	Insert "in writing" after the first instance of "MMO". Insert ", as approved by the MMO" at the end of the paragraph. Both amendments are for consistency with other provisions.	The Applicant made these amendments in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
26	As currently drafted, the obligation on the undertaker is not currently clear, therefore we recommend the insertion of "of completion of the licensed activities" after "Marine Licensing Team".	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
Part 4		

No.	Comment	The Applicant's Response
27(d)	Adopt defined terms from condition 15(1) "WSI" and "PAD".	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
28(2)	The MMO are not content with the wording of this provision and the phrase "within 30 business days". As previously stated within other responses, the MMO as a regulatory body, does not agree with being held to set timescales within the DML. The MMO would reserve the right to ask for further information at any point during the submission process.	The wording (including 30-day timeframe) included in paragraph 30 is identical to that included in paragraph 17 of the DML at Schedule 13 of the Great Yarmouth Third River Crossing DCO 2020. The Applicant considers this wording is appropriate to ensure that further information is requested in a timely manner and the condition allows information to be requested after 30 days with agreement by the undertaker.
29(1)(b)	Delete "condition" and reinstate "paragraph" see comment at 1(1) above. At Deadline 3, the MMO pushed back on this provision as a restatement of the Marine and Coastal Access Act and do not consider that this provision is wholly necessary.	<p>The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).</p> <p>In terms of the appropriateness of the paragraph, the entire condition is not a restatement of the Marine and Coastal Access Act and the Applicant considers for clarity it is beneficial to set out the decision-making considerations within the DML itself. The drafting has precedence in both the Great Yarmouth Third River Crossing Order 2020 and the Lake Lothing (Lowestoft) Third Crossing Order 2020.</p>
30(2)	Delete "condition" and reinstate "paragraph" see comment at 1(1) above.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
30(3)	As previously advised, the MMO will not commit to issuing a decision within 13 weeks. The MMO request that the inclusion of this timescale is removed from the DML in all instances.	As set out in the Applicant's previous responses to this point (the Applicant's comments on Written Representations (document reference 9.22, REP2-006) and its comments on the MMO's relevant representation (document reference 9.2, REP1-035), it is considered necessary to include expected timeframes to ensure that decisions are made in a timely

No.	Comment	The Applicant's Response
		<p>manner and the wording of paragraphs 32(1) and (2) and 33(3) provides that the MMO must give notice of the determination of the return/variation within 13 weeks from the day immediately following that on which the return/variation is received by the MMO “or as soon as reasonably practicable after that date.” This provides a level of flexibility as to timeframes. Additionally, paragraphs 32(3) provides that “Where the MMO determines it is not reasonably practicable to make a determination in accordance with subparagraphs (1) and (2) in 13 weeks, it must notify the undertaker as soon as reasonably practicable and provide confirmation in writing of the intended determination date.” Paragraph 33(4) is similarly worded.</p> <p>This clearly allows the MMO to exceed the 13-week timeframe where it is not reasonably practicable to make a determination in that timeframe but ensures that the Applicant is notified of this. The wording of these paragraphs (including the 13-week timeframe) has precedence in in both the Great Yarmouth Third River Crossing Order 2020 and the Lake Lothing (Lowestoft) Third Crossing Order 2020.</p>
31(2)	Insert “in writing” after “approved” at line 2.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
31(3)	As previously advised, the MMO will not commit to issuing a decision within 13 weeks. The MMO request that the inclusion of this timescale is removed from the DML.	Please see response to paragraph 30(3) above.
Part 6		
32	We do not consider Article 32 to be necessary. There is provision within the terms of the DML for all relevant plans and protocols to be amended by agreement in writing. Article 32 would not add any	The Applicant has deleted this paragraph from the DML in the Deadline 9 version of the draft DCO (document reference 2.1(5)).

No.	Comment	The Applicant's Response
	clarity of certainty, instead it would introduce unnecessary duplication.	
Schedule 10		
	Article 49 is listed as arbitration within the DCO, however is listed above "Schedule 10 Documents and Plans to be Certified". The MMO question whether Schedule 10 should read as Article 47 instead of Article 49.	The Applicant made this amendment in the Deadline 8 version of the draft DCO (document reference 2.1(4), REP8-004).
	Schedule 10 should include all documents to be certified including those to be submitted in Schedule 9. Any documents, including their names and references, listed within Schedule 10 should be updated accordingly.	The Applicant can confirm that Schedule 10 includes all of the certified documents referred to in the DML. The Applicant notes there are some updates to version numbers that have been included in the Deadline 9 version of the draft DCO (document reference 2.1(5)).
Schedule 11		
Ornithology Compensation Measures	Any ornithology compensation measures impacting areas below Mean High Water Springs (MHWS) need to be conditioned within the DML and any works related to compensation measures that are not secured within the DML may require a separate Marine Licence.	The works in the Habitat Mitigation Area (HMA) (if determined to be compensation) are already included in the DML. If the Secretary of State (SoS) determines that the off-site compensation measures are required then the Applicant would seek a separate marine licence for those works if necessary. However the Applicant does not anticipate that those works would require a marine licence as they are proposed to be undertaken on land above MHWS.

2.3 Natural England

Table 2-3 Natural England’s Comments on Change in Waterbird Behaviour Report [REP6-034] and Technical Note for Navigation Management and Ornithology [REP6-033] (REP8-024)

No.	Comment	The Applicant’s Response
Natural England’s Comments on Change in Waterbird Behaviour Report [REP6- 034]		
Summary	Natural England advises that this is a useful piece of work to start to quantify responses to vessel presence and clearly demonstrates that large cargo vessels cause disturbance responses. However, further survey data is required to provide necessary evidence to support the Application.	Noted by the Applicant. Detailed responses are provided below.
1	Vessel Disturbance: This document supports Natural England’s concerns that vessels entering the Haven displace birds from their roosts, and in some cases foraging grounds both in the Haven and at the Mouth of Haven.	The Applicant agrees that vessels entering The Haven can displace birds from roosting and high-tide foraging, as has been addressed within assessments from the original Habitats Regulations Assessment (HRA) (document reference 6.4.18, APP-111) and through successive updates (document reference 9.13, REP1-026, document reference 9.59, REP5-006). Furthermore, while the Applicant has concluded that there is No Adverse Effect on Site Integrity from this activity, it has prepared a Without Prejudice Derogation Case (document reference 9.30 (2), REP8-006) which effectively addresses these impacts should it be deemed necessary they be compensated.
2	Impacts of large vessels vs. small vessels: The document supports Natural England’s concerns that large cargo vessels are more disturbing than smaller vessels such as pleasure craft; the pilot boats; and fishing boats. And therefore, vessel movements associated with the Application are likely to significantly increase the disturbance to Annex I birds.	Please see response to row 1 above.
3	Site network: There is clear documentation of birds swapping between Sites A and B at the development site. This further supports the	The mitigation provided at the Habitat Mitigation Area is proposed to provide sufficient habitat for the number of birds using this area. The Applicant confirms that, should consent for

No.	Comment	The Applicant's Response
	requirement for any project-specific mitigation measures to provide a local network of sites.	the Facility be confirmed, a local network of sites each separated by less than 1 km, between The Haven at Site B and RSPB Frampton Marsh, will be provided ahead of the Operational phase and associated increase in vessel traffic to project levels. Dependent on the conditions of the DCO this network of sites will be providing biodiversity net gain or compensation to the bird populations.
4	Disturbance source: Natural England notes that the most significant source of disturbance is the presence of large vessels causing 99.88% of disturbance events at the Mouth of the Haven and 95% at the development site; wake disturbance is secondary.	The Applicant accepts this interpretation of the data and stresses that this is reflected in their assessments and their Without Prejudice Derogation Case (document reference 9.30 (2), REP8-006) as in row 1.
5	Response Behaviour: Please could the Applicant clarify if all birds in attendance to boats were recorded or just those from which a response was noted.	The Applicant clarifies that (due to the one-person methodology for observing behaviour of large numbers of birds) the recorded and reported birds and numbers concerned birds from which a response was noted. However, note that later surveys (at the 'Wharf site') did report initial numbers of birds present. These are tabulated at the start of Wharf surveys in the Changes In Waterbird Behaviour report and specifically are reported for 25 September 2021, 02 November 2021, 30 November 2021 (document reference 9.71, REP6-034).
6	Disturbance behaviour: Natural England notes that the response varies between species, and not always the same, but the predominant response to the presence of cargo vessels is to abandon roosts and relocate to more distant roost sites. With some birds pushed along the Haven for considerable distances with repeated flushes	This is as discussed in the assessments undertaken. The Applicant accepts this interpretation of the data and stresses that this is reflected in their assessments and their Without Prejudice Derogation Case (document reference 9.30 (2), REP8-006) as in row 1.
7	Night time impacts: Natural England notes that only daytime surveys have been undertaken therefore the sensitivity at night is unquantified.	A worst-case scenario has been used that assumes that the large vessels cause disturbance at night time as they do during the day. It is likely that there would be less visual disturbance during the night time but still be noise disturbance.

No.	Comment	The Applicant's Response
8	Disturbance Threshold distances: Natural England advises that disturbance threshold distances should be identified and included within the report.	Disturbance thresholds have been used and explained within the documents and were taken from the Waterbird Disturbance and Mitigation toolkit developed by the Institute of Estuarine and Coastal Studies in 2013 which is widely used for determining sensitivity thresholds for birds in these situations.
Natural England's Comments on Technical Note for Navigation Management and Ornithology		
1	Natural England notes that this plan has not been developed in a HRA context but suggest it can and should be adapted.	The purpose of this document was to set out how the Navigation Management Plan (NMP) can take into account ornithology mitigation, where appropriate. The note considers ornithology interests on a whole on The Haven rather than focussing on HRA species.
2	Within the document it is suggested that it can be used as a HRA level impact management tool, but there is no evidence that adaptation of vessel movement parameters will mitigate impacts and/or can be secured. Especially as many aspects of vessel movement such as vessel speeds (please see Natural England Deadline 8 Appendix C4) and tides are outside of the projects control.	<p>The Applicant notes NE's comments and has updated all documents to take account of the Port of Boston's view that vessel speeds are in line with COLREGS (i.e. a 'safe speed'). None of the changes to updated documents change any of the assessments presented in the ES or other application documents. The Technical Note for Navigation Management and Ornithology (document reference 9.70, REP6-033) states that the final Navigation Management Plan (NMP) will have to consider, "<i>Opportunities for managing vessel movements so as to reduce vessel speed where appropriate and beneficial to do so</i>" as well as, "<i>opportunities for minimising vessels being held on-station at or near the MOTH. Measures outlined in the PoB's Pilotage Statement (document reference 9.73), paragraphs 8.6 and 8.7 describe how vessels are managed in this regard and is applicable for minimising this kind of disturbance</i>".</p> <p>The Navigation Management Plan Template (document reference 9.80, REP7-012) identifies a clear and overt linkage to REP6-033 and Condition 14(3)(e) of the DCO requires that</p>

No.	Comment	The Applicant's Response
		<p>the NMP also should include “<i>measures for managing disturbance to designated bird species developed in accordance with the process in the Navigation Management Planning Process: Risk to Birds (REP6-033)</i>”.</p> <p>The securing mechanism for vessel speeds to be a consideration within the development of the NMP is clear and unambiguous. Natural England is identified as a statutory body that will be consulted in the development of the NMP with the views of the RSPB also sought.</p>
3	<p>Natural England advises that associated plans referenced in the technical note are not currently available and therefore we are unable to provide further advice.</p>	<p>The Applicant is unsure which plans NE refer to, please can NE clarify.</p>
4	<p>Natural England is concerned that the Applicant has not set out how the plan would take birds into account, how it could be modified and how appropriate Nature Conservation oversight would be achieved. Until this is provided, we can have no confidence that the impacts can be appropriately managed to suitably minimise the risk to nature conservation.</p>	<p>The Navigation Management Plan Template (document reference 9.80(1), REP8-011) was submitted at Deadline 8 which sets out in section 1.4 how Statutory Nature Conservation Bodies (SNCBs) will be consulted in the production of the NMP.</p>
5	<p>Natural England advises that in order to provide the necessary confidence to Secretary of State that the impacts can be mitigated, the Plan could be adapted to address nature conservation concerns, that impacts can be avoided and that the plan can be managed in accordance with statutory requirements.</p>	<p>The primary purpose of the NMP is to address and manage the safety of navigation on The Haven. Where vessel management measures also have a beneficial effect on bird disturbance this will be identified; please see the response to Question 2 above which details the mechanism for securing agreements on managing the traffic in relation to bird disturbance. Equally, the Outline Marine Mammal Mitigation Protocol (document reference 9.12(2), REP7-003) is also referenced in the DCO as a requirement for the Applicant to ensure appropriate protection of marine mammal species through finalisation of this document in agreement with the SNCB and MMO.</p>

Table 2-4 Natural England’s Comments on Draft Development Consent Order [REP6-003] and Schedule of Changes [REP6-031] (REP8-026)

No.	Pg.	Section	Comment	The Applicant’s Response
Natural England’s Comments on Draft Development Consent Order [REP6-003]				
Summary			Natural England have concerns over the maximum electricity that may be generated, and that this cap may be exceeded with the approval of the relevant planning authority. We would welcome further information on this issue and request this is amended to include consultations of the Relevant Statutory Nature Conservation Body (SNCB).	See response to row 1 below.
Detailed Comments on the DCO schedule of changes				
1	10	Item 24 Requirement 25	Natural England notes this requirement limits the maximum electricity that may be generated, and that this cap may be exceeded with the approval of the relevant planning authority. We would request that this requirement is amended further, to include a requirement to consult the Relevant Statutory Nature Conservation Body (SNCB) to ensure that the impacts are not materially different to those assessed. However, we also question if such a change should be controlled through the DCO non-material change process rather than through the post consent approvals process.	Regarding Requirements 25 and 26, the purpose of these requirements is to allow for a proportionate level of flexibility if in the future technology improvements allow for a greater amount of renewable energy to be generated or waste to be processed with no materially new or different effects to those assessed. The Applicant considers that this is an appropriate mechanism to provide for technological advancement rather than the non-material change process. The Applicant agrees to include NE as a consultee on this requirement to the extent that it relates to matters relevant to its functions.
2	11	Item 25 Requirement 26	As above in our comments on Requirement 25, Natural England requests this requirement be amended to include the need to consult the relevant SNCB should any request to exceed the tonnage cap be received.	See response in row 1 above.

No.	Pg.	Section	Comment	The Applicant's Response
3	38	Item 74 Schedule 11	Natural England refers to our response to the ExA written questions at Deadline 7 Appendix F4 [REP7-028] where we have provided detailed comments on this schedule.	The Applicant has responded to NE's comments on Schedule 11 in the Fourth Report on Outstanding Submissions (document reference 9.90, REP8-17) - see Table 2-3.
4	N/A	N/A	As noted in appendix C4 section 2 vi, the vessel mitigation of speed limit has been removed from the Outline Marine Mammal Mitigation Plan (MMMP). But the MMMP continues to discuss reducing vessel speed as mitigation. In order to secure the mitigation of a speed limit, Natural England would advise that a condition in the DML should be added.	<p>As noted in the Outline Marine Mammal Mitigation Protocol (OMMMP), the current practice on The Haven is 'safe speed at all times', in accordance with the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS). An enforced speed limit is inconsistent with current safe practice and would restrict the number of vessels able to transit to the Port each tide (i.e. it could increase the transit time, reducing the number of vessels able to transit each tide, and significantly increase the number of vessels within the anchorage area). The OMMMP identifies that BAEF vessels will aim to travel at below 10 knots, where it is safe to do so. This will help reduce any potential impacts on marine mammals without imposing a set speed limit which is inconsistent with navigational safety requirements.</p> <p>These measures are secured by Condition 17 of the DML which requires the approval of a final MMMP, which must be substantially in accordance with the Outline MMMP. Additionally, the Navigation Management Plan secured by Condition 14 of the DML will include</p>

No.	Pg.	Section	Comment	The Applicant's Response
				measures for managing potential risks to marine mammals in accordance the approved MMMP.

Table 2-5 Natural England's Comments on Outline Marine Mammal Mitigation Protocol (MMMP) [REP7- 004] (REP8-025)

No.	Comment	The Applicant's Response
Natural England's Comments on Outline Marine Mammal Mitigation Protocol (MMMP) [REP7- 004]		
Summary	<p>Unfortunately, the majority of our concerns remain outstanding which were raised at RR-01 and REP2-043. Our detailed advice is as set out below.</p> <p><u>Natural England also notes that there is likely to be wider implications of the text on uninhibited vessel speeds in section 3.3.5 - 3.3.9 of the MMMP on other nature conservation features. Therefore, we will raise these risks and issues in the relevant thematic responses.</u></p>	<p>See responses below to each point.</p> <p>The Applicant refutes this statement entirely, and has addressed each specific point below.</p>
1. Significance of Impacts (Table 2.1)		
	<p>Natural England notes that the significance of the impacts have been determined using Environmental Impact Assessment (EIA) matrices which are for the wider marine environment rather than Habitat Regulations. We advise that a better more precautionary approach, given the restore conservation objectives and declining numbers of Harbour seals, is to acknowledge that there is a potential impact pathway to Annex II species i.e. Likely Significant Effect and adopt appropriate mitigation measures to remove an adverse effect on integrity.</p>	<p>As previously responded at Deadline 4 (Response to the Marine Management Organisation (MMO) and Natural England's queries regarding Marine Mammals and Fish (document reference 9.49, REP4-014)), the assessment for The Wash and North Norfolk Coast SAC has been based on the current Conservation Objective of 'maintain'. While Natural England have stated their wish to update the Conservation Objectives to 'restore' (within their Deadline 2 submission; REP2-043) there is no publicly available information relating to this. The assessments are therefore based on the information that was available at the time of submission.</p> <p>Given the low number of harbour seals that may be affected, and the relatively small potential ranges of effect, it is not</p>

No.	Comment	The Applicant's Response
		<p>considered that there is potential for adverse effect on the Conservation Objectives (which are currently at 'maintain'). However, mitigations will be put in place regardless, to ensure that these species are at low a risk as possible to any effect, and that any effect to the overall population is insignificant.</p>
<p>2. Suitability of marine mammal mitigation measures</p>		
<p>i)</p>	<p>Soft Start (Section 3.1) Natural England reiterates that the JNCC 2010 guidance was developed to mitigate the impacts from undertaking large-scale piling operations associated with monopile foundations at offshore windfarm arrays. The diameter of the foundations to be piled at an offshore windfarms array is >5m which is significantly larger than the pin piles proposed for this project. Therefore, a) the pile is likely to be installed before the completion of 20mins of soft start set out in the guidance, and b) the maximum hammer energy is likely to be reached almost immediately for the pin piles with no ability to ramp up. Therefore, we do not consider this to be appropriate mitigation for this project.</p>	<p>Section 3.2 of the OMMMP (document reference 9.12(2), REP7-003) acknowledges that the full soft-start and ramp-up procedure may not be possible due to the currently anticipated pile design. Once the final pile design is available, the potential soft-start and ramp-up procedures will be based on that final pile design, and in consultation with Natural England. This is secured under DML Conditions 13 and 17. The Applicant is confident that these measures will be sufficient to address concern over the potential for effects on marine mammals.</p> <p>As provided in the response to MMO Deadline 7 comments (Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017)), the potential for reduced strike rate rather than reduced hammer energy will be investigated as an alternative form of a soft-start. In addition, the potential for non-impact piling will be investigated once the final pile design is available.</p>
<p>ii)</p>	<p>Marine Mammal Observations at the wharf location (Section 3.2.4) Natural England advises that whilst the JNCC 2010 guidance hasn't been updated, the advice on using MMOs as mitigation has. Natural England welcomes that project specific underwater noise modelling will be undertaken to determine the Permanent Threshold Shift (PTS) Zone for this project rather than adopting the 500m observational</p>	<p>As provided in Section 1.2 of the OMMMP (document reference 9.12 (2), REP7-003), if required, site specific underwater noise modelling will be undertaken to determine the potential permanent injury (PTS) zone for harbour seal. The final piling mitigations will be designed to ensure there are no individuals within that modelled permanent injury zone. If required, the option for additional observers to be located around the bend in</p>

No.	Comment	The Applicant's Response
	<p>zone. However, we note that the Applicant highlights that, due to a bend in the river observations to the North, it will only be at a distance of 150m. Natural England continues to have concerns with this mitigation measure until modelling and evidence is presented.</p>	<p>the river will be investigated, however, it should be noted that that same bend in the river is likely to form an effective barrier to sound movement around that bend. In addition, the bend in the river is north of the piling location, inshore of the entrance to The Wash, and therefore it would be highly unlikely for any harbour seal to be present.</p>
<p>iii)</p>	<p>Use of non-dedicated MMO (section 3.3.20 - 3.3.29)</p> <p>Whilst, Natural England acknowledges that crew members have the necessary training to be an MMO; we are unable to support having a none dedicated MMO as a mitigation measure for the following reasons:</p> <ul style="list-style-type: none"> • They are to undertake this duty when not undertaking other work • Due to the size of the vessel they will not be able to have 360 degree views looking away from the vessel and vertical views downwards checking adjacent to the vessel • The cargo is likely to be in the way to scan across the vessel • Due to length of time marine mammals spend underwater it is unlikely that a singular non-dedicated individual will be able to detect signs of a marine mammal being present. This is especially true during times of poor visibility and high sea states. <p>Therefore, checks prior to restarting the vessel engines anchorage areas is unlikely to be accurate and the same will be true whilst in transit, especially if there is only one MMO.</p> <p>This also, puts into question the ability to detect seals in front of the vessels to slightly alter course as suggested in the documents. It should also be noted that there would be insufficient space in the Haven to do anything other than keep on a direct route along the deepest part of the river.</p>	<p>The Applicant would ask Natural England to provide detail on what mitigations they would deem acceptable in order to give greater assurance that the harbour seal population would not be significantly impacted. Note that these mitigations are not required as a result of the assessments, as no significant impact has been concluded; they are provided instead to give as much protection to the harbour seal population as possible, regardless of the outcome of the relevant assessments.</p>

No.	Comment	The Applicant's Response
iv)	<p>Vessel speeds (section 3.3.8) Natural England note that vessel speed restrictions have now been removed from the MMMP, whilst highlighting that vessel speeds will be reduced where possible but still ensuring that operations can continue uninhibited. Therefore, we advise that this can't be relied upon as mitigation measure especially as vessel speed when entering The Haven is largely outside of the projects control.</p>	<p>This will be removed as a sole mitigation measure in the final MMMP, and instead included as a best practice measure. Please also see the response to</p>
v)	<p>Vessel mitigation (3.3.11) Natural England advises that, due to the size of the vessel and potential grounding risks on sandbanks where seals haul out, an avoidance of these areas is a standard approach, but doesn't mitigate for those seals in the water.</p> <p>Given our advice on non-dedicated MMOs above, it is unclear to Natural England how it will be possible to detect a seal 300m away if not in direct horizontal line of site, noting that there is a vertical element the closer to the vessel a seal may be.</p> <p>It is also not clear what is meant by 'extra care' being taken during the seal sensitive period?</p>	<p>As outlined in the HRA (Appendix 17.1 - Habitats Regulations Assessment (document reference 6.4.18, APP-111)), the closest seal haul-out site to any project area is Friskney South at 840m from the shipping channel. All BEF vessels will be required to use the set anchorage area and shipping channel., therefore there is no risk to seals hauled-out at one of the known haul-out sites.</p> <p>Vessel speed is within Pilot and Harbour Authority control and ensures that vessel safety is maintained at all times, as well reducing the potential for effects to marine mammals.</p> <p>See above response regarding marine mammal monitoring.</p> <p>During the more sensitive season of June to August, extra vigilance would be taken to ensure that harbour seal are protected while in the water. This would include taking additional measures to avoid any seals in the water (wherever possible), such as minimising vessel manoeuvres and maintaining vessel course and speeds.</p>
<p>3. Monitoring (3.3.30 – 3.3.37)</p>		
	<p>Natural England advises that the monitoring methodologies used should enable the interactions to be successfully observed. Therefore,</p>	<p>If this monitoring option is taken forward as the preferred approach, then the monitoring plan would be designed in such</p>

No.	Comment	The Applicant's Response
	the fixed points/chosen locations will need to be evidenced to demonstrate that there is the most likelihood of monitoring vessel interactions and where that evidence is limited the Applicant should increase the number of observation points. Otherwise, there is a risk of a false negative i.e. animals may be interacting with vessels but they are being missed.	a way as to maximise the potential for interactions to be monitored. As noted in Paragraph 3.3.19 of the OMMP (document reference 9.12 (2), REP7-003), and under DML 17, the final MMMP, including options for monitoring, will be finalised through consultation with Natural England.
	Again, with a camera system how are vessel movements going to be linked to seal observations and will a 360 degree view be possible around the vessel?	If a camera system was used, cameras would be placed on land, rather than on vessels. As for observers above, these would be placed to ensure maximum potential for monitoring interactions.
4. Further Advice		
i)	Natural England continues to advise that further consideration is required of other mitigation measures such as none impact piling i.e. vibro piling to minimise under water noise impacts	As noted above, the potential for vibro-piling will be considered once the final pile design is available.

Table 2-6 Natural England Deadline 8 Cover Letter (REP8-021)

No.	Comment	The Applicant's Response
3. Outline Ornithology Implementation and Monitoring Plan [REP7-013]		
1	Natural England is concerned that this document is too high level and therefore doesn't provide the necessary certainty that any DCO/dML requirements will be delivered and/or if they are to a level that would address our substantial ornithological concerns. Rather than providing a framework of how a plan post-consent will be developed, Natural England advises that any in principle plan at the consenting phase must set out the aims and objectives of the plan (including answering hypothesis and demonstrating predictions) and any commitments/requirements to address residual nature conservation concerns.	The Outline Ornithology Compensation Implementation and Monitoring Plan is an outline of the Plan required under Schedule 11 if the Secretary of State determines there is an Adverse Effect on Integrity and compensation is required, and specifically relates to the implementation and monitoring of compensation measures only. It is not for securing other ornithology mitigation measures which are already substantially detailed in the Outline Landscape and Ecological Mitigation Strategy (OLEMS) (document reference 7.4(2), REP7-037). The approval and implementation of the final Landscape and Ecological Mitigation Plan (which must be substantially in accordance with the OLEMS) is secured by

No.	Comment	The Applicant's Response
		<p>Requirement 6 of the draft DCO and Condition 18 of the draft DML (document reference 2.1(4), REP8-004).</p> <p>The Applicant based the Outline Plan on that submitted following the Secretary of State's minded to approve letter on the Hornsea Three Offshore Wind Farm Order 2020 and the level of detail is commensurate with that plan. The Applicant updated the Outline Ornithology Compensation Implementation and Monitoring Plan (document reference 9.81(1), REP8-013) at Deadline 8 to align it with the amendments to Schedule 11. Further details as the implementation and monitoring are set out in the updated Without Prejudice Habitats Regulations Assessment Derogation Case: Compensation Measures (document reference 9.30(2), REP8-006). Please also refer to the Applicant 's response to Q3.3.1.33 in the Applicant's Responses to the Examining Authority's Third Written Questions (ExQ3) (document reference 9.75. REP7-007).</p>
<p>4. Natural England's Comments on Summary of Breeding Bird Survey Counts (April to June 2020-2021) [REP7-014] and Breeding Bird Survey Monitoring Report (April – June 2021) [REP7-015]</p>		
2	<p>Natural England welcome these survey reports. NE accepts that there is no evidence that the site provides breeding bird support for the SPA beyond foraging avocet. We note that there are a number of species using the site and that a number are amber and red listed, the highest conservation value is likely to be supported by wetland areas and presence of scrub, this should be retained, enhanced and maintained as part of site management.</p>	<p>This is noted by the Applicant and will be taken into account when planning any works on the intertidal areas.</p> <p>As presented in paragraph 7.2.7 and 7.2.8 of the OLEMS (document reference 7.4(2), REP7-037), the Applicant states that the Principal Application Site contains suitable nesting bird habitat for bird species, such as areas of scattered scrub and dense scrub, trees and hedgerows. Wherever possible, areas of vegetation will be retained. Where vegetation is identified as requiring removal, the removal of these areas will be undertaken wherever possible outside of the nesting bird season (this is embedded mitigation). Where there may be a requirement for</p>

No.	Comment	The Applicant's Response
		<p>vegetation to be removed during the nesting season, a check of any vegetation (by a suitably qualified ecologist) will be undertaken prior to its removal. This check will be undertaken a maximum of 48hrs prior to the commencement of the works. Active nests and their associated vegetation/location will remain until young birds have left the nest and during this period an alternative approach to the works will be undertaken.</p> <p>Opportunities to enhance and/or create areas of vegetation which nesting birds may use are presented in Section 8 (terrestrial biodiversity net gain) of the OLEMS (document reference 7.4(2), REP7-037).</p>
Annex 1		
3	<p>Annex 1 (not replicated here).</p> <p>[Produced in response to the Examining Authority question 3.2.2.1: In light of the additional information provided to the Examination to date on features of the designated sites that may be affected by the Proposed Development, please could NE, the RSPB and LWT specify the qualifying features of The Wash SPA, The Wash Ramsar site, The Wash SSSI, and The Wash and North Norfolk Coast SAC on which they consider there would be an adverse effect alone and those on which they consider that there would be an adverse effect in combination. Please identify the location at which those species may be affected, ie the application site, the mouth of The Haven or along The Haven. This could be presented in tabular form for ease.]</p>	<p>The Applicant welcomes clarification of NEs position regarding the features for which they consider there would be an adverse effect alone and adverse effect in combination.</p> <p>What is not clear in all cases is the rationale or mechanism underlying NE's position regarding a given feature. In particular, the rationale for considering species not recorded during project-specific surveys such as Bewick's swan and pink-footed goose to be adversely affected, or the rationale for considering adverse effect on the dark-bellied brent goose (DBBG) feature of The Wash SPA, but not the DBBG feature of The Wash Ramsar.</p> <p>The Applicant maintains its position at Deadline 5 (HRA Ornithology Update, document reference 9.59, REP5-006) that no Adverse Effect on Integrity is predicted for any feature of The Wash SPA/Ramsar/SSSI alone or in combination.</p>

Table 2-7 Deadline 8 Submission - Appendix B5 - Comments on Without Prejudice Habitats Regulations Assessment Derogation Case – Compensation Measures [REP6-026] (REP8-023)

No.	Comment	The Applicant’s Response
Summary		
1	<p>Natural England’s previous concerns with the in-principle compensation measures provided at Deadline 3 [REP3-031] remain unresolved. Natural England continues to advise that an adverse effect on Integrity can’t be excluded due to the reasonable scientific doubt, as a consequence of there being limited project specific ornithological data presented, key operational impacts not being clearly defined and therefore assessed (e.g., vessel movements and speeds) and concerns over the adequacy of proposed mitigation measure and/or securing of mitigation measures to ensure impacts are suitably minimised.</p>	<p>The Applicant’s case for there being no likely Adverse Effect on Integrity is set out in Appendix 17.1 - Habitats Regulations Assessment (document reference 6.4.18, APP-111) with updates provided in the Ornithology, Marine Mammals and Benthic Ecology, Fish and Habitats addendums submitted at Deadline 1 (document references 9.13, REP1-026; 9.14, REP1-027 and 9.15, REP1-028, respectively) and the HRA update submitted at Deadline 5 (document reference 9.59, REP5-006). Having reviewed Natural England’s Risk and Issues log, the Applicant queries whether Natural England have considered all of the information submitted to the Examination.</p> <p>Operational considerations that could lead to adverse effects are defined to the level required to make decisions on both mitigation and, if required, compensation. Vessel movements are clearly set out in the application but the Applicant does recognise that the issue of the previously accepted 6 knot limit for vessels in The Haven has now changed, based on recent information from the Port of Boston that this is not a speed limit that they enforce. All application documents have been reviewed for any implications on this change including all HRA related documents with updates provided at Deadline 9 where required.</p> <p>Mitigation is considered to be appropriate and whilst some ornithological survey data has been submitted during the Examination (i.e, the winter 2021-22 programme) this reinforced</p>

No.	Comment	The Applicant's Response
		<p>the Applicant's understanding of the site and has not changed the Applicant's position on such matters.</p> <p>All mitigation measures have been secured via requirements in the DCO or conditions in the DML.</p>
2	<p>Natural England advises that from the data we have seen, and the information submitted into examination by the Applicant, there is no evidence to determine that an AEol on integrity would not occur as a result of the proposals.</p>	<p>Further to evidence outlined through the successive documents HRA Ornithology Addendum (document reference 9.13, REP1-026), and HRA Update (document reference 9.59, REP5-006), the Applicant directs NE to the Final Waterbird Survey Report Summary of Data (document reference 9.91, REP8-018) and the report on the same data by the field surveyor at Deadline 9, as evidence to determine that an AEol would not occur as a result of activities associated with the Facility.</p>
3	<p>Thus, we advise that the Applicant must make full use of the mitigation hierarchy to avoid, reduce and mitigate the impacts. And where considerable uncertainty remain, in relation to the impacts, we advise that a more precautionary approach to account for the uncertainty in line with the Habitats Regulations is adopted.</p>	<p>The Applicant has considered the mitigation hierarchy in the design of the site and selection of mitigation.</p> <p>The Without Prejudice Habitats Regulations Assessment Derogation Case: Compensation Measures (document reference 9.30(2), REP8-006) sets out that the proposed compensation sites are proposed to support 175 high-tide roosting birds from the Principal Application Site, and 7,000 birds from the Mouth of The Haven (MOTH). Seven thousand (7,000) birds is an approximation of the peak count of The Wash SPA feature/waterbird assemblage recorded at the MOTH. The Applicant considers that this provision is suitably proportionate and consistent with the Habitats Regulations.</p> <p>Additionally, the precautionary principle has been fully taken account of in determining the construction/landscaping programme of the compensation measures to ensure that this is</p>

No.	Comment	The Applicant's Response
		completed at least two years before the negative effects that may lead to AEol occur.
4	Therefore, Natural England advises that the requirements for compensation measures are determined as part on the consenting phase. With sufficient details on the compensation measures provided in order to have certainty in the ability to implement and deliver the measures to <u>more than offset</u> any worst-case scenario and address uncertainties in relation to the scale and significance of any AEol.	<p>As set out in the response to the previous question the proposed compensation land will be designed to accommodate over 7,000 birds, an approximation of the peak count of The Wash SPA feature/waterbird assemblage recorded at the MOTH. Further, this peak count of birds on which scale was based included a significant proportion of birds that did not demonstrate displacement from the MOTH and so did not require an alternative site, therefore providing scale of habitat to support 7000 birds more than offsets any worst-case scenario.</p> <p>When considering the average numbers of birds using the MOTH WeBS sectors for the qualifying species that showed significant disturbance, this more than covers the cumulative average number (3555 birds) (the roost at the MOTH has been surveyed to host a minimum of 100-200 waterbirds and routinely 2000-3000 waterbirds).</p>
5	The EC Guidance on Article 6 (4) of the Habitats Directive states that <i>“compensation ratios of 1:1 or below should only be considered when it is demonstrated that with such an extent, the measures will be 100% effective in reinstating structure and functionality within a short period of time”</i> . We do not believe that sufficient evidence has been provided to suggest this is the case.	<p>As set out in the response above the compensation ratio is not less than 1:1. The reinstatement period is due to be completed more than two years before negative effects leading to AEol occur due to operation (which is the time frame considered sufficient for this type of habitat to reach an effective and functioning state).</p> <p>Figure 4-3 of the Without Prejudice Habitats Regulations Assessment Derogation Case: Compensation Measures (document reference 9.30(2), REP8-006) shows the worst-case implementation programme for the compensation sites and the establishment period. This allows for adaptive management to improve and establish the best compensation possible over a 2 years 8 months period as a minimum.</p>

No.	Comment	The Applicant's Response
		<p>Furthermore, the Applicant proposes to establish an Ornithology Engagement Group (OEG) to provide an advisory role in the development of the compensation options. Initial work will result in compensation plans being produced which set out the measures in detail and the delivery and monitoring mechanisms to ensure their success (to be developed as part of the Ornithology Compensation Implementation and Monitoring Plan (OCIMP)).</p>
6	<p>In addition, no evidence has been presented to demonstrate that the proposed locations for compensation measures have been secured, can be adapted and/or manage to be 100% effective in reinstating supporting habitat structure and functionality and/or maintain the coherence of the national site network. With no adaptive management measures identified to address non delivery of the compensation measures.</p>	<p>Further details on such matters are set out in Sections 4 and 5 of the updated Without Prejudice Habitats Regulations Assessment Derogation Case: Compensation Measures (document reference 9.30(2), REP8-006). The Applicant maintains its position at Deadline 8 that compensation if required is entirely deliverable.</p>
7	<p>Until these issues are resolved we do not believe that that the proposed derogations case will adequacy offset the AEoI.</p>	<p>The Applicant maintains its position that there will be no AEoI, however also notes that if the Secretary of State identify AEoI then the compensation measures are more than adequate.</p>
Main Concerns with proposals		
8	<p>1. <u>Redshank (and Ruff) at development site</u>: Natural England doesn't believe that the measures proposed are sufficient to mitigate impacts. The principle of the approach is sound but the whole site is subject to disturbance, and the bird response study confirms that birds are sensitive to large vessels, and the current option of roost swapping by birds between Site A (development site) and Site B (roost to be enhanced) will no longer be possible. With no Site A if displaced from Site B where will birds go? If they have somewhere nearby then effectively the Status quo is maintained, but if they don't then the measures will fail. There is substantive risk here and the current OLEMS does not seem robust enough to ensure that if the measure fails there</p>	<p>The Applicant recognises that redshank (and ruff) demonstrate swapping between roosts at A and B, and confirms that if the Facility is consented, and regardless of whether compensation is instructed to be required, the project will include provision of an effective network of sites suitable for redshank and ruff within 1 km of a) The Haven at Area B, b) each other and c) RSPB Frampton Marsh. These sites would be completed two years before the operational phase when vessel numbers would reach levels used in Assessments. Movement between adjacent roost sites will therefore be facilitated.</p>

No.	Comment	The Applicant's Response
	<p>will be an adaptive solution. Consequently, there needs to be a compensation allowance, ideally a roost area in the Haven proximate to Areas A or B, but far enough apart that it is not subject to disturbance at the same time as Site B.</p>	
9	<p>2. <u>Loss of the mouth of Haven as a functional roost area for most species utilizing it:</u> Waterbird disturbance study shows that most birds abandon the roost in response to the presence of large vessels. While already disturbed (and therefore sub-optimal) this development will increase pressure which is contra the conservation objectives for distribution of features. While individual species may adapt, there is still a net loss of a roost site from the roost network around the Wash. Compensation would ideally consist of a roost area close to the mouth of the Haven, but sufficiently removed from the disturbance radius of the vessels so that vessel passage does not displace birds.</p>	<p>The Applicant maintains its position at Deadline 5 that the roost at the MOTH will not be effectively lost and that compensation for disturbance impacts is not required. The Applicant has nonetheless outlined provision in principle of two roost sites close to The Haven of sufficient scale and quality to provide a viable component to the roost network, able to hold equivalent numbers of waterbirds as currently routinely roost at the MOTH. This has been outlined under the considerable constraint of being unable to provide an in-principle roost site within the SPA boundary similar in substrate and proximity to intertidal area to the current MOTH roost (following discussion with NE earlier in the consultation).</p>
10	<p>3. <u>Repeated disturbance of golden plover and lapwing at the Mouth of Haven roosts:</u> This is calculated to increase daily energy requirements by 3% per day. It is not known if the birds can compensate for this level of loss in the local area (and requiring the birds to compensate forage would be contra to the Conservation Objectives). Bird responses of compensatory feeding; emigration; or mortality would all be contra site objectives. Two compensatory approaches are valid (a) the provision of an alternate roost sufficiently removed from vessel passage so as to not impact daily energy balance through repeated disturbance (as identified for issue (2)); or (b) provision of enhanced foraging close to the site such that birds can efficiently compensate for increased energetic demands as are not lost from the system (by mortality or emigration).</p>	<p>The Applicant considers that compensatory feeding and the associated use of terrestrial habitats is not contra to Conservation Objectives as the birds' distribution and habitat use will already resemble this behaviour (on account of being common strategy for golden plover and lapwing especially in the east of England) and so will not be changed by project activities.</p> <p>This said, the Applicant additionally confirms that both in-principle compensation sites outlined within the Without Prejudice Derogation Case at Deadline 8 (document reference 9.30 (2), REP8-006) have good capacity to fulfil the roles of both compensatory approaches recommended as valid by NE here, the site designs being short-sward grassland of sufficient size, wetting, and distance from source of disturbance to host foraging</p>

No.	Comment	The Applicant's Response
		and roosting golden plover and lapwing close to the Mouth of The Haven.
11	The compensation package would need to be able to address these impacts; (2) is recognised but not adequately dealt with (1) and (3) are impacts for which no effective compensation appears be in scope at the current time.	<p>The Applicant considers that sufficient scale of in-principle compensation has been demonstrated as securable, over a minimal number of sites (i.e. less fragmented than several smaller sites) to address impact (2) (the probability of which the Applicant considers low as the MOTH roost has persisted through higher vessel traffic than presently).</p> <p>The Applicant disagrees that there is no effective compensation in scope for impacts (1) and (3). Respectively, there will be an effective network of sites suitable for redshank and ruff within 1 km of a) each other b) The Haven at Area B and c) RSPB Frampton Marsh, secured by two years before the operational phase when vessel numbers would reach levels used in Assessments; and both without prejudice sites outlined in the Without Prejudice Derogation Case (document reference 9.30 (2), REP8-006) are also suitable for golden plover and lapwing by virtue of being open, wetted habitat with prospect for foraging and roosting activity.</p>
Detailed Comments		
12	<p>1. Para No. 1.1.14</p> <p>As identified in comments on Chapter 17 Marine and Coastal Ecology and Appendix 17.1 Habitats Regulations Assessment Update [REP5-006], NE does not agree that no AEoI can be concluded on this point and that the area is not functionally linked land.</p>	<p>The Applicant maintains its position at Deadline 6 that the redshank and other specified feature species of The Wash SPA show limited to no connectivity with the Principal Application Site population. However, the Applicant has composed the Without Prejudice Habitats Regulations Assessment (HRA) Derogation Case on the assumption that this position is not accepted by Interested Parties or the ExA and that the Principal Application Site is functionally linked to The Wash SPA populations of all waterbird species.</p>

No.	Comment	The Applicant's Response
13	<p>2. Para No. 1.1.15</p> <p><i>"... the Applicant is still committed to undertake measures to provide a biodiversity net gain for the project.."</i> We are not aware of any proposed net gain measures?</p>	<p>Biodiversity Net Gain (BNG) has been proposed since the early stages of the project and has been discussed with the stakeholders on numerous occasions, including Natural England, and was included in the original OLEMS document (document reference 7.4, APP-123). The measures have been updated in subsequent versions. The updated measures are discussed in the OLEMS (document reference 7.4(2), REP7-037). In addition, the Applicant has committed to provide BNG measures in the Section 106 agreement.</p> <p>This is another example of where Natural England do not seem to have reviewed the information provided.</p>
14	<p>3. Para No. 1.1.16</p> <p>Please see NE Appendix F5 for comments on compensation measures and draft DCO.</p>	<p>Please see the detailed responses provided in Table 2-4 above</p>
15	<p>4. Figure 1-1</p> <p>We note that the addition of 580 vessels per year to current numbers would increase vessel movements to greater levels than any since 1994 at least.</p>	<p>The Applicant recognises this point.</p>
16	<p>5. Para No. 1.3.3 and 2.1.5.</p> <p>This section sets out that <i>"Discussions have also been held with Natural England in relation to the potential for management measures to create new roosting sites within the designated sites themselves. Natural England have advised that as this initiative would affect habitat within The Wash and North Norfolk Coast Special Area of Conservation it would not be acceptable. Sites for compensation are therefore being</i></p>	<p>It was advised to the Applicant, by Natural England during a meeting on the 15th November 2021, during the examination phase, that compensation measures within the SPA would not be feasible due to it also being designated as a Special Area of Conservation which includes Conservation Objectives to Maintain or restore the extent and distribution of qualifying natural habitats and habitats of qualifying species, which includes mudflats and sandflats not covered by seawater at low tide. Other options have</p>

No.	Comment	The Applicant's Response
	<p><i>sought outside of the designated sites and outside of the RSPB reserves."</i></p> <p>NE refutes this as our position. Natural England advises that any compensation measures should not be to the detriment of the SAC features such that the conservation objectives for that site are hindered as a consequence of the compensation measures. But, if there are no other viable alternatives then this option should still be considered, albeit there would then be consequential impacts on the SAC to address. (Which has not been done).</p>	<p>therefore been sought outside of the designated sites and are considered by the Applicant to provide suitable compensation should this be necessary.</p>
17	<p>6. Para No. 1.3.4</p> <p>Natural England advises that as a minimum prior to works commencing there needs to be definite certainty that compensation measures are deliverable and impacts will be offset.</p>	<p>As stated in the draft without prejudice Ornithology Compensation Measures Schedule to the DCO (Schedule 11, document reference 2.1(3)), it is proposed to set up an Ornithology Engagement Group (OEG) to provide an advisory role for the development of an Ornithology Compensation Implementation and Monitoring Plan (OCIMP). Following consultation with the OEG, the OCIMP would be submitted for approval by the Secretary of State (in consultation with Natural England).</p> <p>The NE 'check list' for compensatory measure submissions will be followed to develop the potential compensatory measures more fully for the OCIMP.</p> <p>Development of the OCIMP gives great certainty that compensation will be deliverable to the required standards.</p>
18	<p>7. Para No. 2.1.4</p> <p><i>"..The works proposed as compensation/net gain measures would help to reduce potential for significant effects occurring within the area of The Haven. Potential sites for compensation/net gain have been considered</i></p>	<p>The Applicant made a commitment to undertake net gain measures as part of the project (please see response to row 13 above for further details), despite this not being a legal requirement for NSIP projects. The measures currently proposed</p>

No.	Comment	The Applicant's Response
	<p><i>to ensure that they provide the same ecological function (roosting, foraging and bathing) for the species that would be affected and are not adversely affecting any other sites or features. In providing these additional habitats for birds close to the SPA boundary this should ensure that any potential impacts are reduced in scale to ensure the integrity of the SPA and Ramsar site..."</i> NE questions what this refers to? No Net Gain has been proposed and the identified Site B works would be <u>mitigation not compensation</u>. The need to compensate impacts at the Mouth of the Haven is not addressed.</p>	<p>as compensation measures are put forward as 'without prejudice' measures in case compensation is determined to be necessary and would be to compensate for Adverse Effects on Integrity on the SPA both at the mouth of The Haven and, if considered as functionally connected habitat, at the Principal Application Site. This incorporates the two fields put forward for habitat creation to create wetland, islands and grassland habitats suitable for foraging and roosting habitat. These areas would also provide other benefits for biodiversity that would constitute net gains. This includes potential for nesting habitat for waterbirds and habitat for other species of birds and reptiles, mammals and invertebrates that would benefit from the habitat created. If the compensation measures are not required, the Applicant has committed to undertake these measures as biodiversity net gain measures. There are also additional biodiversity net gain measures proposed in relation to habitat enhancement within the Havenside Local Nature Reserve together with debris clearance along The Haven.</p>
19	<p>8. Para No. 3.2.5</p> <p>NE continues to request further clarification on the proposed Habitat Mitigation Area - in particular regarding the removal of the low-profile banks. We specifically require details of where the bank will be removed, the method, a calculation of the volume of material to be removed and where this will be disposed of. In addition, the location of the created 3 shallow pools and methods used.</p> <p>Also, regarding the placement of rocks from the Principal Application Area to the proposed Habitat Mitigation Area - to facilitate roosting of Redshank - will these function in the same way as the remaining banks (Old sea wall) that is presumably not being removed? This may restrict visibility of predators.</p>	<p>See previous response in Table 2-2 (No1) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p> <p>The Applicant is happy to include relevant signage regarding dog walking in the vicinity of the HMA.</p>

No.	Comment	The Applicant's Response
	<p>Natural England suggest one additional mitigation option here: restricting access by Members of Public and dog walkers onto the Habitat Mitigation Area from the Coastal Path using fencing. This would minimise disturbance if this area is being used more regularly by roosting birds. Signage actively asking Members of public to keep dogs on the lead (and why this habitat is important) would be beneficial.</p>	
20	<p>9. Para No. 3.3.1</p> <p>For clarity it would be good to include the annual number of vessels here so it is comparable with the values given in the following sentence.</p>	<p>Para 3.3.1 states, <i>"It is expected that the increase in vessel movements during operation (maximum numbers of vessels per year) would be up to two large vessel movements per high water tide period."</i></p> <p>As set out in the Application 580 vessels/annum will deliver Refuse Derived Fuel and clay to the Facility and export the Lightweight Aggregate Product. This will take place over 701 tides/annum (calculated on a semi-diurnal tidal cycle of 12.5 hours over 365.25 days/annum) equating to 0.8 vessels/tide on average.</p> <p>Each vessel has two movements (i) arrival at the Facility (ii) departure from the facility equating to 1.6 total large vessel movements per tide. This figure has been rounded up to, <i>"two large vessel movements per high water tide period"</i>.</p>
21	<p>10. Para No. 3.4.3</p> <p>NE does not concur with the conclusion <i>".. The HRA (document reference 6.4.18, APP-111) concluded no AEOI of The Wash SPA (either alone or in-combination with other plans and projects).."</i> There will be the loss of a roost area on all tides diminishing the network of roost sites around the Wash, contra the Conservation Objectives.</p>	<p>The Applicant maintains its position at Deadline 5 that the roost at the MOTH will not be effectively lost. The substrate will continue to attract the same species and at some high tides (neap high tides) there are multiple roosting locations available at the MOTH due to continued presence of mudflats at which birds are not seen to experience similar vessel disturbance as at the main (revetments) roost location.</p>

No.	Comment	The Applicant's Response
22	<p>11. Para No. 3.4.4</p> <p>Also, the distribution of the Assemblage feature as a whole would be affected.</p>	<p>The Applicant has assessed the potential for significant impact on the assemblage as a whole within the Chapter 17 Marine and Coastal Ecology and Appendix 17.1 HRA Update (document reference 9.59, REP5-006).</p>
23	<p>12. Para No. 3.5.3</p> <p>Natural England's comment on paragraph 3.2.5 with regards to the use of the rocks within the proposed Habitat Mitigation Area applies here too.</p>	<p>See previous response in Table 2-2 (No1) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p>
24	<p>13. Para No. 3.5.4</p> <p>Natural England's comment on paragraph 3.2.5 with regards to dogs accessing the proposed Habitat Mitigation Area applies here too.</p> <p>NE advises that a ratio of greater than 1:1 is applied.</p>	<p>See previous response in Table 2-2 (No1) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p> <p>The compensation sites and BNG measures will provide a greater than 1:1 ratio of gains for birds and this is factored into the selection of without prejudice compensation sites.</p>
25	<p>14. Para No. 3.5.5</p> <p>NE agrees with the recognition of these as key species of concern at the Mouth of the Haven but also has concerns about the Assemblage Feature as a whole.</p>	<p>The Applicant notes NE's concern and has demonstrated in Table 4-1 of the Without Prejudice Derogation Case at Deadline 8 (document reference 9.30 (2), REP8-006) the in-principle provision for the Assemblage feature of The Wash SPA in addition to the species features outlined.</p>
26	<p>15. Para No. 3.5.6</p> <p>NE recognises that vessel traffic is already impacting features of The Wash SPA the impact of this development is therefore additive.</p>	<p>The impact assessments have been undertaken with due consideration for the impact caused by the baseline conditions.</p>
27	<p>16. Para No. 3.5.7</p>	<p>The updated document (document reference 9.30(2), REP8-006) recognises this point in paragraph 4.5.6 (last bullet point). Recommended features for incorporation in to any compensation</p>

No.	Comment	The Applicant's Response
	It should be noted that, although not a named component species as species with population of over 2000 individuals, both lapwing and golden plover can be considered Key Assemblage species despite the description here ' <i>.. both not being SPA species in their own right..</i> '	sites include features which would support both species, see Table 4-1 in REP8-006.
28	17. Para No. 3.5.9 NE request clarity on what is being proposed in reference to: ' <i>... The works proposed within the Havenside LNR are currently related more to Biodiversity Net Gain but could also offer some potential for compensation and so are included within the table...</i> ' Without detail it is hard to comment on likely efficacy, however interventions at this site are only likely to be effective for birds already utilizing areas within the Haven. And how this will be additive to the required compensation measures	The reference to Havenside LNR has been removed from the latest version of the report (document reference 9.30(2), REP8-006).
29	18. Table 3.1. Option 1. No clarity as to location, scale of habitat to inform decisions related to likely efficacy of these sites	Table 3.1 has been removed from the latest version of the report (document reference 9.30(2), REP8-006). A summary of recommended features of candidate compensation sites, bird activities and species supported, and area or size ranges of each feature is provided as Table 4-1 in the updated document.
30	19. Table 3.1. Option 2. No clarity as to location, scale of habitat to inform decisions related to likely efficacy of these sites. Text suggests limited scope.	Locational information is provided in Section 4.7 noting that at this stage commercial considerations preclude the specific identification of the sites under consideration.
31	20. Table 3.1. Option 3. No clarity as to location, scale of habitat to inform decisions related to likely efficacy of these sites. Text suggests limited scope. But may provide an alternative site when birds are displaced from Site B roost.	
32	21. Table 3.1. Option 4-6. NE notes that the options with most potential to compensate for impacts on the SPA are now discounted	

No.	Comment	The Applicant's Response
33	<p>22. Table 3.1</p> <p>Natural England advises that the EA may require notification (Flood Permit) if works are undertaken along the banks of The Haven.</p> <p>Prior to the Boston embankment works, the saltmarsh along The Haven was cattle grazed in several places maintaining a short-sward with open bare patches. NE are uncertain whether grazing is still undertaken (due to the removal of the old fences). This may be something that could be investigated. The fences will have reduced the disturbance impact of dogs accessing the saltmarsh/ mudflats from the PROW/ LNR. But habitat management may still need to be provided over the lifetime of the project.</p>	<p>The obtaining of all permissions/consents for any proposed compensation sites is fully recognised by the Applicant and is allowed for in the worst-case indicative implementation programme (Figure 4-3) in REP8-006.</p> <p>The Applicant has been in discussion with the Environment Agency with regard to the proposed works. Works in proximity to the banks of The Haven including the works within the Habitat Mitigation Area are covered within the Protective Provisions of the draft DCO (document reference 2.1(4)). Adaptive monitoring and management is proposed for the Habitat Mitigation Area (as discussed in the updated OLEMS (document reference 7.4(2), REP7-037)). Habitat management is proposed for the duration of the project.</p>
34	<p>23. Section 4</p> <p>Natural England advises that the proposed approach is reasonable, however, enacting key elements of this approach is a must prior to determination to provide the necessary confidence. As such there is not assurance that a suitable site(s) will be secured and the appropriate management implemented.</p>	<p>Assurance that suitable sites can (and will if required) be secured and managed appropriately is provided by information contained in the updated document (document reference 9.30(2), REP8-006). Additionally, Schedule 11 requires that the sites must have been secured in order for the Secretary of State to approve the OCIMP (paragraph 5(a) and (b)), including “the suitability of the site(s) to deliver the measures (including why the location is appropriate ecologically and likely to support successful compensation)”.</p>
35	<p>24. Para No. 4.5.4</p> <p>It is not clear how the ‘shortlisted sites’ will address the compensation needs.</p>	<p>The shortlisted sites are described further in Section 4.7 of the updated report (document reference 9.30(2), REP8-006) including a table of recommended features to support the required species (Table 4-1).</p>
36	<p>25. Para No. 4.5.14</p>	<p>The intertidal area provides foraging and roosting habitat as the rocks within the intertidal area provide roosting habitat.</p>

No.	Comment	The Applicant's Response
	<p><i>".. the intertidal habitat is reinstated to an acceptable condition to enable waterbirds to return to use this area for roosting..."</i> Presumably this should say foraging not roosting as it refers to intertidal?</p>	
37	<p>26. Figure 3.1</p> <p>NE presume the locations of the two arable fields being put forward is not yet common knowledge and this information will be shared?</p>	<p>Yes, this is not yet common knowledge due to commercial sensitivities.</p>
38	<p>27. Para No. 4.6.3 and 4.6.4</p> <p>Natural England queries over what timeframe is this being secured? I.e. as a minimum for the duration of the life-time of the site occupation (and decommissioning phase)?</p> <p>What about the wharf? If that is left in-situ as currently expected? This land (as long as it is used by SPA/ Ramsar bird species) should be considered Functional Linked Land and should be included within the SPA network to retain the sites network coherence. And will need to be managed as such.</p>	<p>The Applicant is seeking to agree long term leases on a renewable basis with a minimum term of 30 years, which will enable the compensation to be in place for as long as necessary to compensate for any AEOI.</p> <p>The wharf comprises a new flood defence structure that would replace a section of the current primary flood defence bank. The flood defence would form a permanent structure that is not anticipated to be decommissioned, however the wharf deck would be decommissioned. The Applicant maintains its position at Deadline 5 (document reference 9.59, REP5-006) that the populations of birds such as redshank at the Principal Application Site are not functionally linked to The Wash SPA/Ramsar populations of these species, however, if the SoS determines that the wharf area is functionally linked and there is an AEOI, paragraph 11 of the without prejudice draft Schedule 11 to the draft DCO (document reference 2.1(5)) provides that "Unless otherwise agreed in writing by the Secretary of State, the compensation measures in place for habitat loss as a result of the construction of Work No. 4 must be maintained following the decommissioning of Work No. 4, unless the intertidal habitat is reinstated to an acceptable condition to enable waterbirds to return to use this area for roosting."</p>

No.	Comment	The Applicant's Response
39	<p>28. Para No. 4.6.10</p> <p>NE comment on Table 3.1 applies here too.</p>	<p>See previous response in Table 2-2 (No5) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p>
40	<p>29. Para No. 4.6.14</p> <p>NE comment on paragraph 4.6.3 applies here too.</p>	<p>See previous response in Table 2-2 (No17) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p>
41	<p>30. Para No. 4.7.1</p> <p>Natural England requests a map of the locations so we can see which side of The Haven it is on. Is the Applicant considering both sites or one/ or the other?</p>	<p>See previous response in Table 2-2 (No1) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p> <p>The exact location of the proposed without prejudice compensation sites are not shown as this is commercially sensitive information at this stage. The Applicant is considering both sides of The Haven, however the currently identified without prejudice compensation sites are both on the same side of the Haven as the Application Site.</p>
42	<p>31. Para No. 4.7.2</p> <p>Natural England has several queries in relation to this section of the HRA. For example: Which bank of the Haven does this paragraph refer to?</p> <p>Regarding the creation of shallow lagoon with an island, presumably water depth will be deep enough to restrict predator access to the island? Or will there be predator fencing? Also, how will the water levels</p>	<p>See previous response in Table 2-2 (No1) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p>

No.	Comment	The Applicant's Response
	<p>of the lagoon bemaintained and where will the water be sourced? Will there be any impacts on RSPB water requirement?</p> <p>Natural England advises that Fencing may be necessary to restrict dog access from the coastal footpath to minimise disturbance.</p>	
43	<p>32. Para No. 4.8.1</p> <p>Natural England's comment on Table 3-1 is also relevant here regarding the possibility of grazing, Also, fencing to minimise access along channel itself.</p> <p>Natural England advises that some of the scrub within the Havenside LNR might be important for migrant birds - RSPB would be able to advise further. Further along the Haven there are records of Turtle Doves using scrub.</p>	<p>See previous response in Table 2-2 (No22) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p>
44	<p>33. Para No. 4.9.1</p> <p>Note all impacts will commence during the construction phase, though disturbance at the mouth of the Haven will not peak until the site is operational.</p> <p>Comments on 1.3.4 also apply here.</p>	<p>The note that all impacts will commence during construction but peak during operation is correct. Only approximately 89 vessels over the whole construction period are forecast (see paragraph 5.5.16 of ES Chapter 5 Project Description (document reference 6.2.5, APP-043).</p>
45	<p>34. Para No. 4.10.1</p> <p>The need to maintain the sites in a condition to allow them to function as Compensatory Habitat is correctly identified, but the mechanism by which this will be achieved and how its effectiveness will be ensured is not identified. This needs to be clearly established.</p>	<p>Surveys of bird usage and habitat development are included in the monitoring. The results of monitoring will be reported annually and any management required will be agreed with Natural England and RSPB, through the Ornithology Engagement Group, as detailed in the updated Without Prejudice HRA Derogation Case: Compensation Measures (document reference 9.30 (2) REP8-005).</p>
46	<p>35. Para No. 4.11.1</p>	<p>As stated in the draft without prejudice Ornithology Compensation Measures Schedule to the DCO (Schedule 11, document</p>

No.	Comment	The Applicant's Response
	<p>The OEG will need to have more than an advisory role it will need to be empowered to ensure compliance with Compensatory requirements.</p> <p>Who is the applicant considering is part of the Ornithology Engagement Group?</p>	<p>reference 2.1(3)), the OEG will provide an advisory role for the development of the OCIMP. Following consultation with the OEG, the OCIMP would be submitted for approval by the Secretary of State (in consultation with Natural England). Empowerment therefore lies with (in part) Natural England.</p> <p>The Applicant is considering that Natural England and the RSPB would be members of the OEG. The Applicant would welcome suggestions on additional representation from Natural England if they feel other parties would have additional skills and knowledge to contribute</p>
47	<p>36. Para No. 5.1.2</p> <p>NE agree this is an appropriate framework for the OCIMP. Natural England is pleased to see monitoring mentioned. However, we have further queries including but not exclusively; For how long? Will this cover the proposed sites and what about the Habitat Mitigation Area? Also, will it cover The Haven mouth with regards to the vessel movements/ disturbance?</p>	<p>See previous response in Table 2-2 (No24) of Deadline 8 Submission - Fourth Report on Outstanding Submissions (document reference 9.90, REP8-017).</p>
48	<p>37. Para No. 5.1.3</p> <p>Agree this is an appropriate monitoring framework, however, the surveys will need to be carried out for more than two years and the OEG will need more than a discursive role in site management.</p> <p>NE notes the recognition that birds show negative behavioural responses to vessels akin to those that will service the development site during both the construction and operational phases.</p>	<p>The OEG will provide an extremely valuable role in helping achieve the objectives of the OCIMP, helping inform the delivery of the compensation and ongoing adaptive management. The role of the OEG will be to inform the delivery of the compensation measures and the ongoing monitoring and adaptive management measures. The plan for the work of the OEG submitted under paragraph 2 of Schedule 11 must include the terms of reference for the OEG and the Applicant considers that this is the appropriate place to set out the specific terms of reference for the OEG following consultation with the members.</p> <p>Bird monitoring and reporting for consideration could include:</p>

No.	Comment	The Applicant's Response
		<ul style="list-style-type: none"> • Vessel-based monitoring of bird responses to vessel transits along The Haven, with special attention to; <ul style="list-style-type: none"> ○ Disturbance ('head-up', walk response, flight response) to aggregations of birds and whether they were resting or foraging; ○ number of times individuals are repeatedly disturbed, e.g. by being 'pushed' progressively along The Haven, and especially where birds are 'pushed' in either direction over the boundary of the protected sites (at Hobhole Drain); • Pre-construction mapping of high tide roosts between the Principal Application Site and the MOTH, and subsequently monitoring the continued attendance (continued use or abandonment) and numbers of birds at these roosts; <ul style="list-style-type: none"> ○ This first point should be considered for surveying both diurnal and nocturnal roosting (via use of specialist optics) as navigation is considered to occupy a potential 24-hour time window; • On-going monitoring of overall population sizes at the Principal Application Site and the MOTH (with a recommendation of obtaining winter peak counts from a standardised rate of counting effort e.g. once per week at a specific tide position or positions – one high and one low water)".
49	38. Para No. 5.1.4	Adaptive management is already secured in draft Schedule 11 of the draft DCO. Paragraph 5(f) requires the OCIMP to include details of the factors used to trigger alternative compensation measures and/or adaptive management measures and paragraph

No.	Comment	The Applicant's Response
	<p>NE is pleased that the potential need for further investment and implementation of measures is recognised and acknowledged, however, the manner by which it will be secured needs clarifying.</p>	<p>5(g) requires the OCIMP to include details of any adaptive management measures. The creation of the habitats will aim to achieve similar habitats as have successfully been created on the RSPB reserves as much as possible to ensure their success. An implementation programme for the proposed compensation sites is provided as Figure 4-3 within Without Prejudice HRA Derogation Case – Compensation Measures (document reference 9.30(2), REP8-006) submitted at Deadline 8. This shows that at least two years has been allowed between the end of the construction for the compensation sites and potential adverse bird disturbance occurring, following advice from RSPB on such establishment timescales. The adaptive management related to the compensation measures would be included within the OCIMP as outlined in the Outline OCIMP (document reference 9.81(1), REP8-013).</p>

2.4 RSPB

Table 2-8 Cover letter to the RSPB's Deadline 8 submissions to the Boston Alternative Energy Facility Examination (REP8-028)

No.	Comment	The Applicant's Response
1	<p>As requested by the Examining Authority, the RSPB has reviewed responses to the Third Written questions. We have focussed on the Applicant's submissions. Within the comments we have also provided further detailed comments to address Q3.3.1.31 outlining why the Applicant's suggestion that the area around the Application site is not functionally linked to The Wash SPA and Ramsar is fundamentally flawed. Our position remains as set out in our Deadline 7 response to the Third Written Questions that the whole of The Haven, including the area adjacent to the Application site is functionally linked land and must be treated appropriately under the Habitats Regulations. We also set out further comments to Q3.3.1.29 regarding the current lack of detail to give any confidence that any mitigation and compensation measures proposed by the Applicant can be delivered and effective in maintaining the integrity of The Wash SPA and Ramsar.</p>	<p>The Applicant thanks RSPB for its response. While the Applicant maintains its position at Deadline 5 that there is no evidence that populations of bird such as redshank wintering at the Principal Application Site are functionally linked to populations within The Wash SPA/Ramsar/SSSI, the Applicant's Without Prejudice Derogation Case (document reference 9.30 (2), REP8-006) proceeds on the basis that a functional link throughout The Haven cannot be ruled out, as a precaution, following Interested Parties' comments in Examination. This Deadline 8 submission also provides detail of the management and composition of securable sites which should give confidence that the mitigation and compensation measures can be delivered and will prove effecting in maintaining the integrity of The Wash SPA and Ramsar.</p>
2	<p>We have noted the request for comments on the Applicant's updated without prejudice derogation case (REP6-026). We provided comments on this document in our Deadline 7 submission. We have no confidence that the alternative redshank roost area will be effective, and outlined those uncertainties in response to Q3.3.1.34 of the Third Written Questions (REP7-030). To meet the requirements of Regulation 68 of the Habitats Regulations requires tangible, targeted compensation measures to be identified that will meet the ecological requirements of the impacted species. There are no such measures in front of the examination. Our comments on this have been set out against clause 3 and its sub-clauses of the draft Schedule 11 (REP7- 031; pp.6-13). These comments still remain.</p>	<p>The Applicant maintains its position at Application Submission, that the area referred to in its assessments as the Habitat Mitigation Area is suitable for providing (expanded) roosting habitat and high tide foraging habitat of sufficient scale and quality for the numbers of redshank and other Scolopacidae recorded during project-specific high-tide surveys at Area A and B. Furthermore, the Without Prejudice Derogation Case (document reference 9.30 (2) REP8-006) has included further offsite compensation should the birds using the HMA be subject to disturbance from vessels (contra expectations of the Applicant) and this is determined to be an AEOI.</p>
3	<p>We have not submitted further comments on the without prejudice derogation case, as we note that an updated version is due to be</p>	<p>Noted by The Applicant.</p>

No.	Comment	The Applicant's Response
	submitted by the Applicant at Deadline 8. We will therefore consider the latest version and provide comments at Deadline 9 as appropriate.	
Revision to maximum vessel speeds and the Applicant's ability to control this along The Haven		
4	<p>Having reviewed the Applicant's updated documents, we are disappointed and have serious concerns to see in the Marine Mammal Mitigation Protocol that vessel speeds will simply be "Subject to the pilotage requirements for navigational safety and efficiency (vessel management), and the application of the principle of 'safe speed' (application of COLREGS), vessel speeds of 'as low a speed as reasonably practicable' are to be encouraged within The Haven and The Wash." (para 3.3.2, p.10; REP7-004). Previous commitments by the Applicant have been that vessel speeds would be limited to 4 knots (mitigation measures discussed with Applicant prior to the DCO submission and set out in the Table on p.viii of the Marine and Coastal Ecology Chapter (APP-055) and subsequently to 6 knots, for example, paragraph 18.6.35 (p.27) of the Navigational Issues Chapter (APP-056) states that "There is a speed limit of 6 knots over The Haven". The Applicant's Habitats Regulations Assessment submitted at Deadline 1 (REP1-026) identified in Appendix 1 that "Speed restrictions for vessels using The Haven, particularly for pilot vessels" was an appropriate measure to manage disturbance to all key species assessed (dark-bellied brent geese, black-tailed godwits, oystercatchers, redshanks, turnstones, lapwings, golden plovers and common terns). The Applicant confirmed at Issue Specific Hearing 2 on Environmental Issues (agenda item 4h) only mentioned speeds of 4 knots and 6 knots (as set out in the Applicant's summary; REP3-023). The latest information is a significant change to the Applicant's commitments with respect to vessel speeds along The Haven.</p>	<p>The Applicant has updated all documents to take account of the Port of Boston's view that vessel speeds are in line with COLREGS (i.e. a 'safe speed'). None of the changes to updated documents change any of the assessments presented in the ES or other application documents.</p> <p>The Technical Note for Navigation Management and Ornithology (document reference 9.70, REP6-033) states that the final Navigation Management Plan (NMP) will have to consider, "<i>Opportunities for managing vessel movements so as to reduce vessel speed where appropriate and beneficial to do so</i>" as well as, "<i>opportunities for minimising vessels being held on-station at or near the MOTH. Measures outlined in the PoB's Pilotage Statement (document reference 9.73), paragraphs 8.6 and 8.7 describe how vessels are managed in this regard and is applicable for minimising this kind of disturbance</i>".</p> <p>The Navigation Management Plan Template (document reference 9.80, REP7-012) identifies a clear and overt linkage to REP6-033 and Condition 14(3)(e) of the DCO requires that the NMP also should include "<i>measures for managing disturbance to designated bird species developed in accordance with the process in the Navigation Management Planning Process: Risk to Birds (REP6-033)</i>".</p>

No.	Comment	The Applicant's Response
		<p>The securing mechanism for vessel speeds to be a consideration within the development of the NMP is clear and unambiguous. Natural England is identified as a statutory body that will be consulted in the development of the NMP with the views of the RSPB also sought.</p>
5	<p>The revised text in the Marine Mammal Mitigation Protocol indicates that vessel speeds would aim to be below 10 knots, but provides no certainty that this would be the case. Indeed, paragraphs 3.3.5 and 3.3.6 (REP7-004) then highlight that vessels actually travel up to approximately 12 knots along The Haven and that there is no enforcement of the "...advisory speed limit of 6 knots along The Haven...". This suggests that vessels could actually travel faster than 12 knots, given that this is an approximate figure, and that any measure to manage speed cannot be considered as mitigation because there is no effective mechanism to ensure that speed limits can be adhered to. The RSPB notes the Applicant's reasons why speed restrictions are not appropriate:</p> <p><i>"An enforced speed limit is inconsistent with current safe practice and Ttwould [sic] restrict the number of vessels able to transit to the Port each tide (i.e. it would increase the transit time, reducing the number of vessels able to transit each tide, and significantly increase the number of vessels within the anchorage area)." (para3.3.7, p.10; REP7-004).</i></p>	<p>As noted in the Outline Marine Mammal Mitigation Protocol, the current practice on The Haven is 'safe speed at all times', in accordance with the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGS). An enforced speed limit is inconsistent with current safe practice and would restrict the number of vessels able to transit to the Port each tide (i.e. it would increase the transit time, reducing the number of vessels able to transit each tide, and significantly increase the number of vessels within the anchorage area).</p> <p>The OMMMP identifies that the Facility's vessels will aim to travel at below 10 knots, where it is safe to do so. This will help reduce any potential impacts on marine mammals without imposing a set speed limit which is inconsistent with navigational safety requirements.</p> <p>These measures are secured Condition 17 of the DML which requires the approval of a final MMMP, which must be substantially in accordance with the Outline MMMP. Additionally, the Navigation Management Plan secured by Condition 14 of the DML will include measures for managing potential risks to marine mammals in accordance the approved MMMP.</p> <p>The Applicant has updated all documents to take account of the Port of Boston's view that vessel speeds are in line with COLREGS (i.e. a 'safe speed'). None of the changes to updated</p>

No.	Comment	The Applicant's Response
		documents change any of the assessments presented in the ES or other application documents.
6	<p>The RSPB has a number of concerns regarding this new information:</p> <ul style="list-style-type: none"> This information appears to have only been included within the Marine Mammal Mitigation Protocol and has not been mentioned in any of the Applicant's submissions relating to impacts on birds and their supporting habitats. A vessel travelling at 12 knots along The Haven will generate a greater wash and more noise. Given the relative narrowness of The Haven, this has significant implications for erosion of foraging and roosting habitats, and the disturbance and displacement of birds along The Haven. No evidence has been presented by the Applicant to enable these impacts on features of The Wash SPA and Ramsar to be assessed. The rock armour protecting the edge of The Haven in the upper reaches of The Haven is not very high (Plate A1-1, p.42 of Outline Landscape and Mitigation Strategy; REP7-038). No assessment has been made of whether wash from vessels inundates this area and impacts on birds using the rocks and area behind them. This is an important area to investigate given the proposed 'Habitat Mitigation Area' to provide additional roosting for redshanks, ruffs and other waterbirds. If the area is inundated when vessels pass, due to the high speed and inability to mitigate impacts through speed restrictions, this has serious implications for the effectiveness of the alternative roost site. Given the speed that vessels use The Haven is double the speed which the Applicant had previously indicated, it is not clear how these higher speeds have been considered in the Habitats Regulations Assessment (HRA) for: 	<p>See responses above in row 4 and 5.</p> <p>The Applicant has discussed the potential effect of erosion at length with the Environment Agency and submitted a Response to the Environment Agency's queries on Estuarine Processes (document reference 9.44, REP3-020) to the Examination. This document has been updated at Deadline 9 (document reference 9.44(1)) in relation to vessel speeds and the Applicant awaits the Environment Agency's response to this. The previous report was accepted by the Environment Agency and a comprehensive plan for monitoring any erosion in the inter-tidal area is presented in Appendix 1.5 or the Outline Landscape and Ecological Mitigation Strategy (OLEMS) (document reference 7.4(2), REP7-037). The Environment Agency are happy with the outline approach provided for.</p> <p>The Applicant's consultation with RSPB on 8 February 2021 (as reported within the HRA (document reference 6.4.18, APP-111)) noted that "the proximity of larger vessels [exerts] the impact rather than ship wash. Therefore slowing vessels down might not be a useful measure and may not be possible due to minimum speeds required." The Applicant recognises the prevalence of visual impact in bird disturbance data compared to wave wash, and stresses that this indicates that re-assessment with an altered maximum value for vessel speed, but no change to vessel traffic scenarios, is expected to yield similar conclusions. The Applicant therefore stands by its assessments as of Deadline 5.</p>

No.	Comment	The Applicant's Response
	<ul style="list-style-type: none"> ○ disturbance and displacement of waterbirds using The Haven ○ the erosion of supporting habitats ○ The scale and type of mitigation measures needed to avoid an adverse effect on integrity beyond reasonable scientific doubt(1) ○ The scale and type of compensation measures needed to ensure the overall integrity of the National Sites Network will be maintained. <p>This change with respect to vessel speeds at such a late stage in the Examination only heightens our concerns regarding the uncertainties of the effectiveness of the proposed alternative redshank roost area and the failure of the Applicant to identify any compensation measures that can be considered to meet the ecological requirements of the impacted species at this time. It is essential that the Applicant ensures that this change regarding vessel speeds is updated across all relevant documents and clarity is needed on how this change affects the Applicant's Habitats Regulations Assessment and Without Prejudice Derogation Case.</p>	
Initial comments on Sections 5 and 7 of the HRA update (REP5-006)		
7	<p>The Applicant provided further information regarding the impact of disturbance on waterbirds using The Haven at Deadline 5. In relation to disturbance, sections 5 and 7 focuses on energetics, which is a very mechanistic view. The Applicant is effectively saying that as long as the birds can get enough food to survive with the level of disturbance and the number of flight responses this causes then everything is fine. We do not consider this an adequate approach.</p>	<p>Noted by the Applicant. However, this in turn is an overly summarised interpretation of the conclusions of the technical note. The conclusions refer the energetics results for the respective species to ecological needs and behavioural ecology. The focus on energetics as a percentage of daily intake is a valid metric for determining severity of disturbance impact and the Applicant maintains that appropriate conclusions have been reached and can be relied on in relation to them, including realistic discussion regarding whether birds can sustain their</p>

No.	Comment	The Applicant's Response
		ecology and activity budgets in light of analysis results. The Applicant maintains that conclusions of this submission are fully robust and reliable.
8	The impact of disturbance is not limited only to energetics (e.g. do birds get enough food to meet their energy needs), but also needs to consider bird behavioural ecology (e.g. do birds behavioural responses to disturbance reduce the carrying capacity of the protected site (i.e. the total number of birds that it can support), for example, if some birds completely avoid areas with high disturbance). Then there's also the potential impact of stress, which can affect overall fitness/survival.	The Applicant acknowledges the effects of disturbance outlined here, but maintains its position from Deadline 5 that the magnitude and frequency of disturbance above baseline conditions is insufficient to drive this mechanism and potentially exert an AEOI of The Wash SPA/Ramsar/SSSI.
9	The Applicant also focusses on the existing levels of disturbance as an excuse for creating more disturbance i.e. there's already a lot of vessel movements, so the additional vessel movements associated with the facility won't make much difference. This is an erroneous approach, as the starting point should be based on whether vessel movements don't affect bird distributions. We are continuing to review the updated HRA and will respond in more detail at Deadline 9.	The Applicant stresses that assessment has aimed to establish whether project-alone or in-combination effects can bring an adverse effect on site integrity (and concluded that they cannot bring such an effect), and inclusion of the baseline under either column is not appropriate.

2.5 UKWIN

Table 2-9 UKWIN's Deadline 8 Comments on Applicant's Deadline 7 Response to UKWIN's Deadline 6 Submission

No.	Applicant's Initial Comment	UKWIN's Comment	The Applicant's Response
2 Waste (outstanding points within Comments on the Applicant's Table 1-2 Response to REP2-058)			
2.1.2	The Applicant recognises that some new EfW facilities may not have been running at full capacity when the fuel assessment was updated, based on the information in the Tolvik report....	UKWIN notes that while the Applicant has acknowledged deficiencies in their report they have not yet rectified these shortcomings.	The Applicant's submission was not deficient as it was based on the best available data at the time of writing, including utilising Government sources of waste data.
	...In UKWIN's calculations it is not clear what the existing recycling rate is for total C&I wastes for the 50% and 33% calculations to be made...	<p>The methodology used by UKWIN is set out on page 7 of REP6-042, with further detail clearly set out within REP2-058 (see paragraphs 21-31).</p> <p>UKWIN's calculations are based on a scenario whereby C&I recycling improvements mirror the being using the Applicant's assumed level of increase in the quantity of household waste recycled.</p>	<p>The Applicant based the changes in recycling rate for household waste presented in the Addendum to Fuel Availability and Waste Hierarchy Assessment (document reference 9.5, REP1-018) on Defra published data, for England this was 45.5% in 2019.</p> <p>Following the Applicant's request for the starting point for the C&I recycling rate, UKWIN has not provided any referenced data source confirming C&I waste recycling rates for specific years to act as a baseline to support their methodology. Without a baseline year, UKWIN's</p>

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		<p>To apply the Applicant's assumed level of increase in the quantity of household waste recycled to C&I waste UKWIN takes account of the fact that C&I waste is a lightly larger proportion of the total residual municipal waste stream. As explained at paragraph 21 of REP2-058: "Household waste represents around 45% of total residual municipal waste, with the other 55% comprising commercial & industrial (business) waste".</p> <p>As such, the methodology used by UKWIN does not require knowledge of current or future C&I recycling rates. The 50% and 33% figures are not the assumed C&I recycling rates, but instead constitute a calculation of the impact of assuming that the relative level of improvement for C&I recycling was either a 50% improvement or a 33% improvement relative to the level of improvement for household waste recycling provided by the Applicant (after correction for the different in the size of the two streams).</p>	<p>methodology does not mirror that of the Applicant's for household waste.</p> <p>The Applicant recognises that increased recycling of materials from C&I waste may reduce the overall quantity of residual C&I waste going to landfill to meet the CEP targets, however the quantity will be significantly less than calculated by UKWIN as their methodology does not factor in existing rates.</p> <p>The Applicant notes that it may be possible to assume such an estimated split in the quantity of household and C&I waste based on UKWIN's assumptions of data from 2016 set out in REP2-058.</p> <p>The Applicant's methodology is based on Government published waste data available in the public domain and does not require reliance on proprietary calculation methodologies.</p> <p>The Applicant notes that if the C&I recycling rate mirrored those of household waste in 2019 as suggested by UKWIN, a 50% increase in the recycling rate would give a rate of 95.5% for England.</p>

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		<p>For the avoidance of doubt, we provide a step-by-step description of the methodology we followed, overleaf.</p> <p>In summary, the process was as follows:</p> <ul style="list-style-type: none"> The applicant assumed that, in their catchment, higher household (HH) recycling rates would result in 5,147ktpa less residual waste arising. This figure appears on page 21 of the Applicant's Addendum to Fuel Availability and Waste Hierarchy Assessment (reference REP1-018). To determine how much this would mean if the same sort of improvements were made to C&I recycling rates we can assume, as per REP2-058, that HH waste represents around 45% of the total residual waste stream and that C&I represents the other 55%. The additional impact of equivalent improvements in C&I recycling – equal to the anticipated level of HH recycling improvements used by the Applicant - could therefore be calculated by multiplying the HH recycling figure of 5,147ktpa by 0.55/0.45 (i.e. by 1.222). This means that an equivalent tonnage impact for improvements in C&I recycling would result in a reduction of residual C&I waste arisings in the Applicant's catchment area of 6,291ktpa (5,147 × 0.55/0.45), i.e. a further reduction of around 6.3 tonnes of residual waste per annum for the Applicant's chosen catchment area. For sensitivity, we also calculated the impact of C&I recycling improvements being just 33% and 50% of the 	<p>The Applicant notes that it may be possible to assume an estimated split in the quantity of household and C&I waste based on UKWIN's assumptions of data from 2016 set out in REP2-058.</p> <p>We note that the most important data required is the existing recycling rate for C&I waste which allows the change to be calculated. UKWIN has not provided this data within its methodology so the Applicant cannot confirm the accuracy of these calculations.</p>

No.	Applicant's Initial Comment	UKWIN's Comment	The Applicant's Response
		<p>6,291ktpa figure, accounting for the possibility that improvement in C&I recycling would be at a lower level of improvement than HH recycling improvement.</p> <ul style="list-style-type: none"> This sensitivity analysis demonstrates that even when taking account of an improvement in C&I recycling rates that are just 33% of the anticipated improved level for household waste this results in significant overcapacity, adding to the evidence base that supports UKWIN's assertion that the Boston facility could be expected to exacerbate incineration overcapacity. 	
	<p>...The Applicant has referenced Government provided waste data and statistics in its calculations, based on current recycling rates and future targets that will be met in line with the transition to the circular economy.</p>	<p>While the Applicant has considered the impact of improvements to recycling rates for household waste, the Applicant has yet to provide any estimates of the impact of similar improvements for C&I recycling. Instead, the Applicant's fuel availability assessments assume that historic rates of residual C&I waste arisings will continue without being impacted upon by Government policies, including Government recycling targets and circular economy support measures.</p> <p>The Applicant has yet to even provide sensitivity analysis to show the potential impact of these measures on the millions of tonnes of potentially recyclable C&I waste that they are relying on as per of their fuel availability assessment.</p> <p>As such, UKWIN would ask that our evidence be adopted as the best available information before the inquiry on this topic.</p>	<p>The Applicant does not consider that UKWIN's methodology is robust as they fail to consider adequately the significant recycling of C&I waste that exists in the UK which diverts existing material from the residual waste stream. Future changes in recycling to meet the CEP targets for C&I waste will build on existing rates.</p> <p>The Applicant states that the data presented are clear and available and in their view represent best available and most appropriate data</p>
<p>4.2 Responses to Specific UKWIN points (Comments on Table 1-2 Response to REP2-057)</p>			

No.	Applicant's Initial Comment	UKWIN's Comment	The Applicant's Response
4.2.1	<p>On pages 15 and 16 of UKWIN's D6 submission, UKWIN shares an example from a recent assessment in December 2021, whereby the assessment assumed a 35% carbon content for RDF waste. It is acknowledged that this carbon composition is higher than the range considered in 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition</p>	<p>UKWIN notes that while the Applicant has acknowledged how they chose for their sensitivity analysis is out of step with evidence provided by UKWIN they are still reliant on an assessment which only assesses up to 30% carbon content and have not assessed the impacts of 35% carbon content at 40-60% biogenic fractions.</p> <p>As such, the Applicant have failed to show that the range of their sensitivity analysis is sufficient to allow for an adequate assessment of the potential adverse climate impacts of the Boston proposal.</p>	<p>UKWIN is referring to the text set out in paragraph 4.21 of The Applicant's Response to UKWIN Deadline 6 Submission (document reference 9.79, REP7-011)). Within this paragraph, the Applicant has not acknowledged that the sensitivity is out of step with the evidence provided by UKWIN. The Applicant acknowledged that the carbon content of 35% for the RDF waste in the Reading Quarry Energy Recovery Centre was higher than that considered in 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019). However, the Reading Quarry Energy Recovery Centre only assumed a fossil / biogenic carbon ratio of 50:50, whereby one of the assumptions within document reference 9.6, REP1-019 assumed a 60:40 fossil / biogenic carbon ratio. Therefore, the Applicant advised that the range of scenarios considered in document reference 9.6, REP1-019 is still reasonable.</p>

No.	Applicant's Initial Comment	UKWIN's Comment	The Applicant's Response
	Scenarios' (document reference 9.6, REP1-019)...		
4.3 Responses to Specific UKWIN points (Comments on Table 1-3 Response to REP3-037)			
4.3.1	...The assessments adopted in Chapter 21 of the ES (Climate Change, document reference 6.2.21, APP-059) and 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019) used design	<p>Contrary to the Applicant's claims, the approach adopted in the Applicant's climate change assessments do not follow the approach set out in Defra's 'Energy recovery for residual waste, A carbon based modelling approach, February 2014'.</p> <p>Firstly, the Defra document includes sensitivity analysis for giving additional credit to biogenic carbon sequestration in landfill. As set out in REP6-042, the Applicant do not do this either within their primary assessment or their sensitivity analysis.</p> <p>Secondly, the Defra document advocates for using a MEF which reflects the decarbonising electricity supply in line with Government Green Book guidelines. However, the Applicant use CCGT for their assessment and do not even sensitivity analysis that reflects the figures that would have resulted had they taken into account the generation-based marginal emissions factors produced by BEIS. Thirdly, the Applicant does not use waste composition as the starting point for the assessment and then calculate all other factors (such as electricity generation and CO2 emissions in incineration and landfill) based on this in line with Defra's approach.</p>	As stated in The Applicant's Response to UKWIN Deadline 6 Submission (document reference 9.79, REP7-011), a sequestration rate of 50% was assumed in the assessment carried out in document 'Climate Change - Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019). This assumption, along with the high landfill gas capture rate (68%) was considered to be a conservative approach. Therefore, it was not considered appropriate to give additional credit for sequestered carbon as this would result in an overly conservative assessment.

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	information specific to the scheme or accepted methodologies such as those provided by Defra		
4.3.3	As stated in Paragraph 4.1.6 of this document, the sensitivity analysis in document 'Climate Change – Further Greenhouse Gas Emissions Analysis and Consideration of Waste Composition Scenarios' (document reference 9.6, REP1-019) also did not consider the effects of	<p>The potential impact of taking into account the various sensitivities highlighted by UKWIN above and within REP6-042 would greatly exceed 80,000 tpa of CO₂, and so the Applicant's failure to take this into account does not excuse the shortcomings in the applicant's main analysis or their sensitivity analysis.</p> <p>By way of illustration, for the year 2026 (the starting year according to the Applicant at paragraph 1.6.4 of REP1-018) the difference between the Applicant's assumed 0.371 kg/kWh (as per paragraph 21.4.78 of APP-059) and BEIS' Generation-based Long-run marginal emissions factor (MEF) of 0.189 kg/kWh (as per supporting Table 1 of BEIS' 'Green Book supplementary guidance: valuation of energy use and greenhouse gas emissions for appraisal') is around 116,000 tonnes of CO₂, rising to a difference of more than 230,000 tonnes of CO₂ by 2042, far exceeding the 80,000 tonnes of CO₂ cited by the Applicant.</p> <p>These figures are based on the Applicant's claimed electricity export of 640,000 MWh (i.e. exporting 80MW for 8,000 hours of operation, as per Applicant assumptions). As can be seen from</p>	<p>The Applicant's analysis considers the annual position in the assumed year 1 of operation of the facility and also considers the offset emissions from a CCGT generation plant. This is considered to be the most likely offset plant, as it seems dubious that an EfW plant would substitute for a renewable source of energy generation, such as, for example, an offshore wind farm. However, if, in the Applicant's Year 1 operation analysis (2026) the MEF of 0.189 kg CO₂e/kWh is substituted for the CCGT figure of 0.371 kg CO₂e/kWh, then the figures stated in Tables 21-24 and 21-25 of Chapter 21 Climate Change of the ES (document reference 6.2.21 APP-059) would change</p> <p>The figure of –147,278 tonnes CO₂e would increase to –30,900 tonnes CO₂e, still a benefit for the scenario 1 comparison with waste landfilling. For scenario 2, the figure would increase to a maximum of 80,299 tonnes CO₂e and a minimum of –129,701 tonnes CO₂e, with the median value most likely to be beneficial.</p>

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	<p>the recovery of 80,000 tonnes of CO2 from the two Recovery plants. Therefore, the outcomes in that document are an underestimation of the potential climate benefits associated with the Proposed Facility.</p>	<p>the table below, the difference between taking account of the recovery of 80,000 tonnes of CO2 from the two Recovery plants and using the Government's MEF, over the Applicant's anticipated 25 year operational lifespan for the incinerator, amounts to more than 3 million tonnes of CO2.</p> <p>[See UKWIN Deadline 8 Response for Table 1 GHG impact of using the BEIS marginal electricity emissions factors for the energy exported from the Boston incinerator.</p> <p>As noted on page 56 of UKWIN's Good Practice Guidance: "...adopting CCGT as the counterfactual for new incinerators should be considered unacceptable because this is likely to significantly overstate the carbon intensity of the energy that would be displaced by new waste incineration capacity."</p> <p>Moving to a different focus for sensitivity analysis, as requested by UKWIN but not provided by the Applicant, the impact of accounting for the additional benefit of biogenic carbon sequestration in landfill can be estimated based on the Applicant's assumed level of decomposition.</p> <p>As noted previously by UKWIN (including within the summary document REP7-036), the actual level of decomposition is expected to be lower for an RDF waste stream than has been assumed by the Applicant, so in reality the impact would be greater than estimated below.</p>	<p>Clearly any analysis is reliant on assumptions, not least of which related to future waste composition and future electricity greenhouse gas intensity figures. On that basis, the Applicant stands by its original and updated GHG analyses, adopting the CCGT-generated electricity GHG intensity factor as the baseline comparator.</p> <p>The Applicant stands by the full range of environmental assessments, as presented, and considers that the methodologies and conclusions are all robust and can be relied on by SoS in determining the outcome of this application.</p>

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		<p>[See UKWIN Deadline 8 Response for Table 2 GHG Impact of giving credit to biogenic carbon sequestration in landfill based on applicant's assumptions and scenarios].</p> <p>This indicates that, based on the Applicant's assumptions, the annual impact of not taking account of biogenic carbon sequestration is between 220,000 and 330,000 tonnes of CO₂ per year, which equates to between 5.5 and 8.25 million tonnes of CO₂ over 25 years.</p> <p>A higher degree of sequestration would be achieved if a higher degree of biostabilisation were assumed.</p> <p>UKWIN set out the above approach for correcting the failure to give credit for biogenic carbon sequestration in our Good Practice Guidance, noting that: "Where the greenhouse gas (GHG) assessment fails to account for the impacts of biogenic carbon sequestration on relative biogenic CO₂ emissions it is sometimes possible for this to be corrected, even by third parties, based on the information provided within an existing climate change impact assessment report.</p> <p>The basic formula is as follows: Sequestered (avoided) biogenic CO₂ = sequestered biogenic carbon x 44/12 In essence, this is determining how much CO₂ one could expect to have been released were the waste to be incinerated.</p> <p>One converts carbon (C) to carbon dioxide (CO₂) by multiplying it by 44/12 which is sometimes shortened to 3.667, and so can also be expressed as: Sequestered (avoided) biogenic CO₂ = sequestered biogenic carbon x 3.667...</p> <p>a) If the quantity of biogenic carbon is stated and the amount of DDOC (dissimilable degradable organic carbon) is stated,</p>	

No.	Applicant's Initial Comment	UKWIN's Comment	The Applicant's Response
		<p>then the carbon sequestered is the biogenic carbon which is not DDOC carbon: Sequestered biogenic carbon = biogenic carbon – DDOC carbon”</p> <p>In line with this approach, we note that the Applicant's Greenhouse Gas Analysis from Waste Composition Scenarios (Document 9.6 / REP1-019) provides the biogenic carbon and total DDOC content for the facilities which allows for the values to be calculated.</p> <p>As the Applicant has not provided their own sensitivity analysis to account for grid displacement factors and/or for biogenic carbon sequestration UKWIN would ask that our evidence on these topics be adopted as the best available information before the inquiry on these matters.</p> <p>Based on this evidence it is fair to say that the adverse environmental impacts of the Boston proposal could be significantly worse than the Applicant has claimed in their various assessments.</p>	